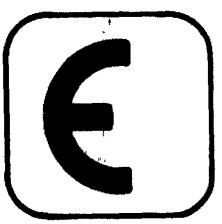
Commission of the European Communities

SYMPOSIUM ON ENFORCEMENT OF FOOD LAW

(Rome, 12-15 September 1978)



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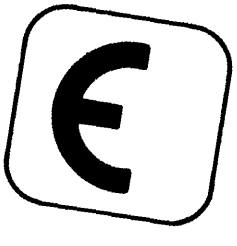

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FOREWORD

The effective application of the regulations on foodstuffs is conditioned by the enforcement exercised by the national administrations. It is necessary that these do not create new differences and discriminations between products being the object of intra-community exchange and that they assure a real protection of the health and interests of the consumers.

The papers given at the symposium, which are contained in this document, present the various enforcement systems existing in the Member States of the European Community. They also permit the summarisation of the practical problems which are posed and the examination of the possibilities of coordination of action and means of the services nationally responsible for this enforcement.

SUMMARY

OPENING SPEECH

P. SCHLOESSER, Deputy Director-General for Internal Market and Industrial Affairs,
Commission of the European Communities, Brussels.

Ladies and Gentlemen,

On behalf of the Commission of the European Communities, I have the pleasure and honour to declare open this Symposium on Foodstuffs Inspection.

Some of the subjects which will be dealt with at this Symposium fall within the competence of the Directorate-General for Internal Market and Industrial Affairs, others within the competence of the Environment and Consumer Protection Service.

1. The Community has set itself as one of its principal objectives the establishment of a single market. The achievement of that objective involves the disappearance of many barriers which prevent or hinder the free movement of goods between our Member States. In the foodstuffs as in other fields, there are still, despite the dismantling of tariff barriers and quantitative restrictions, a large number of national provisions exercising a direct effect on trade because they regulate the composition, the manufacturing procedures for and the packaging or labelling of products and prohibit the marketing of any product which does not meet one or other of these requirements. The often important differences found by comparing the various national laws of this kind form what by consensus are called 'technical barriers to trade', because they obstruct the free movement of goods and by that very fact are incompatible with the single-market concept.

2. The Commission, followed by the Member States and Community economic and social groups, accordingly initiated - from the earliest stages of its existence - an operation designed to remove these technical barriers by means of the approximation or harmonization of laws.

But it is clear that such an operation must not be allowed to degenerate into chaos because the cases in which a national law does not have an objectively justified basis are very rare and the Community has therefore a duty to respect, or even adopt itself, the considerations prompting the lawmakers in the Member States.

Where foodstuffs are concerned, these considerations are based primarily on the need to protect and inform the general public - the 'consumers' - and at the same time on a desire to ensure fair trading and not to distort conditions of competition.

The Community's policy as regards approximating foodstuffs laws is founded on this dual objective and it is comforting to note that public opinion, as our work progresses, perceives the beneficial results of the progressive establishment of a Community system in these fields, even though tangible progress is often difficult to achieve and makes enormous demands on the patience and perseverance of all those involved.

3. The Treaty of Rome which established the EEC judiciously apportions the powers of the Community on the one hand and those of the Member States on the other. To put it schematically, whereas the Community acts essentially as a legislator, the Member States for their part are required to ensure that the Community legal system is properly applied.

It is on this fundamental distinction that the relationships between the Community and its Member States repose, which explains why, in the early stages, the Community institutions concentrated their efforts on the preparation of Community standards covering, for example, the composition of foodstuffs, the treatments which they may undergo and their labelling. This action has, moreover, been on two levels - on a horizontal and general level (approved lists of additives, materials and objects in contact with foodstuffs, general labelling rules, diet foodstuffs) and on a vertical and specific level (cocoa and chocolate products, sugar, fruit juices, honey, tinned milk, coffee and chicory extracts, etc.).

4. However, it soon became apparent that the Community institutions could not dissociate themselves from a particular aspect - namely, the application of the rules which they themselves had laid down.

It is obvious that a standard on the composition of a product, for example, is of little value if it is impossible to make sure that it is complied with in everyday practice, or if the results of an inspection give rise to interpretations which differ from one place to another. In both cases, the law cannot be effective because either it remains a dead letter or it does not result in genuine Community-scale harmonization.

4.1. The first remedy employed to overcome these drawbacks was the inclusion in all Community directives on the harmonization of foodstuffs law of a clause providing for the subsequent adoption of Community methods of analysis and sampling. Not only does such a clause answer the general desire of all the parties concerned, but it is even regarded by some of them as not strict enough, especially by the European Parliament, which consistantly demands that verification methods should take effect at the same time as the basic provisions with which they must ensure conformity. Unfortunately, the Commission has not been in a position to comply with this demand - the principle of which it considers wholly valid - having regard to the very great complexity of the problems arising, which usually preclude assessing with sufficient accuracy the time required for finding a satisfactory solution.

4.2. However, it is clear that, without any desire to disparage their importance, methods of analysis and sampling are only one of the factors to be taken into consideration for ensuring that foodstuffs law is properly applied. The frequency of the inspections, their nature, the places where they are performed, the number of persons involved and their professional training, the facilities used and the financial resources allocated to the competent bodies - all these are essential aspects to be taken into consideration.

The competent departments of the Commission have therefore felt, during the many consultations they have held with both national authorities and economic and social groups, a growing need to include an examination of these questions, or of some of them, in their preparatory work.

5. However, I must confess in all frankness that this happens to be a field in which Community experience is still lacking to a very large extent, if we except certain regulations adopted in pursuance of the common agricultural policy, a summary of which will be presented to you in a few moments.

True to their normal practice, therefore, the Commission departments concerned have made enquiries among their colleagues in the Member States as well as in the Advisory Committee on Foodstuffs, which is the representative body of the trade and consumer organizations associated at Community level, in order to pave the way for a discussion of the problems I have mentioned.

From these various contacts and the valuable advice received on these occasions it has been concluded, with general consent, that it was really necessary, before taking any other action, to carry out an inventory, and we perceived that a symposium would be a particularly appropriate form for this purpose.

6. As regards the programme which had to be adopted for the organization of the symposium, a choice affording due mastery of the subject had to be made.

6.1. The first criterion adopted to this end was the specific nature of the inspections. There are many inspections involving foodstuffs but which also extend to other product categories. Cases in point are fiscal or customs inspections, which may wholly relate to the composition of a product - e.g., for purposes of tariff classification - but which are not precisely or exclusively aimed at foodstuffs. We have therefore decided not to bring up this type of inspection during this symposium.

6.2. The Community lawmakers have already acted in other sectors through regulations. This is the case with certain products subjected to a common market organization. It does not seem appropriate to examine such regulations during this symposium but, needless to say, they will be referred to in the paper that follows.

6.3. The veterinary inspections performed in the fields of animal health protection and health policy are by tradition in our countries activities quite distinct from other types of inspection. This state of affairs and the fact that the introduction of Community law has already been broadly achieved in these fields have prompted us to omit them from this symposium, but the situation created by legislation will also be summarized for your benefit.

7. As regards the organization of the symposium, we have been at pains to create a very wide forum which will make it possible to obtain the views of everybody interested in the proper functioning of foodstuffs inspection.

- First and foremost, we have quite naturally associated with this symposium the Member States which had already helped us to arrange the programme.

The Member States participate in this symposium in two ways :

- First, they have undertaken, each to the extent to which it is concerned, to present to this gathering their national reports describing the actual situation prevailing in their respective countries.

- Secondly, some Member States have appointed speakers to deal with specific inspection problems which are grouped in the chapter on 'Ways and means of foodstuffs inspection' in the programme which has been handed to you.

- Next, the Commission has made a point of inviting all interests represented in the Advisory Committee on Foodstuffs and I am therefore happy to welcome representatives of agriculture, industry, commerce, labour and - last but not least - consumers.

  Furthermore, the representatives of the interests most directly involved in foodstuffs inspection, namely, consumers, industry and commerce will make their views known through speakers.

- The news media - press, radio and television - have shown interest in our symposium and we are happy to invite them to attend.

- International organizations in which the Community actively participates in the foodstuffs field are also present and I welcome in our midst the representatives of the FAO, the WHO and the Council of Europe.

- The other Community institutions have also delegated participants, so that we number in our midst the representatives of the European Parliament, the Council and the Economic and Social Committee.

- May I be allowed finally to express a word of profound thanks to the Italian Government, which has been kind enough, in the finest tradition of Italian hospitality, to host this symposium and place at our disposal an absolutely remarkable system of logistic aid, which, coupled with the human qualities of its representatives, who are so well known to everybody, means that we can once more say that we are at home in coming to Rome.

8. Ladies and Gentlemen, this symposium is bringing together nearly 300 people. That is a measure of the enormous interest that our initiative has aroused, which cannot but be a matter of satisfaction and elation for us. I am confident that, when the work is over, each of us will have a better grasp of the problems arising in the field of foodstuffs inspection and of the specific hopes entertained in the various quarters in this respect. This will no doubt afford us and our national or Community officials the opportunity to draw a few conclusions, albeit temporary and fragmentary, during the round-table meeting which we are convening for this coming Friday. If such were to be the outcome of our symposium, we could say that it was a success - of which I for my part am already convinced.

REPORT ON COMMUNITY REGULATIONS AND THEIR REPERCUSSIONS AS REGARDS FOOD LAW ENFORCEMENT

G. WILKINSON - Administrator in the Directorate General for Agriculture, Commission of the European Communities, Brussels

I. This symposium is entitled "control of food products". This is one aspect of a subject of real importance on both the Community and national level. It is indicative of the very wide range of the Community legislation dealing with the whole range of food products, the conditions under which they are produced, the quality and content of the products themselves and the description of the products and the information made available to consumers.

Such legislation is indicative of the Community's desire to provide protection to all consumers on an equal footing. It does not, of course, mean a standardized product, but rather that whatever the product, it must be in a condition fit to enter into trade. But legislation, however well thought out and however much in accordance with the real needs, is quite ineffective without the assurance that it is going to be applied in practice. This seems to me the importance of this symposium. It is one means of ensuring that Community legislation, whether it applies to third-country trade, intra trade or national trade, is properly applied and is applied in a consistent manner across the Community as a whole.

Free trade is a fundamental Community objective; equally, public health and consumer protection is of primary importance for Community citizens. The intention of Community legislation is to enable both objectives to be achieved and to avoid that the pursuit of the latter be used to unjustifiably prevent the achievement of the former (articles 100 1 2 of the Treaty were drafted in this sense). Control is essential but must not be used to prevent the development of intra trade. That is why this symposium is useful - it encourages the development of co-operation in control practices parallel to the co-operation achieved at the level of Community legislation.

I have been asked to present to you 'the Community's legislation and its implications for control". That is a substantial requirement for half and hour. I shall confine myself this morning in these opening remarks to a brief and very compressed survey - you will be dealing with the details in the days to come.

1. the scope of Community legislation on food products which imply control mechanisms
2. a word about the process of preparation of Community regulations and directives.
3. some comments on control - the main subject of the symposium.

II. Coverage

1. General

The philosophy guiding Community legislation in the field of food legislation rests on a number of different bases. One may perhaps distinguish three major objectives, although the dividing lines are by no means entirely clear and legislation initially established with a particular philosophy has sometimes come to be used in addition for other purposes. In general, however, one may distinguish :

i) legislation aimed essentially at protecting public health.
This is of primary importance and was the major source of concern leading to legislation in most European countries during the nineteenth century.

It remains basic today and in Community terms it is recognized as requiring a particularly strict approach where harmonisation is attempted. It is fair to say that discussions have always been difficult and drawn out;

ii) secondly, much Community and national legislation is aimed at consumer information and protection. This is of increasing importance but can be distinguished from the previous category by the fact that such legislation is aimed at protecting the consumer's pockets rather than their health. The dividing line, however, is rather blurred;

iii) thirdly, in connection particularly with the operation of the Common Agricultural Policy, there is a range of product standards legislation aimed especially at improving the operation of the market in food products and at preventing frauds on public funds.

2. Public health

Legislation aimed at the protection of public health is the largest category as far as Community legislation is concerned. It deals essentially with

a) the quality of the basic raw material,

b) the content of food products which have undergone processing of one sort or another, and

c) thirdly, the conditions and methods of processing, marketing and sale.

For the first aspect, this is the domain of Community legislation covering animal health and the "zootechnical" directives aimed at the elimination of such diseases as bovine tuberculosis, swine fever and at preventing diseased animals from entering the food chain. A similar conception, although other objectives are involved as well, lies behind that part of the quality standards for fruit and vegetables dealing with the presence of pesticides, residues or plant diseases I shall come back to quality standards later.
The second aspect, that of the content of food products, particularly in processed form, involves legislation covering almost all food products, both by means of horizontal and vertical directives.

The addition of preservatives, flavourings, colourants and a whole range of extraneous products to food products has grown rapidly along with the increasing trend towards more highly processed and packaged foods. Such additives are the subject of a wide range of highly technical legislation at the national and Community level and the techniques used to monitor and control these products will form a part of the symposium discussions. Community legislation in this respect is also involved in an earlier stage in the chain of food production. Directives 70/524 and 74/63 are the two facets of the control of substances in animal feedstuffs. In the one the permitted levels of additives are defined and in the other the maximum levels of undesirable substances are regulated. Clearly the control of animal feedstuff quality is essential to the quality of the final food product.

But in addition to these directives there are also Community sectoral regulations with similar aims, laying down in some detail permissible additives. One may mention provisions in the basic wine regulations (816 and 817/70) under Title IV. This lays down in detail the permissible ranges for substances such as sulphur dioxide, tartaric acid and added sugar used in the wine-making process.

The third aspect, that of control of processing, marketing and sales conditions is also important, particularly in the veterinary field, where a constant control of hygiene and sanitary conditions is vital. The Community legislation here lays down very precise standards for the design and operation of slaughterhouses and cutting and preparation plant aimed at avoiding, for example, cross contamination and at ensuring satisfactory waste disposal systems. Inspection of plant at regular intervals is provided for to ensure that plants maintain the levels required for official recognition of conformity. Conforming plant receive a number which is stamped on to products produced by the plant, which are also accompanied by a certificate of conformity.

For the most part in the veterinary sector - indeed with the single exception of the directive on fresh poultrymeat - Community provisions are compulsory only in trade across frontiers. The very existence of standards applicable to intra-Community trade does in practice induce a substantial pressure to apply the provisions across the whole national production.

3. Consumer information and protection

Under this heading I include two kinds of legislation: that concerned with the labelling and description of food products and that which deals with product quality not so much from the public health point of view but more in the interests of protection of consumers against fraud or poor quality. In the former case, legislation is in the form both of draft horizontal directives and of regulations dealing with particular sectors. The draft horizontal directive currently before the Council deals with the labelling of food products in general and is concerned with ensuring maximum useful consumer information consistent with the requirements of manufacturing and selling. There exist, however, specific sectoral regulations for wine (Regulation 2133/74 as amended and amplified by rules of application), and for certain labelling and packaging requirements for eggs (Regulation 2772/75) and for sugar. In the case of wine, the regulations cover both those indications which must be included and those which are optional. In the case of Regulation 2772/75, which covers the marketing standards for eggs, the labelling requirements are less comprehensive but include, for example, date stamping, information concerning packers and weight, as does also the sugar directive 73/437/EEC. Evidently, these "vertical" regulations must be in conformity with the draft "horizontal" directive currently under discussion.

Community legislation which may be classified broadly as consumer protection but without public health connotations in the strictest sense, occurs in various sectors. In the poultry sector, Regulation 2967/76 covers the water content permissible in poultry carcasses and the methods of determination. A modification of this is currently under discussion, particularly with regard to the methods of determining the water content. The control methods and the procedures for taking samples are laid down in considerable detail in the annexes of the regulation. In the dairy sector, Regulation 1411/71 covers the fat content of milk. In addition, long (and unfruitful) discussions have been held in the past on the exclusive use of dairy fat in milk products based on a proposed article 27a of the basic milk market regulation.

4. My final category is more difficult to characterize. What I have in mind is the range of Community leglislation which is aimed, on the one hand, at the smooth functioning of the market and trading system and, on the other, at the protection of public funds. Of course, all Community agricultural legislation has this as a general objective but I am including here quality and marketing standards and also criteria in respect of public intervention measures.

Turning to quality and marketing standards, which apply to all trade, these exist in the form of Directive 73/437/EEC for sugar (currently under revision), in the form of draft directives under discussion of the health and veterinary aspects of milk and as a draft regulation for milk based on Regulation 1411/71. For eggs, Regulation 2772/75 has already been mentioned. Fruit and vegetables are included in a series of regulations,and draft regulations for poultrymeat and potatoes are under discussion. The legal bases are varied, with the eggs and fruit and vegetable standards being derived from articles in their respective basic regulations, whereas in the case of sugar the legal basis is jointly articles 43 and 100 of the Treaty.

In general terms, these quality and marketing standards have two main aims: firstly, to define the characteteristics of the products in question and to provide criteria for classing the product into different categories and secondly, as I mentioned earlier, to ensure certain packaging and labelling standards.

One may take as examples fruit and vegetables, which cover some 30 products ranging from onions to strawberries and which are normally divided into three quality categories according to criteria of size, colour, shape and general presentation. Similarly for eggs, criteria based on shell, yolk, overall size and weight characteristics are used to define different qualities.

Unlike the veterinary directives, these quality and marketing standards apply to all marketed production and not only to trade between the Member States. In the case of fruit and vegetables, detailed application regulations lay down the conditions and methods of control. For export (Regulation 496/70) control is by sampling preferably before departure from packing stations and is accompanied by a certificate of conformity. On import (Regulation 80/63) similarly, with the possibility of refusing entry to all or part of the consignment or of reclassification. The Commission is notified on a monthly basis of such cases. The internal market (Regulations 93/67 and 2638/69) is divided into different zones, and for deliveries outside these zones notification to the authorities is required. Equally the Commission is notified monthly of cases of refusal or reclassing.

In addition to the marketing standards applicable to all marketed production, there is for all products a set of standards and quality characteristics for the purposes of public intervention, prices aids and the full panoply of measures available under the Common Agricultural Policy. Clearly, precise standards are needed in the interests of the proper use of public funds and to some extent as an instrument of market policy. I may mention the dairy sector where precise rules on the quality of skimmed milk powder, butter and cheeses delivered to the intervention agencies are laid down by Community regulations and relate to the chemical and microbiological characteristics of the product. Since certain dairy products, butter and skimmed milk powder in particular, are sold with differentiated subsidies into different market uses, there is a need for a complex control system partly based on the use of tracers and partly on administrative checks.

In practice, the controls are carried out by the presence of inspectors in the manufacturing factories, the inspection of the plants, the checking of bookkeeping and the taking of samples for analysis. Although these norms legally apply only to intervention, quite often they tend to be applied de facto in trade as well.

III. It is evident from this rather brief and necessarily incomplete survey, that the range of Community legislation on the preparation and content of foodstuff is extremely broad. It is increasing rather rapidly as trade between Member States grows and as new obstacles to free movement are brought to light. In many cases the Community legislation replaces rather than adds to national legislation but it is nevertheless clear that the need for enforcement and control is enormous and growing. Law which cannot or is not enforced is worse than useless - it is actively harmful. Hence the need for responsibilities to be clearly defined so far as the control of foodstuff legislation is concerned.

The main principle here is, and must continue to be, that the Member States are in the first instance responsible. It is true that the Commission has responsibilities for the interpretation of regulations and directives, and vis à vis the Member States, of prosecution for failure to implement Community legislation; in addition the Commission has certain responsibilities with regard to public funds and these are exercised, for example, through the Special Control Missions. In the case of some of the sector regulations, quite detailed rules are laid down for the methods of control, whereas in the case of directives, the Member States have greater discretion and the need for co-operation and collaboration is correspondingly greater, but in both cases, the primary enforcement responsibility lies with the Member States and it is up to them to devise appropriate administrative systems.

Some general points need to be emphasized :

a) Preparation: The preparation of Community legislation from initial conception through Commission proposal to Council decision is always a long process.

It is perhaps particularly complex in the case of foodstuffs legislation, as can be seen by the number of proposals outstanding for long periods before the Council. The process is one of consulation, discussion and compromise; what is important is that this process should not only be concerned with the standards themselves but also with the means available to enforce and control these standards. This is all the more important when one considers the distance in time and space of Brussels and even the national capitals, from the officials at the frontier and in the regions, who will have the day-to-day responsibility for the legislation. Many of the problems which arise could perhaps have been eased by more consideration of control issues at an earlier stage.

b) Co-operation: To be effective and equitable, food product legislation must be applied consistently across the Community as a whole. This applies to the methods used, to enforcement and to the penalties in case of infringement. I said at the beginning that Community foodstuffs legislation, whilst of course respecting the essential requirements of the health and welfare of citizens, is intendend to break down unjustified barriers to trade development. It is equally important that the control systems employed do not themselves come to constitute barriers. As far as the methods are concerned, meetings such as this one are essential, particularly where precise methods are not laid down. Consistency in the strictness of enforcement is equally important and requires a high degree of co-operation between officials in Member States.

Similarly, in the case of penalties, it must not be possible for infringements to be treated more lightly in one region than another. With the increasing ease of movement of goods within the Community, "multilateral" frauds are more easily organized and require a correspondingly integrated control to combat them. I can perhaps cite the case in the wine sector where an artificial wine had been produced in Antwerp, delivered to Böchingen and handled by an agent in Strasbourg. It is in response to this kind of operation that increased co-operation and exchange of information between Member States is essential.

I have tried in this half hour to give an overall picture of the scope of Community legislation. My own impression is that the potential benefit to consumers - and for that matter to producers and industry as well - is enormous. What is necessary is to ensure that this potential is fully utilized by consistent enforcement and control across the Community.

NATIONAL FOOD LAW ENFORCEMENT SYSTEMS

Italy: U. PELLEGRINO, Consigliere Ministeriale per l'Igiene degli Alimenti, Ministero della Sanità, Roma

1. In Italy, the legal basis for the inspection and control of foodstuffs is to be found in public law, comprising penal and administrative legislation.

In addition, a private citizen who alleges damage assessable in material terms can bring an action and lay a claim for damages by becoming civil party in criminal proceedings brought against the producer or vendor of a food product which does not comply with the requirements of the law.

Food legislation specifies requirements in respect of the composition, packaging and labelling of products, and breaches of these regulations are a criminal offence. In consequence, proceedings are started in Italy not by the private citizen who has suffered injury but by a public authority under an official procedure initiated either by the criminal police or by the authorities vested with investigatory powers under penal law (judges of the lower court and public prosecutors).

2. In order to understand the great complexity of the Italian system of inspection and control, we have to go back to the historical origins of food legislation.

Italy's history as a single state, of course, goes back only a little over a hundred years. The first law concerned with food was Law 5849 of 22 December 1888; this was a health law and was followed on 3 August 1890 by Royal Decree 7045 enacting "Special regulations for the health inspection of foodstuffs, beverages and articles of domestic use".

Next came the "General Health Regulations" No. 45 of 3 February 1901 and the Consolidated Health Act of 1907 which co-ordinated all the health and food legislation in force at the time.

Somewhat later, Royal Decree 501 of 8 February 1923 (on canned vegetables) and Royal Decree 2033 of 15 October 1925 (on the repression of fraud in the preparation and sale of substances for agricultural use and of agricultural products) added the economic components of industry and agriculture to the primary health component.

Over the years, the priority given to health aspects has remained unchanged and this explains why health controls predominate in the matter of food controls.

It should be added that, ever since Italy became a single state, problems relating to hygiene and public health have been regarded as social problems affecting public order in the widest sense and therefore as matters for the Ministry of the Interior.

Consequently, the first inspection and control system to be adopted was a centralized system headed by the Public Health Department in the Ministry of the Interior, which co-ordinated the activities of the Prefectures. Then, as now, the Prefectures were the outlying organs of the central government (not to be confused with the provincial administrations, which are the agencies of self-governing territorial bodies such as the municipalities).

The "Fraud Service" set up in the Ministry of Agriculture and Forests following the promulgation of the "Agriculture Acts" (Royal Decree Law 2033 of 15 October 1925 and Executive Regulation 1361 of 1 July 1926) also began as a state service with a central co-ordinating office in the Ministry and a number of local agencies and institutions with delegated powers of control from the Ministry.

With the fairly recent creation of the Regions under the terms of the Constitution of the Republic, the position has changed greatly as regards the system of health inspection and controls on the production and sale of food.

Until January 1972, the Ministry of Health was represented in all the procinces (94 in number) through provincial medical and veterinary officers' departments and in all the consumers through links with municipal medical and veterinary officers.

Decree No. 4 of the President of the Republic dated 14 January 1972 transferred the provincial medical and veterinary officers' departments to the ordinary regions (the majority) which also took over the link with municipal health officers.

Powers to inspect and control the production and sale of foodstuffs, previously vested in provincial medical and veterinary officers and municipal medical and veterinary officials were delegated to the regions.

Under the terms of Presidential Decree 616 of 24 July 1977, the powers already delegated were transferred to the regions. The State and hence the Ministry of Health still have control over frontier veterinary services and port and airport health services for the control of imported foodstuffs.

Finally, it should be recalled that powers in respect of health controls were given to the ordinary criminal police, i.e. the Carabinieri, as from 1 November 1963.

The legal instrument was a law (Article 17 of Law 441 of 26 February 1963) which empowered the Minister of Health to use the ordinary criminal police in addition to his own inspectors and enforcement officers.

This arrangement increased operating efficiency so rapidly that it soon encouraged the Ministry of Health and the General Headquarters of the Carabinieri to step up their efforts.

There are now a central headquarters at the Ministry of Health, three interregional headquarters (Milan for northern Italy, Rome for central Italy and Naples for southern Italy) and a regional headquarters in each regional capital.

It is easy to see that the structure is fairly complex. The Italian system of inspection and control can, in fact, fairly be described as "mixed"; in other words it is not wholly decentralized (as in the Federal Republic of Germany) or wholly centralized (as in France). It is therefore a control structure with the advantages and defects of both alternatives.

The Central Government departments concerned are the Ministry of Health and the Ministry of Agriculture and Forests.

Health controls (carried out by Adulterated Goods Squads (AGS) operating within the Ministry of Health and by regional services) are designed principally to protect consumers' health and cover all food products without exception. The Fraud Service of the Ministry of Agriculture and Forests is concerned mainly with ensuring that unprocessed or first-processing agricultural products are genuine as part of protection for the farm economy.

Within the system of health controls, the AGS, i.e. the Carabinieri are concerned almost exclusively with the production stage (i.e. checks at factories) rather than the retail sale of finished products.

In the Regions, controls have a greater chance of succeeding when directed to the general conditions of hygiene in which food products are produced, stored, transported, distributed and sold.

Conversely, local controls are unsuitable when prompt action has to be taken simultaneously throughout the Republic.

The various forms of control and the agencies by which they are applied complement each other in Italy precisely because they differ both in character and in their means of action. Naturally there are undesirable cases of overlapping powers (principally between the AGS and the regional agencies) but it must be said that the regional organization is a dynamic element which is developing continuously and, in my view, is now ready to offer definite conclusions regarding the future course of food controls in Italy.

3. The means of action available to the inspection and control services are briefly as follows.

The Fraud Service has a central co-ordinating office at the Ministry of Agriculture and Forests together with institutes appointed by the Ministry to carry out inspections and controls.

It is noteworthy that these institutes are not organized on a strictly geographical basis but cover more than one region, particularly on the basis of the commodities in which they specialize.

The "Agrarian Law" (Royal Decree 2033 of 15 October 1925) provides that, if analysis of samples shows that the product in question does not meet the legal requirement, the head of the laboratory or of the submitting service shall report the matter to the judicial authorities and shall duly inform the person concerned. The latter then has 15 days in which to apply to the courts for a second analysis but cannot, as in France, nominate a laboratory to perform the check analysis; this must be performed by one of the laboratories or institutes listed in the law.

The procedure differs slightly in the case of health controls.

If the result of an analysis is not satisfactory, the matter is not reported to the judicial authorities at once; instead the person concerned is informed of the result. He then has 15 days to apply to the provincial medical officer or veterinary officer for a second analysis (medical and veterinary officers have separate powers for different types of food).

All check analyses are performed by the Central Health Institute in Rome.

If no application is made for a check or the original result is confirmed by the second analysis, the administrative authority reports the matter to the judicial authority.

The health authorities have substantial administrative powers; for example, if, in the course of an inspection, any foodstuff is suspected to be a possible source of danger, it can be seized as a precautionary measure pending analysis and, if the suspicion is then confirmed by analysis, destruction of the seized products can be ordered.

Another power vested by law in provincial medical and veterinary officers is that of ordering the temporary closure for up to six months of the establishment, store or business inspected, quite independently of any legal proceedings and any penalties which the courts may impose.

Seizure and destruction of products and the temporary closure of businesses are very powerful administrative sanctions and are greatly feared.

As regards the taking of samples, it may be recalled that the average sample, taken by methods ensuring that it is properly representative of the batch inspected, is divided into four equal parts (sometimes five). One is handed back to the person concerned for private analysis if he so wishes; the second is used for analysis by a provincial laboratory for hygiene and preventive medicine; the third is kept for possible check analysis; and the fourth is held in case the judge decides to call for an expert opinion if the matter is brought to court.

A problem now looming on the horizon is the reorganization on a regional basis of the provincial laboratories for hygiene and preventive medicine so that analyses will be dealt with according to specialization and not on a territorial basis.

It is worth noting that the provincial laboratories work in close collaboration with the Ministry of Health, which also makes use of their services for studies and applied research.

The Central Health Institute issues technical directives to the provincial laboratories and, whenever necessary, arranges practical refresher courses for their staffs.

The Ministry also provides annual refresher courses for regional officials (provincial and municipal health officers) and special training courses are organised by the Ministry and the Central Health Institute for officers and non-commissioned officers of the Carabinieri who are to serve with the Adulterated Goods Squads.

These courses last six months, comprising three months of theory and practical instruction, followed by an examination, and then three months in the field for suitable candidates, working with the squads engaged in inspection and control work.

As regards control procedures, the first step is an inspection, particularly when a production plant is involved.

A fairly accurate idea of working conditions at a production plant is obtained straight away from a close inspection of premises, machinery, raw materials, technical processes, finished products awaiting despatch, commercial documents (invoices from suppliers, store records of raw materials received and finished products despatched, copies of invoices to customers and various documents retained for tax reasons); this first impression can be confirmed by inspecting records of the usual analyses carried out by the producing firm's quality control laboratory (naturally when the firm is big enough to have a laboratory).

Inspection and control then concludes with the taking of samples and their subsequent analysis, which is performed not along general lines but in accordance with precise instructions from the inspectors who take the samples.

Experience shows that the results of analyses vary very considerably according to whether they are performed on a finished product, taken at the retail stage, without any precise aim in mind or whether the analyst starts with a fairly clear idea of what to look for (as in the case of samples taken at the factory after an inspection).

The statistics in our possession(covering ten years of control work by provincial medical and veterinary officers, with an average of about 400 000 samples every year) show that the number of samples failing to meet requirements is around 12% of the total. This figure can rise to 28-30% when the sample is taken as a result of an inspector's findings.

The number of samples taken is naturally much lower in the case of controls at the production stage than the number which can be taken during an inspection at the retail stage (where the whole procedure ends with the taking of samples) but the result differs considerably when the analyst does not simply verify that the contents match the information given on the label but, instead, makes checks based on the inspector's findings.

As mentioned earlier, the AGS are concerned exclusively with checking at the production stage while local agencies concentrate their controls mainly on retail distribution.

One additional point to note is that the Adulterated Goods Squads, which form the centralized control service of the Ministry of Health, do not confine their activities to food but cover everything coming within the jurisdiction of the health enforcement authorities.

Their powers, therefore, extend to the production and sale of pharmaceutical products, i.e. medicines for human use, illicit trade in narcotics and protection of the environment and waterways against atmospheric pollution.

In practice, these squads are only the advance guard of a much bigger organization - the Carabinieri - who act to support the specialist squads when the need arises.

As a result, forces which would not otherwise have been available to the Ministry of Health can be called on in special circumstances. For example, when a few cases of cholera were confirmed in Italy during the summer of 1973 and immediate action had to be taken to remove the causes (in almost all cases illicit edible shellfish beds) special groups headed by technical officers from the Ministry were able to call on substantial land, naval and air forces made available by the Carabinieri at the request of the AGS.

4. As regards the legal action taken and the penalties imposed in case of a breach of the regulations, I have already mentioned that cases relating to food come under the penal law in Italy.

A number of basic rules are laid down in the Penal Code itself, which contains two separate chapters dealing with health offences relating to food (Article 439 to 452) and commercial offences (Articles 515 to 518).

Various other offences are covered by a large number of laws (over two hundred), regulations and orders concerning food products.

In all honesty, I must say that since 1972, when the outlying offices of the Ministry of Health were transferred to the Regions, it has not been easy to get a full and clear picture of the controls applied by the Regions, of subsequent legal proceedings and of the penalties imposed by the courts.

On the other hand, reliable data are available for the activities of the Adulterated Goods Squads.

Over the last three years (1975, 1976, 1977) the record of the squads has been as follows:

(a) cases reported to the judicial authorities	11.212
(b) persons reported	23.806
- of whom placed under arrest	146
(c) seizures (quintals)	668.680
(d) seizures (number of packages)	20.583.502
(e) inspections	101.919
(f) establishments closed by the health authorities after being reported by the AGS	489

It should be added that in the vast majority of cases reported the accused were found guilty by the courts and only a very few were acquitted.

The reason for this is that the reports transmitted to the judicial authority are not confined to a record of samples taken and a certificate or report of analysis; in most cases, they are very comprehensive dossiers containing detailed reports of inspection findings, of checks carried out on books and accounts at the plant, records of the interrogation of witnesses, photographs and anything else which may be of use as evidence of the guilt of the accused.

5. As regards the relationship between the services responsible for inspection and control and those responsible for drafting food regulations, one point should be noted at the outset.

In some countries, like France, powers to draft technical regulations are delegated to the public administration under the terms of ordinary legislation (i.e. approved by Parliament). Under these general delegated powers, decrees are issued by the Government and orders are made by ministers or at interdepartmental level.

The Italian Parliament has not seen fit to grant such general delegated powers.

As a result, there are ordinary laws laying down requirements for the composition and labelling of certain food products. In most cases, this type of legislation is followed by implementing regulations issued by the Government and approved by Decree of the President of the Republic. These Government regulations contain detailed instructions for the application of the provisions of the laws already enacted.

Other legislation includes general laws such as No. 283 of 30 April 1962 and laws dealing with certain foodstuffs in particular (e.g. flour, bread and pastas, frozen foods) under the terms of which powers are delegated to the Minister concerned to make permanent legal orders, on the subjects covered by the law.

Consequently, the regulations in certain cases are made by way of Ministerial or Interdepartmental Orders.

For example, Orders are made by the Minister of Health for technological additives; by the Ministers of Health and Agriculture for packaging and materials coming into contact with foodstuffs and for official methods for the analysis of foodstuffs; by the Ministers of Health, Industry and Agriculture for ingredients permitted for use in the preparation of bread and special pastas; by the Ministers of Industry and Health for frozen foods; and by

the Minister of Health for special treatments (e.g. irradiation) to which food products may be exposed.

In the foregoing cases which, as already explained, are not general but limited to particular areas specified by the relevant legislation, there is a substantial measure of identity between the services responsible for control and those responsible for drafting the regulations.

In other cases, there are various forms of relationship between the departments responsible for inspection and control and the legislative power (the Chamber of Deputies and the Senate of the Republic).

In fact, under the terms of the Italian Constitution the legislative process, that is the process of drafting and approving ordinary legislation, is always preceded by the introduction of legislation by which is meant the right of the Government or of Members of Parliament to table draft legislation (in the form of proposals or a draft bill) which Parliament must debate.

On technical subjects such as food, the right to introduce legislation is nearly always exercised by the Government on the proposal of the Minister or Ministers concerned.

When the right is exercised by Members of Parliament, the opinion of the Government must be obtained before any legislative proposal is debated in the Chamber.

It may therefore be stated, in conclusion, that, even when the department responsible for controls does not itself draft and issue food regulations, there is always liaison between the legislative and administrative authorities so that food legislation has the benefit of the practical experience of the departments responsible for protecting the consumer and safeguarding fair trading.

Belgium: C. KESTENS, Inspecteur en Chef-Directeur de l'Inspection des Denrées Alimentaires, Ministère de la Santé Publique, Bruxelles

1. The philosophy and legal basis of the system of control

The fundamental law relating to the specific control of foodstuffs evolved in Belgium from an initial law of 4 August 1890 via a second law of 20 June 1964 to the present law of 24 January 1977.

The law of 1890 was called: "Law relating to the adulteration of foodstuffs". That of 1964 was called: "Law relating to the control of foodstuffs and other products". Lastly, the title of the present law is: "Law relating to the protection of consumers' health with regard to foodstuffs and other products". Through these titles one can perceive the development of the basic philosophy: whilst in 1890 it was a question of curbing adulteration, in 1977 the emphasis is on the need to protect the health of consumers.

This development can also be seen in the administrative structure. The foodstuffs inspection service, created at the time the first law was promulgated, was attached to the Ministry of the Interior. From 1937, when a Ministry of Public Health was set up in Belgium, the foodstuffs inspectorate was one of the first departments to be attached to it.

In addition to the fundamental law of 24 January 1977, several special laws deal with particular commodities: the law of 14 August 1933 relating to the protection of drinking water, the law of 8 July 1935 relating to butter and other edible fats and the statutory decree No. 58 of 20 December 1934 relating to the regulating of wines. In order to rationalize the legal basis for the control of foodstuffs, the 1977 law provided for the subsequent repeal by royal decree of all these texts, with the exception of the first, concerning drinking water.

The fundamental law of 1977 will shortly become, then, the basis on which all foodstuffs, drinking water excepted, will be regulated by royal implementing decrees.

There are other laws, drawn up by the Ministries of Agriculture and Economic Affairs, which also concern foodstuffs. There is the law of 14 July 1971 on commercial practices and that of 28 March 1975 relating to trade in agricultural, horticultural and fishery products. These two laws, however, have entirely different aims from those of the law of 24 January 1977. The first law quoted deals with foodstuffs as marketable products, with the object of protecting the consumer, not as regards his health but as regards his financial interests. The second of these laws aims at securing the production of sound agricultural products, and this indirectly affects the quality of the food products that stem from them.

Secondly, it is appropriate to mention the law of 5 September 1952, relating to the appraisement of and trade in meats, and that of 15 April 1965, concerning the appraisement of and trade in fish, poultry, rabbits and game. These deal with veterinary control and hygiene of the products concerned. However, these two laws in no way deal with the composition of these products or with questions pertaining to information for the consumers.

There remain, finally, the international agreements which in certain cases provide, together with the 1977 law, the basis for drawing up royal decrees regulating foodstuffs. In the specific case of the regulations of the EEC, which are directly enforceable but carry no penalties, the 1977 law explicitly stipulates the penalties to be applied for infringement of the provisions of these regulations.

2. Description and structure of the control system

The foodstuffs inspectorate is centralized, in that it is run by a central administration. Each inspector responsible for inspection in a province or a part of a province, nevertheless enjoys great autonomy as regards control operations and has under him two, three or four controllers. The service comprises 14 graduate inspectors, and 32 non-graduate controllers. Roughly speaking, the ratio is one inspector to 700 000 inhabitants and one controller to 312 000 inhabitants.

In practice, the inspectors working in the inspection department are in the majority of cases holders of the diploma of chemical engineering (agricultural industries) awarded by an agriculture faculty at one of the Belgian universities. This training gives them the greatest scope for understanding the chemical, microbiological and technological problems of the food industries.

Two of the inspectors, currently on field service, are holders of the Diploma in Pharmacy All inspectors are recruited via an examination organized by the Permanent Sercretariat of State for Recruitment.

The controllers must be holders of the upper grade diploma of intermediate studies (generally obtained at the age of 18). They are not recruited by examination, but are promoted to the rank of controller from the administrative rank of clerical officer in the Ministry. Consequently, neither their studies, which are very general, nor their past activities, which are purely administrative, give them a scientific background comparable to that of the inspectors. The technical training of the controllers within the department proves difficult because of their lack of elementary knowledge of chemistry and microbiology.

The inspectors check the manufacture of and trade in foodstuffs in industry and the wholesale trade. The controllers, under the authority of the inspectors, do so in respect of small-scale manufacturers (bakeries, cake shops, etc.) and the retail trade (hotels, restaurants, cafes, grocer's shops).

The law of 24 January 1977 entrusts the control of implementing measures to the law officers answerable to the public prosecutors (procureurs du Roi), the burgomasters, each as regards his commune, and the officials and representatives designated for this purpose by the King. The law officers rarely make use of these powers, but in certain large towns the burgomaster has dèlegated his powers to communal inspectors.

Of the representatives nominated by the King, the inspectors and controllers of foodstuffs have general powers of control. Certain other officials have been appointed by royal decree for specific tasks of control. The inspectors and controllers at the meat trade inspectorate have powers to examine all meat products, certain officials at the Ministry of Agriculture have similar powers for dairy products and for pesticide residues on vegetable products and the inspectors of the general economic inspectorate are empowered in questions of labelling and advertising in connection with foodstuffs. Lastly, the personnel of the gendarmerie (the national police) also have general powers, which they rarely use, to examine foodstuffs.

3. Means of action

The control of foodstuffs involves various operations at various stages of manufacture and trading.

In a factory or a small workshop, all goods, from raw materials through the products at various stages of manufacture to the packaged commodity ready for delivery, may be examined.

In the case of raw materials, their freshness is verified and, if necessary, a sample may be taken to detect undesirable pesticide residues or for a microbiological examination. During the manufacturing process, the standards of hygiene when food products are being handled, the cleanliness of the equipment and utensils used and the cleanliness of the factory premises may be checked. At this stage also, it is easier to examine the introduction of additives, as well as the quantity used.

The slips showing the composition formulae may be verified. It is also useful to check the stock of additives itself in order to determine whether unauthorized products are being kept at the factory or workshop. Any suspect product may be subjected to sampling and identification analysis.

Another means of control relating to raw materials, ingredients and additives employed consists of an examination of the purchase book, which enables the factory's supplies to be identified.

Containers and packaging in direct contact with foodstuffs may also be examined. The materials of which they are composed must satisfy the relevant regulations.

Finally, the packaged food products ready for sale or for delivery are examined as to their conformity with the label. Samplings and subsequent analyses will show whether the food product conforms to the standards relating to it, as well as revealing the presence of contaminants from the manufacturing process or from the packaging.

Similar samplings may be carried out at all stages of the wholesale and retail trade. Similarly, premises all along the commercial chain are checked to see that they comply with the hygiene regulations in force.

Any foodstuff which is spoilt, harmful or declared harmful because of the presence of inadmissible animal or other waste or of unauthorized additives or contaminants will be seized and impounded, under the control of the court that will order confiscation and declare it unfit for human consumption. If the food product is perishable and unlikely to keep until after the judgement of the court, the ban will operate automatically, generally subject to the consent of the public prosecutor.

The finding leading to the seizure of the food product may be made on sight in the case of spoilt foodstuffs or after analysis in the case of others. In the latter case, the suspect food product may be held temporarily until the result of the analysis is known.

The laboratory examinations are carried out either by the foodstuffs laboratory or the microbiological laboratory of the Institute of Hygiene and Epidemiology in Brussels, or by one of the laboratories approved for this purpose by ministerial decree. These approved laboratories are spread throughout the country. These are official laboratories coming under the provinces or the communes, university laboratories or even private individuals who have shown the requisite abilities.

Samplings, seizures, impoundings and the removal of foodstuffs from circulation are effected in accordance with rules laid down by royal decree. The foodstuffs inspectorate and all the other departments competent to officiate in these matters are obliged to observe these rulings.

The foodstuffs inspectorate has the controls and samplings carried out by the foodstuffs inspectors and controllers, each in the area for which he is responsible, as mentioned under 2 above.

Up to now, each inspector and each controller has taken samples at his own discretion. Recently, the head of the department established the system of programmed samplings, which provide an overall view of the situation for a given food product and facilitate better financial management. The costs of sampling and sample analysis are imputed to a budget head administered by the inspection service.

The rights of inspectors and controllers and of any other person appointed by the King for the purpose of controls and sampling are given in the law of 24 January 1977. They have the right of access to all places and documents relating to the control.

4. Nature of prosecution and penalities

The law of 24 January 1977 provides on the one hand for the possibility of taking offenders to court (tribunaux correctionnels) and on the other hand for the possibility of imposing, in certain cases specified in the law, administrative fines.

An administrative fine is imposed in all cases where the infringement relates to a question of labelling, advertising or hygiene with regard to premises or people.

In all other cases, the accused is taken to court; this also happens should he decline to pay the proposed administrative fine.

The punishments for which the law provides are imprisonment and a fine, or one of these punishments alone, at the judge's discretion.

Prison sentences vary from one week to one year and fines from 26 to 15 000 francs. Taking into account the multipliers, these fines therefore vary from about 1 000 to 600 000 francs.

Where an offence is repeated within three years following a conviction, the punishment may be doubled.

Administrative fines are proposed by officials of the Ministry of Public Health who are nominated for this purpose by the King and must have a legal qualification. Payment of the administrative fine puts an end to the proceedings. If payment is not made, the file is passed to the public prosecutor, who takes the matter to court. The administrative fine may not be less than or greater than ten times the minimum fine laid down in the event of conviction by court for the infringement concerned.

In the case of food products which are spoilt, harmful or declared harmful by an administrative ruling, the law prescribes confiscation and removal from circulation as a "public order" measure. In the event of conviction of the accused, confiscation counts as an augmentation of the penalty imposed. Even where the accused is acquitted, confiscation is ordered, but is then to be regarded as a measure in the interest of public health.

A final administrative measure that is to be regarded as a penalty is the refusal to admit foodstuffs that are spoilt, harmful or declared harmful and which are held in a private warehouse or which are presented for importation. Should the person responsible object to this, the food products, once introduced into the country, are banned from human consumption.

5. Relationships between the control services and those responsible for drawing up the regulations

The foodstuffs inspectorate comprises a central administration and an inspection department. However, the latter, which is in fact decentralized in the provinces, is subordinate to the central administration, which sees to the proper performance of the programmed samplings and on occasion assigns specific tasks to the inspectors. Each inspector is responsible for a province or half a province and, apart from the instructions relating to the programmed samplings and the special tasks emanating from his superiors, decides to a considerable extent how the work in his district is allocated.

Six inspectors are attached to the central administration and have responsibility for harmonization within international organizations such as the Benelux Economic Union, the European Economic Community, the Council of Europe - the Partial Agreement and the Codex Alimentarius.

Each of these inspectors has charge of one or more sectors, such as meat products, dairy products, fats or starchy foods.

In these same sectors, each inspector is responsible for updating the national regulations and, subsequently, the interpretation, to be given to the texts of royal decrees.

6. Addresses of the foodstuffs inspection departments

6.1 Central Administration,
Cité Administrative de l'Etat,
Quartier Vésale,
1010 Brussels — Tel: 02/564.11.22 or 564.11.23
Telex : 25768

Inspectors responsible for international harmonization and the drawing-up of national regulations:

C. Kestens	Director
M. Viaene	Meat products Fish products Preserves Vegetable products

	Deep-frozen products Technological aids Additives (purity criteria)
R. Van Havere	Dairy Products Egg products Fats Special foods Contaminants
T. Terwagne	Sugars Wines and spirits Vinegar Analysis methods and tariffs
A. d'Adesky	Flour products Other seasoning products
C. Cremer	Non-alcoholic drinks and beers Tonic products Flavouring substances Labelling Additives (international)
G. Temmerman	Publicity and advertising Additives (list)

6.2 Field service

District 0 : M. Fabry: Department Chief Inspector and
M. Van den Baere: Inspector
- Brussels - Capital

District 1 : M. Claes: Departmental Chief Inspector
- Province of Antwerp
Area 111: M. Vercaeren: Inspector
Area 112: M. Van den Bossche: Inspector
- Province of Limbourg
Area 121: M. Claes: Departmental Chief Inspector
- Flemish Brabant
Area 131: M. Van den Baere: Inspector

District 2 : M. Fabry: Departmental Chief Inspector
- Province of Hainaut
Area 211: M. Pirmez: Inspector
Area 212: M. Bataille: Inspector
- Wallon Brabant
Are 221: M. Fabry: Departmental Chief Inspector

District 3 : M. Wallez: Departmental Chief Inspector
- Province of East Flanders
Area 311: M. Wallez: Departmental Chief Inspector
Area 312: M. de Baere: Inspector

- Province of West Flanders

  Area 321: M. van Praet: Inspector

  Area 322: M. Huys: Inspector

District 4 : M. Mathieu: Inspector

- Province of Liège

  Area 411: M. Petre: Inspector

- Province of Luxembourg

  Area 421: M. Feroumont: Inspector

- Province of Namur

  Area 431: M. Mathieu: Inspector

Addresses

Claes J., Inspecteur-Hoofd van Dienst
Steenweg 34
3610 Diepenbeek

Fabry P., Inspecteur-Chef de Service
Rue de Tiernat 2A
1340 Ottignies

Wallez A., Inspecteur-Hoofd van Dienst
A. Van Laethemstraat 23
9001 Gentbrugge

Vercaeren P., Inspecteur der Eetwaren
Eikenlaan 30
2241 Halle (Kempen)

Van den Baere A., Inspecteur der Eetwaren
Berkenlaan 1
2970 Hever

Van den Bossche J., Inspecteur der Eetwaren
Troyentenhoflaan 83
2600 Berchem

Van Praet G., Inspecteur der Eetwaren
Ganzendries 12
8790 Waregem

Huys G., Inspecteur der Eetwaren
Mgr Waffelaertlaan 33
8370 Blakenberg

De Baere W., Inspecteur der Eetwaren
Villalaan 13
9440 Erembodegem

Mathieu C., Inspecteur des Denrées Alimentaires
Rue des Mesanges 8
6345 Villers-le-Gambon

Pirmez H., Inspecteur des Denrées Alimentaires
Rue Poète Folie 24
6220 Fleurus

Bataille A., Inspecteur des Denrées Alimentaires
Rue Defusseaux 139
7340 Tertre

Feroumont J.M., Inspecteur des Denrées Alimentaires
Rue Jean de Bohème 8
5400 Marche-en-Famenne

Petre M., Inspecteur des Denrées Alimentaires
Rue de Namur 37
5050 Egheze

Denmark: N. BORRE, Direktør, Miljøministeriet, Copenhagen

This brief summary of Danish food control has been prepared for the use of a symposium on food control to be held by the Commission for the European Economic Communities in Rome, 12th - 15th September, 1978.

The symposium will not include control within the following fields: weights and measures and prices, customs duties, wines and spirits (reserved designations and certificates), meat hygiene (including poultry and meat manufactures), and quality standards.
Consequently, these fields of control have not been included in the summary.

1. Legal Background

1.1. The Food Act of 1973 contains provisions concerning foodstuffs offered for sale on the home market. The principal aim of the Food Act is to protect the consumers from risks to their health and from misleading information in connection with the consumption and purchase of foodstuffs.

In addition, there are a number of special laws dealing with various groups of food: fish, eggs, milk, margarine, and dairy produce (as well as meat, rabbit, and poultry). As a main rule and in several cases primarily, these special laws contain export provisions. The object of these laws will often, in addition to considerations relating to health and quality, be to promote the sale of the products in question.

1.2. In the Food Act and in regulations issued pursuant to that Act the Minister of Environmental Protection has laid down a number of provisions applying to foodstuffs offered for sale on the home market. These provisions deal with a range of questions about:

- Import of foodstuffs and additives;
- Sale etc. of foodstuffs wholesale;
- Authorization of businesses which manufacture foodstuffs and additives;
- Retail sale of foodstuffs;
- Use of additives in foodstuffs;
- Residues of contamination in foodstuffs;
- Residues of insecticides and weed killers (being prepared);
- "Misleading".

According to the Order concerning Import of Foodstuffs and Additives all imports shall be registered, with the exception of such imports as are governed by the special legislation.

The Order concerning the Sale etc. of Foodstuffs Wholesale covers wholesale trade, i.e. storage, bottling, packing, repacking, and transport of foodstuffs for which there is no special legislation.

The Order concerning Authorization of Businesses which Manufacture Foodstuffs and Additives covers any manufacturing business with the exception of such businesses as are governed by the special legislation.

The Order concerning Retail Sales, including Serving etc., of Foodstuffs covers all retail trade with foodstuffs no matter whether the foodstuffs as such are covered by the general regulations of the Food Act or the production is governed by the special legislation.

The Order concerning Additives for Foodstuffs contains a number of provisions on marking and authorizes the working out of a list of approved additives and their use with indication of possible requirements as regards the identity and purity of the substances (The Positive List). This Order, as well as the Orders which have been or will be prepared concerning the residues of contamination and insecticides and weed killers in foodstuffs, also covers all foodstuffs.

The provision about "misleading" implies that foodstuffs must not be sold in circumstances which are suited to mislead the consumers as regards the origin, time of production, nature, character, quantity, composition, treatment, qualities, and effects of the commodity.

The starting point of the Food Act was that transverse regulations should be carried into effect for all foodstuffs. This should to a wide extent render standards for commodities superfluous. However, among other things because there is an extensive work of harmonization in progress within this field within the European Economic Communities, such product specific orders have been issued pursuant to the Food Act.

1.3. The special legislation on milk and liquid milk products was most recently revised in 1975 and covers production and transport, treatment, and both import and export of full milk, light milk, skimmed milk, cream, butter milk, and other liquid milk products.

The special legislation on dairy produce was most recently revised in 1973 and covers production, wholesale trade, and import and export of butter, cheese, etc., ice-cream, and tinned milk.

The special legislation on eggs end egg products was most recently revised in 1972 and covers sale of eggs and manufacturing of egg products as well as import and export.

The special legislation on margarine was most recently revised in 1965 and covers manufacturing etc. and import and export.

In accordance with the special legislation on milk and liquid milk products, dairy produce, eggs and egg products, and margarine, the Minister of Agriculture has worked out orders concerning:

- production and tranport of milk;
- the quality of the raw materials in the manufacture of dairy produce, egg products and margarine;
- authorization, approval or registration of manufacturers and wholesale dealers;
- manufacture and storage and composition and quality of liquid milk, dairy produce, egg products, and margarine.

1.4. The special legislation on fish and fish products was most recently revised in 1975 and covers catching, storage, transport, freezing, preservation, and other processing or treatment of fish and fish products, together with import as well as export.

In this Act, or in orders issued pusuant to this Act, the Minister of Fisheries has laid down provisions on:

- the handling and storage of fish on board;
- the storage and transport of fish and fish products on land;
- freezing of fish, smoking of fish, and manufacturing of tinned fish;
- authorization of businesses which process, freeze store, and repack fish and fish products;
- approval of wholesale trade and wholesale packing of fish and fish products.

2. Description of the Control Systems

2.1. It is the business of the local authorities (town councils, local councils, corporations) to supervise the provisions of the Food Act and regulations issued pursuant to that Act, as well as the legislation in respect of milk and liquid milk.

Central authorities are responsible for the approval, authorization or registration of businesses which manufacture or import foodstuffs or additives. The National Food Institute of Denmark, which works as an institution under the Ministry of Environmental Protection, grants authorization to manufacturers of additives and registers importers of foodstuffs and additives. The Veterinary Department, which has powers in this respect both for the Ministry of Agriculture and the Ministry of Environmental Protection, grants authorization or approval of manufacturers of foodstuffs.

However, the supervision of the approved, authorized or registered businesses still rests with the local authorities, and it is also a municipal task to approve shops in the retail food trade.

According to a plan approved by the Minister of Environmental Protection, all municipalities will in future be connected to a foodstuff control unit, and there will be a reduction in the number of these units. To-day there are 43 units, and after the expiration of certain specified terms of transition there will be a total of 34 foodstuff control units, each having an average population base of 100 000-150 000 persons.

The work of supervision is carried out by veterinary surgeons with participation of locally trained semi-technicians.

2.2. While, as mentioned above, the supervision of milk and liquid milk products rests with the local authorities, the control with the rest of the special legislation which comes under the Ministry of Agriculture is a Government task, resting with the Government Dairy Produce and Egg etc. Control which manufacture and sell wholesale as well as import and export dairy produce, eggs and egg products and margarine.

The Government Dairy Produce and Egg etc. Control also supervises the said groups of products in the businesses, wholesale stores and at export places. The supervisory functions are performed by dairy engineers or agronomists. The control also relates to the quality. Connected with the Government Control are the Government Butter, Cheese, and Tinned Milk Evaluations carrying out sensory evaluations of the dairy produce.

The Government Dairy Produce and Egg etc. Control has a head office and four regional offices as well as two control stations.

2.3. The supervision of the special legislation on fish and fish products is also a governmental task, which rests with the Industrial Inspection and the Fisheries Inspection of the Ministry of Fisheries.

The Industrial Inspection of the Ministry of Fisheries is a central control institution which is in charge of the general handling of problems of inspection. Besides, the Industrial Inspection attends to the tasks concerning authorization of fishing industries, approval of fish warehouses and fish auction halls as well as registration of, for example, wholesale dealers (including exporters) and importers of fish and fish products.

The Industrial Inspection of the Ministry of Fisheries has at its disposal a staff having a higher technological, chemical or veterinary education as well as staff experienced in fisheries.

The Fisheries Inspection is administratively divided into three main districts, each being managed by a fisheries inspector. Each of the three main districts is divided into subdistricts each with a fisheries control station of its own. In all there are 27 fisheries control stations. The staff of the Fisheries Inspection are people with a practical knowledge of fishing and treatment of fresh fish, mainly fishermen who are given a supplementary training.

The most essential task of the Fisheries Inspection is to supervise the quality and the treatment of the fresh fish landed in Denmark. Besides, the Fisheries Inspection has the day-to-day supervision of the authorized businesses.

3. The Means of the Control

3.1. The whole of the Danish food control is of a preventive nature and is based on knowledge and supervision of all the businesses or premises in which foodstuffs and additives are manufactured, produced, stored or sold, or to which they are imported.

In connection with this, government authorities effect authorizations, approvals or registrations. However, it is the municipal authorities which approve the retail shops.

The supervisory functions are carried out by the municipal food control units or - in the case of most of the field covered by the special legislation - by governmental control authorities, which can work centrally or locally.

As a result of the supervisory work the taking out of samples for laboratory examinations can be reduced to random sampling.

3.2. Laboratory examinations are carried out by the municipal food control units in the manner that all of the food control units perform the microbiological and physico-chemical examinations which are required to evaluate the bacteriological-hygienic quality of a foodstuff. On the other hand, the intention is that examinations which require chemical expert knowledge shall be concentrated in 16 of the 34 future food control units.

In the chemico-analytical field there are, besides six Government laboratories, a central laboratory at the National Food Institute of Denmark and five provincial laboratories. The regional laboratories have been established for Government use in connection with municipal food control units and have on average a population base of one million people each.

The regional laboratories and the central laboratory carry out analytical control tasks for which there are special requirements as regards apparatus or chemical expertise, or where, for other reasons, the task cannot be expected to be handled by the municipal laboratories. Besides, these laboratories perform verification of analyses carried out by the food control units.

3.3. The Government Dairy Produce and Egg etc. Control has no laboratories of its own at its disposal. The samples taken are therefore sent to other Government institutions for bacteriological and chemical analysis, and private laboratories are also used to a certain extent.

As regards laboratory examinations for the contents of vitamins, insecticides and weed killers, and certain contaminations, the analyses are carried out by the central laboratory at the National Food Institute of Denmark and by the provincial laboratories.

3.4. The Fisheries Inspection sends in samples taken out for analysis with the Industrial Inspection of the Ministry of Fisheries, which has at its disposal a laboratory which can carry out microbiological examinations and simple chemical analyses.

As for products which belong under the Government Dairy Produce and Egg etc. Control, complicated chemico-analytical examinations of fish and fish products are carried out by the central laboratory and the provincial laboratories.

3.5. Attention may be drawn to an established violation by the supervising authorities either in connection with the exercise of the supervisory function or as a result of a laboratory examination.

The supervising authorities may, besides, seize, refuse or destroy a consignment of foodstuffs, the consumption of which is deemed to involve risks to the health, or which is against the provisions in force.

The authorities of approval and authorization may withdraw licences granted, including approvals and authorizations, if the conditions of the granting no longer exist or the conditions of the granting have not been complied with.

4. The Nature of Legal Proceedings and Sanctions in Connection with Violations

4.1. Because of the preventive nature of the Danish food control, legal proceedings and sanctions of a legal nature are used only rarely.

If a violation has been established attention is often drawn to it in connection with the inspection, and if the matter has been corrected at the following inspection, no further action is usually taken. Repeated cases of calling attention to such things and violations of a serious nature may result in legal proceedings with the police examining the case.

In connection with this it should be mentioned that not only the person or the business that manufactures or imports a foodstuff or an additive in contravention of the provisions in force, may be punished. Subsequent links in the trade may also be involved in cases concerning violations of the food legislation. Responsibility pursuant to the food legislation may be placed both on individuals and on companies (firms).

If the parties concerned plead guilty, a case may be settled out of court with the parties concerned let off with a warning or a fine. Other cases are decided by the courts, in which cases the party concerned is most often fined, the amount of the fine being fixed in relation to the nature of the violation. The legislation authorizes fixing of punishment in the form of a fine, "hæfte" (a special Danish form of imprisonment) or imprisonment for up to twelve months.

4.2. As regards such part of the special legislation as is administered by the Government Dairy Produce and Egg etc. Control the special rule applies that, if the offender pleads guilty, the Minister of Agriculture can settle the matter by imposing an administrative fine.

5. Organizing Relations between the Control Authorities and the Legislative Authorities

5.1. The food legislation is issued by the Minister of Environmental Protection and, as far as the special legislation is concerned, by the Minister of Agriculture and the Minister of Fisheries.

The governmental administration of the food legislation is dealt with by institutions and directorates as described in detail above under point 2. As a result of this, draft orders will in general be worked out at institutional level. Frequently, the initiative to amendments to the Act will also come from the institutions.

5.2. It is a municipal task to supervise the observance of the Food Act, and regulations issued pursuant to that Act, and of the milk and liquid milk legislations.

As a result of the decentralized control, the National Food Institute of Denmark, as an institution under the Ministry of Environmental Protection, and the Veterinary Department, which has powers both for the Ministry of Environmental Protection and for the Ministry of Agriculture, have been installed as authorities of supervision and complaints, and it is also these authorities that can grant authorizations or approvals of businesses.

Furthermore, the National Food Institute of Denmark and the Veterinary Department carry out the professional supervision of the local food control units.

In connection with this a number of directions, regulations, and instructions about supervision, sampling, and laboratory examinations has been worked out. The National Food Institute of Denmark shall prescribe methods of analysis for use at the food control units and the provincial laboratories and is, in connection with this, in charge of intercalibrations.

5.3. It is a Government task to supervise the special legislation on fish and fish products, besides such part of the special legislation within the field of the Ministry of Agriculture as relates to dairy produce and eggs and margarine.

The supervisory functions are attended to by the Industrial Inspection of the Ministry of Fisheries and the Government Dairy Produce and Egg etc. Control, respectively, and it is also these institutions which grant authorizations and approvals of businesses or premises.

As far as the Government Control is concerned, the day-to-day supervisory work is carried out by the district offices and control stations of the institution.

Within the field of the Ministry of Fisheries the day-to-day supervisory work is, on the other hand, carried out by the Fisheries Inspection, which reports to the Industrial Inspection of the Ministry of Fisheries.

The Ministry of Agriculture is the authority of complaints as regards decisions made by the Government Control. The Ministry of Fisheries has set up a special board of appeal to deal with complaints about certain decisions made by the Fisheries Inspection and the Industrial Inspection of the Ministry of Fisheries.

6. Annex with the names, addresses, telephone numbers and possibly telex numbers of the public authorities which are responsible for food control in Denmark.

I. The National Food Institute
The Veterinary Department

Map indicating the placing of food control units and provincial laboratories. *)

II. The Government Dairy Products and Eggs... Control

Map indicating the placing of regional offices and control stations. *)

III. The Industrial Inspection of the Ministry of Fisheries

Map indicating regional offices and control stations. *)

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*) Maps (annexes I, II, and III), not published.

Federal Republic of Germany: H. DREWS, Ministerialrat, Bundesministerium für Jugend, Familie und Gesundheit, Bonn

1. Objectives and legal basis

1.1 Historical development and objective

Food monitoring in Germany began more than 100 years ago. The Act of 14 May 1879 governing trade in food, luxury goods and consumer goods provided a legal basis for official food monitoring and stipulated that inspection institutes should be set up. The law regulated the inspection powers of the police and imposed penalties for trade in harmful, tainted, imitation or adulterated food. The Act also provided a right to issue decrees in order to protect public health.

A decree dated 26 June 1916 was the first to protect the consumer against economic loss through misleading statements on food. The Food Acts of 5 July 1927 and 17 January 1936, as a result of which a relatively large number of decrees were issued, brought further improvements in the protection of consumers.

The 21 December 1958 Act amending and supplementing the Food Act introduced some important new regulations, including prohibition of the use of foreign substances (now called additives), and the use of irradiation processes, and increased the powers governing food inspection.

The Food Act was superseded by the Food and Consumer Requisites Act (German abbreviation LMBG) of 15 August 1974. As a result of the LMBG, the existing regulations were improved and supplemented in practically all departments. The conditions were provided for suitably adapting food regulations to new health requirements and technological conditions, thus embodying the principle of preventive protection of public health. New regulations on additives and on residues of pesticides and pharmacologically active substances are particularly important. The Act is both an umbrella act and a skeleton act, i.e. it contains general regulations for food, tobacco products, cosmetics and other consumer goods, based on the principles of the protection of health, protection from deception and the provision of adequate information to consumers. With regard to monitoring, the Act provides a number of facilities for intensifying implementation of the law.

In addition to the general provisions of the LMBG, there are numerous regulations for individual foods and groups of foods in a number of other Acts (the Meat Inspection Act, the Milk Act, the Margarine Act, the Wine Act, etc.) and in about 60 decrees relating to food. The food health regulations are supplemented by hygiene regulations. The Federal Disease Act ensures that persons having certain infectious diseases are not employed in food undertakings.

1.2 Legal basis

In order to explain more clearly the monitoring regulations in the Federal Republic of Germany, we must stress at the beginning that the Federal structure of Germany makes the Länder themselves responsible for implementing Federal Acts in accordance with Article 83 of the Basic Law.

Uniform Federal basic regulations on the monitoring of trade in food and consumer articles in the Federal Republic of Germany are laid down in Sections 40–46 of the Food and Consumer Requisites Act (LMBG) of 15 August 1974.

In each of the Länder there are special regulations for the implementation of food regulations, supplementing the uniform Federal basic regulations of the LMBG. This serves as the legal basis for those monitoring tasks for which the Länder acts, implementing orders and administrative regulations. In some Länder the basis is still the circular dated 21 June 1934 by the State Minister of the Interior on regulations relating to the uniform implementation of the Food Act, more particularly for defining spheres of jurisdiction and the scope of sampling and testing. The Länder try to make monitoring as uniform as possible, in order to avoid distortion of competition and disadvantages to the consumer.

2. Description of the control system and its structure

Food monitoring is decentralized (see 1.2) and the Länder are responsible for checking the observance of food regulations. Accordingly, the official facilities and the administrative procedure are controlled by the Länder (Basic Act, Article 84, para 1).

2.1 Sphere of jurisdiction

There are wide variations in the rules regarding jurisdiction in food monitoring in the Länder. This is due to differences in the official systems and the distribution of duties, which cannot be described in detail in this report.

2.1.1 Spheres of jurisdiction at Land level

The sphere of jurisdiction for food monitoring at ministerial level varies from Land to Land. The Department of Health is responsible in four Länder (Berlin, Bremen, Hamburg and Saar), whereas the Ministry of the Interior is responsible for all food monitoring in Bavaria and Rhineland-Palatinate. In five other Länder (Baden-Württemberg, Hesse, Lower Saxony, North Rhine-Westphalia and Schleswig-Holstein) responsibility is divided between the Department of Health and the Agricultural Department, depending on the nature of the food. For simplicity, we can assume that in these Länder, the supreme veterinary authorities (Department of Agriculture) are responsible for monitoring food of animal origin, whereas the supreme health authorities (Department of Health or of the Interior) are responsible for vegetable food, tobacco products, cosmetics and other consumer goods.

2.1.2 Jurisdiction at district level

There are also wide differences between the administrative structures and associated spheres of responsibility in cities, districts and local authority areas. The monitoring measures are usually the responsibility of the public order or police authorities. Accordingly, the enforcement authorities are the district administration, public-order authorities or police authorities, sometimes including the local police (e.g. the Industrial Supervisory Service in Baden-Württemberg).

In some Länder in recent years, certain responsibilities of the public-order authorities have been transferred to existing technical administrations. For example, in Berlin and Hesse, responsibility for food monitoring has been transferred to the veterinary administration in local authority areas or districts. There is also a tendency for the competent district authorities to delegate food monitoring to a subordinate specialist authority (e.g. the veterinary authority or, in isolated cases, the health office).

2.2 The responsibilities of the supervisory bodies

According to LMBG Section 41, para 2, food monitoring must be carried out by trained specialists. If required for technical reasons, therefore, inspections are made by scientific experts who have completed their university training. Specially trained staff (food inspectors) are used in other cases or as assistants to the scientific administrative staff.

2.2.1 Responsibilities of the scientific specialists

Scientific specialists (about 1,000 veterinary officers in the District Veterinary and Food Departments and a small number of food chemists in North Rhine-Westphalia) are at work in the food monitoring authorities and responsible for judging whether food, tobacco products, cosmetics and other consumer articles are fit for sale. The health inspection staff also includes doctors (in district health offices). In order to test the above products, the food monitoring authorities provide scientific specialists in the chemical, veterinary and medical inspection institutes, who report any infringements of the food regulations. These specialists also play a varying part in food inspection. In Bavaria, specialists in the three above-mentioned disciplines are combined in Land inspectorates for public health. There are also private specialists who, by official appointment, test officially returned samples.

As part of the food monitoring procedure, the specialists give views on technical questions regarding food monitoring. In accordance with the Länder regulations, they take part in factory inspections and sampling or carry them out independently. The preparation of specialist reports for the authorities and courts is particularly important.

2.2.2 Responsibilities of food inspectors

The task of food inspectors is to inspect and sample in accordance with LMBG Section 41 para 1(2), where the sampling is not done by scientifically trained experts. If infringements and abuses are suspected, the inspector must make the necessary enquiries and take steps to prevent any risk. It is also important to make prompt use of scientific experts and, if required, other organizations and authorities such as health inspectors, the health office, inspectorates, the prosecutor's offices and authorities responsible for the imposition of fines or maintenance of public order.

2.3 Training of food inspectors

The technical requirements for food inspectors are laid down in the Food Inspectors' Decree of 16 June 1977. The inspector must be capable of performing the previously-mentioned tasks. His knowledge and ability, as required for his job, have to be demonstrated in an examination after completing a 24-month course. The course is divided into theoretical instruction and practical training, including practical training in offices responsible for chemical veterinary and medical testing.

3. Duties of supervisory offices

The authorities responsible for implementing the Food Acts will take all necessary and permissible measures for implementing the food regulations. Regular inspection and sampling are required at all undertakings in which food, tobacco products, cosmetics and other consumer articles are manufactured, processed or sold (LMBG Section 41, para 1).

Food inspection is not entirely the responsibility of the authorities. The executive branch is responsible for providing continuous monitoring for preventive purposes. The monitoring authorities can act even if there is no suspicion of criminal behaviour or minor breach of regulations.

3.1 Controls

3.1.1 Powers of the monitoring authorities

The powers of the monitoring authorities are laid down in LMBG Section 41, para 3. According to the Act, inspectors have the right to enter property and factory premises in which products are commercially manufactured, processed or sold, to enter the associated business premises during normal factory and business hours, and exercise certain inspection rights. One important power is that, in order to avoid urgent risks to public health or order, the inspectors can enter property and premises even outside factory and business hours, and may even enter the homes of those who are obliged to give information.

Inspectors are also entitled to examine business records, way-bills, books and documents about the manufactured substances, except for descriptions of manufacturing methods, and prepare copies or extracts therefrom (LMBG Section 41, para 3, No. 3).

The business papers are examined in order to obtain more rapid information about the origin and distribution of products to whose use an objection has been raised and thus prevent their further circulation.

Inspectors have the right to demand all necessary information from those concerned, more particularly information about manufacture, the processed substances and their origin (LMBG Section 41, para 3, No. 4). Information may be refused only in answer to questions which, if answered, will expose the person responsible or an employee to the risk of legal prosecution or proceedings under the Act governing Minor Breaches of Regulations (LMBG Section 41, para 4).

In accordance with LMBG Section 43, the owners of the property, premises and equipment under inspection and their appointed representatives are obliged to permit the premises to be entered and inspected and samples to be taken, and to co-operate with the inspectors in performing their duties (see 3.2, third paragraph).

The general precondition for all inspection procedures is that they are necessary in a particular case and in a particular form in order to implement the regulations on traffic in food and consumer articles, more particularly for checking that they have been manufactured in accordance with the regulations and nature and labelling. However, when compliance with food health regulations is supervised, it should be remembered that they are also designed to have a preventive effect.

3.1.2 Frequency of inspection of undertakings

Regular tests are necessary, to ensure effective food control. It is particularly important to intensify tests on manufacturers and importers, and on wholesalers and middlemen also, if required. Samples are taken from these undertakings so that complaints can be effectively dealt with. Subject to the principle of the prime importance of inspecting manufacturing undertakings, the frequency of factory inspections depends on the implementation regulations or instructions of the competent authorities. Factories giving repeated grounds for complaints should be inspected at shorter intervals.

We shall now give some inspection intervals prescribed in the Berlin Land, as an example of guidelines which allow for differences in the inspection requirements with the type of food:

Central food markets:	daily
Covered markets and weekly markets:	once or twice per week
Meat and fish factories:	once a week
Dairy farms, large kitchens and canteens:	twice a month

Monthly inspections are laid down for other undertakings such as canneries, bread factories, large bakeries and food sections of department stores and self-service stores. In other food undertakings, inspections are made once, twice, four or six times a year, depending on the nature and importance of the food.

By way of example, in the Land of Hamburg (about 1.7 million inhabitants) there were more than 80 000 inspections of undertakings in 1976.

Veterinary officers responsible for food inspection made 516 307 factory inspections in the Federal Republic of Germany in 1976.

3.2 Sampling

According to LMBG Section 42, the inspecting authorities are entitled to demand and take samples of their choice for investigation, for which they give a receipt. Unless the manufacturer or importer waives his right, part of the sample (the counter-sample) must be left behind. If the sample cannot be divided into uniform parts without jeopardizing the test, the inspectors must leave behind a second similar portion by the same manufacturer (the duplicate sample). Samples left behind must be officially closed or sealed.

Suitable payment must be given for samples not obtained from the manufacturer or importer.

In accordance with Länder Regulations, payment for counter-samples is made on demand, provided the sample cannot be sold after the period of sealing.

The obligations to co-operate (see 3.1.1, fifth para) extend to all measures permissible and necessary for taking samples. More particularly according to LMBG Section 43, there is an obligation to identify rooms, equipment and facilities and to open premises and containers and permit the removal of samples by providing suitable containers.

In accordance with the LMBG Section 35, the Federal Office of Health is obliged to publish an official collection of sampling procedures (see 3.4). This is particularly important in taking representative average samples when checks are made on the contents of pesticide residues or aflatoxins.

The uniform Federal basic regulations are supplemented by Länder administrative regulations on the detailed numbers of samples, quantity, nature and packaging of individual foods, place of sampling and method of sampling. In view of the great differences in local and economic conditions (e.g. city-states, large-area states, number and size of manufacturing undertakings, extent of imports), there are some differences between the regulations of individual Länder.

3.2.1 Numbers of samples

The regulations for uniform implementation of the Food Act provide that at least five food samples should be taken per 1 000 inhabitants and at least one sample of consumer goods per 2 000 inhabitants. These values are still important as guidelines, but are usually greatly exceeded.

The details of the number of samples and place of sampling depend on the sampling procedures, which are prepared by inspection institutes alone or in co-operation with the Länder monitoring authorities. The procedures take account of the capacity of the inspection institutes, the results of enquiries by monitoring authorities and inspection institutes, and reports on complaints about particular products in other Länder. In the retail trade, samples are preferably taken of food sold loose or packed food suspected of being unfit for consumption or tainted.

In addition to the regular samples, the monitoring authorities take additional samples on suspicion or with a view to prosecution, if there are special findings during a factory check or if complaints are received from consumers.

3.3 Confiscation

The LMBG contains no uniform Federal regulations about confiscation of food or consumer goods. The required safety measures are taken by the Länder in accordance with their police rights (the Länder safety and public-order Acts). In particular cases, food and consumer goods which give grounds for complaint or are inimical to health can be impounded in accordance with these provisions and in accordance with implementing orders. The specialists responsible advise on the further treatment of the impounded goods.

In Bavaria, the preconditions for impounding, confiscating and further treatment, if any, of food are laid down in detail in the Act governing the implementation of the food laws.

3.4 Testing of food

The samples taken during food supervision are tested in inspection institutes by officially prescribed methods, usually by approved methods which accord with the present state of science.

In accordance with LMBG Section 35, the Federal Office of Health is obliged to publish an official collection of methods for sampling and testing food, tobacco products, cosmetics and consumer goods. The methods are devised in co-operation with specialists from the monitoring sector, science and the industry concerned.

3.4.1 Duties of the inspection institutes

Samples are tested in chemical, veterinary and medical inspection institutes, nearly all of which are run by the Länder. In Bavaria, the State Chemical, Veterinary and Medical Test Institutes are combined in two Land inspectorates for health, with a few outside stations. There are local authority chemical inspectorates in North Rhine-Westphalia (25) and Schleswig-Holstein (3), whereas in Baden-Württemberg and Bavaria there are only two local authority inspectorates in addition to the Federal Inspection Institutes.

The number of inspection institutes, except for medical institutes, is shown in the following list:

	National	Local authority
Chemical inspection institutes	23	31
Veterinary inspection institutes	24	1 (Bavaria)
Länder inspectorates (Bavaria)	2	-

In recent years, more than 600 000 food samples on average have been investigated annually in the Federal German Chemical and Veterinary Inspection Institutes.

The sphere of responsibility of the various inspection organizations is laid down in the Länder implementing regulations. In the chemical inspectorates food is tested by chemical, physical-chemical, botanical-microscopic and other methods. In veterinary inspectorates, food of animal origin is tested mainly by histological, microbiological and serological methods. There are also medical inspectorates for conducting bacteriological examinations on personnel engaged in the food trade and on particular foods and consumer goods.

In the chemical inspection institutes, more than 400 food chemists, assisted by about 900 technical staff, examine and judge the composition and nature of food and consumer articles. In the veterinary inspection institutes, more than 300 veterinary officers and the associated technical staff are responsible for testing the composition and evaluating food of animal origin.

Owing to the great increase in the scope of the investigation assignments, continual adjustments have to be made to the requirements of food monitoring. There is thus a tendency to set up testing stations containing more staff and technical equipment. In order to improve the inspection capacity, the Länder have enacted a number of administrative measures, mainly the formation of specialist inspectorates for various fields of investigation. One tendency is for investigations on particular foods and consumer goods to be made the sole responsibility of one office inside the entire Land.

4. Nature of disciplinary proceedings

In the event of infringements against food regulations, specialist reports and/or the findings of the inspection institutes will be sent in writing to the competent authorities for further action (criminal charges, fixed penalty notice, caution, instruction, order, injunctions, impounding, or confiscation).

On the basis of the criminal and fixed-penalty regulations in LMBG Sections 51-54, individual offences can be punished either as criminal offences or as minor breaches of regulations.

4.1 Criminal offences

Criminal offences, i.e. wilful and negligent infringements against health regulations, are punished by up to two years' punishment (up to one year for negligence) or by a fine (LMBG Section 51). In particularly serious cases the punishment is from six months to five years' imprisonment. Wilful infringements of the regulations against deception or regarding additives, labelling and residues are punished by up to one years' imprisonment or by a fine (LMBG Section 52).

4.2 Minor breaches of regulations

Negligent infringements of the regulations regarding deception, additives, residues and hygiene are minor breaches of regulations and punishable by a fine of up to DM 50 000 (LMBG Section 53).

There are special regulations for infringements involving residues. In such cases, a person is guilty of a minor breach of regulations if he uses or adds pesticides or pharmacologically active substances without permission or imports food treated with such materials. Breaches occur only in cases of gross negligence.

Wilful, negligent infringements of hygiene regulations or medical advertising regulations are punishable by a fine of up to DM 50 000; corresponding infringements of labelling regulations are punishable by a fine of up to DM 25 000. A person is guilty of a minor breach of regulations if he fails to comply with the obligations relating to information, labelling and reporting; the fine may be up to DM 1 000 (LMBG Section 54).

In the case of minor breaches, the monitoring authorities and officials can warn the person concerned and impose a warning fine of up to DM 20.

4.3 Confiscation

Articles in connection with which an offence or breach has been committed may be confiscated (LMBG Section 55).

5. Co-operation between Federal and Länder authorities

The general obligation of all Federal and Länder authorities to co-operate in legal and official matters is based on the basic Act, Section 35, para 1 and is specified in greater detail in the Administrative Procedure Act.

At regular intervals (two or three times a year) questions of supervision, testing and judging of food are discussed and co-ordinated in the following Länder Committees, which always include representatives of the Federal Ministry for Youth, Family and Health:

1. Study group of the leading veterinary officials of the Länder (German abbreviation Argevet) and the Argevet Food Monitoring Committee (AfLMÜ)

2. The Food Hygiene and Food Monitoring Committee of the study group of the leading Länder medical officials (ALU).

3. The working party of food chemistry experts of the Länder and the Federal Office of Health (ALS).

4. The working party of veterinary specialists in food hygiene (ALTS).

ANNEX

Report on "Food Monitoring in the Federal Republic of Germany"

Addresses of Länder Authorities responsible for food monitoring

1. Supreme Länder Health Authorities

Land Authority	Telex No	Telephone
Baden-Württemberg: Ministerium für Arbeit, Gesundheit und Sozial- ordnung des Landes, Baden-Württemberg, Rotebühlplatz 30 D-7000 STUTTGART	7 22 54 8	Stuttgart 66731
Bavaria: Bayerisches Staats- ministerium des Innern, Odeonsplatz 3, D-8000 MÜNCHEN 22	5 24 54 0	München 21921
Berlin: Senator für Gesundheit und Umweltschutz, An der Urania 12-14, D-1000 BERLIN 30	1 83 79 8	Berlin 21221
Bremen: Senator für Gesundheit und Umweltschutz, Bahnhofsplatz 29, D-2800 BREMEN 1	2 44 80 4	Bremen 3611
Hamburg: Gesundheitsbehörde der Freien und Hansestadt Hamburg, Tesdorpfstrasse 8, D-2000 HAMBURG 13	2 12 12 1	Hamburg 441951
Hesse: Hessischer Sozialminister, Adolfsalle 59, D-6200 WIESBADEN	4 18 68 17	Wiesbaden 8151
Lower Saxony: Niedersächsischer, Sozialministerium, Hinrich-Wilhelm-Kopf-Platz 2, D-3000 HANNOVER	9 23 53 0	Hannover 1901

Land Authority	Telex No	Telephone
North Rhine-Westphalia: Minister für Arbeit, Gesundheit und Soziales des Landes Nordrhein-Westfalen, Horionplatz 1, Landeshaus, D-4000 DÜSSELDORF	8 58 21 92	Düsseldorf 8351
Rhineland-Palatinate: Ministerium des Innern, Schillerplatz 5, D-6500 MAINZ/RHEIN	4 18 76 09	Mainz 161
Saar: Minister für Familie, Gesundheit und Sozialordnung, Hindenburgstrasse 21, D-6600 SAARBRÜCKEN	4 42 13 94	Saarbrücken 5929
Schleswig-Holstein: Sozialminister des Landes, Schleswig-Holstein, Brunswiker Str. 16-22, D-2300 KIEL 1	2 99 87 1	Kiel 5961
2. Supreme Länder Veterinary Authorities:		
Land Authority	Telex No	Telephone
Baden-Württemberg: Ministerium für Ernährung, Landwirtschaft und Umwelt, Marienstrasse 41, D-7000 STUTTGART 1	7 21 60 8	Stuttgart 66761
Bavaria: Bayerischen Staatsministerium des Innern, Odeonsplatz 3, D-8000 MÜNCHEN 22	5 24 54 0	München 21921
Berlin: Senator für Gesundheit und Umweltschutz, An der Urania 12-14, D-1000 BERLIN 30	1 83 79 8	Berlin 21221
Bremen: Senator für Gesundheit und Umweltschutz, Bahnhofsplatz 29, D-2800 BREMEN 1	2 44 80 4	Bremen 3611

Land Authority	Telex No	Telephone
Hamburg: Gesundheitsbehörde der Freien und Hansestadt, Hamburg, Tesdorpfstrasse 8, D-2000 HAMBURG 13	2 12 12 1	Hamburg 441951
Hesse: Hessischer Minister für Landwirtschaft und Umwelt, Hölderlinstrasse 1-3, D-6200 WIESBADEN	4 18 68 14	Wiesbaden 8171
Lower Saxony: Niedersächsischer Minister für Ernährung, Landwirtschaft und Forsten, Calenberger Str. 2, D-3000 HANNOVER	9 22 70 9	Hannover 1901
North Rhine-Westphalia: Minister für Ernährung, Landwirtschaft und Forsten des Landes Nordrhein-Westfallen Rossstrasse 135, D-4000 DÜSSELDORF	8 58 49 65	Düsseldorf 45631
Rhineland-Palatinate: Ministerium des Innern, Abteilung 5, Schillerplatz 5, D-6500 MAINZ	4 18 76 09	Mainz 161
Saar: Ministerium für Familie, Gesundheit und Sozialordnung, Hindenburgstrasse 23, D-6600 SAARBRÜCKEN 1	4 42 13 94	Saarbrücken 5929
Schleswig-Holstein: Minister für Ernährung, Landwirtschaft und Forsten des Landes Schleswig-Holsein, Düsternbrooker Weg 104-108, D-2300 KIEL 1	2 92 75 1	Kiel 5961

France : H. CARRE, Inspecteur Divisionnaire du Service de la Répression des Fraudes et du Contrôle de la Qualité, Nantes

CONTENTS

THE MONITORING OF FOOD

The monitoring of food in France is the responsibility of the Ministry of Agriculture, the task itself devolving chiefly on the following two departments, which belong to the Quality Directorate, one of the seven directorates of this ministry :

- the Service de la Répression des Fraudes et du Contrôle de la Qualité (RFCQ) the "Department for the Restraint of Fraud and Supervision of Quality", and
- the Service Vétérinaire d'Hygiène Alimentaire (SVHA), the "Food Hygiene Veterinary Department".

The result is a considerable centralization of facilities and action undertaken, together with a uniform territorial system of monitoring departments and a single set of principles applied to the entire national territory, within the scope of the authority and powers of these two departments,

I - THE LEGAL BASIS OF FOOD MONITORING

The monitoring of food in France is legally based on the following two fundamental texts:

- the Act of 1 August 1905 on fraud and adulteration, and
- the Act of 8 July 1965, relating, among other things, to the health and qualitative inspection of live animals and animal food or food of animal origin.

These texts are supplemented by general provisions relating, among other things, to advertising, names of origin and certificates of quality.

A - THE ACT OF 1 AUGUST 1905

This is both a criminal Act defining a certain number of general principles and an outline Act for continually adapting the regulations to modern developments and knowledge. In order to apply the Act, the Service de la Répression des Fraudes was set up by the Finance Act of 30 January 1907.

1 - GENERAL PRINCIPLES

The Act of 1 August 1905 protects the health and material interests of consumers. It provides penalties for the following four classes of offence:

a) Fraud and attempted fraud

All goods must be sold for what they really are. This is the fundamental principle of Article 1 of the Act of 1 August 1905, which thus gives material protection to consumers' interests and to fair competition, more particularly in the matter of food.

The Act lists the factors capable of constituting an offence of fraud, i.e. nature, species, origin, main qualities, composition, content of useful substances, quantity, identity, suitability for use, inherent risks in use, tests conducted, method of use and required precautions.

b) Adulteration

Adulteration of food is restrained by the general provisions of the Act, both in order to prevent fraud or attempts at fraud and also to protect the consumers' health. Adulteration consists in illegally modifying, before sale, the composition or state of a food, either by removing a component normally present or by adding a lower-value component or an additive not expressly permitted in the food, or more generally by applying any unauthorized treatment, even if purely physical.

c) The possession without legitimate reason, or display, offering for sale, or sale of adulterated, tainted or toxic food;

d) The possession without legitimate reason, or display, or offering for sale of products, objects or devices used for adulterating food, or encouragement to use such objects; employing any commercial or publicity methods or the possession of false or inaccurate weights or other measuring instruments.

2 - STATUTORY POWERS GRANTED TO THE GOVERNMENT BY THE ACT OF 1 AUGUST 1905

In Article 11, the Act empowers the Government to adopt, by decree, any measures required for implementing it, most particularly with regard to the following:

- inspection procedure, i.e. the formalities before taking action, the choice of methods of analysis, and the authorities entitled to make searches;
- the definition, composition and names of goods, the manner of displaying them by means of labels, the commercial documents or advertising, and the conditions of sale or even free distribution of any goods;
- the permitted treatment which may be applied to the goods;
- the cleanliness of undertakings where food is prepared, preserved or sold (apart from food more specifically subject to health checks by the Veterinary Departments) and the cleanliness and state of health of the persons working in those places.

This power granted to the Government has been widely used and has resulted in numerous decrees and orders, i.e.:

- a procedural decree (decree of 22 January 1919);
- some one hundred public administrative food regulations defining the products and the conditions of sale;
- texts of general reference, updated if required, on the following subjects, among others:

. additives: principle of positive lists	Decree of 15 April 1912 Order of 28 June 1912
. materials in contact with foods and drinks:	Decree of 15 April 1912
- purity and inertness of constituents, list of permitted components	Decree of 12 February 1973
. cleaning products positive list of permitted constituents	Decree of 12 February 1973 Order of 27 October 1976
. residues and contaminants possibility of fixing permissible residual rates by means of orders	Decree of 30 July 1971 Order of 27 March 1973 (oestrogens) Order of 5 July 1973 (pesticides in fruits and vegetables)

. irradiation of food - principle of general prohibition except for specific authorization by way of Orders, under supervision of the RFCQ department	Decree of 8 May 1970 Decree of 12 February 1973 Order of 8 November 1977 (potatoes) Order of 2 August 1977 (onions, garlic and shallots)
. labelling and display - prohibition of ambiguous presentation of any food or drink, and obligation to provide informative labels on goods pre-packed for retail sale	Decree of 12 October 1972

B - ACT OF 8 JULY 1965

This Act modified the provision of the rural code, which provided for health inspection of animals for slaughter. The Act extended the scope of action to the inspection of the wholesomeness and quality of all animal food or food of animal origin and to the inspection and supervision of hygienic conditions under which the food is prepared and preserved, including those during transport and when put on sale. The reason for the Act is that animal food is constantly changing and the legislator wished to provide the means for checking its wholesomeness up to the stage when sold to the consumer;

To this end, a State Department of Food Hygiene (Service d'Etat d'Hygiène Alimentaire) has been set up and is staffed by veterinary specialists aided by health technicians or officials having the status of civil servants or state officials.

The health and qualitative standards which must be met by animals, animal foods and food of animal origin before being judged fit for consumption, are fixed by order of the Ministry of Agriculture or, in the case of sea products, by joint order of the Minister of Agriculture and the minister responsible for sea fishing. Thus, the responsible ministers have flexible, efficient statutory powers, which have enabled them to make a series of enactments of general scope relating, amongst other things to:

. the hygienic conditions applicable on fishing boats and in undertakings for processing, and the wholesale and retail sale of sea and freshwater products (Orders of 1, 2, 3 and 4 October 1973);

. the health-stamping of meat and meat-based products (Order of 15 May 1974);

. the hygiene of undertakings for collecting and processing milk and dairy products (Order of 15 May 1974);

. the preparation and sale of minced meat for human consumption (Order of 15 May 1974);

. the hygienic conditions for freezing and thawing animal food and food of animal origin (Order of 26 June 1974);

. the preparation, preservation, distribution and sale of precooked dishes (Order of 26 June 1974);

. the stamping of carcasses and poultry offal or giblets (Order of 30 July 1976);

. cut, pre-packed poultry meat (Order of 5 February 1977);

. egg products for human consumption (Order of 8 July 1977);

. the preparation of cut meat, whether boned or not (Order of 18 July 1977).

C - OTHER TEXTS OF GENERAL SCOPE

1 - Act of 27 December 1973, Article 44, restraining misleading advertising.

This text supplements Article 1 of the Act of 1 August 1905 and increases the efficiency of material protection of consumers and fair competition.

2 - Act of 6 May 1919 on names of origin.

A name of origin is the name of a country, region or locality used to denote a product which originates there, the quality or character of the product being due to the geographical area, including both natural and human factors.

In accordance with the Act:

- the right to the name of origin is limited, either by an approach to the civil courts by the parties concerned or by administrative decision. In both cases, an enquiry is instituted in order to find out and give official approval to fair, consistent usages;
- the names thus defined are protected and penalties are imposed for any fraudulent use thereof.

With regard to food, this protection relates mainly to certain typical products of the soil, such as wine, spirits and cheese.

3 - The Agricultural Guidance Act of 25 August 1960, Article 28, providing for the use of agricultural stamps.

Agricultural stamps are collective marks showing that a food or agricultural product has a distinct set of specific qualities and properties which have previously been fixed and which establish a quality level.

An agricultural stamp can be used only after approval by a commission at the Ministry of Agriculture, more particularly after examination of the production procedure.

The specification of quality is the responsibility of the owner of the stamp (a trade association, regional chamber of agriculture, etc.), i.e. a legal entity which may not take part in producing or selling the product.

The public authority limits its actions to checking that the internal monitoring laid down by the technical regulation is properly applied, thus providing a second-level check. Administrative penalites (withdrawal of the stamp) or criminal penalties are laid down for inefficient operation or fraudulent use.

Agricultural stamps relate mainly to poultry, pork-butchers'meat, fruit and vegetables.

II - DESCRIPTION AND STRUCTURE OF THE MONITORING SYSTEM

A - THE AUTHORIZED DEPARTMENTS

1 - With regard to the restraint of fraud and detection of infringements of health and qualitative food standards, numerous officials, in addition to those in the Restraint of Fraud and Veterinary Departments, are given powers (i.e. by the Decree of 22 January 1919, Article 4 and the Act of 1 August 1905, Article 12-1). The persons in question are: judicial police officers, departmental medical inspectors of health, and employees of the Sea Fishing Institute, the department of weights and measures, the Customs, the taxation and prices departments, etc.

At present, this wide range of powers provides possibilities which could be used if necessary. In practice, however, the monitoring of food is increasingly becoming the business of specially trained personnel, i.e. the staff of the Service de la Répression des Fraudes and of the Service Vétérinaire d'Hygiène Alimentaire, whereas metrological checks are the responsibility of the Service des Instruments de Mesure (department of weights and measures).

2 - With regard to the health inspection of animal food or food of animal origin, authority is vested in the veterinary specialists of the Service Vétérinaire d'Hygiène Alimentaire, assisted by technicians or health officials, who have the power to impound food pending its examination and decision by the veterinary inspector.

Depending on the needs of the department, the technical staff can be supplemented by veterinary inspectors or by health officials with the status of full-time employees on contract or hourly-paid part-time employees.

B - DUTIES AND DISTRIBUTION OF AUTHORITY

With regard to the drafting of texts and the application of food regulations, the distribution of duties between the RFCQ and SVHA is substantially as follows:

1 - SERVICE DE LA REPRESSION DES FRAUDES ET DU CONTROLE DE LA QUALITE

Defining and improving the quality of agricultural and food products, during production and during sale. Hygienic and quality monitoring of conformity to standards. Protection of names of origin. Checking the fairness of transactions and publicity.

2 - SERVICE VETERINAIRE D'HYGIENE ALIMENTAIRE

Checking the cleanliness, quality and wholesomeness of animal food or food of animal origin. Defining and checking the conditions under which the food is prepared, handled, transported and distributed, including inspection of the installations and the cleanliness of the staff.

With regard to the common field of action of the two departments (animal food or food of animal origin), the distribution of duties in the matter of drafting the texts is substantially as follows:

- in general, the Fraud Restraint Department, in accordance with Article 11 of the Act of 1 August 1905, is responsible for laying down the composition and presentation of food and the permitted treatment which may be given to it.
- It is the responsibility of the veterinary department, in accordance with the Act of 8 July 1965, to make certain permitted treatments obligatory for hygienic reasons.

This distribution of powers with regard to the preparation of texts is, of course, reflected in the monitoring of food i.e. the RFCQ is responsible for the fairness of transactions and for ensuring that only permitted treatment is applied, whereas the SVHA ensures compliance with the food health rules.

Clearly, these two classes of duties are complementary, with the result that employees of the two departments often form a team for making combined inspections.

C - STRUCTURE OF THE FRAUD RESTRAINT DEPARTMENT

The department serves the dual purpose of drafting texts and supervising the regulations defining the duties of the department.

The Service de la Répression des Fraudes et du Contrôle de la Qualité employs a total of some 1250 people, i.e. 150 in the Central Department, 800 on inspection duties and 200 in laboratory work.

1 - THE CENTRAL DEPARTMENT

The Central Department, which is a legal, scientific and administrative structure, is responsible for:

- helping to lay down food policy and to enact the corresponding regulations, in association with the other departments of the Ministry of Agriculture and, if required, with other ministries, after consultation with organizations such as the Conseil d'Etat, the Conseil Supérieur d'Hygiène Publique de France and the Académie de Medécine;
- guiding, co-ordinating and supervising the action of external officers responsible for inspection, and;
- maintaining the necessary permanent contacts with consumers, professional workers and other public departments.

The Central Department also takes part in the work of international courts (i.e. EEC, Codex Alimentarius, Council of Europe), whose aims include that of harmonizing agricultural markets and national food regulations.

2 - INSPECTION DEPARTMENTS

A distinction must be made between a) the General Inspection Department, which has a variety of duties and covers the entire country on a regional and departmental scale except for Paris and the three inner-ring "départements" (Hauts de Seine, Seine Saint Denis and Val de Marne) where inspection is the responsibility of the Prefecture of Police and b) specialized national teams.

a) The General Inspection Department

This is divided into 25 regional divisions, directed and guided by a divisional inspector, each including a number of departmental inspectorates.

In each department, a civil servant belonging to the State Staff of Inspectors for the Restraint of Fraud, is in charge of all the inspection staff, who consist mainly of State Supervisors. Subject to approval by the Minister of Agriculture, the State Inspectors may be assisted by supervisors paid by area administrations (e.g. those of "départements" or local authorities) and by employees paid out of trade association funds.

The activity of the regional inspection departments is not limited to monitoring. The duties of the departmental and regional inspectorates include that of helping to draft regulations by making the necessary enquiries and research. The departments are also responsible for publicity and the necessary liaison with public authorities, trade organizations and consumer groups.

b) National teams

The teams are governed by different organizational principles. They serve a narrowly specialized purpose and have powers extending throughout the country, thus giving them the required efficiency and flexibility of operation.

With regard to food, the Service de la Répression des Fraudes et du Contrôle de la Qualité at present comprises the following two national teams:

- the teams for monitoring horticultural products and poultry (about 200 employees) whose activity, in the case of food, relates to fruit, vegetables and eggs in shell, more particularly during export;
- the team for monitoring wine and spirits (about 50 employees), who use methods of investigation requiring trained staff, experienced in matters which include auditing (inspection of registers and documents accompanying the goods at all stages of sale).

3 - LABORATORIES

Most laboratories are multi-purpose and on an inter-regional scale, at least with regard to physical and chemical analyses. Their powers extend not only to food but also to agricultural and manufactured products.

Their main activities are 1) to make daily analyses of samples of products taken by the inspectorate in order to detect any infringements and 2) to conduct study and research into new methods of analysis.

At present, the Service de la Répression des Fraudes has seven laboratories of its own, namely the Central Laboratory of Massy, the inter-regional laboratories of Bordeaux, Marseilles, Montpellier, Rennes and Strasbourg and the laboratory of Saint Denis de la Réunion. The department also makes use of external institutions belonging to the State or, more frequently, to "départements" or local authorities, which are authorized to make physical and chemical or bacteriological analyses.

The laboratories are required to follow official methods (when such exist) of analysis resulting fromt the work of the "Commission générale d'unification des méthodes d'analyse" (CG d'UMA), a research and co-ordinating body directly attached to the Central Department and having the following main duties:

- to standardize the methods of analytical investigation and
- to develop new techniques.

D - STRUCTURE OF THE FOOD HYGIENE VETERINARY DEPARTMENT

1 - CENTRAL DEPARTMENT

The functions of this department are similar to those of the Central Department for Restraining Fraud and monitoring quality, i.e.:

- drafting of texts, mainly via Ministerial Orders;
- guiding and co-ordinating the territorial departments, and;
- national and international representation.

2 - INSPECTION DEPARTMENTS

These were set up by the Decree of 31 March 1967, which defined veterinary inspection divisions in each département of France. The divisions vary greatly in territorial extent. They may be limited to a single local authority area if they serve an important purpose there.

Each division is directed by a veterinary inspector, who is a state official. If required, the technical staff of each division include other veterinary inspectors. The inspectors are assisted by technicians (who are now being recruited) and health officials (recruited by the old method), both groups being civil servants.

Depending on departmental requirements, the technical staff may be supplemented by veterinary inspectors or health officials having the status of full-time employees on contract or hourly-paid employees, these being appointed by the Minister of Agriculture and sworn in before the Courts.

In each département of France, the entire inspection staff comes under the Veterinary Inspector responsible for veterinary services in each département.

The present inspection staff is as follows:

Regular veterinary inspectors	359
Veterinary inspectors on contract	52
Full-time hourly-paid veterinary inspectors	23
Part-time hourly-paid veterinary inspectors	1450
Technicians in the veterinary departments	673
Regular health officials	423
Health officials on contract	60
Full-time hourly-paid officials	507
Part-time hourly-paid officials	521

3 - LABORATORIES

These are fairly uniformly distributed over the entire country. At present nearly all the départements of France (86) have a veterinary laboratory. The laboratories are departmental and are financed by the local authority area, i.e. the département.

In addition the Service Vétérinaire d'Hygiène Alimentaire is responsible for State laboratories concerned with applied research, i.e.:

- the Central Laboratory of Food Hygiene, Paris;
- the Hygiene Research Laboratory, Nice;
- the Veterinary Research Laboratory, Ploufragan;
- the National Study and Research Centre for the Catering Trade, Paris.

E - TRAINING OF PERSONNEL

1 - SERVICE DE LA REPRESSION DES FRAUDES ET DU CONTROLE DE LA QUALITE

a) Recruitment

The Service de la Répression des Fraudes et du Contrôle de la Qualité recruits staff at the following two levels of general education:

- university education (engineers from professional colleges - university degree): inspectors and heads of laboratories, and
- secondary education certified by Baccalauréat or equivalent diploma, more specifically one in agricultural training: supervisors and laboratory technicians.

In all cases, recruitment is by competition. Successful applicants are given a one-year course at the Centre National de Formation et de Perfecionnement (CNFP) of staff, at Montpellier. The Centre also, on request, undertakes to prepare candidates for the competition.

b) Further training

The CNFP also gives further training to its staff in the course of their duty,

- by organizing collective further-training courses lasting about one week. In 1977 there were 12 courses of this kind for different groups of inspectors or supervisors, accounting for a total of 255 participants;
- by taking responsibility for individual further training by specialized organizations. In 1977, 18 inspectors or laboratory heads benefited from this kind of instruction.

c) Documentation

The CNFP has a publishing section which publishes the text of regulations, manuals providing preparation for competitive examinations, training courses, reports on further training stages, the results of individual enquiries and documents providing information for the public.

2 - SERVICE VETERINAIRE D'HYGIENE ALIMENTAIRE

The SVHA also recruits its staff at two levels of education:

Veterinary inspectors are recruited:

. by external competitive examination among qualified veterinary surgeons, or

. by internal competitive examination of students in national veterinary colleges at the end of their third year. The students then return to their college for their fourth year of study, leading to the qualification of veterinary surgeon.

In both cases, the recruits complete a year of additional training in the subjects in which increased knowledge is required by the veterinary inspectorate staff. Probation courses are provided at the Ecole Nationale du Génie Rural for teaching refrigeration techniques and at the Centre de Formation du Personnel de la Répression des Fraudes at Montpellier.

Technicians are recruited by competitive examination of people holding the Baccalauréat or an equivalent certificate. The recruits are given nine months' instruction at the Centre de Formation et de Perfectionnement attached to the Ecole Nationale Vétérinaire at Lyons, with a view to acquiring the necessary knowledge relating to the hygienic quality of animal food or food of animal origin. Next, the students take a three-month probation course geared to a special subject. They are also trained in refrigeration techniques so that they can officially approve vehicles operating at a controlled temperature.

In addition, official technicians are given further instruction with regard to the health aspects of milk, eggs and derivatives thereof, at a further training centre attached to the Ecole Nationale Vétérinaire at Toulouse.

III - ACTION WHICH MAY BE TAKEN BY THE MONITORING DEPARTMENTS

Monitoring can be carried out systematically or by sampling. In the first case, the inspection is recorded:

- by a stamp or mark affixed by the Service Vétérinaire d'Hygiène Alimentaire (who check the wholesomeness of meat, cooked dishes and egg products) or;
- a stamped band affixed by the Service de la Répression des Fraudes et du Contrôle de la Qualité (who check the quality of exported fresh eggs, vegetables and fruit).

Inspections by sampling can be made in accordance with a plan of action at departmental level or for the originating division or in the form of individual or combined operations, limited in time and area, but sometimes extending to the whole country.

The inspections can be made during production, packing or any stage in the wholesale or retail sale of food. These follow various procedures, which may or may not require laboratory facilities. If the standards are found to be infringed or disregarded, the inspections may result in administrative or legal action.

Monitoring may also be carried out at a second level or by participation in approval commissions, in which case the object is to evaluate the efficiency of a professional monitoring system (e.g. agricultural labels or approval commissions for wine).

A - DIRECT FINDINGS

1 - SERVICE VETERINAIRE D'HYGIENE ALIMENTAIRE

With regard to veterinary inspections, the direct findings constitute the basis for action, since the main aim is to check the wholesomeness of animal food or food of animal origin by the following two methods:

- examination of the constituent raw materials, or
- monitoring of the conditions under which the food is handled, processed, transported, stored and distributed.

2 - SERVICE DE LA REPRESSION DES FRAUDES ET DU CONTROLE DE LA QUALITE

Similarly, direct observation is the normal form of action by the Service de la Répression des Fraudes et du Contrôle de la Qualité, when checking weights or volumes, checking labels or methods of display, or ensuring that the production conditions are hygienic and the food is distributed under favourable conditions (e.g. temperature, stock rotation and withdrawal of goods after a given period).

In addition, direct monitoring is a conventional and normal method of finding the exact composition and characteristics of products. Accordingly, inspections are conducted mainly at production and packing establishments, and consist chiefly in checking off and examining raw materials, the additives used, and the technical processes employed.

A direct inspection may also include the examination of documents (forwarding certificates, pamphlets, catalogues, invoices, etc.), and may even include a final audit.

In their reports, the inspectors may also include specimens of packing or labelling and, if necessary, a sample of the tested product for use a evidence.

B - USE OF LABORATORIES

1 - SERVICE VETERINAIRE D'HYGIENE ALIMENTAIRE

The main aim of the laboratory is to provide the veterinary inspector with an additional means of investigation in doubtful cases, e.g. with regard to the justification for seizing food.

In such cases, pending the results of analysis, the food is placed under seal so that it cannot be used.

The laboratory will give a descriptive report of the food without indicating what action should be taken; the power of decision rests with the veterinary inspector, who will evaluate the analytical results while taking account of other information in his possession.

Of course, the laboratory plays a more crucial part in evaluating the microbiological quality of processed product (e.g. minced meat and cooked dishes). Even in such cases, however, the decision will be greatly influenced by the general environment in which the product is handled, processed, stored and distributed.

2 - SERVICE DE LA REPRESSION DES FRAUDES ET DU CONTROLE DE LA QUALITE

When the service of the laboratory is required, monitoring is based on sampling, which may take a number of forms:

a) Multiple sampling

Usually, three samples are taken with a view to physical and chemical analysis. One sample is intended for the laboratory, and the other two are for counter-evaluation if required.

Legal action may be based entirely on the analytical results, in which case the suspected person must be given the opportunity to obtain a counter-evaluation as he is entitled to do by law.

b) Single samples for physical and chemical examination.

In the case of products which perish rapidly or are difficult to break up, a special procedure is laid down for taking single samples whereby a legal expert's report is obtained immediately, without involving the administrative laboratory.

However, it is rare to use single samples when taking legal action. Single samples are usually obtained for information and sent to the adminsitrative laboratory. This laboratory then provides the inspector with useful additional facts to assist him in decision-making or increases his knowledge of the undertakings he supervises and of which he needs information.

c) Microbiological sampling

The Service de la Répression des Fraudes et du Contrôle de la Qualité conducts microbiological tests on food in co-operation with the Service Vétérinaire d'Hygiene Alimentaire, in accordance with a procedure for distributing duties and co-ordinating action and information, depending on the location and the product, defined in detail by a circular from the Quality Directorate dated 14 February 1978.

For historical reasons, the Service de la Répression des Fraudes et du Contrôle de la Qualité bears the main responsibility for hygienic testing of pasteurized milk for humain consumption, ice, ice cream and water ices.

Usually, persuasion or administrative action will be sufficient to obtain the desired results. However, if the defaulting party is particularly recalcitrant,

a procedure is laid down for obtaining a counter-evaluation and thus applying the criminal penalties stipulated by the Act of 1 August 1905.

C - LIMITS AND PLACES OF MONITORING

1 - SERVICE VETERINAIRE D'HYGIENE ALIMENTAIRE

Veterinary officials have free access, night and day, to abattoirs and associated buildings, including markets for live animals, and to all places where animal food or food of animal origin is processed, converted or handled.

Premises where the activity is limited to storage, transport or distribution of food may be inspected only by day.

With regard to the inspection of documents, the veterinary officials have the same powers as the Fraud Restraint Department, since they are empowered to assist in enforcing the Act of 1 August 1905.

Failure to co-operate with the inspector is punishable by a fine of FF 200 to 2 000.

2 - SERVICE DE LA REPRESSION DES FRAUDES ET DU CONTROLE DE LA QUALITE

The fraud restraint officials and, in general, all officials empowered to assist in enforcing the Act of 1 August 1905 are free to inspect all places of manufacture, production, processing, storage, warehousing or sale, vehicles used for conveying goods, and places where animals are kept or slaughtered in order to provide meat or other products for consumption.

No limitation regarding the hours of inspection is laid down, but it is usual, apart from exceptional cases, to limit inspections to the normal working hours of the establishments in question.

In the cases where the undertaking does not pay occupational taxes, i.e. when its activity is not industrial or commercial (e.g. in the case of agricultural producers), an inspection may not be carried out against the wish of the persons concerned, unless the official requests, and is granted, authority by the judiciary.

Persons whose undertakings are inspected are obliged to make contracts of sale, invoices, confirmations of orders, delivery notes and all other financial or commercial documents available for scrutiny. In practice, only private documents are excluded.

Public authorities must provide the inspectors with all information required for performing their duties.

In the case of advertising, advertisers must justify the correctness of their statements when asked to do so by the inspector. In practice, this constitutes a reversal of the onus of proof.

Refusal to co-operate is punishable in the same manner as fraud itself.

IV - NATURE OF LEGAL ACTION AND OF PENALTIES IMPOSED

Inspections may be followed by either administrative or judicial action.

A - ADMINISTRATIVE MEASURES

1 - WARNINGS

In view of the policy of co-operation generally followed during inspections, most particularly those of manufacturers, the inspectors will naturally warn the persons concerned about anything that may appear to contravene the existing regulations. The inspectors make wide use of this procedure, since it usually results in an immediate end to the dispute. In addition, if the warning is disregarded, the attitude of the person conerned may be interpreted as increasing the seriousness of the offence or as evidence of bad faith, and may thus affect the severity of the penalty.

In the case of milk for consumption which does not meet the bacteriological standards, a warning must be given before sale is prohibited.

2 - DOWNGRADING, REGRADING, CHANGE OF USE, WITHDRAWAL OF APPROVAL

a) Animal food or food of animal origin

Veterinary inspectors are empowered to decide on the special use to be made of animal food or food of animal origin which cannot be made fit for human consumption although it is not a danger to health. They thus have the power to return food to commercial use, usually after heat-treatment under their supervision, in cases in which it would be wasteful simply to destroy the food.

With regard more particularly to fresh eggs, the SVHA and RFCQ apply the provisions of EEC Regulation 2772/75 with regard to downgrading and changes of use (breaking, conversion to industrial use).

b) Fruit and vegetables

The Service de la Répression des Fraudes et du Contrôle de la Qualité may refuse permission to import, or may downgrade, regrade or change, the permitted use of fruit and vegetables in accordance with EEC Regulation 80/63.

c) Wine

The Service de la Répression des Fraudes et du Contrôle de la Qualité is alone empowered to downgrade a quality wine if it no longer has the analytical or organoleptic properties of its class. This may be done either on the Department's initiative or at the request of the wine-dealers, after analysis and following the deliberations of a special commission consisting of a majority of professional wine-producers and wine-merchants. The downgraded wine can be placed in a lower category (e.g. vin ordinaire) or given a different approved use (e.g. in vinegar or for distilling).

d) Labelled products

At the request of an inspection commission including representatives of the Service de la Répression des Fraudes et du Contrôle de la Qualité, the Ministry of Agriculture may order the withdrawal of the right to use a label. This may be done, for instance, when the monitoring by the certifying organization has been found defective or when the characteristics laid down in the Regulations appear insufficient owing to developments in the production or sale of the product in question.

3 - IMMEDIATE SAFETY MEASURES

a) Prohibition of sale

At the request of the monitoring department, the Prefects may forbid sale for a given time, e.g. in the case when, after two warnings, pasteurized milk is still below the regulation bacteriological standards.

Pre-packed food rejected because of its incorrect weight or volume may be marked "not for sale" by the inspectors, so that the food cannot be sold.

b) Seizure

Seizure takes two forms, depending on whether ordered by the veterinary inspectors or by fraud restraint officials.

Veterinary seizure is frequently preceded by sealing-up, which may be ordered by a veterinary technician or official. The decision is strictly administrative and there is no possibility of appeal in practice. This relates to food recognized as unwholesome after direct examination, followed by a laboratory examination of necessary.

In accordance with the fraud restraint procedure, food found after direct examination or analysis to be adulterated, tainted or toxic; or products, articles or apparatus which can be used for adulteration may be seized. Seizure may also be carried out by SVHA officials. The inspector may destroy or sterilize or denature the food. Unlike veterinary seizure, the action is not strictly administrative since it comes under the judicial authority, who must receive a report of the findings and ensure that the operations are legitimate. Subsequent legal action may be taken against the person selling or possessing the goods, if he is found to be criminally responsible.

4 - CLOSURE OF UNDERTAKINGS

By virtue of their general police powers, Prefects (and mayors if necessary) are entitled to order the closure of undertakings for health reasons, on demand by the inspection departments.

Such action, owing to its exceptional severity, is not taken except in very serious cases.

B - LEGAL PROCEEDINGS

The right of compromise, i.e. the proposal of a fine by the administration, does not exist in the matter of commercial frauds; the papers are sent to the legal authorities and the matter is settled either by the criminal courts in the case of relatively serious offences, or by the courts of summary jurisdiction.

Some of the criminal penalties are traditional in French law i.e. fines and imprisonment. Others are more specifically adapted to the nature of the offence e.g. publication of the conviction by displaying it on the doors of the establishment or insertion in the press, publication of correction (in the case of false advertising), and confiscation of the equipment used for the fraud. The legal authorities may also order the discontinuance of advertising even before the judgment, as an immediate safety measure.

The main summary penalties are fines and, rarely, short terms of imprisonment. However, it is very common for the courts to adopt a "totting-up" procedure for the penalties incurred for individual offences, so that very high penalties may result if a large number of sub-standard items haven been sold.

Thus the inspectors, if they make full use of their findings, have considerable coercive powers over recalcitrants. For example, at the Rennes Court of Appeal on 11 July 1975, 541 fines of FF 2 000 were imposed, a total of FF 1 082 000.

In addition, trade associations and consumer organizations have the right to demand reparation from the court for the damage suffered by the collective interests they represent.

To simplify the description, the penalties applicable are set out in the following table.

PENALITES / INFRACTIONS	EMPRISONNEMENT	AMENDE	PUBLICATION DU JUGEMENT	AUTRES PEINES
Tromperies, falsifications, commercialisation de denrées falsifiées, corrompues ou toxiques (art. 1 et 3 de la loi du 1er août 1905)	3 mois à 2 ans	1 000 FF à 250 000 FF	possible	confiscation - obligatoire pour les instruments de pesage et mesurage faux - possible pour les autres instruments suivie de destruction ou changement de destination
Mêmes délits aggravés, (essentiellement en cas d'atteinte à la santé)	6 mois à 4 ans	2 000 FF à 500 000 FF	possible	d°
Détention de denrées fraudées ou d'instruments de fraude (Art. 4, L du 1/08/05)	6 jours à 3 mois	500 FF à 30 000 FF	possible	d°
Même délit aggravé (atteinte à la santé)	3 mois à 2 ans	1 000 FF à 250 000 FF	possible	d°
Infractions en matière de labels (Loi du 5 août 1960)	3 mois à 2 ans	1 000 FF à 250 000 FF	non	non
Usurpation d'appellation d'origine (Loi du 6 mai 1919)	3 mois à 1 an	360 FF à 20 000 FF	possible	non
Publicité mensongère (L. du 27 déc. 1973)	3 mois à 2 ans	1 000 FF à 250 000 FF pouvant être porté jusqu'à 50% des dépenses de la publicité constituant le délit	obligatoire	Annonces rectificatives possibles selon modalités fixées par le Tribunal
Contraventions en matière d'hygiène alimentaire (D. du 21 juil. 1971)	10 jours à 2 mois (en cas de récidive)	200 FF à 2 000 FF	non	non
Contraventions en matière de répression des fraudes (L. du 1er août 1905, art. 13)	non	80 FF à 160 FF	non	non

V - LIAISON BETWEEN THE MONITORING DEPARTMENTS AND THE DEPARTMENTS RESPONSIBLE FOR DRAFTING REGULATIONS

As we have seen, the departments (RFCQ - SVHA) which draft the regulations at the centre are the same as the departments which enforce the regulations via their external branches.

Exchange of information between SVHA and RFCQ, both at the centre and at the external branches, occurs without difficulty since the two departments belong to the same Directorate of the Ministry of Agriculture and also work in the same building i.e. 44, boulevard de Grenelle, Paris.

Local co-operation during inspections is either spontaneous, as a result of events, or organized in accordance with predetermined plans of action, as in the case of "holiday operations", which have regularly been carried out every year for several years, mainly in tourist resorts.

ANNEXE

ADRESSES DES RESPONSABLES REGIONAUX
DES SERVICES DE LA REPRESSION DES FRAUDES
ET VETERINAIRES D'HYGIENE ALIMENTAIRE
(FRANCE)

CONTROLEURS GENERAUX DES SERVICES VETERINAIRES
ADRESSES POSTALES ET TELEPHONIQUES

Région Parisienne
2, rue Crébillon
75006 PARIS
Tél. 633.64.00

Région de Bourgogne - Franche Comté
Cité Delaborde
2, rue Hoche
21000 DIJON
Tél. 05.30.09

Région d'Aquitaine
Marché d'intérêt national Brienne
B.P. 63
33076 BORDEAUX CEDEX
Tél. 91.52.59

Région de Poitou-Charentes
496, Route de Bordeaux
16016 ANGOULEME CEDEX
Tél. 95.20.96

Région - Midi-Pyrénées
10, chemin des Capelles
31300 TOULOUSE

Région du Nord-Champagne
9, Avenue Saint Maur
59110 LA MADELEINE LEZ LILLE
Tél. 55.77.84

Région Provence - Côte d'Azur - Corse
6, Avenue César Franck
13008 MARSEILLE
Tél. 77.12.24

Région Alsace - Lorraine
22, Avenue Carnot
54130 SAINT MAX
Tél. 29.39.62

Région Languedoc-Roussillon
165, Avenue Paul Rimbaud
B.P. 6036
34030 MONTPELLIER CEDEX
Tél. 63.39.30

Région Rhône-Alpes - Département d'Outre-Mer
Hôtel des administrations
9, Quai Créqui
38000 GRENOBLE
Tél. 44.02.82

Région du Centre
113, Rue de la Gare
45000 ORLEANS
Tél. 87.25.88

Région Auvergne - Limousin
11bis, Avenue des Etats-Unis
63000 CLERMONT-FERRAND
Tél. 37.20.86

Région Basse Normandie et Haute Normandie
Cité administrative
Rue Saint Sever
76100 ROUEN
Tél. 70.96.90

Région de Picardie
43bis, Rue de la République
80000 AMIENS
Tél. 92.06.17 - Poste 342

Région Bretagne
8, rue Nationale
35000 RENNES
Tél. 79.09.96

Région du Pays de la Loire
12, Rue Menou
44035 NANTES
Tél. 47.39.05

CHEFS DE CIRCONSCRIPTION REGIONALE ET RESPONSABLES DU CONTENTIEUX
SERVICE DE LA REPRESSION DES FRAUDES ET DU CONTROLE DE LA QUALITE

N°	Ressort	Adresse du bureau et n° de téléphone	Nom et Grade
1	NORD PAS-de-CALAIS	Cité Administrative 59048 - LILLE CEDEX Tél. (20) 52.00.25 52.12.21 Contentieux:	M. HERMET (I.D.) M. BLANQUART (I.)
2	AISNE OISE SOMME	25, Rue Evrard de Fouilloy 80000 - AMIENS Tél. (22) 92.13.68 Contentieux:	M. DESOUTTER (I.D.) N...
3	VILLE de PARIS HAUTS-de-SEINE SEINE-SAINT-DENIS VAL-de-MARNE	14, Quai de Gesvres 75195 - PARIS R.P. SERVICES PUBLICS Tél. 277.11.00 260.33.22 326.06.30 Poste 44-30 ou 50-59	Contrôles exercés par la Direction de la Police Economique & de la Répression des Fraudes de la Préfecture de Police
4	ESSONNEE YVELINES VAL-d'OISE SEINE-et-MARNE	44, Boulevard de Grenelle 75732 - PARIS CEDEX 15 Tél. 575.62.25 Contentieux:	M. ADMENT (I.D.) M. NAVIZET (I.)
5	CHER EURE-et-LOIR INDRE INDRE-et-LOIRE LOIR-et-CHER LOIRET	Cité Administrative Coligny 131, Rue du Faubourg Bannier 45042 - ORLEANS CEDEX Tél. (38) 62.18.91 62.08.47 62.15.20 Poste 202 Contentieux:	M. LEGER (I.D.) N...
6	EURE SEINE-MARITIME	Cité Adminsitrative Rue Saint Sever 76037 - ROUEN CEDEX Tél. (35) 62.81.44 Contentieux:	M. BARDET (I.D.) N...
7	CALVADOS MANCHE ORNE	6, Boulevard du Général Vannier CAEN Adresse postale: B.P. 5057 14040 - CAEN CEDEX Tél. (31) 94.66.66 Contentieux:	M. VERNOUX (I.D.) M. GUIGNE (I.)

N°	Ressort	Adresse du bureau et n° de téléphone	Nom et Grade
8	COTES-du-NORD FINISTERE ILLE-et-VILAINE MORBIHAN	17, Boulevard du Colombier 35100 - RENNES Tél. (99) 30.74.57 Contentieux:	M. PRIEUR (I.D.) M. BONJOUR (I.)
9	LOIRE-ATLANTIQUE MAINE-et-LOIRE MAYENNE SARTHE VENDEE	12, Rue Menou - NANTES Adresse postale: B.P. 1042 44035 - NANTES CEDEX Tél. (40) 47.39.05 Poste 130 Contentieux:	M. CARRE (I.D.) (Honoré) M. DOUSSIN (I.P.)
10	CHARENTE CHARENTE-MARITIME DEUX-SEVRES VIENNE	47, Rue de la Cathédrale 86020 - POITIERS Tél. (49) 88.30.34, 35, 36, 37 I.D. poste 36 Secrétariat poste 31 Contentieux:	M. BOUBE (I.D.) M. VALIN (I.)
11	CORREZE CREUSE HAUTE-VIENNE	Cité administrative Blanqui 87031 - LIMOGES CEDEX Tél. (55) 79.58.18 Poste 237-238 Contentieux:	M. MEYRAT (I.D.) M. DUSART (I.) (Jacques)
12	DORDOGNE GIRONDE LANDES LOT-et-GARONNE PYRENEES- ATLANTIQUES	74, Rue Auguste Poirson 33080 - BORDEAUX CEDEX Tél. (56) 44.13.96 44.96.16 Contentieux:	M. DOCHE (I.D.) M. AKRICH (I.)
13	ARIEGE AVEYRON HAUTE-GARONNE GERS LOT HAUTES-PYRENEES TARN TARN-et-GARONNE	Cité Administrative Bâtiment "E" Boulevard Armand Duportal 31074 - TOULOUSE CEDEX Tél. (61) 23.11.50 Poste 38-04 Contentieux:	M. CABE (I.D.) M. ROUGE (I.) (Aimé)
14	ARDENNES AUBE MARNE HAUTE-MARNE	6 ter, rue Saint-Eloi 51022 - CHALONS-SUR-MARNE CEDEX Tél. (26) 68.30.95 Contentieux:	M. HECKER (I.D.) (par intérim) M. MAIGROT (I.)
15	MEURTHE-et-MOSELLE MEUSE MOSELLE VOSGES	13, Rue de la Gendarmerie - METZ Adresse postale: B.P. 423 57008 - METZ CEDEX Tel. (87) 75.63.09 - 75.71.75 75.67.89 Contentieux:	M. HUMBERT (I.D.) M. GLOTTIN (I.)

N°	Ressort	Adresse du bureau et n° de téléphone	Nom et Grade
16	BAS-RHIN HAUT-RHIN	5, Rue Paul Muller Simonis 67000 - STRASBOURG Tél. (88) 36.17.80 Poste 148 Contentieux:	M. MULLER (I.D.) M. SAVARY (I.)
17	DOUBS JURA HAUTE-SAONE TERRITOIRE de BELFORT	74, Grande Rue - BESANCON Adresse postale: B.P. 135 25014 - BESANCON CEDEX Tél. (81) 82.12.34 Contentieux:	M. HECKER (I.D.) M. SANSEIGNE (I.)
18	COTE-d'OR NIEVRE SAONE-et-LOIRE YONNE	Cité Administrative Delaborde 2, Rue Hoche 21034 - DIJON CEDEX Tél. (80)43.60.01 Contentieux:	M. SEMARD (I.D.) M. FRAICHARD (I.P.)
19	ALLIER CANTAL HAUTE-LOIRE PUY-de-DOME	6, Avenue Marx Dormoy 6300 - CLERMONT-FERRAND Tél. (73) 35.17.21 Contentieux:	M. DUSART (I.D.) (Albert) M. MICALEFF (I.)
20	AIN ARDECHE DROME LOIRE RHONE	149, Rue Pierre Cornaille - LYON Adresse postale: B.P. 21 69397 - LYON CEDEX 3 Tél. (78) 62.20.30 Poste 389 Contentieux:	 M. ARMANET (I.)
21	ISERE SAVOIE HAUTE-SAVOIE	Cité Administrative Dode Rue Joseph Chanrion 38032 - GRENOBLE CEDEX Tél. (76) 54.43.81 Contentieux:	M. DUNIAU (I.D.) M. GREINER (I.)
22	AUDE GARD HERAULT LOZERE PYRENEES-ORIENTALES	Maison de l'Agriculture Place Chaptal 34076 - MONTPELLIER CEDEX Tél. (67) 92.44.90 92.41.42 Contentieux:	M. GAYRAUD (I.D.) M. PLANCHOU (I.)
23	ALPES-de-HAUTE PROVENCE HAUTE-ALPES ALPES-MARITIMES	49, Boulevard de Cessole 06100 - NICE Tél. (93) 84.32.81 Contentieux:	M. VIALLAT (I.D.) (par intérim) M. GAUTHIER (I.)

N°	Ressort	Adresse du bureau et n° de téléphone	Nom et Grade
24	BOUCHES-du-RHONE VAR VAUCLUSE	44, Boulevard Michelet 13295 - MARSEILLE CEDEX 2 Tél. (91) 76.05.26 Contentieux:	M. VIALLAT (I.D.) M. GAUTHIER (I.)
25	CORSE (HAUTE) CORSE du SUD	Résidence Mariani - Bâtiment "G" Quartier Saint Joseph 20000 - AJACCIO Tél. (95) 22.37.78 Contentieux:	M. LUCCHINI (I.D.) N...

Ireland: M.LYONS, Higher Executive Officer, Department of Health, Dublin

Introduction

The two major principles which underlie food legislation in Ireland, in common with other Member States of the E.E.C., are the protection of the health of the consumer and the prevention of fraud. These two principles which are embodied in a wide corpus of food law in Ireland endeavour to ensure that the consumer will get food which is not injurious to his health as a result of adulteration or contamination and also that food will be both sound and wholesome. In addition to protecting the consumer, the law also helps to ensure fair competition on the market by indirectly specifying uniform rules which must be complied with by manufacturer and seller alike.

Early legislation

Food law and its enforcement in Ireland has its origins as far back as the mid-18th century. At that time and for roughly the next 75 years, both Ireland and the United Kingdom had the same food legislation.

In the middle of the 18th century there was little or no legal or administrative control governing the sale of foodstuffs. At the time the diet of the population was very limited and generally home produced. The earliest inspections of food were carried out by inspectors called "GARBLERS" who were appointed by the Grocers' Company to examine parcels of imported spices and to remove from them stones and other visual impurities before they were marketed. In addition, several towns appointed "Ale Conners" whose duty it was to test the quality of the local brew and to mark the barrels with X's according to the quality of the brew.

The beginning of the 19th century saw a rapid increase in urbanisation and industrialisation and this brought with it an increase in the standard of living and an increased demand for several different kinds of foodstuffs. However, this increase in demand was not accompanied by administrative protection for the consumer and adulteration of food became commonplace. For instance, the addition of water to milk, and iron filings and beech leaves to tea, the presence of bone ash and alum in bread, and the addition of chicory and dandelion root to coffee, and of fluor to mustard, pepper and spices were not uncommon. It was said at the time that the only food which was not adulterated was an egg.

At this stage the public were becoming increasingly concerned about malpractices such as these and as a result, the editor of the LANCET established an analytical service for food entitled 'The LANCET ANALYTICAL SANITARY COMMISSION" and because the results of the investigations of this Commission on the adulteration of food were so alarming a Select Parliamentary Committee was appointed to report further on the matter. The Committee reiterated the findings of the Commission and warned that the health of the people was at risk. As a result of the Committee's findings, the first anti-adulteration Act was drafted and in 1860 there appeared on the statute book the "Act for Preventing the Adulteration of Articles of Food or Drink".

With the coming of the Act a new local authority officer appeared on the scene - the Public Analyst - an office which still exists in much the same form today and one which is the pivot around which the enforcement of food law revolves in Ireland. The first public analyst in Ireland was appointed in 1852 and was located in Dublin. The duty of the Public Analyst under the 1860 Act was to examine the purity of articles of food or drink which were on sale to the public, a function which still forms part of his workload today.

The 1860 Act also provided that any purchaser of an article of food or drink who suspected the purity of the article would have a legal right to have the article analysed by the Public Analyst on payment of a fee.

Samples of food and drink which were taken under the Act and analysed to check that they were not adulterated showed that a high level of adulteration of food existed. However, one serious inherent weakness in the act - i.e. the word "adulteration" was not defined - proved to be a weakness in enforcement as it lead to many dismissals in Court primarily over different interpretations by prosecution and defence of what was meant by adulteration.

The Sale of Food and Drugs Act, 1875

Following on the 1872 Act came the first main Act dealing with the control of food in these islands. This Act, which is entitled the Sale of Food and Drugs Act, 1875, is still in operation today. In the Act the word adulteration does not appear but the situation is catered for by section 6 which states that "no person shall sell to the prejudice of the purchaser any article of food or drug which is not of the nature, substance or quality of the article demanded by such purchaser under a penalty not exceeding £20". The Act is designed both to protect the public health and to protect the consumer angainst fraud. While some elaboration may be required on the interpretation of the general phrase "nature, substance and quality" there is no doubt but that the 1875 act is quite specific in its entitlement to the consumer to get safe, sound, wholesome food.

"Nature" deals with substances which are biochemically similar but nevertheless entirely different from the consumer's point of view. For example to sell apples not of the variety asked for, or fish not of the species demanded are cases in point.

"Substance" deals with adulteration and it is to protect the public from this that the 1875 Act is mainly concerned. When an article of food is sold which does not contain the proper ingredients or which contains some adulterant the article is not of the substance demanded. It protects the public, for example, against the addition of water to milk or to whiskey or, in relation to the composition of a foodstuff for example where the filling in an alleged fresh cream cake contains vegetable fat, one is not getting the substance demanded.

The word "quality" deals with situations where any of the attributes which go to make up quality are defective or mould growth has taken place. Examples of this are the sale of bread containing a visible mould or the sale of creamery butter which has an unpleasant odour.

After the passing of the 1875 Act adulteration of many articles of food gradually died out. Tea, flour, bread and coffee are nowadays never found to be adulterated and only occasionally is it found that samples of whiskey and of milk have been watered down.

The Sale of Food and Drugs Act 1875 was followed by Acts dated 1887, 1907, 1935 and 1936 which prescribed compositional standards for butter, margarine, milk and cream. All of these standards are still in operation.

The Health Act, 1947

With the increasing development of food processing in Ireland and the growing use of artificial substances in food, there was an obvious need for more stringent legal measures than those contained in the Sale of Food and Drugs Act to control the use of these substances adequately to protect the public health. This void was filled with the passing of the Health Act, 1947 which gave the Minister for Health wide powers to ensure that food should be safe to eat from the toxicological, hygienic and compositional points of view. Since the Act came into force regulations which I will refer to later have been adopted controlling the use in food of certain additives and of the artificial

sweetener cyclamate, limiting the level of certain contaminants which may be present in food and specifying a compositional standard for ice-cream. The Food Hygiene Regulations, 1950 which will also be enumerated upon later were also made under the Health Act, 1947, and these govern the qualitative aspects of food for human consumption.

This block of legislation made under the Health Act 1947 has become most important in the protection of the public health and with its evolution and the increased use of artificial substances in food the work of the Public Analyst has shifted from adulteration of food to its analysis for the presence of additives and contaminants.

Regulations governing the use of food additives

As mentioned, regulations have been drawn up governing the use of certain additives in food. The additives covered are preservatives, colouring matters, antioxidants, solvents, mineral hydrocarbons and cyclamates.

These regulations specify by means of positive lists the additives and in some cases the permissable levels of the additives which may be used in specified foods. Labelling provisions are also prescribed in these regulations.

Regulations controlling the presence of contaminants in food

The regulations lay down maximum tolerances for arsenic and lead in food.

The Food Hygiene Regulations, 1950-1971

These regulations set out statutory hygiene requirements in relation to food and food premises. They prohibit the sale for human consumption of food which is diseased, contaminated or otherwise unfit for human consumption and require that adequate precautions shall be taken to prevent the contamination of food intended for sale for human consumption at all stages of its importation, manufacture and distribution, including the maintenance of hygienic conditions in food premises and observance of certain hygienic precautions by food handlers. The regulations also provide for the seizure of unfit food and for its destruction and for the registration of food premises.

Compositional Standards and the Food Standards Act,1974

The other element of food control contained in the Sale of Food and Drugs Act, 1875 - the protection of the consumer against fraud - was extended in acts passed between 1887 and 1961 and was updated further with the passing of the Food Standards Act 1974. This act provides for, inter alia, the drawing up of standards of composition and quality for foodstuffs by the Ministers for Health, Industry, Commerce and Energy and Agriculture, respectively. The Minister for Health has not so far used this statute but the Minister for Industry, Commerce and Energy has used it to draw up compositional standards for cocoa and chocolate products and the Minister for Agriculture has drawn up compositional standards for sugar and honey under the Act. As mentioned, in the Acts adopted between 1887 and 1936 compositional standards were prescribed for milk, butter and margarine. Compositional standards were laid down for ice cream in 1952 and for whiskey, brandy and rum in 1961.

Enforcement of Food Law requiring a chemical analysis

Food law in Ireland falls into two categories for enforcement purposes, the major one being enforcement of food law which requires a chemical analysis. This aspect will be dealt with first.

Legal Bases

The legal bases for enforcing food law in Ireland are contained in the Sale of Food and Drugs Act, 1875, in the Health Act, 1947, and in the Food Standards Act, 1974. These statutes contain general provisions for the enforcement and execution by health authorities and by certain authorised officers of the Act or of regulations made under the Acts. In practice regulations are enforced by the local health boards, of which there are eight (Annexe I).

Enforcement - System and Structure

Sampling of Food

Samples of food are taken on a routine basis at retail level to ascertain if there are any contraventions of the Acts or regulations. The samples are taken by the 210 health inspectors who are employed by the health boards and who are specifically authorised by the boards to enforce the law.

Samples of food are also received by the inspectors from consumers who wish to complain about the condition of a particular foodstuff.

Method of Sampling

The method for taking food samples is laid down in the Health (Sampling of Food) Regulations, 1970 (made pursuant to the Health Act, 1947) and in the Sale of Food and Drugs Act, 1875, and these provide that health inspectors may purchase or take without payment any article of food to investigate compliance with the law. Samples fall into two categories, formal and informal. An informal sample is taken by a health inspector without payment in the course of his routine sampling of food. Prosecution proceedings may not follow in relation to an informal sample. A formal sample is taken by the inspector usually following a complaint but sometimes during his routine sampling. Such a sample would be purchased. A certain procedure is followed in the taking of a formal sample - the sample is divided into three parts, and each part is marked, sealed and fastened, one part is sent for analysis, one to the seller, and the third part is retained. Prosecution proceedings may be entered into only if this procedure is followed.

Analysis of Samples

The samples of food are sent for analysis to the Public Analyst. At present there are two regional Public Analyst's Laboratories in Ireland, situated in Dublin and Galway, respectively. The Dublin Region Public Analyst serves 14 counties covering 1.8 million of the population and the Galway Region Public Analyst serves the rest, representing approximately 1.2 million people (Annexe II). A third Public Analyst's Laboratory has been built in Cork and it is expected that this will open later this year. A re-organisation of the areas to be served by the three laboratories will then be carried out and this will be based on health board area rather than the local authority area of the country as at present.

Rationalisation of Food Sampling for chemical analysis

It is recommended that a minimum of 2.5 samples per 1 000 population should be taken to ensure a comprehensive monitoring of compliance with the food legislation. In 1977, approximately 10 000 samples were taken so the target figure has been realised. However, due to the fact that random sampling is carried out, much duplication in sampling and analysis has resulted. Random sampling was more than adequate in the past when dealing with foods which are likely to be adulterated.

However with the developments in food processing and the resultant multiplicity of convenience foods now available, the full range of foods on the market is not nearly being examined.

With a view to improving the situation, the Department of Health has asked health boards to rationalise their sampling procedures by drawing up plans for the sampling of food on a weekly basis. Different foods would be sampled each week and it is hoped that the rationalisation of sampling would provide the Department with a better overview of whether or not food legislation is being complied with, would make available constant banks of information on the quality and composition of food and would facilitate the identification of foods which are not complying with the regulations so that action could be taken to protect the public.

The first such plan commenced in the Eastern Health Board area in July, 1977 (Annexe III) and this plan will, it is hoped, be extended to the rest of the country in the near future. The sampling list has been drawn up having regard to the specified foods in the additives and contaminants regulations, volumes of sales and previously unsatisfactory samples.

Penalties for Contravention of the Regulations

If a sample of food is found to contravene the law, the health board may initiate proceedings to prosecute the offender. Under the Health Act, 1947, if the offender is found guilty by the Court of contravening the provisions of regulations made under the act, he is liable on summary conviction to a fine not exceeding £100 and in the case of a continuing offence, to a further fine not exceeding £10 pounds for each day on which the offence is continued or, at the discretion of the Court, to imprisonment for any term not exceeding six months or to both such fine or fines and such imprisonment. Under the Sale of Food and Drugs Act, 1875 financial penalties which may be imposed thereunder naturally appear less harsh today than they did when the Act was first enforced. Under this Act, persons found guilty of contravening it would be liable, on the first offence, to a penalty not exceeding £50 and every conviction after this could result in imprisonment for not more than six months. The provisions relating to penalties under the Food Standards Act, 1974 specify that a person shall be liable on summary conviction to a fine not exceeding £200 with penalties and fines similar to those under the Health Act for continuing offences.

In addition to the penalties mentioned, food may also be seized and destroyed.

Training of Staff involved in Food Sampling

The Health Inspector undergoes a three-years course of training which covers a wide variety of health subjects. The course consists of theoretical and practical training and leads to a diploma qualification. In addition to the sampling of food, the health inspector is also concerned with environmental matters. The Public Analyst must possess an Honours Degree in Science and have at least eight years' experience working in a laboratory mainly dealing with air, food and water.

Liaison between Central Government Departments and enforcing authorities

In Ireland, there is very close co-operation in the drafting of food regulations and their inforcement between the Government, the industry, the enforcing authorities and consumer interests. When regulations are being drafted a comprehensive consultation procedure is adopted which is aimed at achieving so far as is possible a legislative instrument which will achieve in a harmonious way its basic objective.

Three Government Departments are responsible for the drafting of food regulations

in Ireland - the Department of Health, the Department of Agriculture and the Department of Industry, Commerce and Energy. When regulations are being prepared the sponsoring Department is obliged by statute to consult with the other two Departments to ensure that the proposals are acceptable to all. In addition to consultation between Government Departments, the relevant trade interests are consulted to investigate the feasibility of the trade meeting the requirements of the proposed regulations without undue hardship, and consumer interests are consulted where necessary, as is the public analyst. The Minister for Health has established an expert committee called the Food Advisory Committee to advise him on food matters and this Committee is also consulted on draft regulations which he would be sponsoring. This Committee is composed of experts in toxicology, microbiology, chemistry, nutrition and veterinary medicine. When assessing the implications for the public health of a proposal, which it is free to do independently and in any way it wishes, the Committee considers all the information available in respect of the subject under consideration from every source possible such as the EEC Commission's Scientific Committee for Food or the Joint FAO/WHO Expert Group on Food Additives.

There is also continuous liaison between Government Departments and the enforcing authorities and other interested parties after regulations have been adopted. For instance, the public analysts are bound by law to furnish a report on the foods analysed and this serves as vital information for Departments to monitor compliance with the law. In addition, the trade interests keep Departments informed of technological changes in food manufacture which may require changes in the law.

Enforcement of Food Law not requiring a Chemical Analysis

The aspects of food law which do not require a chemical analysis relate to packaging and presentation, transportation, storage and distribution; time limits for consumption and certain labelling provisions such as the giving of false or misleading information. These are contained in the Food Standards Act, 1974, in the Merchandise Marks Acts, 1887-1931 and in the Consumer Information Act, 1978.

The Merchandise Marks Act, 1887 was the first legislation on marking and is designed to prevent the giving of false information in respect of foods, including goods in packages. Under the provisions of Section 16 of the Act imported goods bearing the name or trademark of an Irish manufacturer, dealer or trader must on importation bear the name of the country of origin of the goods. Section 20 of the Merchandise Marks Act, 1931 extends the aforementioned provision to the point of distribution and sale.

The Consumer Information Act, 1978 amends and extends the provision of the Merchandise Marks Acts, 1887 and 1931 in regard to the application of trade descriptions to goods (which would include foodstuffs) sold or offered for sale. It extends the provisions relating to the sale of goods to apply also to any such trade descriptions or statements relating to goods which are contained in advertisements. The use of certain misleading indications as to prices, e.g. reduced price offers are also prohibited. The Act contains powers enabling the Minister for Industry, Commerce and Energy to make certain Orders which will all have the effect of improving and clarifying the information available to consumers. It provides adequate enforcement functions to be carried out by officers authorised thereunder. Finally it establishes the Office of Director of Consumer Affairs. The Director will have wide-ranging powers in relation to consumer protection including both supervisory powers and powers of prosecution in certain cases.

The Merchandise Marks Act, 1970 empowers the Minister to make Orders providing that goods shall be prepacked in standard sizes and that these and other prepacks must bear an indication of quantity of contents. The first such Order, the Merchandise Marks (Prepacked Goods)(Marking and Quantities)Order, 1973, which came into force on the 1st February, 1974, requires that the goods

specified, mainly foodstuffs, should be packed only in the prescribed sizes set out, and all of these, together with a wide range of other goods must indicate the quantity of contents by weight or by volume, and in some cases by length or by number.

Enforcement Arrangements

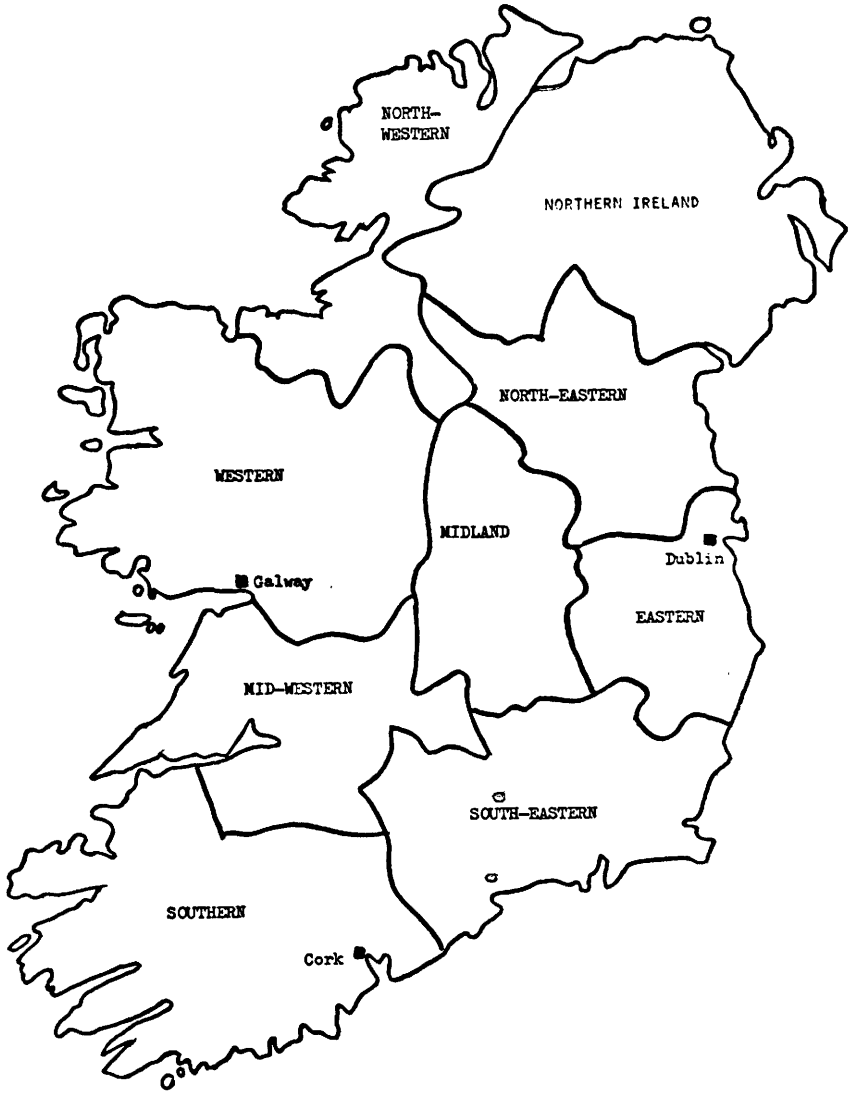
Enforcement of the provisions of the Merchandise Marks Acts are carried out by officers authorised in writing by the Minister or the Council or Corporation of a county or other borough who are empowered to enter premises and inspect goods, documents, records, etc. to detect offences. Offences are prosecuted in court and there are provisions for fines and in some cases imprisonment.

Enforcement as regards imported goods is carried out by the Customs Authorities at the point of entry into the country. At this point, goods which do not comply with the law may be prohibited entry. In cases of hardship the Minister for Industry, Commerce and Energy can permit entry by licence subject to certain conditions.

ANNEX I

IRELAND

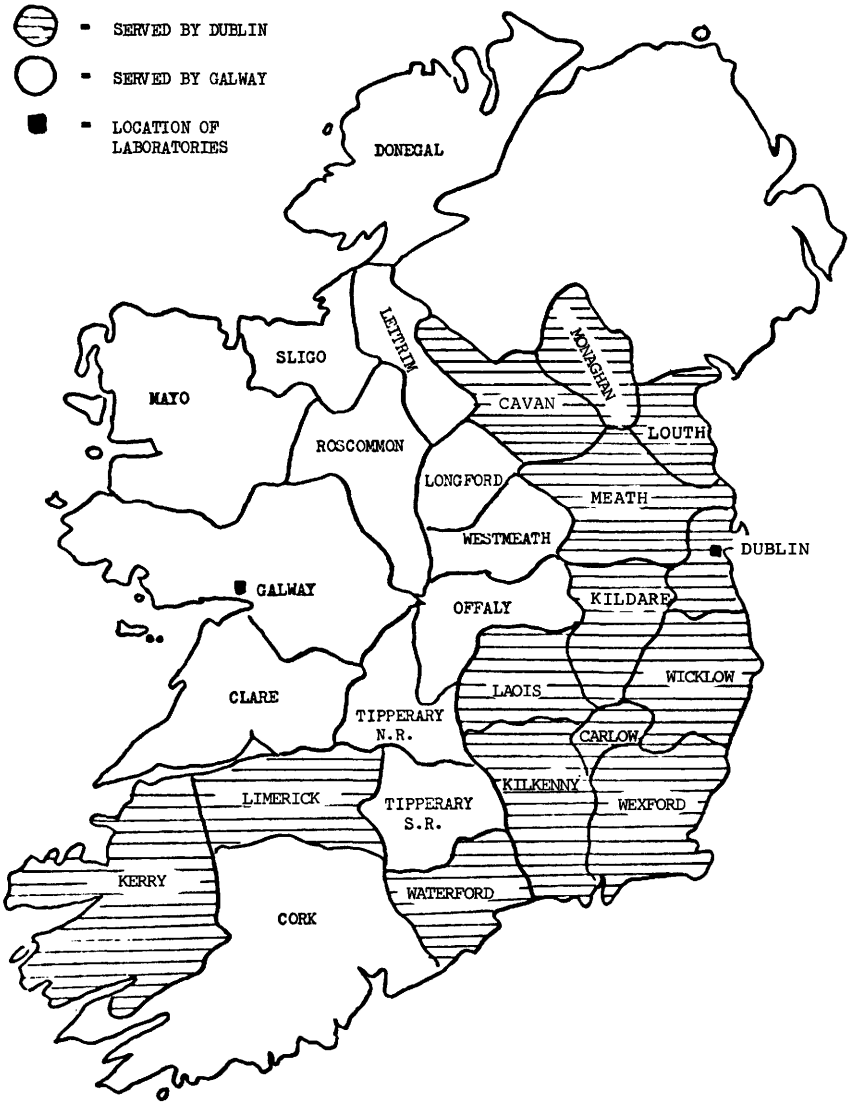
FUNCTIONAL AREAS OF HEALTH BOARD



ANNEX II

IRELAND

AREAS SERVED BY PUBLIC ANALYST'S LABORATORIES IN DUBLIN AND GALWAY



ANNEX III

UNPUBLISHED

TABLE OF SAMPLES TAKEN FOR VARIOUS FOOD PRODUCTS

ANNEXE IV

Departments responsible for the monitoring of foodstuffs in Ireland

Department of Health
Food & Drugs Division
Hawkins House
Dublin 2

Telephone : 784322

Telex : 4894

Department of Agriculture
Agriculture House
Kildare Street
Dublin 2

Telephone : 789011

Telex : 4280 or 5118

Department of Industry, Commerce & Energy
Frederick Building
Setanta Centre
St.Frederick Street
Dublin 2

Telephone : 710833

Telex : 4651

Grand-Duchy of Luxembourg: F. ARENDT, Ingénieur, Chef de Division de Service du Contrôle Alimentaire, Institut d'Hygiène et de Santé Publique, Luxembourg

I. INTRODUCTION AND LEGAL BASIS

In the Grand Duchy of Luxembourg, the monitoring of food by the public authorities is governed by the Act of 25 September 1953 for organizing the monitoring of food, drinks and articles of daily use. The Act is a skeleton act, which lays down the general principles of food monitoring, this latter being organized in accordance with the Act. It defines the main aims, the scope of action and the powers of the departments responsible for carrying out the monitoring of food, and also lays down the penalties for offences.

The main purpose of the basic Act is to protect health by forbidding and restraining the sale of spoilt, contaminated, toxic or dangerous food or drink. It also provides penalties for adulteration and all kinds of fraud or attempted fraud relating to sale, labelling, commercial documents and advertising.

The Act of 25 September 1953 has a scope extending far beyond food for human consumption. More particularly, it enables the Government to adopt public implementing of regulations for regulating, supervising or forbidding the following:

1. Manufacture, preparation, processing, sale and distribution of edible or drinkable food or drugs for the use of man or animals; consumer articles and garments; cosmetic and toilet products; and articles and products of daily use in the household, such as toys, carpets, furniture, wallpaper, utensils, paints, oils and other liquid or solid substances;

2. Sale and distribution of apparatus, utensils, vessels and other articles used for making, or adapted to be brought in contact with, edible or drinkable food or drugs, articles of consumption, cosmetic products and toilet articles.

So far, the Act has been the basis of more than 50 implementing regulations on food additives and various classes of food and articles of daily use, the regulations being either at national level or in accordance with decisions of the Benelux Economic Union and EEC Directives.

II. DESCRIPTION OF THE MONITORING SYSTEM

In Luxembourg the monitoring of food, drink and articles of daily use is the responsibility of the Ministry of Public Health. The monitoring is carried out by specialists and officials of the appropriate state departments and by officers of the general police (Gendarmerie et Sûreté Publique) or local police (police commissariats in towns). The following specialists and officers are responsible for food monitoring and have been appointed by the Grand-Ducal Decree dated 7 September 1954 and by the Grand-Ducal Regulation dated 21 August 1963 implementing the basic Act of 25 September 1953:

Specialists:

(a) chemical engineers of the Institut d'Hygiène et de Santé Publique;

(b) veterinary officers of the Laboratoire de médicine vétérinaire;

(c) veterinary inspectors;

(d) veterinary officers responsible for inspecting meat;

(e) medical inspectors;

(f) doctors from the Institut d'Hygiène et de Santé Publique;

(g) inspector of pharmaceuticals;

(h) the wine inspector.

Officers:

(a) the technical assistants of the Institut d'Hygiène et de Santé Publique and of the Laboratoire de médicine vétérinaire;

(b) health officials responsible to the medical inspectors;

(c) customs officials, in the case of imports and exports across customs frontiers.

In practice, the organization of food monitoring is based largely on this list of specialists. Food is monitored mainly by the chemical engineers and technical staff of the "Laboratoire du contrôle alimentaire" which, on the administrative level, is one of the Departments of the Institut d'Hygiène et de Santé Publique - in co-operation with the other responsible authorities and departments, most particularly with the local police officers.

In the special case of meat, however, monitoring is the sole responsibility of the veterinary departments administration, right from production or import until the meat leaves the abattoirs. From the retail stage onwards, the veterinary inspectors share responsibility with the Laboratoire de médecine vétérinaire in the case of microbiological analysis and the Laboratoire du contrôle alimentaire in the case of sampling and chemical analysis.

The Laboratoire du contrôle alimentaire, the activities and functions of which form an essential part of this report, is the only laboratory of its kind in Luxembourg and in fact is the central food monitoring agency. Its scope of action extends throughout the country. In contrast to the situation in other countries, there is no separation between the analytical laboratory and the inspection department responsible for monitoring and sampling. A large proportion of food sampling and inspection of food undertakings is carried out by the technical staff of the Laboratoire du contrôle alimentaire. Of course, it is assisted in its inspection activity, more particularly in the taking of samples, by other competent departments, especially by police officers.

In addition to their duties directly relating to monitoring and laboratory tests, the staff of the Laboratoire du contrôle alimentaire share in the work of harmonizing the regulations and standardizing the methods of analysis in international organizations such as the Benelux Economic Union, EEC, the FAO/WHO Codex Alimentarius, the O.I.V., and the Council of Europe. At the regional level, there are regular contacts and friendly relations with inspection agencies, including those of Lorraine and the Saar.

In addition the Laboratoire du contrôle alimentaire plays an important part in drawing up food regulations.

The laboratory is under an engineer who is a head of section or head of department. At present it has a staff of ten, i.e.:

three graduates, i.e., two chemical engineers, also holding the Swiss Diploma in Food Chemistry; and one engineer for the fermentation industries;

four female laboratory assistants, holding a certificate showing they have completed secondary studies, and a laboratory assistant's or analytical technician's diploma (three-year course) granted by a foreign advanced technical college recognized by the Ministry of Public Health;

one technical laboratory assistant holding a Chemical Assistant's Certificate from a technical school and a laboratory technical assistant's State Diploma, awarded at the end of an 18-month further training course in an approved laboratory;

one food inspector having the required professional qualifications; and

one office employee with secondary education.

The staff has doubled during the last 10 years but even for a small country like Luxembourg (population approx. 350 000) it is insufficient compared with the amount of testing and analysis required, particularly in view of the many additional administrative responsibilities due to factors including the harmonization work with the international organizations.

Other departments and authorities responsible for monitoring food

The following are some of the state departments and authorities who, together with the police and the Laboratoire du contrôle alimentaire, have duties and responsibilities relating to food monitoring:

1. The veterinary departments authority

This authority, which is administratively subordinate to the Ministry of Agriculture, is concerned with veterinary problems, including the protection of livestock. It is also responsible, in conjunction with the departments of the Ministry of Public Health and under the authority of the Minister of Public Health, for making health checks on food of animal origin.

In contrast to the structure of the Laboratoire du contrôle alimentaire, the veterinary departments authority has two separate divisions, i.e. the inspection department and the Laboratoire de Médecine vétérinaire.

The veterinary inspection department includes four veterinary inspectors, each responsible for one part of the country. The inspectors, together with the inspectors of meat in abattoirs (appointed by the Minister of Public Health), monitor the hygienic quality of meat. The veterinary laboratory carries out veterinary analysis and microbiological analysis of meat and meat products.

2. The medical inspectors' department.

This department has the duty of protecting public health, including responsibility for checking the cleanliness of the staff in food undertakings.

3. Wine monitoring

In Luxembourg, the restraint of fraud in the sale of wine is based on the following two basic Acts:

(a) The Act of 24 July 1909 on wines and similar drinks.

The wine inspectors and the staff of the Institut Viti-Vinicole de l'Etat, who come under the Ministry of Agriculture and Vine-Growing, are responsible for checking the cellars of vine-growing co-operatives, the cellars of private vine-growers, the book-keeping and, in general, the observance of all legal provisions relating to the treatment and sale of wine.

(b) The Act of 25 September 1953, on the reorganization of monitoring of food, drinks and articles of daily use. The officials for implementing the Act on the general monitoring of food are concerned mainly with the supervision of the retail sale of wine and similar drinks. In the detection of fraud, they co-operate closely with the wine inspectors.

Wine samples, which are taken in accordance with the provisions of the two Acts, are chemically analysed by the Laboratoire du contrôle alimentaire.

4. The Laboratoire des eaux of the Institut d'Hygiène et de Santé Publique

This laboratory is responsible for protecting surface and underground water, for supervising the catchment, processing, piping and storage of drinking water, and more particularly for monitoring the quality of drinking water. Of course, there is very close co-operation between the Laboratoire des eaux and the Laboratoire du contrôle alimentaire, both of which are parts of the same Institute.

5. Administration of the technical agricultural departments

A number of departments or divisions of this administration have duties and powers directly or indirectly related to food monitoring. The departments in question are:

The vegetable protection department, which is responsible for health checks on vegetables and vegetable products, granting phyto-sanitary certificates, and approving pesticides and phyto-pharmaceutical products. On the basis of the Grand-Ducal Regulation of 29 May 1970 on the control of agricultural pesticides, there is close collaboration between the vegetable protection department and the Laboratoire du contrôle alimentaire, more particularly in regard to the approval of pesticides, their uses and manner of use, and to pesticide residues on or in food of vegetable origin.

The horticulture department is responsible, among other things, for standardization and, in co-operation with the police and the Laboratoire du contrôle alimentaire, for monitoring the quality of fruit and vegetables. The same department is responsible for applying the general market regulations in so far as they relate to fruit and vegetables.

The "Control and Test Laboratories" Division plays an indirect part in the monitoring of some food, to the extent that the check analyses and research conducted at production level on food products of agricultural origin are for the purpose of providing the producers with the necessary technical advice for improving the production and quality of agricultural products. The division is also responsible for monitoring cattle-feed, which also comes under the basic Act of 25 September 1953.

III. The methods of action and the types of monitoring

The officers and specialists responsible for food control are sworn into office and have the status of judicial police officers. They are empowered to report any breaches of the Food Monitoring Act of 25 September 1953 or the associated implementing regulations, which also lay down their powers of intervention.

They have the right to inspect places where food and other products covered by the Act are made, prepared, processed, stored, put out for sale, sold or distributed. In addition, they have a similar right to inspect vehicles or other means of transport which contain or may contain the aforementioned goods. Furthermore, they are empowered to inspect or even cancel any commercial documents relating to food and products coming under the Act.

Inspection officials may, in particular, take any samples they require for examination or analysis, or any materials used for manufacturing them. A receipt must be given for the samples, which must be paid for at current prices. Part of the sample, duly sealed, is returned to the holder or owner of the product for the purpose of re-examination if required, unless the owner expressly waives his right.

During inspection, it is always permissible to confiscate tainted, spoilt or adulterated food or the associated commercial documents. If the specialists find that food or articles covered by the Act are contaminated and a danger to health, the food can be impounded by order of the competent medical inspector.

With regard to the administrative powers of monitoring bodies, it should be noted that manufacturers, processors, consignees, or those who trade in or transport food must co-operate with the inspection officials in carrying out their duties.

In practice, monitoring is carried out in various ways, within the previously mentioned legal limits.

Some monitoring is systematic and applies to an entire class of food passing through a particular sales channel, e.g. in the case of meat, meat products, milk, some dairy products (butter, cream and fermented milk), wine for ordinary consumption and certain kinds of imported fruit and vegetables.

However, most tests are conducted by sampling, in principle at all stages of manufacture and sale to the consumer. Since Luxembourg has a relatively small food industry, however, a very large proportion of goods is imported. In the case of all these goods (except for the previously mentioned articles which must be checked when imported) monitoring is limited to the analysis of samples taken during sale, or to the checking of commercial documents if necessary.

In short, the most frequent checks are by sampling and by analysis. To this end, a sample which is as representative of the goods as possible and taken in accordance with legal procedure is sent to the Laboratoire du contrôle alimentaire of the Institut d'Hygiène et de Santé Publique and/or the Laboratoire de médecine vétérinaire in the case of meat products or other animal products. The sample for the testing laboratory must be accompanied by a report giving detailed information about the identity and origin of the product, the place and date of sampling, the identity of the batch, the storage conditions and any other information required for analysis and evaluation of the quality of the product in question.

The analysis, which can be chemical or bacteriological, relates to the quality and presentation of the product. It comprises the following, depending on the individual case:

(a) checking the composition and quality standards laid down by legal provisions or regulations;

(b) comparing the actual composition with that stated on the label or in the commercial documents;

(c) a check for additives and for any contaminants (e.g. residues of pesticides, toxic heavy metals, antibiotics, hormone substances or aflatoxines) present in the food, and;

(d) checking the hygienic quality.

If the check analyses reveal any breach of legal provisions or regulations, penal action may be taken.

Although sampling and analysis constitute the usual method, checks of other kinds are regularly made. For example, a check by direct observation is made during the checking of labelling and advertising regulations or the inspection of documents, accompanying certificates, and places where food is produced and sold. Any infringements may be directly reported to the judicial authorities.

In addition, food may be analysed at the request of certain manufacturers or businessmen. Such analysis may to some extent be regarded as preventive. In recent years, a growing number of manufacturers and tradesmen have been sending samples of their products to the Laboratoire du contrôle alimentaire, to make sure that the quality and labelling are in accordance with the regulations in force.

Finally, the Laboratoire du contrôle alimentaire occasionally intervenes in lawsuits between consumers and vendors.

IV. The nature of legal action and penalties resulting from infringements of the regulations

In principle, all infringements of food regulations found by the inspection departments, either by direct observation or on the basis of analysis, result in legal action. To this end, a detailed statement or report containing the evidence is sent to the Public Prosecutor's Department, which is responsible for instituting a prosecution if justified by the nature of the infringement and the evidence.

In practice, however, some freedom of choice is left to the monitoring bodies and judicial authorities as to whether they take legal action or not.

The monitoring departments and the magistrates associated with the public prosecutor's office have the option of refraining from legal action but warning the person concerned, in the case of minor infringements of administrative regulations. This option is widely used, as in cases where the infringement does not directly affect the material interests or health of the consumer and is due to ignorance of the regulations, without malice on the part of the person concerned.

In such cases, this course of action sometimes results in a more rapid improvement in the legal situation than would be obtained by legal proceedings. In addition, the person concerned is aware that, if the warning is disregarded, the penalty will be much more severe since he will not be able to adduce any extenuating circumstances. In addition, the warning may in certain cases be accompanied by an "administrative penalty", which sometimes results in appreciable material disadvantages to the person concerned, such as prohibition to import an article, withdrawal from sale and return of the product to the country of origin, the obligation to modify the label on a batch of goods already in the shops, or transfer to a lower quality class.

If legal action is taken and the accused is found guilty, the legal penalties are in accordance with the Act of 25 September 1953 on the reorganization of the monitoring of food, drink and articles of daily use, without affecting the penalties laid down by the penal code and other acts. A number of provisions of the Act of 25 September 1953 relate to the restraining of infringements. Without going into excessive detail about

these penalties, we shall list the penalties which, depending on the seriousness of the crime, can be imposed after infringement of the food regulations.

1. Ordinary infringements of administrative regulations, considered as infringements only and not as offences, are punishable by a fine.

2. Adulteration of food, sale of adulterated, spoilt or contaminated food, deception by imitation of legal marks, signs or documents, or the use of misleading information or signs regarding the nature, composition, method of manufacture, origin or weight of foods are punishable by a fine or imprisonment or both.

   The confiscation of goods found to be adulterated is ordered by the Court of Justice. If the goods are not dangerous to the health or in other respects, the Public Prosecutor will make them available to charitable institutions; otherwise he will impound them.

3. Manufacture, preparation, sale, laying out for sale, transport for sale and distribution of food which is dangerous or harmful to health, or the sale of substances for preparing food which is dangerous or harmful to health or the attempt to commit these offences is punishable by imprisonment and a fine. If the offence has resulted in the death of a person or in an apparently incurable disease or permanent disablement or serious mutilation, the punishment will be hard labour.

   A criminal verdict of Guilty for one of the above actions may result in the accused being forbidden to manufacture, prepare, sell or distribute food. Any food found to be dangerous or harmful to health will be impounded.

   Adulteration of a food so as to make it dangerous or harmful to health is not a separate offence but a circumstance which increases the seriousness of the adulteration.

4. The Courts and Tribunals of Justice may order the publication of decrees and judgments, in whole or in extracts, by displaying them at certain places or by inserting them into specified journals.

5. If a person is condemned to a major or minor prison sentence for breaches of the present Act, the Court and Tribunals may order his shop to be closed, to stop manufacture, processing or sale for a given period.

   Extenuating circumstances laid down by the penal code are applicable to infringements of the Act of 25 September 1953.

V. Departments responsible for drafting regulations

In Luxembourg, there is no special department responsible for drafting food regulations. The regulations implementing the food monitoring Act of 1953 are prepared by the competent monitoring departments, more particularly by the Laboratoire du contrôle alimentaire, or by the veterinary departments administration, in co-operation with the legal department of the Ministry of Public Health, in the case of regulations relating to the harmlessness of meat or meat products or, in certain cases, some other foods of animal origin. The same applies to the drafting of regulations for incorporating EEC directives or Benelux decisions in the national law. In the case where a food regulation affects the interests or powers of another ministry, the appropriate ministerial departments are first consulted.

The resulting draft regulations are sent by the Ministry of Public Health to the professional institutes and to the advisory Council of State. The final texts, after being debated by the Government in Council, are signed by the Grand Duke and published in the form of regulations in "Mémorial", the official gazette.

ANNEX

Authorities and departments responsible for monitoring of food in the Grand Duchy of Luxembourg

Ministère de la Santé Publique, Luxembourg, 57 Boulevard de la Pétrusse, tel: 40801

- Direction de la Santé Publique, Luxembourg, 1 rue Auguste Lumière, tel. 40801, tlx. 2546 Santé Lu
- Laboratoire du contrôle alimentaire, Institut d'hygiène et de Santé Publique, Luxembourg, 1A rue Auguste Lumière, tel: 491191
- Laboratoire des Eaux, Institut d'hygiène et de Santé Publique (same address)
- Service des Médecins-inspecteurs de la Santé Publique, Luxembourg, 4 rue Auguste Lumière, tel: 40801

Ministère de l'Agriculture et de la Viticulture, Luxembourg, 1 rue de la Congrégation, tel: 478-1, tlx. 2537 Agrim Lu

- Administration des services vétérinaires

  Direction et service d'inspection, Luxembourg,
  3 rue de Strasbourg, tel: 480530

  Laboratoire de médecine vétérinaire, Luxembourg
  54 avenue Gaston Diderich, tel: 22753 and 24750

- Administration des services techniques de l'Agriculture

  service de la protection des végétaux et service de l'horticulture, Luxembourg, 16 route d'Esch, tel: 46521

  Laboratoires de contrôle et d'essais, Ettelbruck, avenue Salteniny, G.-D. de Luxembourg, tel: 82109 and 81081

  Institut Viti-Vinicole, Remich, G.-D. de Luxembourg, tel: 69122 and 69160.

Netherlands: L.J. SCHUDDEBOOM, Inspecteur in Algemene Dienst, Staatstoezicht voor de Volksgezondheid, Leidschendam

1. INTRODUCTION

The subject of food inspection in the Netherlands should not be discussed without paying some attention to the economic background of the production of foodstuffs in this country.

With about 28 % of the total industrial production the food industry is the most important branch of industry in the Netherlands. In 1976 the total sales of the food industry amounted to 43 billion guilders. About 60% of this amount came from export products. The total amount of imports of agricultural products, mainly grains, feedstuffs and meats, is 16 billion guilders.

Because of the dominating position of the export of some food products, inspection procedures and the underlying legislation for these products are designed especially for export purposes. This may influence to a great extent the inspection systems for foods intended for the home market.

In some cases, however, there is a clear distinction between inspection systems for products, to be exported and products destined exclusively for the home market.

Examples will be given later in this presentation.

2. SOME HISTORY

Official rules with regard to the wholesomeness of foods started in medieval times, where this was the initiative of municipal agencies. Trade Guilds especially exerted a powerful influence on commerce regulations. It is already mentioned in 1196 that the Municipality of Utrecht employed inspectors to control the quality of the fish on the market. In 1614 the Municipality of the Hague introduced a preventive inspection of fish. The same municipality promulgated in 1653 a regulation prohibiting the colouring of butter.

Napoleonic rules introduced some general provisions to prevent food adulteration, which were laid down in the Penal Code:

Article 174: "whosoever knowingly sells foodstuffs injurious to health and life, and conceals this danger shall be liable to punishment", and

Article 330: "whosoever knowingly sells foodstuffs and beverages which are adulterated, and conceals this fact, shall be liable to punishment".

Detailed regulations were not specified, however.

It was only in the second half of the 19th century that the Municipalities of some large cities took the initiative to establish the supervision of foods by arranging special inspection services. The background of these services was formed by the development of chemistry and physics and the invention of the microscope at the same time.

The first official laboratory of this kind was established in 1893 by the Municipal Council of Rotterdam. The convincing results of its activities stimulated other cities to take similar initiatives.

During the years 1908 to 1920 for the most important foods a number of standards were developed nationally and combined to a national Codex Alimentarius, to assist the municipal analysts in their advice on what was to be considered a normal composition and a normal hygiene practice.

Products to be exported were however the concern of private enterprise. Private butter control laboratories were, for example, founded working under State Supervision and only butter of a high quality level was allowed for export, which was guaranteed by means of a special State-mark.

The first world war led to a shortage of foods. Adulteration of foodstuffs increased and the trade in substitute of doubtful composition sold under fancy names became throughout common practice, but especially in towns where no official inspection existed. This convinced the authorities of the need for legal control of food based on law systems operative for the whole country. In 1919 the first Commodity Act and the Meat Inspection Act were promulgated. The scope of the Commodity Act was even enlarged to other commodities than food alone, in order to ensure also for these other commodities, important from a consumer viewpoint, practices of fair trade. The further history of the inspection systems for foodstuffs in the Netherlands is for a great deal determined by a multidisciplinary development, in which pharmacists, chemists, veterinarians and biologists as well as lawyers were playing their specific role.

3. INSPECTION IS BASED ON LEGISLATION

The historical developed inspection systems in the Netherlands are based upon laws in different fields which have given rise to different services (table 1).

The Commodity Act of 1919, renewed in 1935 (under revision now)
The Meat Inspection Act of 1919, renewed in 1977
The Veterinary Cattle Act of 1920, renewed in 1976
The Pesticides Act of 1962, renewed in 1972
The Agricultural Quality Act of 1971

The Commodity Act is still the most important Act with regard to food and food inspection. The objectives of this Act are (i) the protection of public health and (ii) promotion of fairness in trade. This last aspect is not only of interest to the consumer but also to the producer. The regulations of this Act are covering the inspection of all foods with the exception of the microbiology and veterinary inspection of meat and meat products. The inspection of foods is carried out by 16 Inspection Services, each having competence within their own district.

Meat inspection is based upon the Meat Inspection Act as well as on the Veterinary Cattle Act and is carried out by 129 Meat Inspection Services, also having competency within their district.

The Netherlands was one of the first countries in the world to prpmulgate a Pesticides Act to ensure safety of the use of pesticides. Only pesticides which are officially authorized my be used and a list of tolerance for residues of pesticides in or on food and food products is permanently kept up to date in the Residue Order. Enforcement is carried out by the Food Inspection Service.

The Agricultural Quality Act is disigned for the promotion of the sale of agricultural products, including foods. This Act, which is a follow up of the preceding legislation, designed mainly for export purpose and especially for dairy products, provides also a base for certain Quality Assurance Programmes. Quality grading is carried out in close cooperation with producers by governmental and private laboratories which are officially recognized. In this field the Agricultural Inspection Service, under the jurisdiction of the Ministery of Agriculture and Fisheries, is designated as the competent inspection body. Since also the Food Inspection and Meat Inspection Services are active in this field, some overlap of competence is difficult to avoid. The Government is now aiming at co-ordinating their tasks so as the prevent overlap in inspections.

4. FOUR TYPES OF INSPECTION SERVICES

4.1. The Food Inspection Services

The Commodity Act deals not only with all foods and beverages but also with other commodities such as cosmetics, soap and detergents, food packaging material, cooking ustensils and even with children's toys. Inspection of commodities according to this act falls under the jurisdiction of the Minister of Health and Environmental Protection.

Food Inspection Services are charged with the inspection of the whole area of producing, distribution and selling of all food items, with an emphasis on the inspection of the consumer products with the only restriction as specified before with respect to meat inspection.

There are 16 Food Inspection Services assigned to enforce the Commodity Act, which are municipally - or provincially - owned laboratories. Most of the districts have 700 000 to 1.2 million inhabitants (see fig. 1). The number of inhabitants provides the basis for the number of staff: as a rule there is approximately one employee to every 25 000 inhabitants of a district for each Food Inspection Service. In special cases this norm can be enlarged to one per 20 000 (presence of large harbours, involvement of special tasks, a.o. in the field of environmental protection, dangerous substances).

For the entire country there were in 1978:

total personnel	643
university degree	74
laboratory personnel	
inspectors	191

Each Food Inspection Service has a laboratory, equipped for analytical-chemical, biochemical and microbiological examinations, and a team of field-inspectors.

In the staff of the food inspection services you find therefore analytical chemists, food technologists, microbiologists, veterinarians, biochemists and food-scientists, acting in multidisciplinary team-work. As has been stated earlier, the control of food is in our country a multidisciplinary activity; it would be unwise for one discipline - whatever it may be - to claim exclusivity (2, 3).

Food Inspection Services are operating under the direction of chemists with a university or equivalent degree. In view of the recognition of multidisciplinary principles for food inspection organizations, the strict requirement of an education in chemistry is expected to disappear in future.

The combination of the laboratory with field inspection operations within one service is extremely efficient. Because of this system a laboratory investigation can be focused on and directed by the indications of the field inspectors. Immediate feed-back and follow-up is possible. This structure is in accordance with the recommendation no. 5 of the WHO Report on a consultation on organization and management of food hygiene programmes in 1971 (1).

Field inspectors are of medium technical level and have to follow official courses in order to obtain the required diplomas.

Thanks to the small size of the country, the 16 district directors of the Food Inspection Services can meet once a month to discuss problems in order to obtain uniformity in inspection and interpretation.

Moreover a centralised approach and a further co-ordination of inspection activities is achieved by the specialised surveillance department of the Ministry (Foodstuffs Division) and by three related co-ordinating Regional Inspection Services.

The most important task of the inspection is the control of sanitary food processing and handling as well as inspection of all ingredients and additives. Much work is carried out with regard to non-permitted additives.

Table 2 with statistical figures for the year 1974 gives the total number of inspections divided over different classes of business. To mention just one figure, the attention may be drawn to approximate 75 000 inspections of restaurant kitchens, which includes kitchens of hospitals, children's homes, institutions, etc.

Table 3 provides the total number of samples which were examined by the laboratory, to test whether they were meeting the requirements.

Basic foods such as bread, milk, meat (only chemical investigations) and vegetables receive much attention. Also numerous analyses are carried out to check whether the tolerances for residues of pesticides are not exceeded (for 1975):

products of vegetable origin: ca. 27 000 samples with ca. 1 000 violations

products of animal origin : ca. 3 000 samples with ca. 500 violations

It might also be useful to know that every consumer has the right to go to the Food Inspection Service with complaints which are always seriously investigated.

A new development in food inspection services is a greater degree of specialization. For some subjects it is indispensable to have the use of sophisticated laboratory facilities and know-how, which should be mutually available.

A list of specialized laboratories is given in table 4.

A complete list of addresses of Food Inspection Services is presented in table 5.

The total cost of the 16 Services amounts to 58 million guilders, which means an amount of Fl 4.14 per inhabitant. This amount has been gradually increasing over the years (see table 6).

An important part, namely 25-35% of this total cost is paid by fines paid by the enterprises (food industry, retailers, shops), which are covered by the Commodity Act.

In principle 50% of the total budget will be provided by the central government and the local authorities are providing the remainder.

Food Inspection Services have little to do with inspections in the field of export. Only for egg products do they carry out regular microbiological investigations and, beginning a few months ago they are involved in inspections with certification procedures requested recently by some countries for fish.

Other export certification is performed only on incidental occasions. The cost of inspections and investigations has to be covered by the exporters.

This system is however extensively developed by the other sections which will shortly be described.

4.2 Meat Inspection Services

The subject of meat inspection will not be dealt with here in such detail as the preceding section but only in such a way to obtain a more coherent picture of the inspection system in the Netherlands as a whole.

The main task of the Meat Inspection Services is to inspect slaughter animals brought to the slaughterhouse and to perform ante and post mortem inspection.

Regulations which are based upon the Meat Inspection Act, are laid down to ensure that slaughtering, transport, processing, handling, storage and selling are carried out in a hygienic way in order to achieve hygienic procedures on the long way from the slaughterhouse to consumers. The inspection in this field is also a task of the Meat Inspection Services (see table 7).

Poultry and poultry meat inspection was carried out originally by the Food Inspection Services under the provisions laid down in the Commodity Act. For several years already part of the production intended for export received additional veterinary inspection on a voluntary basis. This situation changed when in February 1973 the EC Directive on health problems affecting trade in fresh poultry meat became effective for the trade between Member States. The Directive required governments to implement statutory regulations for veterinary inspection of the meat which is exported to the other EC Member States. It was intended that the Directive would also apply to production for the home market from 1977, but this seems not to be practically applicable in all Member States.

In total there are now 129 Meat Inspection Services which were until last year under the jurisdiction of the local authorities, similar to the Food Inspection Services (see fig. 2). This situation has changed now and within a transitional period of five years Meat Inspection will be a centrally organised State activity. It is intended to combine the smaller Meat Inspection Services into larger units.

The Meat Inspection Services are staffed with 251 veterinarians and a team of 870 field inspectors. Each service has laboratory facilities to support the inspection at the slaughterhouses and the field inspection work. Total cost of meat inspection amounts to 113 million guilders in 1978 and of poultry inspection to 11 million guilders.

It has to be taken into account however, that Neat Inspection Services are also in charge of the supervision of the export of meat and meat products, on behalf of the Ministry of Agriculture and Fisheries, in connection with the regulations of the Veterinary Cattle Act.

4.3 The Agricultural Inspection Service

Quality grading in relation to the promotion of sales, which is based upon the Agricultural Quality Act of 1971, is carried out, in close co-operation with the producers, by private laboratories recognized and supervised by the government. In this supervision the RIKILT (= Gouvernment Quality Institute for Agricultural and Horticultural Products), the former Government Dairy Station, plays an important role as central laboratory.

There is a large production of milk and dairy products in the Netherlands and the inspection services look carefully after the wholesomeness and quality of these products (4). Veterinary activities have eradicated tuberculosis of cattle and brucellosis has become a rarity.

The information and guidance of governmental services has encouraged a still growing production of milk of high quality. The milk from each farm is sampled and tested every fortnight for quality grading and health control.

This quality control may be considered as a more general approach of grading which started earlier with butter, cheese and milk powder for export. Duplication of inspection efforts may however easily arise, and this must be avoided, requiring special precaution.

For carrying out field inspections the Ministry of Agriculture and Fisheries has at its disposal an Agricultural Inspection Service which is active in this field. This service is dealing not only with dairy regulations but also with plant protection, control of pesticides, feedstuffs, animal drugs and with market regulations.

Inspection in relation to EC-regulations concerning quality classes of fresh fruits and vegetables, the water content of poultry meat and concerning egg grading are a.o. also within the field of action of the Agricultural Inspection Service.

The task of this service is performed by ca. 400 officers.

The total amount of the budget of this service was 29.5 million guilders for 1976.

It has to be taken into account that about 75% of the activities of the Agricultural Inspection Service are connected with foods and feedstuffs.

4.4 Other Inspection Services

For the sake of completeness it should be mentioned here that in the Netherlands, according to the present-day construction of the Commodity Act, the so called Commodity Boards - official bodies in which private entreprise, workers unions and the government co-operate - also have powers of regulation in the field of foodstuffs.

Commodity Boards may for example take over regulations from the Commodity Act.

The organisation of the inspection which is connected with regulations created by these Commodity Boards may also be assigned to special institutions. These may be inspection system bodies of private law to control activities of the members. Effective control in the production stage will be possible in this way.

It will be apparent from this survey that national food inspection matters in the Netherlands are intensively intertwined with an organically grown network of legal developments and executives.

5. PROSECUTION, PENALTIES

In cases of violation of the Commodity Act or the Meat Inspection Act, the directior of the Inspection Service decides which measures are to be taken. These measures may consist of a warning, or in serious cases, such as repeated offences, a prosecution. The judge will decide whether a prosecution will take place.

Goods may be seized and fines may be imposed to a maximum of Fl 10 000 with possible further measures such as publication of the findings and closing of establishments.

According to the Agricultural Quality Act similar measures may be taken and also an intensified inspection which has to be paid for by the violator may be ordered.

6. EDUCATION

Nevertheless it would not be justified to consider the inspection services only as police authorities. Strong persuasion with good arguments is often more successful than the application of punishment.

In this respect the education of all persons involved in food production and distribution is of relevant importance. Without an understanding of inherent hygiene problems by these persons, repressive measures are of limited value only.

Special legislation, which will require that persons responsible for the production or handling of foods shall have an adequate knowledge of food hygiene, is therefore being prepared.

7. FURTHER DEVELOPMENTS

In concluding this survey it might be useful to focus the attention upon a few salient points of current interest which come more or less automatically forward from the above presentation.

Food is a part of the environment. In view of the confrontation with **over-all contamination** problems coming from the environment it has become clear that the operating of only repressive systems of inspection will not safeguard our foods early enough. As in other countries regular surveillance programmes have therefore been developed, in which the Inspection Services are performing an important task, in order to **reach** a reasonable level of prevention.

A second point of actual interest is the necessity to promote better safety and quality of food products by optimization of our control systems. Inspection by governmental organizations may be expensive in comparison with continuous surveillance carried out by the industry itself. The development of inspection procedures in the USA, where continuous governmental surveillance is to be replaced by non-continuous supervision, deserves full attention. The US Food and Drug Administration as well as the US Department of Agriculture are involved in these reorganizations (5, 6).

It is hoped that the survey given here has made clear that the development of regulations and the organization of food inspection in our country is a complex task which can only be accomplished by the co-operation of many scientific disciplines. For the practice of food inspection these matters have to be integrated, however, in order to come to a workable organization.

Improvement in this field is under consideration.

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FIGURE 1

Food Inspection Services

FIGURE 2

Meat Inspection Services

TABLE 2

SURVEY OF INSPECTIONS BY FOOD INSPECTION SERVICES IN THE NETHERLANDS, 1974

	Food Inspection Service at:	Alkmaar	Amsterdam	Assen	Dordrecht	Enschede	Goes	Den Haag	Groningen	Haarlem	Den Bosch	Leeuwarden	Maastricht	Nijmegen	Rotterdam	Utrecht	Zutphen	Total number of inspections	warnings concerning: quality of commodities	designation	content	hygiene requirements	various requirements	total	prosecutions
	Inhabitants of the district	738984	1171726	393739	734459	749295	536285	1023962	532649	807660	1246438	547223	932163	1003713	1090661	1060823	919138	13488818							
selling points	Markets and stalls	378	1924	476	526	351	353	1707	411	546	1515	373	636	857	2320	723	952	14048							
	Vessels and vehicles	582	578	1603	669	1017	2025	4704	580	715	954	754	1726	2260	1179	1504	1976	23426							
	Food and fish auctions	213	88	-	241	-	76	544	12	68	63	91	57	197	155	104	133	2042							
	Multiple stores	1426	1354	995	698	1009	530	6327	796	1127	1877	632	1193	1974	1909	2116	1354	25317							
	Retail stores	2177	16935	1796	3756	4471	3950	10621	1953	4307	4889	2161	5786	4870	5656	3965	3590	80883							
	Total	4776	20879	4870	5890	6848	6934	23503	3752	7763	9298	4011	9398	10158	11219	8412	8005	145716	3592	1666	101	3675	3511	12545	151
preparation premises	Agricultural enterprises	443	378	197	390	67	181	119	56	344	325	546	825	1347	70	355	445	6088							
	Bakers and confectioners	995	2104	543	1334	2382	1541	2721	381	786	2146	1783	1739	3115	1672	1889	1980	27111							
	Icecream preparers	66	343	332	240	520	349	1963	8	384	495	43	157	416	1039	107	239	6701							
	Hotel and catering industry	3066	9426	1023	2975	3489	4465	6344	1286	4291	8013	2747	6779	8102	4893	5099	2719	74717							
	Domestic industry and social workshops	485	3	-	109	-	331	-	6	9	71	90	-	1	7	6	15	1133							
	Poulterers	117	9	17	125	109	98	1207	25	427	373	29	151	277	244	726	120	4054							
	Butcher's shops	962	22	289	709	1245	727	585	311	1033	1304	522	1581	927	1400	1106	574	13297							
	Fish preparation	1227	131	104	129	132	241	1658	97	1273	357	145	91	330	327	552	277	7071							
	Others	52	151	2	31	25	614	182	98	122	211	34	137	114	340	121	274	2508							
	Total	7413	12567	2507	6042	7969	8547	14779	2268	8669	13295	5939	11460	14629	9992	9961	6643	14680	719	287	20	8553	2460	12039	269
manufacturing premises	Bread and pastry	172	91	96	114	150	122	77	54	36	207	270	98	276	93	208	140	2204							
	Beer and liquors	33	22	-	68	42	38	11	35	23	97	48	16	12	154	20	27	646							
	Chocolate and confectionery	78	50	-	45	2	42	37	3	26	49	21	27	58	57	27	3	525							
	Icecream	21	21	1	28	24	2	49	11	9	28	16	13	31	15	6	30	309							
	Processed vegetables	66	-	3	63	1	39	8	8	31	25	-	26	170	6	8	19	473							
	Raw materials and production aids	4	43	6	21	11	18	11	3	18	6	5	5	47	28	61	49	336							
	Soft drinks, jams, etc	18	32	11	61	21	16	10	21	36	31	21	67	107	35	82	31	600							
	Margarine, oils and fats	22	-	-	3	-	15	10	1	1	6	55	18	12	23	23	4	193							
	Flour and flour products	84	19	-	11	3	8	30	31	4	17	17	4	10	34	11	3	286							
	Milk and dairy products	225	249	246	378	211	180	668	79	104	266	259	155	556	150	745	168	4639							
	Meat and meat products	82	71	22	25	51	23	128	16	42	86	17	58	105	61	57	55	899							
	Game and poultry	11	2	2	-	9	14	44	-	-	68	19	7	68	8	130	1	383							
	Other commodities	62	188	47	148	120	134	217	40	229	264	69	101	122	392	292	124	2549							
	Total	878	788	434	965	645	651	1300	302	559	1150	817	595	1574	1056	1670	654	14038	1453	137	27	1099	218	2934	27
storage premises	Deep freezing & cold storage	48	4	45	84	203	16	101	6	19	20	26	10	80	32	49	13	756							
	Wholesale and import companies	398	1151	260	716	257	552	746	211	656	577	260	621	650	1492	558	287	9392							
	Warehouses	6	-	-	2	-	1	-	-	-	13	1	-	1	80	5	2	111							
	Other storage premises	81	342	75	224	265	502	873	244	819	482	351	771	536	-	748	285	6598							
	Total	533	1497	380	1026	725	1071	1720	461	1494	1092	638	1402	1267	1604	1360	587	16857	156	132	2	319	208	817	40
other enter-prises	Radioactive substances and dangerous substances	11	98	-	22	-	-	7	21	37	-	19	-	-	171	85	6	477							
	Miscellaneous	-	793	-	248	-	-	-	28	-	-	-	-	-	2649	999	-	4717							
	Total	11	891	-	270	-	-	7	49	37	-	19	-	-	2820	1084	6	5194	7	15	-	35	141	198	3
	Total number of inspections	13611	36622	8191	14193	16187	17203	41309	6832	18522	24835	11424	22855	27628	26691	22487	15895	324485	5927	2237	150	13681	6538	28533	770

TABLE 3

SURVEY OF INVESTIGATED SAMPLES AND REJECTED LOTS, FOOD INSPECTION SERVICES IN THE NETHERLANDS, 1974

Food inspection Service at:	Alkmaar	Amsterdam	Assen	Dordrecht	Enschede	Goes	Den Haag	Groningen	Haarlem	Den Bosch	Leeuwarden	Maastricht	Nijmegen	Rotterdam	Utrecht	Zutphen	Total number of investigated samples	Total number of defective samples	from which were rejected for:				warnings	prosecutions	rejected lots
																			Designation	Content	Composition	Condition			
Alcoholic beverages	338	654	70	571	301	79	121	485	449	241	221	343	402	435	426	367	5503	1370	201	311	677	253	768	364	152
Flavours, soups and meat extracts	217	131	35	72	180	89	111	79	133	204	127	324	175	57	339	168	2441	292	109	43	79	71	208	25	81
Vinegar, mustard, spices and salt	184	123	39	252	169	74	147	126	48	171	38	245	84	200	144	263	2307	346	130	89	187	21	207	25	109
Pesticides	28	10	4	11	9	-	19	41	23	12	2	12	66	58	115	15	425	144	104	3	40	-	172	18	395
Bread	1128	1745	413	1639	274	1218	2544	632	782	2137	1656	1597	856	1549	1910	669	20749	2460	42	258	2165	14	1773	427	40
Cocoa and chocolate	89	183	7	68	25	90	54	74	63	73	39	95	68	115	54	74	1171	193	108	58	25	5	148	8	35
Icecream	1110	1499	343	1030	824	1001	1485	344	1371	1262	411	1518	1288	1373	2038	736	17633	2657	53	3	611	2175	2050	459	200
Cosmetics and toiletries	33	2	9	51	156	12	24	25	17	27	19	10	13	65	54	14	531	20	4	2	11	3	13	3	1
Egg and egg products	64	27	-	89	2	2	-	-	36	53	9	12	8	17	40	32	391	75	4	1	13	57	48	-	16
Pastry, biscuits and confectionery	488	468	199	226	437	283	106	220	136	193	306	166	171	940	439	110	4888	808	55	30	153	665	631	117	178
Utensils	66	75	35	58	37	-	7	-	119	2542	10	2	29	1638	1165	1	5784	639	1	-	437	205	596	15	966
Processed potatoes and vegetables	128	4	2	94	16	41	6	196	76	59	27	166	46	13	15	64	953	175	23	13	44	104	118	9	245
Peanut and peanut products	402	176	33	93	14	38	40	78	235	71	151	170	110	302	90	167	2170	306	1	7	207	91	82	162	80
Raw materials & processing aids	171	63	3	99	56	25	22	71	57	285	75	70	63	328	53	54	1495	232	64	4	49	119	171	17	82
Honey, sugars and sirups	37	84	19	63	23	15	39	65	96	52	21	69	32	45	48	59	767	173	52	38	93	4	114	12	17
Jams, soft drinks, etc.	514	644	293	456	416	548	299	852	391	511	326	846	646	817	770	864	9193	1852	463	243	614	668	1336	229	384
Cheese and processed cheese	202	280	20	91	50	87	31	55	98	35	48	159	52	104	241	131	1684	468	188	120	185	27	314	56	114
Complete meals	33	13	24	70	21	1	15	2	18	-	46	1	9	32	248	245	778	104	4	1	38	62	78	17	68
Children's toys	92	4	13	40	25	8	7	8	44	81	17	27	46	37	104	22	575	60	3	-	63	2	26	3	40
Snacks	1071	1599	223	295	581	296	475	275	961	1330	245	1326	1330	1424	378	518	12327	3037	19	18	64	3280	2084	351	369
Coffee and tea	58	95	14	36	7	23	41	26	17	46	75	73	55	75	104	68	813	147	84	47	21	-	101	6	19
Agricultural & horticultural prod.	1268	945	297	4459	1586	1355	3164	236	1943	2318	534	1458	2934	1553	3111	1951	29112	511	12	5	300	196	332	102	475
Margarine, oils and fats	176	179	32	95	120	135	83	142	147	164	77	142	137	172	104	129	2034	241	50	40	135	43	154	17	92
Flour and flour products	239	63	32	59	88	49	49	133	32	159	127	87	101	53	99	74	1444	259	52	80	33	108	193	12	102
Milk and milk products	8182	7609	4873	33751	11221	9053	6634	1270	29876	46611	11035	23208	5171	14829	64003	3428	280754	10533	384	1457	2362	7596	7061	1802	5004
Pulses and seeds	74	35	19	26	14	20	16	79	16	13	13	62	68	67	8	42	572	122	21	26	20	60	88	17	28
Radioactive and dangerous substances	-	-	-	-	-	-	1	-	-	-	-	-	12	13	-	-	26	-	-	-	-	-	-	-	-
Packaing materials	7	-	11	125	2	-	-	11	92	-	4	7	68	4	547	12	890	45	-	-	39	6	43	1	19
Fish and fish products	320	129	67	51	101	125	135	108	611	66	44	237	113	319	127	54	2607	295	67	81	57	121	158	308	710
Meat and meat products	2353	2058	479	727	1725	718	262	1087	2089	3060	1353	1464	1024	1287	1327	2520	23533	3919	186	332	3429	61	1694	1296	173
Mattresses and quilts	-	1	1	9	42	-	-	5	-	7	6	9	2	3	15	1	101	51	9	-	44	-	21	29	5
Detergents, bleaching and polishing agents	72	41	13	72	100	22	25	70	40	38	11	109	87	62	109	42	913	157	52	7	52	51	112	4	5
Water	48	49	5	62	109	90	22	35	71	51	1	55	182	33	34	41	888	145	-	-	20	137	129	6	-
Game and poultry	36	-	6	25	49	-	-	3	12	113	18	57	13	141	267	96	836	82	-	8	29	46	57	14	284
Other foods and beverages	180	90	1	7	54	50	22	84	50	83	198	94	85	294	82	33	1407	289	27	7	17	262	232	39	162
other regulated commodities	-	-	2	-	7	7	-	15	-	-	2	-	14	-	21	1	69	3	1	-	1	1	1	-	2
Special paid investigations	87	215	11	80	315	2	228	6	253	1	50	359	1432	-	271	142	3452	21	-	-	11	10	1	-	-
Samples from consumers	177	442	48	111	150	24	453	167	278	127	147	143	184	93	259	332	3135	598	15	2	235	350	221	22	81
Total number of investigated samples	19672	19735	7695	45063	19306	15580	16687	7105	40680	62196	17489	34722	17176	28547	79159	13539	444351	32829	2588	3334	12560	16874	21535	5992	10733
Total number of defective samples	3039	2734	738	1382	1252	1672	1400	1399	4861	3039	1312	1400	2077	2929	2327	1268									

TABLE 4 - SPECIALISATIONS OF FOOD INSPECTION SERVICES

Amsterdam	aromas and flavourings fruit juices, soft drinks and wine
Dordrecht	pressure packagings
Enschede	cosmetics downs and other fillings for mattresses etc.
Goes	emulsifiers, stabilizers etc.
Haarlem	anorganic compounds in food packaging material and utensils children's toys
's-Hertogenbosch	protein compounds
Leeuwarden	heavy metals
Maastricht	vitamins and trace elements
Nijmegen	fats and oils
Rotterdam	colour agents mycotoxins
Utrecht	organic compounds in food packaging material and utensils residues of feed additives and veterinary medicines
Zutphen	protein compounds spices and production aids for meat and meat products

TABLE 5 - ADDRESSES OF FOOD INSPECTION SERVICES

		telex	telephone
Alkmaar	Postbus 166 1800 AD Alkmaar	57240	072-110944
Amsterdam	Keizersgracht 732-734 1017 EW Amsterdam	16542	020-237525
Assen	Westerbrink 3 9405 BJ Assen	53986	05920-16300
Dordrecht	Planetenlaan 2 3318 JJ Dordrecht	26666	078-70044
Enschede	Postbus 777 7500 AT Enschede	44866	053-767555
Goes	Evertsenstraat 17 4461 XN Goes	55013	01100-14910
's Gravenhage	Prinsegracht 50 2512 GA 's Gravenhage	33761	070-631928
Groningen	Postbus 465 9700 AL Groningen	53408	050-164911
Haarlem	Nieuwe Gracht 3 2011 NB Haarlem	41697	023-319132
's Hertogenbosch	Oude Dieze 12 5211 KV 's-Hertogenbosch	50748	073-139965
Leeuwarden	Postbus 372 8901 BD Leeuwarden	46456	05100-50205
Maastricht	Florijnruwe 111 6218 CA Maastricht	56641	043-33030
Nijmegen	Meyhorst 60-02 6537 KT Nijmegen	48492	080-446444
Rotterdam	Baan 74 3011 CD Rotterdam	27057	010-143922
Utrecht	Nijenoord 6 3552 AS Utrecht	40618	030-443843
Zutphen	Praebsterkamp 34 7203 BG Zutphen	49119	05750-16644

TABLE 6 - BUDGET TREND OF FOOD INSPECTION SERVICES

Year	Total cost $x10^6$ guilders	Inhabitants $x10^6$	Cost per inhabitant guilder
1968	15,6	12,8	1,20
1969	18,2	13	1,40
1970	19,4	13,1	1,48
1971	21	13,3	1,53
1972	25	13,4	1,86
1973	28	13,5	2,07
1974	33,8	13,6	2,48
1975	40,2	13,7	2,92
1976	48,3	13,8	3,50
1977	53,6	13,9	3,86
1978	58 (1)	14	4,14

1) Estimated

TABLE 7 - MEAT INSPECTION SERVICES

Slaughterhouses

abattoirs	58
private slaughterhouses	88
emergency slaughter places	200
slaughter places at butcher's shops	2000

farmer slaughterings: number of animals, yearly 40,000

Activities on a yearly basis

1. ante and post mortem inspection	15 million animals
2. inspection of died slaughter animals	1 million animals
3. inspection of diseased slaughter animals	200,000 animals
4. import inspection	
4.1. meat	120 million kg
4.2. meat products	63 million kg
5. export inspection	
5.1. in connection with item 1	3.5 million animals
5.2. c.q. after processing, from 1 and 4 (requiring certain lab. investigations)	392 million kg
6. hygiene inspection of enterprises:	
42,000 enterprises; 400,000 inspections	
7. laboratory investigations	
7.1. in direct relation with slaugher animal inspection:	
anthrax	500,000
antibiotics	138,000
hormones	48,000
bacteriological, incl. Salmonella with suspected animals	135,000
pathological anatomical	25,000
7.2. other investigations in relation to 6:	
hygiene, by means of agar stamps	14,000
Salmonella on chopping blocks etc.	13,000
histology meat products	1,500
total counts meat and meat products	10,000

United Kingdom: ANN M. WATERS, Principal, Food Standards Division, Ministry of Agriculture, Fisheries and Food, London

I. THE LEGAL BASIS

Purpose of Food Legislations

1. Food legislation in the United Kingdom has a long and distinguished history. Its aims are twofold; of primary importance is the protection of the consumer and with this must be coupled the establishment of fair trade and competition which is the protection of the honest trader. Protection of the consumer can be further divided and measures aiming to ensure the hygienic preparation and sale of food may be separated from measures aimed at preventing the defrauding of the consumer by the sale of adulterated or misleadingly labelled food. Protection of the honest trader is most closely tied up with the second aspect of consumer protection; both consumer and trader benefit if competition is controlled at least to the extent that fairness is maintained.

Development of Food Legislation

2. Until recently the protection of the health of the consumer has been separate from measures aimed at ensuring satisfactory food quality. The former has its origins in the Public Health Acts of the last century and developed with the understanding of the possible dangers of dirt and disease as part of the general moves towards cleaner and more hygienic premises. The quality aspects of food legislation first appeared in 1875 in the Sale of Food and Drugs Act which required that food must be of the nature, substance and quality demanded by the purchaser. In 1938 a new Act brought together for the first time all aspects of legislation governing food; both hygiene and quality, and introduced provisions to control the labelling and advertising of food. The current legislation – the Food and Drugs Act 1955-incorporates all provisions affecting food and empowers Ministers to make regulations to control the hygienic preparation of food and the composition, labelling and advertising of food. However, this applies only to England and Wales. Two separate but similar Acts apply in the rest of the United Kingdom:- The Food and Drugs (Scotland) Act 1956 and the Food and Drugs Act (Northern Ireland) 1958. This paper deals basically with the provisions of the 1955 Act.

The Current Law

3. The main provisions of the Food and Drugs Act 1955 reflect very accurately the main concepts which the original legislation sought to introduce. On the health side the Act makes it an offence to sell for human consumption any food to which substances have been added or abstracted or which has been processed so as to render it injurious to health and to sell food which is unfit for human consumption. On the quality side the Act continues the provision of the 1875 Act, which is seen by many as the basic provision of the legislation, that it is an offence to sell to the prejudice of the purchaser food which is not of the nature, substance or quality demanded. This is backed up by the provision which makes it an offence to use a description which falsely describes a food or which is calculated to mislead as to its nature, substance or quality. Since 1955 various changes have been made to the Act, the main one being that it no longer applies to drugs. The Medicines Act 1968 now controls medicines (or drugs) and leaves the 1955 Act to control only food.

4. Three particular points relating to the way the law is framed and enforced should be mentioned here.

(a) The basic provision of the Act creates an offence only when a food is sold and although the regulations include the concept of "having in possession for sale" most enforcement is related to the point of retail sale, i.e. sale to the individual who is to eat the food or give it to his family and friends.

(b) The Act creates an offence in relation to each article of food and not to a representative part of a batch. Thus if any article of food, for example, a single sausage or a single bun, does not comply with all the many provisions of the food law when it is sold an offence has been committed.

(c) The Act also imposes strict liability on the seller. It is not therefore a defence under the Act for the seller to claim that he did not intend to sell unfit food or did not intend to defraud the consumer. Some defences are available but the principle behind the Act is that if an offence has been committed somebody must be responsible for that offence.

These three provisions are of considerable importance in understanding the way in which regulations made under the Act are framed and in understanding the methods of enforcement and the restraints imposed upon enforcement.

5. The Food and Drugs Act therefore provides the main legal base and includes a definition of food. This is that "food includes drinks, chewing gum and other products of a like nature and use, and articles and substances used as ingredients in the preparation of food or drink or of such products, but does not include:-

(a) water, live animals or birds,

(b) fodder or feedingstuffs for animals, birds or fish,

(c) articles or substances used only as drugs".

Over 40 main sets of regulations have been made under the Act to control the composition and labelling of many foods, for example the Bread and Flour Regulations 1963, The Cream Regulations 1970 and the Cocoa and Chocolate Product Regulations 1976, to control the use and levels of additives in food, for example the Preservatives Regulations 1975 and the Emulsifiers and Stabilisers Regulations 1975, to control the general labelling and advertising of all foods by the Labelling of Food Regulations 1970. Other regulations control the hygienic preparation and sale of food, for example the Food Hygiene (General) Regulations 1970, and the import of food into the United Kingdom is subject to the Imported Food Regulations 1968.

The Future

6. The basic legislation is now over twenty years old and is currently being reviewed with a view to introducing a new and modern Act to take account of changing patterns in food distribution and to lay the foundations for future developments. It is hoped to complete this work within the next few years.

II. THE ENFORCEMENT SYSTEM - THE ROLE OF CENTRAL GOVERNMENT

Preparation of Legislation

7. When legislation is necessary it is usually instituted by central government departments. This applies to both primary legislation, i.e. the Acts, and the regulations made thereunder. Individual Members of Parliament may take the lead on the former. The Food Standards and Food Additives and Contaminants Divisions of the Ministry of Agriculture, Fisheries and Food are responsible for initiating legislation on quality, composition and labelling of food. The Public and Environmental Health Division of the Department of Health and Social Security is responsible for initiating legislation on the health and hygiene aspects of most food, with the Animal Health Division of the Ministry of Agriculture, Fisheries and Food responsible for meat hygiene in slaughter houses.

8. However, these departments together with the Welsh Department, which has a subsidiary role, are responsible only for legislation covering England and Wales. Separate departments and therefore separate Ministers are responsible for the introduction of legislation in Scotland and Northern Ireland under the separate Acts which pertain there. In order that the same rules apply within the whole United Kingdom however the regulations made in Scotland and Northern Ireland are generally the same as those made in England and Wales.

9. Primary legislation, i.e. Acts, must be debated by both Houses of Parliament and regulations, although rarely debated, must also be approved by Parliament.

10. The role of central government departments is therefore confined to all the work necessary to prepare legislation, have it approved by Parliament and put onto the Statute Book. This must involve detailed and lengthy discussions with all involved - the enforcement authorities, the food manufacturers, distributors and retailers and the consumers. Proposals for regulations are published and discussed; the aim must always be to ensure that the legislation which is eventually made is fair to all parties, that practical problems have been fully considered and that compliance with the law and enforcement of the law can be readily achieved. Rules with which compliance is impossible or enforcement impractical cannot be said to make sensible law. It is the duty of central government departments to ensure that sensible law is made. Once made, the role of these departments almost disappears and they play no part in enforcing or interpreting the law. Informal advice may be given but it carries no legal weight. Enforcement of the food law rests with the local authorities and interpretation with the courts.

THE ROLE OF LOCAL AUTHORITIES

11. Enforcement of the quality, composition and labelling aspects of the food law is the duty of food and drugs authorities. These, in England and Wales, are the county councils and the London boroughs, 88 authorities in all; in Scotland they are the regional and island authorities of which there are 12 and in Northern Ireland the district councils of which there are 26 grouped into five public health committees. Enforcement of the health and hygiene parts of the Act and regulations is the duty generally of the lower tier authorities who are responsible for environmental health. These, in England and Wales are the district councils and the London boroughs, in total almost 400 authorities, in Scotland the islands and districts and in Northern Ireland the same authorities as enforce the rest of the Act.

12. This division of responsibilities results from a number of factors. One of the most important is the other duties which each level of authority also carries out. The county councils enforce such consumer protection legislation as that related to weights and measures, trade descriptions, fair trading and consumer credit. The purpose of all this legislation is to ensure that the consumer is not defrauded or misled about purchases and that the trader works in an area of free and fair competition. The quality aspects of food legislation fit sensibly into this framework. The departments entrusted with these duties are the consumer protection or trading standards departments. The district councils deal with all public health matters, housing and sanitation and into this framework the health and hygiene aspects of food law neatly fit. The environmental health departments are responsible for enforcement at district council level.

13. The smaller number of authorities dealing with labelling and quality of food means that a more consistent approach to offences can be established with less opportunity for local variation. Within the constraints imposed by the concern of the elected councillors, the public and the press each food and drugs authority has discretion over such actions as the number of food samples to be taken or the cases which should be brought to court. There will therefore always be variation in the protection afforded to consumers and the line taken with manufacturers. However, there are now moves towards co-operation between authorities and towards developing a common approach to certain types of offences. This must carry with it advantages for both manufacturers and consumers.

14. The district councils cover smaller areas which makes it easier for the environmental health officers to become familiar with the food premises in their area and thus more easily give advice on hygiene questions and follow up complaints about unfit food which may result from poor processing or storage.

15. Enforcement of the Imported Food Regulations, which are aimed at ensuring that all food entering the country is fit and does not contain non-permitted additives, lies with the port health authorities. Where food enters the country in containers and is not cleared by Customs until an inland destination is reached, the duty of enforcement of the regulations passes to the appropriate inland district council.

16. Each food and drugs authority is required by the Food and Drugs Act to appoint a public analyst, qualified as laid down in regulations, to carry out the necessary analyses of foods. Public analysts are not necessarily local government employees and may have private laboratories carrying out analyses for food and drugs authorities on a fee paid basis, the fees being worked out nationally. The involvement of the public analyst and his laboratory in the sampling and enforcement of the legislation varies greatly between counties and it is impossible to draw a picture which is true throughout the country. Environmental health departments of district councils will also use public analysts when necessary but they are mainly concerned with microbiological problems and for this purpose maintain close links with the local and central laboratories of the Public Health Laboratory Service.

Manpower and cost of the Enforcement Service

17. The enforcement of food legislation is only a relatively small part of the duties of both the trading standards department of the county council and the environmental health department of the district council. Public analysts too have statutory responsibilities under a number of other Acts. It is therefore impossible to arrive at an accurate figure for the number of man days employed in enforcing the various provisions of the food law. Similarly costs cannot readily be calculated.

The best estimate that can be made would set the total cost of enforcement of all food legislation at about £6.5m. Financial restraints on local authorities are likely to prevent great increases in the near future although the cost of analysis is rising rapidly and must have some effect. Manpower cannot be estimated with any degree of accuracy and no sensible estimate can therefore be given.

Training of Enforcement Officers

18. Trading standards officers, who enforce the quality, composition and labelling aspects of the food law, must qualify by passing an examination for the Diploma in Trading Standards. The syllabus for this includes study of the general law, the role of central and local government, economic and commercial practice, sampling and statistical techniques, the technology of goods and services and a detailed knowledge of those Acts which the officer will have to enforce. Thus the enforcement officer should have a good basic knowledge of the type of problem that can occur with food products in relation to their nature and quality and a basic knowledge of the Food and Drugs Act and the specific regulations. Experience will greatly increase his knowledge and enable him to enforce the law more effectively.

Enforcement officers will also attend courses organised by their professional association to keep up to date with developments in food law.

19. Environmental Health Officers, who enforce the health and hygiene aspects of food law, must pass the exams necessary to achieve a Diploma in Environmental Health. This covers environmental science, construction technology, law and administration, occupational health and safety, pollution control, food safety and hygiene and statistical methods. The food safety and hygiene syllabus covers food hygiene in production, manufacture, distribution and retail sale, education of food handlers, milk and meat processing, recognition of diseased and unfit carcase meat and meat products, canning and other preservation methods and microbiology in the control of food safety and hygiene. Here again the officer acquires experience with service in the field but the basic knowledge he must have to pass the diploma exams does mean that a good basic knowledge of food safety is assured.

III. METHODS OF ENFORCEMENT

20. Enforcement of food legislation is left entirely to local government. Ministers may take enforcement action only if it appears to them that a local authority is not enforcing the law adequately and that this failure affects the general interests of consumers or the general interests of agriculture in the United Kingdom. No Minister has ever found it necessary to initiate such action. Enforcement of food legislation may be divided up into separate parts.

Informal advice

21. This is not a statutory duty but may be just as effective as any number of prosecutions. Food manufacturers, before launching a new product onto the market, will often seek the advice of an enforcement officer in whose area the food factory lies. Advice is most usually given about the label, whether it complies with the law in that it carries the name of the food, the name and address of the packer or labeller and the list of ingredients (where appropriate) and whether the label accurately describes the food it covers. Advice from one officer may not necessarily agree with advice from another in the next county. Liaison is being developed to provide a more uniform advice system so that puzzled manufacturers are not faced with the situation of complying with the advice of one officer only to find another in another authority intent on prosecution for an alleged offence. Only the courts can interpret the law, as some manufacturers have found to their cost. However, an efficient system of advice can save manufacturers, inspectors and consumers much time and effort. Advertisements too may be approved in this way.

Informal Sampling

22. The next method of enforcing the law is to take an informal or "screening" sample. This again is not a statutory requirement but a quick and easy way of finding out whether some particular food may be compositionally deficient in some respect. The method of sampling is usually to buy a few similar products from a shop and have them analysed by the public analyst. If this shows that something is wrong the officer will return for the formal sample upon which a prosecution can be based. Informal sampling permits of smaller samples and a wider ranging check than the procedures of formal sampling would allow and is widely used where the officer can be sure that the food will still be available for formal sampling should an offence be indicated. This system of informal action on the quality side is to some extent paralleled on the health side where food processors or retailers may choose voluntarily to surrender food which is unfit to the environmental health authority who will confirm that the food is unfit and that it has to be destroyed.

Formal sampling

23. The formal sample is the legally accepted way of enforcing the food quality laws. Having taken a formal sample, whether by purchase or not, the officer must divide it into three parts, keep one for analysis, give one to the vendor, (or similar responsible person where the food is sampled from a vending machine) and retain one to be sent as the referee sample to the Government Chemist should there be a dispute about the analysis during the prosecution case. Particular rules are laid down in those cases, such as prepacked meat pies, where division of the individual food into three parts is impracticable. In such a case the officer is allowed to treat three cans or packs as the food and each one as a third of the whole. If the officer decides that the food should be analysed he is required to send it to the public analyst for the area in which the food was sampled. In effect few cases are taken unless the food has been analysed, the public analyst being called by the prosecution (the local authority) as an expert witness. Formal sampling therefore must be undertaken in any case where an offence is suspected, or where the officer cannot depend on the food from which he might prefer to take an informal sample still being there if a possible offence is discovered.

24. It will of course have been noticed that in discussing sampling one of the basic principles of the Acts mentioned in paragraph 4 is important. Every item of food must comply with the law and it is enough for a prosecution that one sausage should be deficient in meat content. No inferences are drawn about the general level of acceptance of the batch from which the offending sausage has come but manufacturers will often amend their manufacturing practices if a warning letter is received from an inspector or a prosecution is initiated.

Consumer Complaint

25. The final way in which the law is enforced is by the action of the largest body of enforcement officers in the country - the consumers. Many cases are taken to court after a consumer has complained to the local enforcement authority that there is a nail in a loaf or bread, or a dead beetle in a box of dates. Complaints may also be made about the

peculiar nature of a meat product with the consumer voicing suspicions that it contains not meat but vegetable protein or about the apparent absence of strawberries in strawberry jam. In many cases analysis leads to a prosecution, for every item sold must comply with the law; in some cases the enforcement officer will take other follow-up action. Complaints about extraneous matter in food or dirty food will often lead to a fresh inspection of the manufacturing premises, restaurant or shop by the environmental health officers to ensure that the Food Hygiene Regulations are being observed. This, and the correction of any hygiene faults found, may be more beneficial for consumers than a prosecution for a piece of dirt in a loaf of bread.

26. Enforcement officers are constantly on the watch. When the food and drugs inspector is checking on weights and measures he will also be keeping an eye on food quality. When an environmental health officer is called in to give advice on the washing facilities for cooking staff he will check the whole food premises in relation to the hygiene regulations. But perhaps the consumer should always be aware of the standards of the food bought in order to help the enforcement officers to assist the food manufacturer to ensure good fit food of the nature, quality and substance demanded by the purchaser.

27. Enforcement is carried out mainly at retail level although advice may be given at points much earlier in the chain. This results from the way the law is framed and because its purpose is to protect the consumer rather than to provide information or protection at earlier stages in the manufacturing and distribution chain. Any sale is in effect covered by the provisions of the Act, and not just the final sale to the consumer, but because those involved in earlier sales such as wholesalers and retailers will probably have contracts and warranties, enforcement has developed to protect the most vulnerable part of the chain - the consumer.

Legal Action

28. Although enforcement officers may write warning letters to manufacturers and retailers about alleged offences administrative sanctions are very rare in food legislation. They exist in relation to licensing of slaughterhouses and are being introduced in the water content in poultry regulations but in all parts of the food law, as tightly defined, sanctions can come only from the courts or the magistrates.

29. When a food and drugs authority takes a case to court it is usually the retailer who will be the prime defendant. However, the law acknowledges that in many cases the retailer cannot be fully responsible for the food, in that he is unlikely to have seen the contents of any prepacked food or to be able to verify that the label accurately describes the contents of the pack. Using a special provision in the Food and Drugs Act the enforcement authority may institute proceedings against the manufacturer immediately, missing out the retailer and thus acknowledging his peripheral role in the case. In other circumstances the retailer will be taken to court and it is then up to him to prove that the offence was due not to his default but to the default of another, and if he can so prove to the court's satisfaction he shall be acquitted and the other, probably the manufacturer, found guilty. The retailer may instead plead a warranty defence again passing back the alleged offence to the point in the chain where someone had greater responsibility for the food than he. A warranty defence can be claimed only where a retailer bought the food believing that the description applied to it was lawful, that he still believed it at the time of the offence and that the food was in the same condition at the time of sale as at the time of purchase.

30. Of course all such passing back of an offence must to some extent depend on the manufacturer being within the jurisdiction of the courts. A retailer or importer of foreign food may plead either the defence that the offence was due to someone else's default, or, more commonly, will plead the warranty defence and will be acquitted. No case can then be brought against the manufacturer because he will have offices in a different country, in a different legal jurisdiction. A retailer or importer is rarely taken to court when the food involved is of foreign origin because in most cases little can be achieved. Enforcement authorities faced with continuous problems over imported food are likely eventually to take action against the importer if it can be shown that the warranty defence does not hold because the importer cannot prove that he has taken reasonable steps to ascertain, and did in fact believe in, the accuracy of the statement in the warranty.

31. The most usual course of action when those clearly responsible for an offence cannot be brought to court is for the enforcement authority to write to the country's Embassy in the UK asking them to initiate checks on the factory involved, or to seek the assistance of the Ministry of Agriculture in approaching the Embassy. The effectiveness of this type of approach varies greatly between countries.

32. Where food imported into the country is found to be unfit or to contain non-permitted additives on examination at the point of entry the health authorities may, under the Imported Food Regulations seize the food and seek an order from a magistrate that the food should be condemned and destroyed. Imported meat from countries outside the EEC must be accompanied by a health certificate and failure to provide such a certificate will mean that importation is prevented. On the health side therefore there is tighter control of imported food than on the quality and composition side.

IV. LEGAL ACTION AND PENALTIES

Legal Action

33. In England and Wales cases are begun in the magistrates' courts, the lowest courts in the legal system, and may be fought right up through the whole hierarchy until a final decision is given in the House of Lords. Obviously such a procedure can be very expensive and few authorities, if a case is lost, will seek leave to appeal to a higher court. Large manufacturers on the other hand may well choose to do so in the hope of winning the day or at least of obtaining a definite judgement from an expert lawyer in the person of a High Court Judge.

34. The lay magistrate, or justice of the peace, has a more important role to play in relation to food hygiene and food fitness cases than in food quality and composition cases. He may order unfit food to be destroyed, he may order unhygienic food premises to be closed down, and although appeals against such action are possible such procedures do mean that where risk to public health is involved the law provides for the most rapid action.

Penalties

35. The Food and Drugs Act was made in 1955 and although some penalties in the Act have been raised since then it can still fairly be claimed that the penalties do not reflect the seriousness of the offences the Act seeks to control. The main penalty laid down in the Act for any offence is a fine not exceeding £100, or imprisonment for a term not exceeding three months or both and in the case of a continuing offence a further fine not exceeding £5 for each day during which the offence continues after conviction. Very few defendants go to prison. Obstructing an officer in the course of his duty attracts a penalty of only £20 and this provision has frequently been criticised in that it makes it worthwhile for a guilty party to obstruct and, if found guilty, pay the lower fine rather than be helpful and run the risk of a much higher penalty.

The penalty of adverse publicity about a case of extraneous matter in food or failure to comply with a compositional standard may be more damaging to a food company than any fine imposed by the courts. This is probably particularly true where restaurants are found guilty of having unhygienic kitchens.

V. COMMUNICATION BETWEEN CENTRAL AND LOCAL GOVERNMENT

36. Good liaison between those officers responsible for writing the Government's intentions into law and those responsible for enforcing that law is of the greatest importance if the law is to provide useful protection for the consumer. Communication may take place between central government and individual local authorities or with associations of enforcement authorities or officers. Each type of authority has its own association, for example the Association of County Councils (the food and drugs authorities) and there is an association to present all types of enforcement officers, for example the Institute of Trading Standards Administration and the Environmental Health Officers Association.

37. The local authority associations have recently formed a body entitled the Local Authorities Co-ordinating Body on Trading Standards (LACOTS) on which enforcement officers are represented. This body can be said to speak for all those involved in enforcement and provides central departments with easy access to the views of local enforcement officers.

38. Information channels can be separated into three main categories:- statutory requirements for information to be provided to the Minister; formal channels which have been developed to ensure that each party to the legislation knows what the other is doing and can contribute towards it; and the informal contact which provides all concerned with the best opportunity for learning about the system as a whole.

(a) Statutorily required information

(i) Public analysts are required to submit every quarter to the food and drugs authority by which they are employed a report of the analyses carried out in that quarter under the Food and Drugs Act. The authority is required to pass on a copy of the report to the Minister of Agriculture, Fisheries and Food. These reports provide the only detailed information on how the food law is being implemented. Until recently little use could be made of them in building up statistics because true comparability between reports did not exist. These statutory returns are now being voluntarily augmented and produced in the same layout throughout the country at the request of Food Standards Division so that useful statistics giving a full picture of food law enforcement can be built up.

(ii) Local authorities are required to inform the Minister of Agriculture, Fisheries and Food of their intention to initiate a prosecution under a section of the Food and Drugs Act controlling the labelling and advertising of food, and under the Labelling of Food Regulations. The Ministry must, fourteen days after receipt, issue a certificate to the effect that the information has been received, as prosecutions cannot legally proceed without this. The purpose of this is to provide Ministry officials with enough information so that where two prosecutions were being initiated at the same time they warn both authorities involved of what is happening. The Ministry has no power to stop prosecutions and has never used the information provided under this provision except to acquire material about the enforcement of particular requirements in the law.

(iii) Local authorities are required to make weekly and quarterly returns of the number of cases of food poisoning within their areas. This information is collated and published by the Office of Population Censuses and Surveys.

(b) Advice from enforcement authorities

(i) Comments on existing legislation. This will often result from a prosecution which has failed for legal reasons or which has thrown up some point in the law which is not totally clear. Criticism of legislation may come because it is apparent that it is not adequate to deal with the abuses being discovered and because it is felt that modern developments in food technology cannot be controlled without new legislation. Such comments and advice are always useful and contribute in an important way to the development and continuing effectiveness of the legislation.

(ii) Comments on proposed legislation. Proposals for regulations are required to be circulated for comment to all interested parties. This includes enforcement authorities and practical comments are usually received by central government.

(iii) Membership of Committees

(a) Enforcement officers make up an ad hoc Committee which gives advice to central government on the impact of proposed EEC food law harmonisation directives and its enforcement on UK food legislation.

(b) Enforcement officers are represented on the National Codex Committee along with food manufacturers and consumers. This Committee helps to establish the line which central government takes in discussions in Codex Committees.

(c) Information from Central Government

(i) Food Standards Division used to hold a meeting every six months with all types of enforcement officers to keep them up to date with developments both in London and Brussels. This was to allow discussion of any matter of particular interest but was discontinued because subjects of sufficiently wide appeal did not always appear.

(ii) These meetings were followed up with a bulletin on everything which might be of interest to local authorities and a copy was sent to each authority. This bulletin continues to be issued about once every six months and is used to keep all enforcement authorities up to date with developments.

(c) Informal Channels

This involves ad hoc meetings to discuss particular points, contributions from both local and central government officers to symposia, lectures and conferences. Informal contacts help as much as any formal contacts to ensure that information passes freely among all those involved with the administration and enforcement of the food law and ensures that it is effective.

CONCLUSION

39. Food law in the United Kingdom is based on central initiation and local enforcement, co-operation between those responsible locally and centrally ensures that the law is sensible and is enforced sensibly. Food manufacturers are generally content with the level and method of enforcement and consumers benefit from a level of protection which ensures safety and quality of food while at the same time allowing the development of new food technology which will increase the choice of food available. Future developments in the whole field will be based on secure foundations.

VI. ADDRESSES OF CONTACT POINTS IN THE UNITED KINGDOM

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PRELIMINARY SUMMING UP : SIMILARITIES AND DIFFERENCES BETWEEN NATIONAL ENFORCEMENT SYSTEMS

A. KINCH - Head of Division in the Directorate General for Internal Market and Industrial Affairs, Commission of the European Communities, Brussels.

This is the only opportunity I have to address you and I think I should start with a confession. I was not originally an enthusiastic supporter of the idea of this symposium. I could not discern the real purpose nor perceive the results. I have been converted. The benefits can be enormous particularly if we do not attempt too much too quickly.

My hope is that you will take away from this symposium a new respect for the system in force in other member states; that you will use the contacts you have made to examine for yourself the merits and faults in each other's system so that your mutual understanding will grow and that some myths about what goes on in neighbouring states will be dispelled by your own first hand knowledge.

It is only in this way that those improvements can be expected to be achieved which will lead from respect for, to mutual acceptance of, our different systems.

Introduction

This is a symposium on the "Enforcement of food law". The papers so far presented have concentrated quite rightly, and for the major part, on the detection of infringements and the subsequent punishment of offenders. Scattered throughout the papers however there are references to matters within national systems which seem to me to fall into an area which is rather broader than that which some of us have perhaps too readily accepted as being covered by the title given to our discussions.

Let me explain what I mean. The main object for which a legislator makes a law is that he whishes that law to be observed for what he considers to be the better ordering of the society for which he is legislating. In the area with which we are dealing which ranges from criminal to quasi criminal behaviour in relation to the law, it is important that the legislator should be able to provide for the detection of breaches of the law, and provide sanctions to penalise those breaches. He does not in my view, however, rely solely upon enforcement in this sense for securing the observance of the law. For example in all our countries we have a not unreasonable objection to murder as a method for settling disagreements between our citizens. It is stretching the meaning of language to say that the laws against murder can be enforced by the detection and punishment of offenders. The state cannot enforce the law against murder. It can only punish the breach of it. The observance of the law depends upon the self discipline and restraint of the individuals who are subject to the law.

Foodlaw is not a domain entirely on its own. It cannot be considered in isolation from the complex fabric of law regulating our relations with each other, and our relations with the state. In the major part food law is observed by manufacturers because it is the law; not because it is possible to detect infringements and penalize them. It is easy to understand the impossibility of checking every item of food manufactured in our countries. In this sense it is not possible for authority to secure the observance of the law. Its observance is, in by far the largest measure, freely accorded. This is what a famous English judge, Lord Moulton, once described as "obedience to the unenforceable". This principle is manifested in our morality, in the fulfilment of duty, and in what amounts to a matter of good manners in our behaviour towards our fellow citizens. If we do not retain this principle, and come to have to rely solely upon authority to secure the observance of the law, then I do not believe our society as we know it has a great future.

I have spent some time on my introduction because my belief is that we are all trying to secure the better observance of the law. It is in this context that I want to set what I regard as the significant differences in the ways in which we have been told this is attempted, and achieved in the member states of the Community. The differences and similarities I shall mention, are those which seem to me to be significant to the integration of the European Community.

1. The making of the law

There are four principal parties to the making of any law. The legislator, the individual who is required to observe the law, the individual for whose benefit the law is to be enacted, and those who will be requested to enforce the observance of the law. It is interesting to observe that food law in its modern form was the subject of legislation in all our member states in the years between 1875 and 1905. At that time the main concern of the legislator was that food being sold was often, in the polite phrase of English law "not of the nature substance and quality" demanded by the purchaser. In other words far too much of it was being fraudulently adulterated for the pecuniary benefit of some suppliers. Scientific developments permitting control led to a dramatic reduction in the number of those who were failing to observe the law. At that time such matters were seen, not so much as measures for consumer protection, but as matters relating to honesty in trading. There was a need to protect the honest trader from his dishonest counterpart. In an area which is coincident with theft and in which an intent which is criminally fraudulent is palpably evident, there is no real need for the legislator to consult the other parties. Their assent can be taken for granted, although I must confess that the genius of the English barrister even then led to some interesting forensic contests about the meaning of the word "adulterated".

In the last hundred years our concern has shifted from the raw question of adulteration. We have come to concentrate much more on questions concerning public health, consumer protection and the composition of our foods. The emphasis has shifted from the simple necessity to suppress fraud, an evident piece of wrong doing, to an area which is much more debatable and in which there can sometimes be as many opinions as there are experts. In this area the observance of the law depends in the first place upon the formal opportunity accorded by the legislator to those principally concerned, to express their views and have them considered.

Such a formalized system exists in the United Kingdom and Ireland and there is substantial if less formalised and exhaustive consultation in other member states. The food standards Committee which is multidisciplinary and independent of Government receives evidence and accords a hearing to any interested party, including private individuals, before making its report to ministers. The report is published for general public comment and subsequently draft regulations are circulated for a further round of comment by interested parties before being laid before Parliament. The Committee is advisory and the Government is not obliged to accept all the recommendations made by it. This system ensures that every citizen has an opportunity to express his view.

Even if an individual does not agree with the law which emerges or a particular part of it, he is much more likely to observe it if he has had an opportunity to have his say, than if it is imposed upon him without such an opportunity being accorded.

2. The organisation of control

If the Community is to develop in the future a better coordination of the services whose task it is to secure the observance of the law, it seems to me to be a precondition for concerted Community action or for concerted action between any two or more member states, that there should exist in each member state a central authority empowered to initiate and carry through any action agreed to be necessary by the member states at community level. This would provide effective means for organising common action in the face of a Community wide threat, mercury in oranges, for instance, or for simultaneous Community-wide checks on particular foodstuffs as a matter of routine, or in view of a particularly widespread breach of a particular provision of the law.

If I have understood the position correctly central organisations exist in Italy (for imports), Belgium, France, Luxembourg and Holland. There appears to be no such central authority in Italy (internal production), Denmark, Germany, Ireland and U.K. If this suggestion raises eyebrows and even hackles in some quarters, I can only ask that it be considered cooly in the light of the benefits that it may confer not only on local communities but on the larger Community we are all working to develop.

3. The function of inspectors

There is a frequent and not unjustified complaint about the manpower provided by states for securing the observance of food law. As I said earlier one cannot divorce food law from other regulatory law the observance of which requires to be secured. I do not think I need enumerate them but they are myriad in all our countries. Governments made up of politicians have to weigh these needs against each other and against competing claims for the state's resources. That is a political internal matter for each member state, as is the question of the duties assigned to inspectors. Reading the papers that have so far been given one is bound to inquire whether the observance of the law relating to food is secured more effectively by an inspector whose sole task that is, or by one who has multiple functions. There may be possibilities for inter-disciplinary cooperation in inspection services having different responsibilities. In terms of the security of the external frontier of the Community, the controls carried out by our customs services for the purposes of the common agricultural policy, and tariff classification, should be extended to cover compositional conformity with national and Community regulations.

4. The point of inspection

In dealing with this point I am anxious not to trespass on a subject that is so competently covered by Mr. Allen, our next speaker. It is however one of the points of difference. Ann Waters' paper brought out very effectively the reasons for point-of-sale enforcement in the United Kingdom and I think indicates some of the consequences flowing from it. Now there is point-of-sale enforcement as well as factory enforcement in all member states. The reasons for the absence of compositional enforcement in the factory in the United Kingdom stem I believe from the 1875 Act and the reasons for its enactment. Its purpose was to deal with the adulteration of food. Now the English legal mind is incapable, except in some specific statutory cases such as drugs and carrying housebreaking implements (which can mean a penknife) by night, of conceiving it to be an offence to be in possession of a gallon of liquid which is half milk and half water even if the possesser is a dairyman.

He had to sell or attempt to sell it to someone before he could be convicted of comitting an offence. One of the consequences of this approach is that an average system for weights and measures is not possible simply because each article which is sold must comply with the law. Changes are afoot and we shall hear about them from Mr. Allen. It must be evident that there can be little hope for the reciprocal acceptance by member states of food inspection in respect of intra Community trade unless a system of in-factory inspection for composition as well as hygiene exists.

The present difficulty can be rectified, but its origin lies in the fundamental differences between a legal system which combines unwritten, judge-made common law with statute law, and systems based upon a code of law.

5. Sanctions

I regard the application of a sanction as a breakdown in securing the observance of the law. I believe that particularly in this sort of area of administrative regulation the vast majority of offenders are guilty of negligence and not of any criminal or fraudulent intent. Where there is criminal negligence or fraud, punishment should in my view be severe. It appears that the element of persuasion by a warning process exists in Germany, Denmark (which rarely resorts to legal proceedings), France, Luxembourg, Ireland and the U.K. There is also a procedure for administrative sanctions in Belgium, Denmark and Luxembourg and such a procedure which avoids publicity seems to me to be good if it is regarded as part of, almost the final step in, the process of persuasion. It does not otherwise appear to me to be an effective form of punishment. At the risk of being thought positively medieval, I believe that in matters relating to the supply of food to the public which warrant severe punishment, the most effective sanction is to give the offence the widest possible publicity in the area in which the offender operates. Some member states have particular powers in this respect and do not have to rely solely upon newspaper reporting. Publicity of this sort has the merit of being an equitable sanction. Local publicity can be given to the offence of a small manufacturer whose area of operation is limited whereas Community-wide publicity can be given to the international operator who is in default. I emphasize again that here I am referring to serious and deliberate breaches of the law, or breaches which are so grossly negligent that they must be deemed to have been deliberate.

Monetary penalties in some member states are very low today and rely for their effectiveness upon the number of offences that can be grouped together. Even then their effectiveness depends upon the depth of the offender's pocket. As to imprisonment I suspect that there are inequities simply because in the case of a one-man business it is easy enough to isolate the offender. It is more difficult in the case of a multinational. I do not believe that penalties can be equalised because their application if they are to be equitable must be related to the culpability and circumstances of the offender. The role of enforcement is therefore wider than the mere question of sanctions. It extends to teaching, persuasion, and counselling as well.

6. Conclusions

In concluding this paper I would like to highlight some of the points about the systems in operation in the member states which have particularly impressed me in reading the papers, as well as some difficulties which these systems seem to me to present.

The regulation of sample taking by reference to a certain minimum, and the systematic taking of samples both as routine and to meet particular situations seem to me to be effective. Ireland requires 2.5 samples per thousand population and Germany 5 samples per thousand.

Some member states calculate their manpower requirements in this area in relation to population. In Holland it is one for every 20 or 25 000 (the inspector has multiple functions), in Belgium the ratio is one inspector per 700 000 of population and you can make rough calculations from the papers as to the cover provided in other member states.

I have already referred to the degree of consultation in making the law which exist in the United Kingdom. In terms of what I might call rapport between the parties to legislation and the possibilities for developing continuing dialogue between them, I note that in France there is an element of self regulation by the trade in the consultation of wine dealers whose commission may request the quality downgrading of wine. In Luxembourg traders voluntarily send in samples to the enforcement services to ascertain whether they comply with the law. This last is interesting because it contrasts with the situation in the United Kingdom. There, advice is given by enforcement authorities. Such advice is an integral part of the persuasive role of the inspection service. If it is followed it can give protection from prosecution only in the area of the officer who gave the advice. In another area a quite different view might be taken. Such advice can therefore only ever be unofficial. It is never ever a complete protection from prosecution because there exists in the United Kingdom and Ireland an individual private right to prosecute which is separate from the civil damage related remedies available in all member states. This uncertainty about the law stems from the fact that the courts alone in the United Kingdom and Ireland can interpret the law and every word of any regulation is open to such interpretation. Once an interpretation has been given by the High Court in London or Dublin its ruling is followed. This means that in the United Kingdom and Ireland it is not sufficient for a complete understanding of the law to master its text: you must also know and understand the decided cases.

No member state appears to have experimented extensively with any system of self certification by food manufacturers. There are other regulatory areas in which this is done and there is in principle no reason why it should not be extended under proper supervision to questions relating to the observance of food law. I make this observation because there is a company which operates in the United Kingdom and elsewhere which by imposing its own standards commercially upon its suppliers has achieved a level of observance of the law which is often higher than the demands of the law itself. The carrot and the stick are simple: if you want to supply your goods to us then the conditions under which you produce them, and the quality of your product must be the condition and the quality that we demand for our customers.

It was said long ago that reason is the life of the law. It is right that we should devote ourselves, all of us who are concerned with the making of law whether as legislators, consumers, manufacturers, or enforcers, to the discovery of that reason which is the life, as much of food law as of any law. If reason is seen to be the life of the law, we can command both obedience to the unenforceable, and secure the better observance of the law.

Point of Enforcement. At what stage of distribution chain is food law enforcement most effective (manufacture, wholesale, import and/or retail)? A discussion of possibilities

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1. In attempting to assess at what point, or combination of points, in the food distribution chain enforcement is most effective - manufacture, wholesale, import and/or retail - it is perhaps instructive to look briefly at our historical development, then to examine the present position and what is meant by enforcement, and finally to discuss possibilities for the future.

The past

2. The centenary of our present food laws was celebrated in 1975 at a London Symposium, which broadly endorsed the proposition that consumers were well protected and fair trading had been established in the market place. This satisfactory position was largely attributed to the introduction in 1875 of the Sale of Food and Drugs Act and its administration by Local Authorities.

3. By 1910 a clear picture had emerged showing that the adulteration of food and drugs could be, and was being, suppressed. In Birmingham the percentage of adulterated samples to the total taken fell between 1873 and 1909 from 40.6 to 7.1. In England and Wales as a whole, from 1879 to 1909, the fall was 13.7% to 8.2% and it is suggested (1) that the vital factor in this achievement was the emergence of the Enforcement Officer.

The present

4. During the past 100 years enforcement of food laws in the United Kingdom has largely remained a Local Government responsibility and has concentrated at the point of retail sale. This works well in practice because of good co-operation between the Ministries of Agriculture, Fisheries and Food, Health and Social Security, Prices and Consumer Protection and the Office of Fair Trading on the one hand, and between the various Local Enforcement Authorities, on the other. Co-ordination is achieved via the Local Authority Associations, the Professional Institutes and Associations, National and Regional Sampling Schemes and more recently through Lacots (Local Authorities Co-ordinating Body on Trading Standards). Previously a somewhat more limited role was performed by Lajac (Local Authorities Joint Advisory Committee) comprising the Enforcement Authority Associations, with Public Analyst representation, in negotiating and revising Codes of Practice with trade and industry.

5. Throughout the same period there has been a substantial increase in the proportion of goods pre-packed at the point of manufacture and although the total numbers of such articles currently used in the U.K. over a year is not known with any accuracy an approximate figure is 30 000 million or about 1 1/2 pre packs per day for each man, woman and child.

6. In monetary terms this represents about half the total expenditure by households in the U.K., more than half of which is for food-stuffs, and there is therefore a growing recognition of the need for a significant transfer of Enforcement Officer resources from the retail sector into the factory.

Enforcement

7. The latest national statistics (2) for consumer complaints and prosecutions are set out at Appendix I. These show that less than 10% of all complaints resulted in prosecution and that the figure of 43 662 complaints notified in 1976/77 represents about one complaint per £500 000 spent.

8. Figures (3) given at Appendix II illustrate the inter-relationship between a County Council Food and Drugs Authority and one of the seven District Public Health Authorities within that geographical County.

9. The statistics in themselves cannot show how succesful the enforcement agencies have been in minimising the risk to consumers and promoting fair trading, but they can indicate trends and direct the attention of Enforcement Officers to those areas of greatest need.

10. Since prosecution is a weapon of last resort, and to some extent an indication of failure on the part of both seller and Enforcement Officer, it is not unreasonable to suggest that a low figure for prosecutions might be interpreted as meaning that other enforcement techniques have been at least as succesful in preventing breaches of the law.

11. Such techniques include effective quality control in the factory and throughout the distribution chain; self-regulation by traders and Trade Associations; advice and discussion between Company and Enforcement Officer; consumer complaints and subsequent investigations; cautions; seizure of goods; loss of Licences and decisions not to prosecute.

12. One of the most important of these techniques is the Enforcement Authority's discretion NOT TO PROSECUTE in cases where a prima facie offence has been disclosed; such discretion being approved in the House of Lords case - Smedleys Limited -v- Breed (1974) All ER 21.

13. In that case a large and well known firm of vegetable and fruit canners (with an excellent reputation and record) was held by the House of Lords (the highest judicial Appeal Court in the United Kingdom) to have been rightly convicted of selling a tin of peas which contained a caterpillar. Viscount Dilhorne, in the course of his judgement re-affirmed the well established legal principle that food must not contain extraneous matter, but deemed it necessary to refer to a previous decision in which the Attorney General said, "It has never been the rule of this Country - I hope it never will be - that criminal offences must automatically be the subject of prosecution". This judgement reminded Local Authorities of the need to exercise their discretion wisely and the low ratio of prosecutions to complaints suggests that Enforcement Authorities do indeed exercise that discretion.

14. One new method of enforcement currently being evaluated in the United Kingdom is where a Company and the Enforcement Authorities become jointly concerned about the number of convictions against that Company for offences under the Food and Drugs Acts. In consultation with the Enforcement Officers, company officials carry out an extensive examination of procedures in the factory with a view to introducing additional safeguards in the hope of obviating similar problems in the future. Such procedures are carried out under the terms of Part III of the Fair Trading Act of 1973, which permit the

Director General of Fair Trading to seek undertakings as to particular companies' future performance.

15. It is too soon to judge whether this form of control will be succesful with that most difficult of problems - the persistent offender. However, where company and Enforcement Officer co-operate there seems every likelihood of improved performance and better quality control.

Point of enforcement

16. There cannot be a single point in the food distribution chain where law enforcement is wholly effective. What is most appropriate for some pre-packaged foods may be totally inappropriate for restaurant meals and so it is necessary to ensure that quality and quantity controls are applied intelligently throughout the distribution chain. Nevertheless, it is suggested that a combination of enforcement at the beginning and end of that chain is likely to be the most efficient and cost effective; partly because consumers will continue to draw attention to individual but unfair trading practices in the retail sector and partly because Enforcement Officers can better utilise their scarce resources on volume production lines in the factory.

Retail

17. Experience in the United Kingdom suggests that enforcement at the point of sale of foodstuffs should retain a prominent role in the protection of consumers from health hazards and misdescription. Section 2 of our Food and Drugs Act(s) makes it an offence to sell to the prejudice of the purchaser any food which is not of the nature, substance or quality demanded by that purchaser. Section 6 creates offences for false advertising or labelling of food and Section 8 punishes the sale, possession or preparation for sale of food unfit for human consumption.

18. The need to maintain public confidence in the ability of the Enforcement Authorities to protect their economic and safety interests is assisted in the U.K. by the involvement in, and ready accessibility of, democratically elected Councillors in locally based Public Protection Services.

19. Equally important is the requirement to maintain as comprehensive a service as possible with the minimum duplication of Enforcement Officer involvement, combined with maximum accessibility for local trade and industry to obtain advice and assistance in complying with the ever-increasing volume and complexity of modern legal requirements.

20. From the Enforcement Officer's point of view one of the most important reasons for maintaining effective control in the retail sector is the need to monitor and test the accuracy of advertising in all its many guises.

21. Television advertising is statutorily controlled under the terms of the Independent Broadcasting Authority Act of 1973, which, amongst other things, requires the pre-vetting of all advertisements to be shown on television and, on a sample basis, for commercial sound radio. All other types of commercial advertising are voluntarily monitored and regulated at a national level by means of the advertising industry's own self-regulatory Code of Practice (4) enforced on their behalf by the Advertising Standards Authority.

22. Close co-operation is maintained between these national bodies and the local enforcement agencies, but the overriding requirement is to have the ability, resources and local knowledge to test the accuracy of national and local advertising of foodstuffs in the context in which it is sold. This ability is provided by the comprehensive Trading Standards and Environmental Health Services.

23. Other major Statutes which control transactions involving foodstuffs, particularly at point of sale or consumption, include the Trade Descriptions, Weights and Measures, Public Health, Fair Trading and Prices Acts. All these provisions afford purchasers and prospective purchasers a most valuable protection, namely the right to complain to the Local Enforcement Authority and the right to expect that Authority to take appropriate action.

Manufacture

24. The United Kingdom is currently engaged in three fundamental changes to its Consumer Protection and Trading Standards laws.

25. FIRST, we hope to complete our change to the METRIC system of weights and measures by 1981. SECOND, we expect to have adopted the AVERAGE QUANTITY system (Council Directive 76/211/EEC) by 1980 and THIRD, our Government announced, on 15th November 1977, its intention to REVIEW FOOD AND DRUGS LEGISLATION and to issue a Consultative Document in the Summer of 1978.

26. These events are inter-related and will progressively require Enforcement Officers to spend more time in the factory, although it is recognised that during the final stages of the change to the metric system even greater vigilance will be needed in the retail sector.

27. In March 1975 a Working Party on Metrological Control Systems was appointed to : "Consider and Report (5) to the Secretary of State for Prices and Consumer Protection :

a) the appropriate method and pattern of enforcement;

b) the most suitable timing for the implementation in the U.K. of the system of quantity control for pre-packed goods set out in the EEC Directives on "The making up by volume of certain pre-packaged liquids" and "bottles used as measuring containers", and the proposed EEC Directive on "the making up by weight or volume of certain pre-packaged products" within the terms provided for in those Directives, and in the national pattern of Weights and Measures Authorities as provided for in Section 201 of the Local Government Act 1972 and Section 149 of the Local Government Act (Scotland) 1973;

and of the changes needed in the law to give effect to its proposals".

28. In June 1977 their Report was published and in so far as foodstuffs are concerned it concluded that the system of control should be a blend of three things: inspection of records (factory audit), making average quantity reference tests (on packers, premises) and feeding back information from monitoring activities at shops and wholesalers; monitoring has an essential role in assessing the effectiveness of the first two, and in guiding the allocation of resources for them. To this formalised system will be added an indispensable element - INFORMAL ADVICE FROM INSPECTORS. Although this report deals specifically with quantity control the principles contained therein are applicable to quality control.

Import and Wholesale

29. As has already been indicated the need for maximum food law enforcement is likely to be in the manufacturing and retail sectors. This is not to suggest that enforcement at the point of importation and at wholesale premises is unnecessary. On the contrary, if foodstuffs entering this Country are properly monitored, the risks to subsequent manufacturers, packers, wholesalers, retailers and consumers can be considerably reduced.

30. Indeed, if it were possible to extend the voluntary weights and measures "e mark" system (denoting an attestation by the packer that the contents meet

the requirements of the Liquids or Solids Directives) to food compositional requirements there could be a considerable reduction in the necessity for systematic checks at frontiers or ports, on foodstuffs from other Member States.

Sampling

31. The point at which enforcement is most effective cannot be divorced from sampling procedures and it is one of the matters which will undoubtedly need to be considered during the Review of U.K. Food and Drugs legislation announced last November.

32. Looking back at the unsatisfactory state of food law enforcement in the 1870's it is possible to discern a re-emergence of the pressures and tendencies which may encourage adulteration and/or substitution of foodstuffs during the 1970's.

33. Inflation has produced a situation whereby the cost of many basic and traditional foods has risen rapidly, with the result that consumer resistance to higher prices has been encountered. Modern technology, particulary in the field of "novel proteins", has provided the manufacturer with an opportunity to introduce cheaper substitutes and this in turn has caused difficulty in the determination of appropriate designations, sampling and analytical procedures.

34. At present our statutory sampling procedures are mainly based on the taking or purchasing of "formal" samples, in the prescribed manner, at the point of retail sale. This involves the division of the sample into three parts; one for retention by the Sampling Officer, one for retention by the Seller and one for submission to the Public Analyst for analysis. Formal sampling is often preceded and/or supplemented by the taking of "informal" or "screening" samples at various points throughout the distribution chain. In addition, there is the "private purchaser" complaint sample which can and does result in direct enforcement action, including prosecution, without the necessity of complying with the prescribed sampling procedures.

35. Formal sampling could be more representative and efficient if it were carried out on the premises of the manufacturer, packer or importer, but this will require an amendment to our present law. In the meantime the continuing development of our regional and national sampling programmes should ensure that new food technology is adequately controlled but not inhibited.

The future

36. It is clear that the United Kingdom will have difficulty in adapting its food law enforcement to the more general EEC pattern, not only because of the greater emphasis placed upon Local Government in the U.K., but also because the long-term effects of the food harmonisation programme could result in a doubling of our food laws. If implemented in its entirety such a programme would undoubtably place considerable strains upon our existing enforcement structures and it is therefore encouraging to note that there now appears to be general agreement that priority should be given to "horizontal"Directives and that "vertical" Directives should be restricted to essential rather than peripheral matters.

37. It may not always be possible to demonstrate a positive cost benefit when introducing new laws but an essential ingredient of any new law is that it should be both practicable and enforceable. In an attempt to achieve this desirable objective some of the consultative and other procedures adopted in the U.K. prior to the introduction of new legal requirements are illustrated by recent developments in relation to Unit Pricing and Poultry.

Unit Pricing

38. Before extending legislation to require the price per pound or unit price to be indicated for all normal retail cuts of meat a pilot scheme (6) was established in August 1975 to test the practicability of the proposals. The scheme involved multiple traders, trade associations and enforcement authorities and as a result the legislation which came into force some eighteen months later was very much more practicable than it might otherwise have been.

Poultry

39. The United Kingdom is currently introducing the necessary domestic legislation to implement Council Regulation (EEC) no.2967/76.

40. Because the EEC Regulation and the U.K.Poultry Meat (Slaughterhouse Checks on the absorption of Water) Regulations of 1977 posed new problems for industry and Enforcement Officers alike, a joint Working Party, comprising representatives from Industry, Public Analysts, the Government Chemist, Ministries and Local Authority Associations (represented by their Enforcement Officer Advisers) was established. Subsequently, it was decided to conduct factory trials in order to assess the practicability (or otherwise) of the proposed U.K. implementing Regulations. These trials were highly satisfactory in establishing appropriate testing and sampling procedures and the resultant Guidelines have now been distributed to all interested parties.

41. One technical difficulty, however, arose because it was necessary to make the Regulations jointly under our Food and Drugs Acts and the European Communities Act of 1972. This meant that only the lesser penalties from the Food and Drugs Acts (for obstruction and breach of Regulation) could be applied, whereas perfectly adequate penalties (a necessary enforcement tool) are available under the European Communities Act.

42. Such anomalies will, of course, be put right during the Review of our Food Laws, whereas the trials themselves demonstrated the spirit of co-operation and co-ordination that exists between trade, Central and Local Government, and at the same time provided Local Enforcement Officers with further practical experience of enforcement in the factory.

Conclusions

43. A need to maintain public confidence in the ability of the Enforcement Authorities to protect their economic and safety interests.

44. A continuing need to promote fair trading by means of enforcement throughout the food distribution chain, whilst recognising the benefits arising from a transfer of Enforcement Officer resources from the retail sector into the factory.

45. An increasing need for even more effective enforcement in the future because of the twin effects of inflaction and the development of new technologies in the food industry.

46. An over-riding need to ensure that only necessary, practicable and enforceable laws are introduced as part of the harmonisation programme.

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APPENDIX I

Table 1 - CONSUMER COMPLAINTS ANALYSED BY TYPE OF GOODS

Goods	Number of Complaints		Complaints per £ M Spent	
	1975-1976	1976-1977	1975-1976	1976-1977
Fresh Food	12 019	12 015	1.8	1.5
Manufactured food and drink	25 388	31 647	2.1	2.2
TOTAL	37 407	43 662		

Note to table 1:

The expenditure figures used in calculating the ratio have been taken from National Income and Expenditure, Family Expenditure Survey, and I.P.C. Marketing Manual of the United Kingdom 1977. These have been modified where necessary by the index of retail sales taken from the Monthly Digest of Statistics.

Table 2 - CONSUMER COMPLAINTS ANALYSED BY CRIMINAL LEGISLATION

	Number of Complaints	
	1975-1976	1976-1977
Trade Descriptions Act 1968	33 792	35 228
Weights and Measures Act 1963	10 823	11 297
Food and Drugs Acts 1955 and 1956 (Scotland)	10 696	11 224
Public Health Acts 1936 and 1961	471	445
Fair Trading Act 1973	57	202
Prices Act 1974	1 365	1 763
TOTAL	57 204	60 159

Note to table 2:

The complaints cover all types of goods, servicing or service, including those relating to food and drink. Some consumer complaints involve more than one trading practice or category of law and so it is not possible to make a direct comparison between Tables 1 and 2.

Table 3 - CONVICTIONS AND FINES UNDER THE TRADE DESCRIPTIONS ACT 1968

	Number of Convictions		Total Fines	
	1976	1977	1976 £	1977 £
Section I : Misdescription	51	61	3 230	7 120
Section II: False Price Claims	133	158	10 487	16 909
TOTALS	184	219	13 717	24 029

Note to table 3:

Convictions relating to Food and Drink represent approximately 15% of all prosecutions under the Trade Descriptions Act.

Table 4 - CONVICTIONS AND FINES UNDER THE FOOD AND DRUGS ACTS 1955 AND 1956

Food and Drink	Number of convictions		Total Fines	
	1976	1977	1976 £	1977 £
Sections 2 and 6: Not of the Nature, Substance or Quality; False Labelling or Advertisement	1 443	1 341	62 913	66 357
Sections 8 and 9: Unfit for human consumption	311	246	15 337	19 382
Other Offences including Adulteration, Hygiene and Obstruction	646	634	83 059	83 172
TOTALS	2 400	2 221	161 309	168 911

Note to table 4:

Convictions relating to extraneous matter in foodstuffs represent the largest category (approximately 40%) of all prosecutions under the Food and Drugs Act. Mouldy and/or unfit food followed by unhygienic premises form the next largest categories, whereas convictions for composition and labelling offences, at less than 2% of the total, are amongst the smallest.

Acknowledgements: The above statistics have been compiled with the assistance of the Office of Fair Trading and the Ministry of Agriculture, Fisheries and Food.

Table 1 - CONSUMER PROTECTION AND TRADING STANDARDS STATISTICS

East Sussex County Council	Area : 179 529 hectares
population : 655 600	

Consumer Protection Department Estimates 1977/78

The Consumer Protection Department of the County Council is responsible to the Public Protection Committee (24 elected members) for the administration, within the geographical County of East Sussex, of Consumer Protection and Trading Standards functions, including:

Food and Drugs (Composition, Advertising and Labelling)
Fertilisers and Feeding Stuffs (Composition, Advertising and Labelling)
Medicines (Advertising and Labelling)
Pharmacy and Poisons (Licensing)
Weights and Measures
Trade Descriptions
Product Safety
Consumer Credit
Prices
Fair Trading
Consumer and Trade Advice

Estimated Breakdown of Expenditure for Food and Drugs Administration

		£
Total Budget for Consumer Protection Department		319 000
Number of fully qualified Inspectors	18	
Number of Assistants and Administrative Staff	12	
Proportion of time spent on Food and Drugs	15%	
Therefore staff costs		22 500
Public Analyst and Other Analytical Fees		12 000
Equipment and Other Costs		2 500
TOTAL COST OF FOOD AND DRUGS ADMINISTRATION		37 000

Note to table 1:

(i) The above figures should be regarded only as illustrative and not typical, although East Sussex is an average-sized County with average expenditure when compared with the other 38 English non-metropolitan Counties.

(ii) Expenditure on Food and Drugs administration represents approximately 11½ % of the Departmental Budget and involved the taking of 1 250 samples, receiving 205 complaints and instituting 6 prosecutions.

(Iii) The approximate cost per thousand population is £ 56 or 5 pence per annum per inhabitant of East Sussex.

Table 2 - ENVIRONMENTAL AND PUBLIC HEALTH STATISTICS

Lewes District Council	
Population : 76 500	Area : 29 224 hectares

Environmental Health Department Estimates 1977/78

The Environmental Health Department of the District Council is responsible to the Health Committee (17 elected members) for the administration, within the geographical district of Lewes, of Environmental and Public Health functions, including:

Food and Drugs (Food Hygiene and Safety)
Port Health (Newhaven)
Milk and Dairies (Licensing)
Infectious Diseases (Food Poisoning)
Meat Inspection
Pollution Control
Nu sances
Pest Control
Public Cleansing
Health and Safety at Work
Health Education and Trade Advice

Total Budget for Environmental Health Department (excluding public cleansing) £ 206 000

Estimated Breakdown of Expenditure for Food and Drugs Administration

		£
Number of fully qualified Inspectors	14	
Number of Assistants and Administrative Staff	9	
Proportion of time spent on Food and Drugs	5 - 100%	
Therefore staff costs		25 000
Public Analyst and Other Analytical Fees		1 000
Equipment and Other Costs		35 650
TOTAL COST OF FOOD AND DRUGS ADMINISTRATION		61 650

Note to table 2:

(i) The above figures should be regarded only as illustrative and not typical, Lewes being somewhat smaller than the average when compared with the other 332 English District Councils.

(ii) Expenditure on Food and Drugs administration represents approximately 30% of the Departmental Budget and involved the taking of 545 samples, receiving 67 complaints and instituting 5 prosecutions.

(iii) The approximate cost per thousand population is £ 811 or 80 pence per annum per inhabitant of Lewes.

Acknowledgements : The above statistics have been compiled with the assistance of Lewes District Council.

Aspects of sampling for legal purposes (general principles and criteria)

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Introduction

The basic principles of food legislation are the protection of the consumer against damage to his health and against exploitation through commercial or industrial malpractice. To ensure this protection the necessary characteristics of food products are laid down in legal regulations. The food shall meet legal requirements to be acceptable when sold for human consumption. To make sure that the level of quality as required in maintained, the extrinsic and intrinsic charcteristics of the product have to be checked. This is done by the official inspection services acting as the "agent" of the consumer. To judge the acceptability of the food product in most cases, a sample is taken and thereupon analysed. It is obvious that the legal requirements to which the product shall conform should be closely related to the method of sampling and the method of analysis used to check conformation. These methods, therefore, should be part of the food standard.

Conclusions to be drawn by the Community

The aim of the Community, as clearly stated in Article 2 of the Treaty of Rome, is the establishment of a Common Market. After having abolished primary trade hindrances such as customs duties and quantity restrictions, national legislations should be harmonized as far as needed to enable free circulation of commodities inside the Community. Having harmonized the requirements to be fulfilled as regards food production and food composition, the food inspection and supervision to enforce the legal provisions should also be harmonized to ensure an equal judgement of the acceptability of lots of food products. As sampling is part of the inspection, there is a need for harmonizing the procedures for sampling for legal food control purposes. As a first step, agreement should be sought on the general principles for the selection of procedures for sampling.

The objective of sampling

The objective of sampling is isolating a portion from the whole in such a way that on ground of the results obtained from inspection and examination of the portion, the whole can be considered as either acceptable or rejectable.

This means that it should be clearly pointed out beforehand what results obtained from the inspection and examination of the portion will lead to rejection of the whole. In other words: criteria of rejection must be laid down.

General considerations with respect to sampling

It holds in general that in sampling, the sample taken should reflect as close as possible the average composition of the examined lot. Hence in sampling products in bulk, the lot shall be thoroughly mixed together before isolating

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a portion of the whole. If for some reason this is not possible, a number of small portions should be taken at random from different places in the consignement. These portions should then be joined in order to obtain a bulk sample for examination.

In sampling packaged foods a number of units are taken at random from the lot in order to obtain a representative sample.

In the ideal situation the sample should be identical in all properties with the bulk of the material from which it has been removed. However the practice of sampling has shown that in most cases it is impossible to draw such ideal samples from consignments which are generally more or less heterogeneous in properties and composition.

Therefore as a compromise a sample is taken in such a way that it will give as much information as possible about properties, composition and heterogeneity of the consignment without involving high expenses and, in case of a destructive examination, high losses of material.

Efforts should be made to avoid wrong decisions as far as possible in order to prevent on the one hand that the producer runs too great a chance that a consignment that actually meets the legal requirements will be rejected, and that on the other hand the consumer might run too great a chance to receive a product that should have been rejected. The producers' risk and the consumers' risk should be small.

Based on these general considerations, sampling plans can be set up characterized by the number of primary samples, the sample size and the criterion of rejection.

The question of sampling for the determination of net contents of prepackaged commodities

Let us consider as a first example the question of developing a sampling plan for the determination of the net content of a prepackaged food. We take this example as in this case no hazards to the health of the consumer are involved but only economic risks which might result from incorrectly accepting a defective lot. We take this example also because the "net contents" belongs to the extrinsic characteristics of a food product, not touching the essential characteristics of the food. Similar characteristics are "size" and "appearance".

By "net contents" of a single package is meant the whole of the content, exclusive of the container (package, bottle, can, etc.). Thus "net contents" is equal to "grossweight" minus "tare weight". We will assume that the contents are stable, e.g. neither attracting nor losing moisture. We furthermore assume that the frequency, the distribution of the values of the net content of the individual packages of the lot, is Gaussian.

There are several alternative interpretations to be considered as regards the correctness of the declared net contents on the packages in the lot. The most important ones are given below and are taken from Anderson(1).

a) The "net contents" of each package in the lot shall be without exception equal or greater than the declared value: the "each-and-every-unit-shall-comply" system.

   This is illustrated in figure 1, in which the measured values of the "net contents" are plotted against the relative frequency of packages in the lot having this value.
   For legal purposes this interpretation is not usable, as man and machines are fallible, and is self-prohibitive in case the inspection is destructive.

b) The "net contents" of most of the packages in the lot shall be equal or greater than the declared value. Only a small proportion of the packages may be excepted. This is illustrated in figure 2. To be meaningful the small

proportion should be prescribed. For legal purposes this interpretation still presents the difficulty that a small proportion of large deficiencies can be present, which is not acceptable.

c) The "net content declaration" shall be deemed correct if the measured value for each package in the lot is equal to or greater than a prescribed minimum value. A tolerance is permitted. This is illustrated in figure 3. A difficulty inherent to this interpretation is that a packer using sophisticated filling machines could take advantage of too generous a tolerance resulting in median net contents below the declared value. This is illustrated in figure 4.

d) The "net content declaration" is deemed to be correct if the average (arithmetic mean) of the measured net content of all packages in the lot is equal to or greater than the declared value. A restriction on the dispersion of the net contents of individual packages is given. In addition limits can be set for a small proportion of packages having a net content lower than the prescribed minimum (defectives). This is illustrated in figure 5.

This interpretation is a reasonable approach for legal inspection of the net contents of packages commodities. A small problem might be that some consumers get overweight and some underweight which will not always be balances. With the built-in restrictions this objection would be largely theoretical.

In the Community the latter approach is followed in the Directive of 19 December 1974 (2) and of 20 January 1976 (3) both concerning the harmonization of the legal provisions of Member-States with regard to the net contents in volume and weight of packaged commodities.

On the basis of statistical consideration (ISO Standard 2859) a two class attributes acceptance sampling plan for the control of net contents has been developed, using an acceptable quality level (AQL) of 2.5 percent. The at random sampling, the sample size related to the magnitude of the lot, the tolerances and the small number of allowed defectives are prescribed. As regards tolerances the differences in running properties of products has been taken into account, control of "net content" by the packer being more easy for free-flowing products such as flour and sugar as compared with peas and beans and viscous products.

The packer or the importer is responsible and has to make sure that the legal requirements are respected.

The whole lot is judged on the basis of the results obtained from a sample. If the sampling is done by attributes the criterion for rejection of a lot is the rejection number to be read from tables. For details I like to refer to general handbooks (4,5).

The question of sampling for legal inspection of intrinsic characteristics (e.g. composition) of food products

A food standard stipulates a number of requirements for the characteristics of the product. For the control of the specified requirements appropriate methods of analysis are needed. For the analysis a sample is needed. This sample should sufficiently represent the lot. In sampling, more or less developed sampling plans should be used. Depending on the caracter of the requirement the sampling plan may be different. Some of these are to be considered as absolute, which means that no departure from it can be tolerated. The lot will be rejected even if one single unit does not comply.

This normally is the case only if a hazard to the health of the consumer might be involved, e.g. the presence of a toxic substance, or of a not-permitted substance, e.g. a food additive is present. Sampling for legal purposes is simple: "every-item-shall-conform" is the answer.

For all other cases the only practical solution is to develop a sampling plan in such a way that it is accepted that the lot contains a certain percentage of deviating units. How to select the sampling plan, depends largely on the economic importance of the characteristic to be inspected and to the amount of control work, whether destructive or non-destructive, to be done.

As the sampling is done for legal purposes, the sampling plan shall be part of the standard and the level of confidence in the results of the examination shall be high enough to establish in a court of law "beyond any reasonable doubt" that an infraction of the law indeed occured.

To increase the level of confidence without increasing the sample size and thus the amount of work in the laboratory and the costs of the examination, it is appropriate to go step by step before contemplating enforcement action, i.e. via warning, severe reprimand, to seizure of the goods.
A reasonable approach, following common practice, therefore is to accept as a rule that the decision whether to accept or to reject a lot will be taken on the evidence of the results of the analysis of a sample taken from the lot in a prescribed way. The sampling plan in most cases will be an attribute sampling scheme based on earlier gained experience.

Some examples

1. A first approach in the direction as mentioned above is to be found in the EEC-Regulation No. 2967/67 of 23 November 1976 (6) controlling the water content of frozen and deepfrozen chickens, hens and cocks. The Regulation limits the amount of "added water"to that taken up by the poultry carcass during processing. The sampling plans, methods of analysis and criteria for rejection of the lot from which a sample is drawn are described in the annexes of the Regulation.

Besides an "on the line" self-inspection sampling plan to control the "drip" based on the random selection of 25 carcases, two alternative official methods for controlling the final product are given in the annexes III (Danish method) and IV (German method). The basis of these methods is a sample size of seven birds of which the average is taken for decision. It can be calculated that the limit chosen is such that there is about a one-in-forty chance that some chickens with an extraneous water content of 10.4% will be passed when using the Danish method. As the German method does not meet the same standard of accuracy, reproducibility and reliability, the chances of there being some chickens with a water content of 10.4% are even thought to be higher (7).

2. The Codex Committee on Processed Meat Products proposed in its eighth session (8) a sampling plan for the inspection of Cooked Cured Ham and for Cooked Cured Pork Shoulder, based on a report of a working group. The working group agreed that for a valuable and expensive product, like Cooked Cured Ham, being subjected by inspection to a destructive analysis for the determination of the fat-free-protein (PFF), a sequential sampling plan in which the sample size is independent of the size of the lot would provide a useful and statistically sound inspection scheme. This sampling plan has been endorsed by the Codex Committee on Methods of Analysis and Sampling (9). The plan is based on an absolute minimum of 16.5% PFF and an average value of 18.0% PFF combined with a zonal sampling system. The zones are as given in figure 6.
A random sample is taken. If the measured value for PFF is equal to or above 18.0, the lot is accepted. If this value is below 16.5, the lot is rejected.
If the PFF value of the first sample falls in zone B, a further sample shall be taken of which the PFF value shall be 18.0 or above for the lot to be accepted.

If the PFF value of the first sample falls in zone A, two further samples shall be taken and the results of both analyses shall be 18.0 or above for the lot to be accepted. It has been calculated that if the producer does not wish to run a rather high risk of lots of his products being rejected, he is forced to produce to an average PFF of 18% plus one time the standard deviation, virtually 18.7%.

3. The Codex Committee on Pesticide Residues has developed sampling plans for the determination of pesticide residues (10).

The sampling procedure provides for a "representative sample" of the lot for the determination of the average pesticide residue content. The sampling operation is performed by the following steps.

From the consignment a minimum number of primary samples of similar size are taken. This minimum number is related to the weight of the lot and can be read from a table. The primary samples are united and mixed, making the bulk sample which should in most cases be the final sample to be submitted to the laboratory. The minimum amount of material to be submitted to the laboratory depends on the kind of food to be sampled. These amounts also are read from a table (0.5 kg, 2 kg).

Instead of examining every primary sample a selection of portions is examined. This is a pragmatic approach to the problem of estimating the residue in the material. It is realized that several errors may arise in both sampling and analysis. Nevertheless the plan is to be considered as having great practical value as it seems not worthwhile to elaborate costly sampling plans in order to reduce sampling errors if the method of analysis introduces greater error.

4. Sampling for the control of the microbial quality of foods. Sampling for legal purposes to control the microbial quality of foods is still open for discussion giving rise to several questions. Which criteria for rejection of a lot are to be established? Can the protection of the consumer be achieved by a retrospective system? Can the risk from the point of view of public health and the risk of spoilage or quality loss considerably be decreased by drawing samples for the testing of pathogenic organisms or spoilage agents and taking legal action when unfavourable results so require? The answer of experienced hygienists is "no". This may be illustrated by figure 7, taken from Mossel (11) indicating the consumers' risks part of the Operating Characteristic Curve for the sampling examination of consignments of foods. For public health protection we need a very low - preferably zero - number of defectives in the consignment. What in reality is the case?

If the criterion for rejection is that at the usual level of 95% probability a consignement with 0.1% defective units shall not be accepted, the inspector needs to examine some 3 000 samples rather independent of the size of the lot. It is obvious that protection of the consumer against food poisoning along these lines is impossible. It is far more efficient to avoid manufacture of deficient lots by prevention, for example by prescribing a "botulis cook" for canning low-acid food to decrease the risk of surviving Clostridium botulism spores to one in 10^{12} cans. Another alternative is the development of Codes of hygienic practice and educating people how to handle food in a way to prevent contamination with pathogenic organisms. Here indeed the slogan "the batch is for the policeman but not for the sanitarian" fits well. In addition only those production units which meet internationally recognized hygiene requirements should be allowed. For the premises hold that sanitation can be built in.

It is not at all the objective of these considerations to say that sampling for the control of the microbial quality of foods is meaningless. In several cases a three-class sampling plan can be used for the monitoring of foods on the basis of microbiological reference values. The International Commission for Microbiological Specifications for Food (ICMSF) distinguishes three regions of acceptability: "acceptable", "marginally acceptable" and "not acceptable" indicating the measure of concern to be concluded from the results of the examination (12).

Summary

The Treaty of Rome commits the Member-States to refrain from raising legal hindrances regarding products entering the Common Market. To this end statutory regulations for foodstuffs must be adopted. Deviation from a standard may result in rejection of the consignment. The standardization of foodstuffs must therefore be aimed at the standardization of the sampling procedure, the specifications relating to it and the methods of analysis. The standardization of the sampling procedure implies the description of a sampling plan in order to obtain a "representative sample".

This sample normally is a collection of a prescribed number of sub-samples or units taken at random from a lot. The results of the examination of the sample are unimpeachable and constitute the basis for the decision to be taken with regard to the consignment under inspection. Therefore the level of confidence in the results of the examination shall be high enough to make sure "beyond any reasonable doubt" that an infraction of the law occured.

This means that good lots are usually not rejected and bad lots are usually not accepted. Only in cases where an absolute protection of the consumer is justified, e.g. in the case of a defective sample being a matter of life and death, the "every-item-shall-conform" approach shall hold. In all other cases a "producers' risk" (usually 5%) and a "consumers' risk" (usually 10%) is arbitrarily incorporated in the sampling plan. In establishing sampling plans methods of mathematical statistics may be helpful in order to enhance objectivity and uniformity in measures to be taken. General principles for the harmonization of sampling plans are discussed and some examples of sampling for legal purposes are considered.

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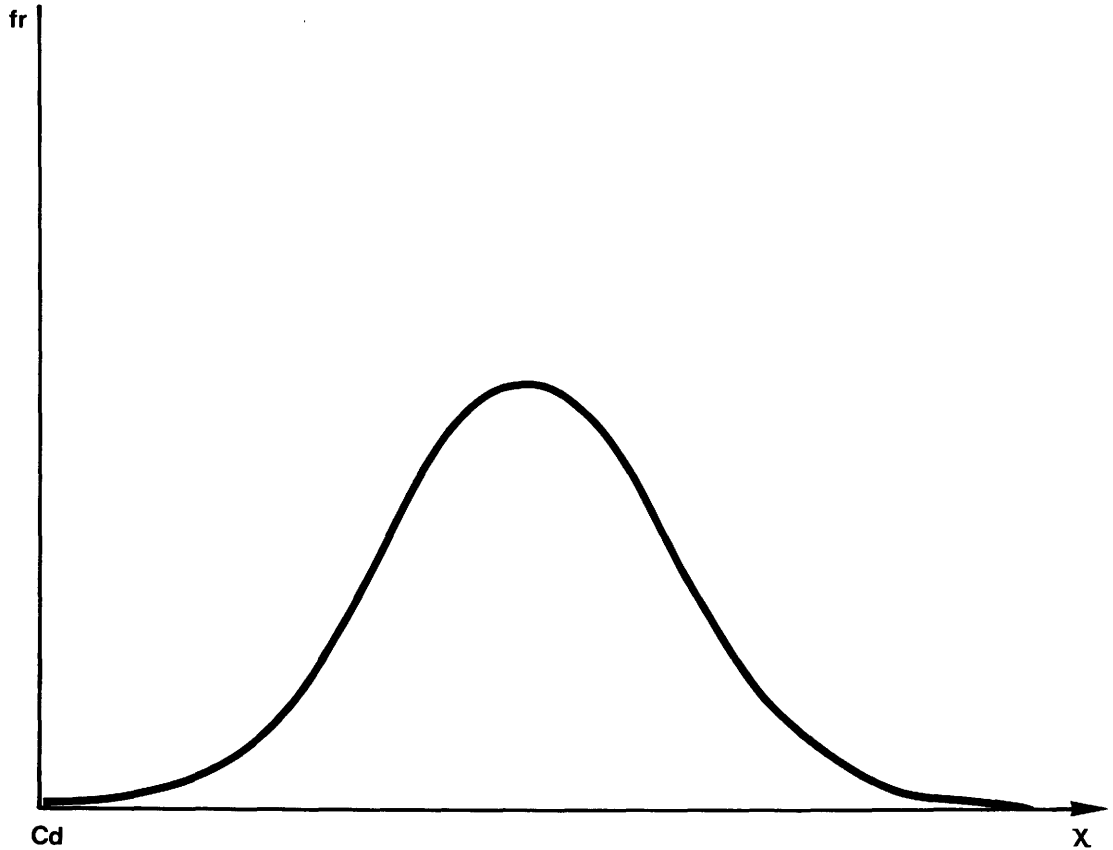

FIGURE 1

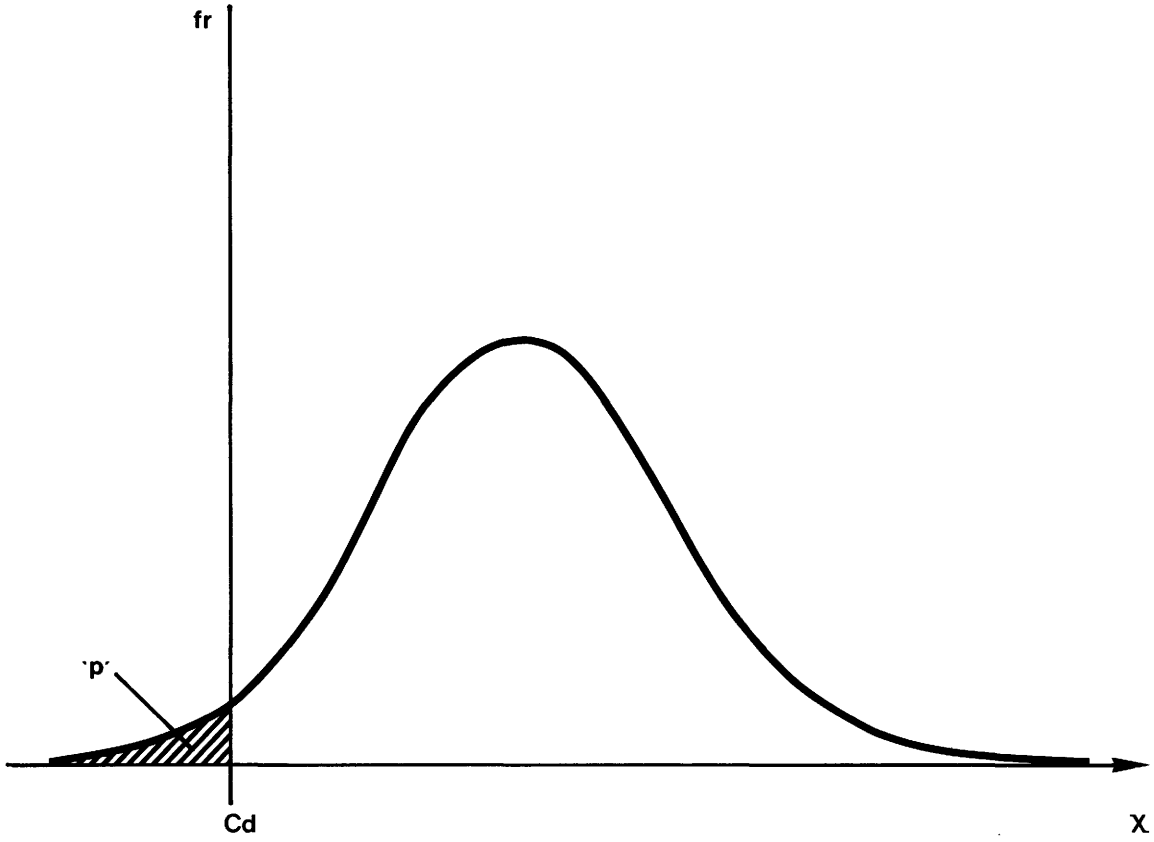

FIGURE 2

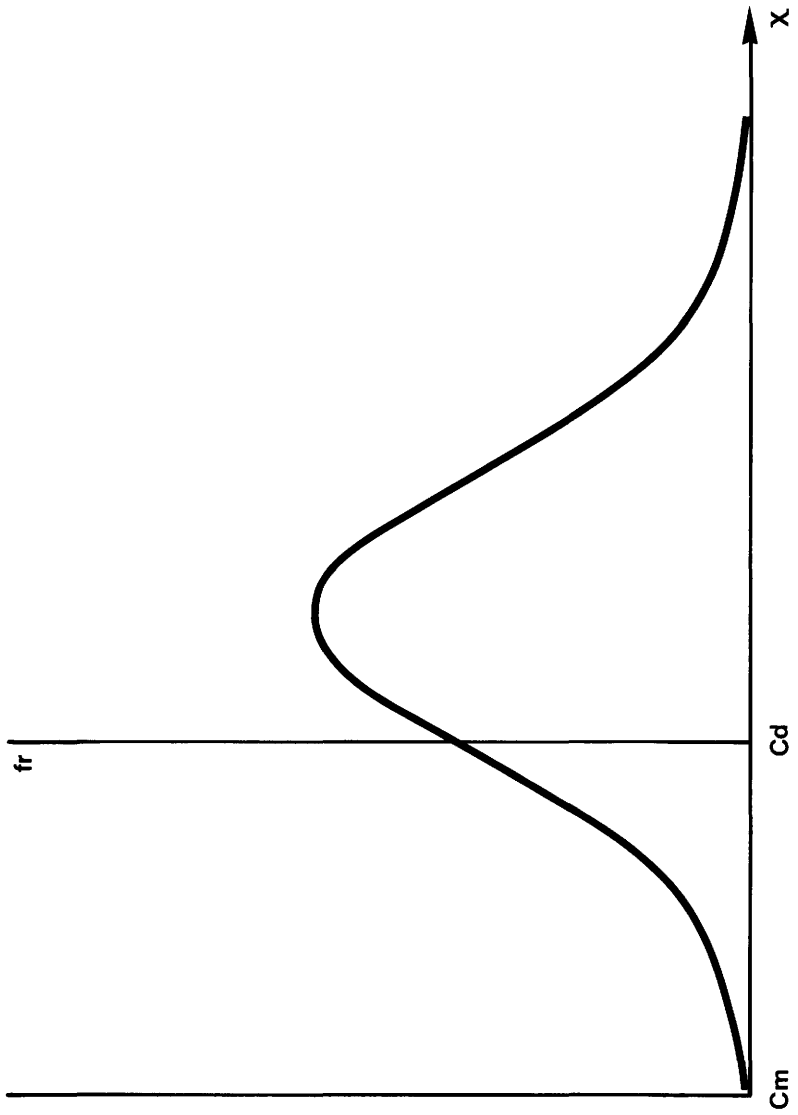

FIGURE 3

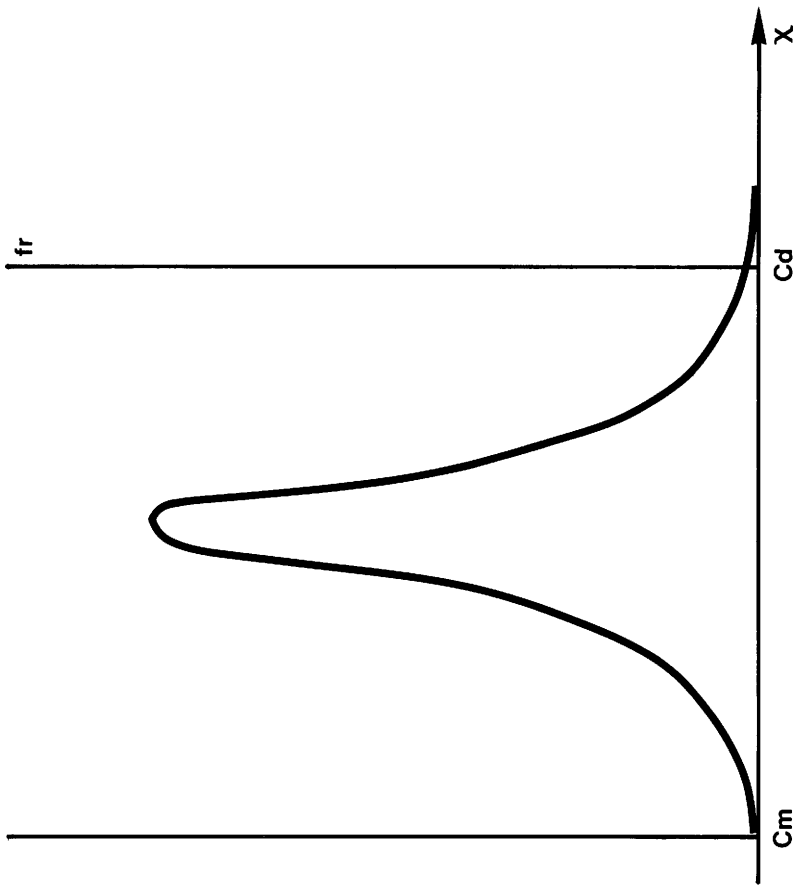

FIGURE 4

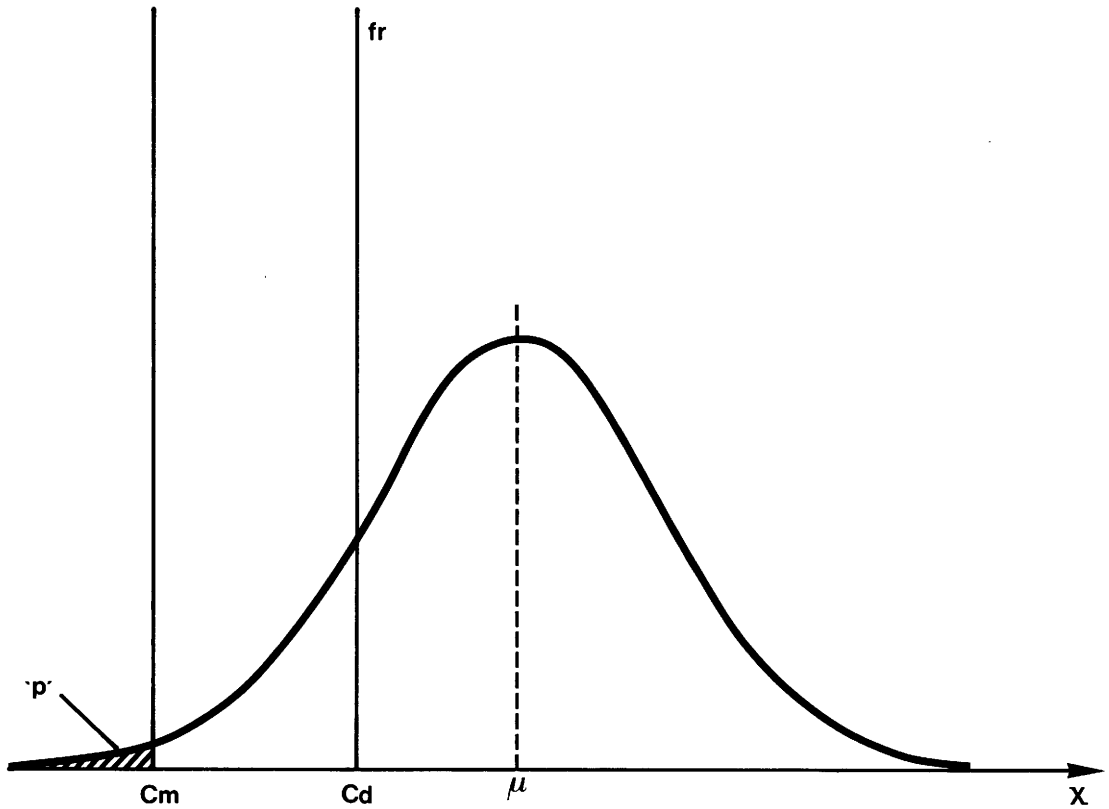

FIGURE 5

COOKED CURED HAM

ZONA	% PFF	
L	< 16.5	
A	⩾ 16.5	< 17.3
B	⩾ 17.3	< 18.0
C	⩾ 18.0	

FIGURE 6

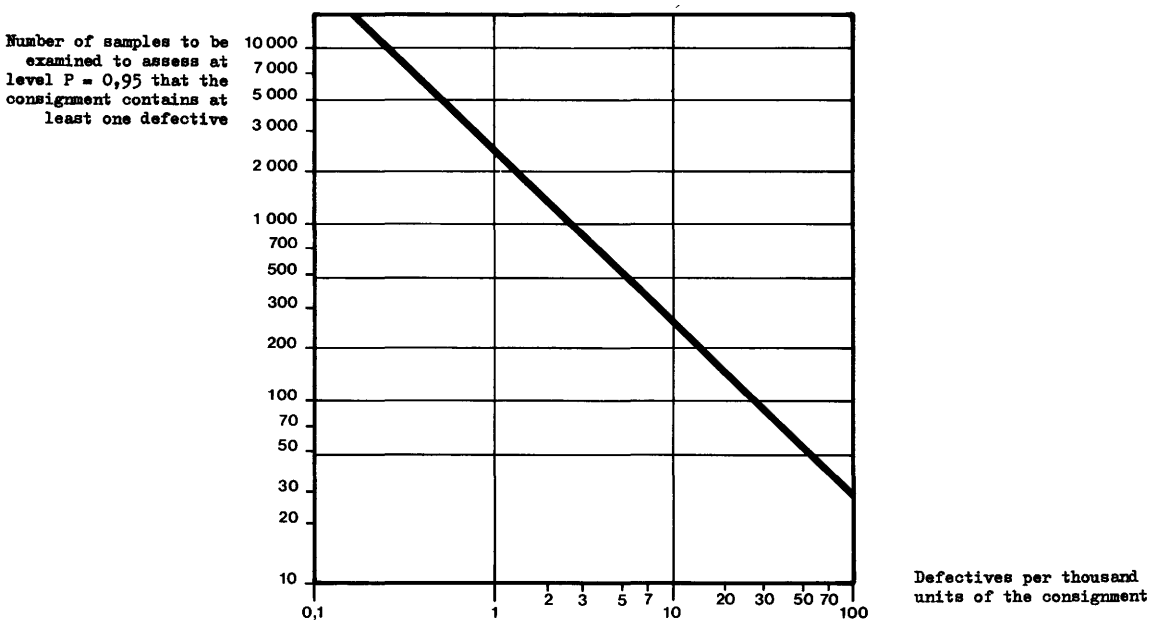
Number of samples to be examined to assess at level P = 0,95 that the consignment contains at least one defective
10 000
7 000
5 000
3 000
2 000
1 000
700
500
300
200
100
70
50
30
20
10
0,1
1
2
3
5
7
10
20
30
50
70
100
Defectives per thousand units of the consignment

FIGURE 7

Specialization in monitoring operations, concentration of emphasis in inspection institutes, automation, use of large-scale equipment

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1. Some one hundred years ago, in other words at about the time that the first statutory controls were introduced in the field of food legislation (1879 Food Law), the first inspection institutes were established in Germany for the inspection of foodstuffs and consumer requisites. Run chiefly by local or provincial authorities, these institutes were small and their equipment conformed with the level of knowledge then current in the fields of chemistry and food hygiene. Food inspection was largely non-specialized. The experts were able to - and indeed had to - cover the entire scope of the chemistry and hygiene of food and consumer requisites.

2. A number of factors have greatly influenced developments in the field of food inspection in the last hundred years.

2.1. Because of the growth in the industrialization of food production and manufacture of consumer requisites, and as this was accompanied by a marked increase in the timespan between production and consumption or end-processing and packaging of foods, a need arose for:

- the use of preservatives to prevent microbial spoilage;
- the use of antioxidants to prevent oxidative (enzymatic or non-enzymatic) spoilage;
- the use of protection agents for food in storage, to prevent the loss of moisture and nutrients, etc. (e.g. moisture inhibitors for potatoes; antiputrefactants for citrus fruits);
- the use of colorants to compensate for the sometimes unavoidable losses of natural colouring (e.g. in canned preserves);
- the use of technological auxiliaries (e.g. emulsifiers) to resolve the problems such as those resulting from the machine-processing of foods on a large scale.

2.2. New knowledge of nutritional medicine and nutritional physiology, besides altered consumption habits due to changes in such factors as social structure, working habits and conditions and family circumstances, has led to the conception and production of foods which:

- take account of special nutritional requirements (e.g. low-sodium food, PKU (phenylketone-uria)diet, food containing increased or reduced quantities of particular ingredients);
- permit rapid preparation at home as a result of prior processing (ready-prepared dishes, "instant" products);
- are served as ready-to-eat meals, e.g. in canteens and hospitals.

2.3. The reduction in land areas suitable for food production, as well as the increased spread of harmful insects and damaging micro-organisms, necessitated:

- an increase in livestock production by intensive rearing and the necessary measures for the prophylaxis and therapy of disease with chemical agents, as well as rapid fattening with special types of feed;
- an increase in the productivity of foods of plant origin by the use of crop protection agents and herbicides,

in order to ensure that the population is provided with the necessary quantity and quality of foods at reasonable prices.

2.4. The increasing presence of chemicals in the environments of man, animals and plants has been due to the contamination of foods with harmful substances (e.g. heavy metals and polycyclic hydrocarbons), either directly or through food chains.

2.5. Advances in the sciences concerned with foodstuffs and the hygiene of foodstuffs (food chemistry, veterinary medicine, human medicine, nutritional physiology, biology and agricultural chemistry, to name but a few) have allowed a deeper insight into the composition of foods, changes due to micro-organisms or the influences of fertilization, animal feeding, the technology of production, packaging and transport, as well as their influences on the human organism by way of the foods.

3. The performance requirements imposed on the inspection institutes were affected substantially by the factors cited by way of example under 2, the trend being towards:

- a general expansion of capacity, so that it would be possible to cope with the wide variety of investigations;
- specialization of employees and equipment;
- production and use of specific detection and determination methods;
- production and use of methods for detecting and determining substances present in trace quantities (e.g. in ppb to ppm ranges for heavy metals and their compounds, nitrosamines, vinyl chloride and acrylonitrile in foods, ppt to ppb ranges for polycyclic hydrocarbons and other harmful substances, e.g. mycotoxins);
- rapidly conducted methods of determination for many substances alongside one another (multi-methods), e.g. in the scope of an investigation into crop protection agent residues, and also to enable commercially available products with excessive residue quantities to be seized.

4. Which structures is it possible to use for inspecting foods and consumer requisites, cosmetics, tobacco and tobacco products (products within the meaning of the Food and Consumer Requisites Law (Lebensmittel- und Bedarfsgegenständegesetz - LMBG) and which are actually employed? The organizational structures possible for the inspection of products within the meaning of the LMBG will be set out and discussed on the basis of the rules applied in the Federal Republic of Germany.

In the Federal Republic the samples taken in compliance with the terms of the Food and Consumer Requisites Law of 15 August 1974 (Federal Law Gazette I, p. 1945) are investigated by specialists in food chemistry, human medicine and veterinary medicine at chemical, medical and veterinary inspection institutes for their conformity to the legal regulations and are subjected to expert appraisal.

In the Federal Republic of Germany the structure and organizational incorporation of the three groups of experts into the organization for the monitoring of foodstuffs and consumer requisites varies from region to region as a result of the country's federal structure.

In Bavaria, for instance, these three groups of experts are incorporated into two Land inspectorates for health with a presidial structure (1), whilst in other Federal Länder such as the Rhineland-Palatinate there are separate units for every governmental district, these units taking the form of chemical inspection institutes, medical inspection institutes and a veterinary inspection institute.

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(1) See notes at end of text.

The demarcation between the fields of work dealt with by the three groups of experts is determined in varying manners; but it is safe to assume as a general rule that the medical inspection institutes will investigate and assess the microbial characteristics of food not deriving from animals (e.g. bakery goods, ice cream, fruit and vegetables), as well as checking the health of those employed in the production and marketing of foods. The veterinary inspection institutes examine and assess the microbial characteristics of foods of animal origin (e.g. meat and sausage products, eggs, milk and dairy produce) and, in addition, conduct not only supplementary sensory tests and simple chemical investigations but also histological and serological tests. The chemical, chemophysical, physical and sensory testing of foods and consumer requisites is conducted at chemical inspection institutes, as was already indicated in a Circular Order of the Reich Ministry of the Interior in 1934.

At all events close co-operation is expected between the experts in the individual disciplines involved in the inspection of food and between the respective institutes.

The structure of the Land inspectorates for health as it exists in Bavaria (1) has not yet been adopted in the other Federal Länder. Nevertheless, owing to the physical proximity of the specialists in the various disciplines, this structure affords substantial advantages in the comprehensive and rapid manner in which foods and consumer requisites are investigated and assessed. The possibility of creating project groups for inspecting and assessing particular foods (e.g. meat and sausage products in conjunction with veterinary officers and food chemists, or ice cream in conjunction with food chemists, doctors and veterinary officers) affords advantages also with regard to the quantitative throughput of samples.

These advantages cannot be exploited in the same manner with other structures in organizational measures, e.g. division of samples and dispatch of samples to the various inspection institutes to be involved (e.g. in Baden-Württemberg) or dispatch of part of a particularly suspect sample (e.g. in Rhineland-Palatinate) from one institute to another, e.g. from the veterinary inspection institute to the chemical inspection institute for further chemical investigation. However, the fact must not be overlooked in this connection that excessive rigour and concentration may impair the individuality of the investigation as a result of over-planning, and that the centralization that this necessitates may cause the expert to have insufficient contact with the producer and monitoring bodies, in other words the necessary feedback between investigation and monitoring will be inadequate.

A very largely regional division of the structure into municipalities and districts, as exemplified in the Federal Land of North Rhine-Westphalia, does ensure close contact between monitoring and investigation but generally means small institutes with a relatively small number of personnel and thus little differentiation in their equipment and little specialization amongst the experts. Of the 56 chemical inspection institutes in the Federal Republic of Germany, as many as 26 are in North Rhine-Westphalia (25 run by local authorities and one by the state).

It is not yet possible to make a generally valid statement in favour of one system or the other; opinions have not yet crystallized, but there is a clearly discernible trend in concentration from smaller to larger units, in other words from units with two to five experts up to units with fifteen to twenty experts. The Land health inspectorates of Bavaria are staffed by 30 to 40 chemical experts and 35 to 40 veterinary and medical experts, these working with a high degree of specialization in a closely-knit organizational structure embracing their three disciplines. Thus in 1953 there were still 77 chemical inspection institutes, whilst by 1977 their number was down to only 56.

5. In 1977 in the Federal Republic of Germany as a whole there were:

56 chemical inspection institutes (2)
27 veterinary inspection institutes (8).

The distribution of the inspection institutes in the individual Federal Länder, and their catchment areas relative to the size of population that each one covers, are shown in a list of the chemical inspection institutes in the Federal Republic of Germany (2). The 56 chemical food inspection institutes currently extant employ 473 specialist personnel (in 1975) compared with only 247 in 1952, whilst the veterinary inspection institutes employ a total of 254 veterinary officers. The catchment areas of small institutes each include about 600 000 inhabitants, whilst those of large institutes cover up to 2 000 000 inhabitants. The Land inspectorate for the health service of southern Bavaria covers 6 000 000, and its counterpart for northern Bavaria 4 200 000 inhabitants.

6. In the Federal Republic of Germany there are also various systems being tested and adopted for specialization of expert staff, for the development of regional emphases and for the full utilization of facilities and personnel.

6.1. Specialization of the experts in the inspection institutes takes place horizontally according to inspection methods and vertically according to individual food groups.

Horizontal specialization (establishment of special laboratories in an inspection institute) derives from the need to use complicated and expensive analytical equipment, which has to be operated by regular personnel and whose fitness for use and error-likelihood have to be ascertained, and for which it is essential to ensure full supervision, proper handling and operation to capacity (points of emphasis for equipment).

This applies especially to detection and determination methods employed in conjunction with many products within the meaning of the Food and Consumer Requisites Law. These methods:

- are used, for instance, to determine the chemical grouping of a substance (e.g. by mass spectrometry);
- permit the determination of substances that occur in all or nearly all products within the meaning of the LMBG, even though in varying quantities, and which are essential for their comprehensive assessment (e.g. heavy metals and their determination by means of atom absorption spectrometry and polarography);
- require specialist knowledge in their execution and in the use of special reagents (e.g. enzymatic substrate and activity analysis, serological methods).

Vertical specialization in an inspection institute has become essential because the total volume of knowledge has expanded so swiftly in the last few decades that it now exceeds the capacity of any single expert. Other reasons are the need to investigate properly and comprehensively a constantly growing number of samples and the need to provide the consumer with proper protection, notwithstanding the increasingly sophisticated forms of adulteration and other infringements of food regulations.

In addition to the specialization which results from the distribution of tasks among these three expert groups involved in the investigation, another rough grouping, which usually seems to follow a uniform pattern, can be discerned. This provides a division into:

- foods of animal origin;
- foods of vegetable origin;
- beverages (juices, beer, wine and spirits);
- water (drinking water, and in some cases also service water and effluent);
- cosmetics and other consumer requisites;
- tobacco and tobacco products.

In large institutes these groups are further subdivided in some instances. Excessive specialization should be avoided, as otherwise the resulting range of vision will become too narrow. Instead a system involving a change of tasks at reasonable intervals (about every five years) would provide new stimuli and afford motivation for fresh achievements.

6.2. Supraregional points of emphasis

Horizontal and vertical points of emphasis covering more than one region are adopted in certain instances where dictated by the regional concentration of importers and exporters of certain foods and consumer requisites, e.g. in the large trading and transshipment centres of the world or in the geographical vicinity of raw material sources, e.g. preserve factories for fruit and vegetables, sugar refineries, and factories producing tobacco and tobacco products close to cultivation areas. Another governing factor, however, is the availability of specialists for particular groups of food or specific inspection techniques. The points of emphasis adopted at individual institutes are shown in (2).

Another vital consideration governing the creation of supraregional points of emphasis for the inspection of foodstuffs and consumer requisites is that many brands of article with the same composition are offered for sale in more than one region. It is therefore pointless for every inspection institute to carry out thorough tests on samples of branded chocolate, branded spirits and other branded products whose composition can be seen at a glance from the producer's recipe, especially when the products are ones whose composition can be determined largely by specifications that can be complied with (e.g. sugar). It seems appropriate that, within an area comprising many regions, such branded products should be taken to a single institute for investigation, namely to one with regional responsibility for the producer in question. Nevertheless, random sampling should be carried out on a small scale in order to discover any changes occurring after production (e.g. by excessively long storage or microbial contamination) as well as to detect any deliberate production of inferior-value goods in regions where inspection is inadequate. This should take account of such factors as identity reactions and reactions indicating product spoilage.

Another supraregional point of emphasis that suggests itself is in the inspection of products and substances where particular difficulty occurs owing to the demands imposed by highly specific subject-matter, the nature of the equipment employed and the need to use very sophisticated examination methods, e.g. the inspection of essences and aromas, including those in foodstuffs. Here the Federal viewpoint ought in all events to be sensibly subordinated to the desirability for points of emphasis to be unrestricted by Länder frontiers.

The supraregional establishment of points of emphasis in the inspection institutes is approached in widely differing manners in the various Federal Länder. Probably the most far-reaching establishment of points of emphasis in accordance with the above principles is that currently taking place in the Federal Land of Rhineland-Palatinate.

In conjunction with suitable organizational measures, a system of highly developed supraregional points of emphasis can enable inspection to be optimized and existing personnel strength to be used efficiently.

6.3. Apparatus (*)

To enable products to be properly examined as provided for the LMBG it is necessary to have not only the basic apparatus normally available but also:

- several gas chromatographs of varying performance with several detectors and the required accessories such as tracers, integrators and possibly also process control;

(*) The apparatus listed is based on the example of the chemical inspection institutes.

- UV spectrometer with fluorescence attachment;
- infrared spectrophotometer;
- atom absorpion spectrometer (also flameless and with hydride system);
- polarographs;
- densitometers.

Examples of the requirements for particular points of emphasis are:

- for the analysis of pest control agents and their identification, essence and aroma analysis, and identification of the aromatic substances and their impurities - mass spectrometers also in the GC-MS combinations;
- for the investigation of cosmetics and the analysis of vitamins - high-pressure liquid chromatographs with various detector systems also in the HP-MS coupling fluorimeter;
- for the analysis of plastics and the detection of the migration of plastic constituents to food (e.g. for determining the monomer contents of vinyl chloride and acrylonitrile in plastics and foods) - headspace gas chromatographs;
- and for radiological investigations, e.g. the determination of carbon-14 activity in spirits and gamma ray activity in foods - gamma spectrometers and scintillation counters.

This list is not exhaustive.

In the Federal Land of North Rhine-Westphalia the apparatus, staffing and space provided for the food inspection institutes have been determined by decree (3). No statutory regulation in accordance with § 44 No. 1 of the LMBG on the staffing, apparatus and other minimum technical requirements for the Federal Republic of Germany has yet been promulgated. Although a regulation of this type would afford advantages for a few institutes still poorly equipped and/or badly staffed, it would involve laying down rules in rigid terms and would lead to inflexibility, especially since changes required to adapt to technical progress would always necessitate the awkward procedure of amending the regulation. Moreover, such a regulation would constitute a directive for the financial administration and would thus greatly hinder the necessary adaptation of staffing and equipment to requirements. Determining staffing and equipment by legislation is not a practice to be recommended for adoption at EEC level either.

It is, however, a useful suggestion to recognize as a guideline the recommendations of scientific specialist associations, which can be adapted more rapidly to requirements, e.g. those of the Germand Veterinary Association or the Association of German Chemists (Deutsche Veterinärmedizinische Gesellschaft or the Gesellschaft Deutscher Chemiker).

6.4. Use of automatic analysis equipment

Automatic laboratory machines are nowadays employed also in the public sector for carrying out routines examinations efficiently, in tests on water, meat and meat products (e.g. in determining the protein, fat, water and hydroxyproline content) of alcoholic and other beverages (e.g. to determine the relative density, sugars, alcohol, extract, sulphur dioxide and total acids). The development of automatic machines for the inspection of foods is currently proceeding apace. Several investigation institutes in the Federal Republic of Germany are already equipped with automatic machines of this type. However, the efficient use of automatic analysis equipment is contingent upon a certain appropriate concentration of emphasis to ensure that these machines are fully utilized.

6.5. Space requirements

There are still wide variations in the size and layout of premises available to institutes for investigating products within the meaning of the LMBG. When

details were provided of the space requirements for chemical inspection institutes currently being built or in the planning stage, it was revealed that 35 m2 is the actual space requirement per employee. This takes into account all requisite auxiliary spaces for the workrooms constantly in use, e.g. chromatography rooms, extraction rooms and special measuring rooms for physical and chemical methods, as well as rooms for a library, administration, storage and technical equipment such as ventilation and waste-water purification. The space requirement for heating (since district heating may be employed), the storage of heating fuel and the caretaker's residence have been estimated separately.

A floor area of 20 m2 (preferably 24 m2) is regarded as necessary laboratory space for each employee engaged on experimental chemical work. This figure is supported by data from the industrial sector, clinics and universities (4).

These requirements and other standards derived from the principles of modern working hygiene for room depth, storey height and other parameters, such as have long been specified in the industrial sector and largely complied with but are only slowly being met in the public sector as a result of new building and rebuilding, are set out in 5) and 6).

6.6. Personnel requirements

The space requirements, like the multiplier for the provision of apparatus, are governed by the number of personnel (and personnel requirements). The personnel requirement will depend not only on the number of samples to be investigated but also on the nature and intensity of the investigation.

Every year in the Federal Republic of Germany at the present time some 650 000 samples of products are investigated in accordance with the terms of the LMBG, 300 000 of these being food samples in the veterinary inspection institutes. This should mean on average ten food samples and one sample of a consumer requisite per 2 000 inhabitants. The extension of monitoring and thus of inspection of further objects of daily life, which results from an extension of the legal regulations, will require a substantial increase in the number of personnel. Although in the scientific sector in the Federal Republic of Germany there has been an increase of 173 jobs up to 1975 in the chemical investigation institutes alone since 1958, when the 1958 Food Law came into force, the effects of the 1974 law on food and consumer requisites, as well as those of the statutory regulations at EEC level, suggest that a further increase in personnel is likely.

In the Federal Republic of Germany experience shows that on average in the field of practical chemical investigations a food chemist with three chemical/technical assistants can cope with the investigation and assessment of 600 samples per year.

In the veterinary sector it is assumed on the basis of experience that one veterinary officer and three technical assistants are required in order to investigate 1500 samples of food (excluding milk). This number of samples may well also be applicable to the field of human medicine.

The key figures quoted should be regarded as the standard only for the usual investigations of products within the meaning of the LMBG. Investigations incurring additional expenditure, e.g. investigations of aromas and essences, radiological investigations, the investigation of plastics and cosmetics, vitamin-boosted foods and dietetic foods require other key figures.

7. Standardization of the inspection methods

The choice of the methods employed for the investigation is made by the expert after considered judgement, except in cases where the investigations are expressly stipulated at national level or in EEC regulations and directives. The methods employed are either described in the literature or derive from collections of methods such as the Swiss Food Manual (Schweizerisches Lebensmittelbuch) or the collection of methods of the AOAC. ISO and DIN methods

are employed as well. The investigation results obtained in this manner will contain not only a factor for the inaccuracy of the method but also one for the inaccuracy due to the individual use of these methods. The results of several investigators are therefore not always comparable with one another - a fact which occasionally causes difficulties not only in a national but also in a supranational context. Consequently it seems a good idea to devise standardized methods for general application and to recommend these or even make these obligatory in the public and industrial sector, as has been implemented, for instance, for wine in EEC Reg. 1735/73.

On the basis of § 35 of the LMBG, the Federal Office of Health was given the task of preparing and publishing an official collection of methods for sampling and investigating foods, tobacco products, cosmetic agents and consumer requisites in co-operation with specialists from the fields of scientific monitoring and the industry involved. Work on this has commenced and the first methods will be published this year. Initially, this collection of methods will not possess the character of statutory standards but may be prescribed by statutory regulation as generally binding in accordance with § 44 No. 2 LMBG. It is intended in principle that this collection should include methods assessed statistically in round robin tests (comparability, reproducibility).

Although it appears essential to standardize the methods for the public sector so as to ensure that results can be compared, it is not intended to anchor these within the framework of statutory standards in view of the inflexibility known to be inherent in standards of this type and in order not to obstruct the ongoing development of the methods or their essential adaptation to the scientific standard. On the other hand it appears sound policy to stipulate in writing the general requirements imposed on methods regarding their specificity, detection limits, determination limits, comparability and reproducibility.

The literature and official collections do not contain suitable regulations for all objects for investigation or for all parameters. Consequently, the experts at the inspection institutes will constantly be obliged to develop new regulations or adapt existing regulations to particular substrates.

8. Purpose-related applied research in the field of the inspection institutes

The need to develop new regulations for the investigation of products within the meaning of the LMBG or to adapt existing investigation regulations to new substrates embodies the requirement for purpose-related applied research. However, besides the research work for the development and improvement of methods, including their automation, it will also be necessary to conduct research studies to discover the compositions of products within the meaning of the food law, the changes they undergo during storage and the manner in which they are affected by the environment, unless such investigations are carried out in institutes of the universities or at other research centres, including those in industry. In individual cases it may be necessary to check information provided by third parties in order to confirm or refute its veracity.

This type of purpose-related applied research in the field of investigation institutes not only helps expand the general level of knowledge in certain fields but also keeps the specialists in continuous contact with scientific problems. Hence, it represents an aid to further training and, as experience has shown, has a beneficial effect on the daily work of the specialists through the motivation it provides.

One special type of applied scientific activity is the collection and evaluation of data which come to hand in the investigations regularly carried out.

9. Collecting data of this type on the properties of products within the meaning of the LMBG, especially data on their composition, can be arranged supraregionally, as is done in the area of the Federal Republic of Germany for data on chemicals in the environment at the Central Recording and Evaluation Department of the Federal Office of Health (ZEBS) (e.g. for the heavy metal contents of foods). This task can, however, be decentralized to individual institutes, where it serves several purposes in food monitoring, namely:

- recognizing trends in the composition of foods over several years (e.g. in the composition of meat and sausage products);
- providing access to knowledge on the usual composition of products for product assessment by experts;
- creating bases on which to establish sampling plans, especially since these have to take particular account of deficiencies in certain sectors which can be detected by way of such data collections.

Data banks of this type can be operated purely manually or alternatively by electronic data processing (EDP). The use of EDP will also provide a means of controlling sample input and sample processing and thus help to accelerate the work sequence. Even the automated issue of routine-type certificates (e.g. in the case of meat and meat products) thus becomes feasible. Pilot studies of these matters are currently being conducted at several inspection institutes in the Federal Republic of Germany, e.g. in Stuttgart in the Federal Land of Baden-Württemberg.

10. Summary

Proceeding from the fact that similar problems exist in all countries of the European Economic Community in the conduct of investigations and the assessment of samples taken within the scope of official food monitoring, an attempt has been made, by a critical study of examples from the Federal Republic of Germany, to form a picture of the actual situation and potential, as well as trends, and to indicate possible solutions in some cases.

In the last hundred years the investigation and assessment of such samples has undergone a massive change, adapted in each instance to industrial developments and to the level of scientific knowledge. The investigation and assessment of such products are thus not static but in a constant state of flux. Hence the official structures necessary must occasionally be looked at critically and revised, especially today, when greater performances are required from less abundant resources, in order to provide optimum protection of consumers from fraud and health hazards.

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ANNEX 1

FOOD MONITORING IN BAVARIA - A MODEL FOR REORGANIZATION

by Erich Coduro

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(non published)

ANNEX 2

L I S T

OF

OFFICIAL LABORATORIES OF CHEMICAL ANALYSIS AND INSTITUTES OF CHEMICAL RESEARCH, OFFICE OF INSPECTION IN THE BUNDESWEHR, WINE ENFORCEMENT OFFICERS AND CONSULTANTS IN THE FEDERAL REPUBLIC OF GERMANY

Elaborated and published by:
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8131 Bernried

Gliederung

A. Verzeichnis der Untersuchungsämter, (örtlich gegliedert)
B. Verzeichnis der Untersuchungsämter in den einzelnen Ländern
C. Orts- und Gebietsverzeichnis
D. Untersuchungsstellen der Bundeswehr
E. Liste der Weinkontrolleure
F. Verzeichnis der Gegensachverständigen
G. Berufsstatistik

Abkürzungen

A: Anschrift
Amtsbez: Amtsbezirk für die Lebensmittelüberwachung
E: Einwohnerzahl des Amtsbezirks
F: Fernsprecher
L: Leiter des Amtes
S: Spezialgebiete
Techn.M: Technische Mitarbeiter (einschließlich Schreibkräfte und Verwaltungspersonal, soweit nicht besonders aufgeführt)
Tr: Träger des Amtes
V: Vertreter des Leiters
Wiss.M: Wissenschaftliche Mitarbeiter

A. Verzeichnis der Untersuchungsämter

1. Aachen

Chemisches und Lebensmitteluntersuchungsamt der Stadt Aachen

A: 51 Aachen, Am Gut Wolf 4, F: (0241) 432 572, 21243 oder 26598

Tr: Stadt Aachen

Amtsbez: Stadt Aachen, Kreis Euskirchen, Kreis Heinsberg, E: 606 200

S: Zolluntersuchungen von techn. Fetten, Trinkwasseruntersuchungen (chem. und bakt.), toxikolog. und physiolog. Untersuchungen, Auslandsfleischuntersuchungen, Abwasseruntersuchungen, Schlammuntersuchungen, Kontrolluntersuchungen von Mülldeponien, Prüfung der Umweltschädlichkeit von Abfallstoffen, Unters. zur Bewertung von Abwasserreinigungsverfahren, Staubmessungen

L: Chemiedirektor *Edwin Klein*

V: Oberchemierat *Eckhart Goldschmidt*

Wiss. M: Dipl.-Chemiker *Dr. Günter Heil,* Chemierat z. A. *Joseph Freund,* Chem.-Ing. *Günter Bell*

Techn. M: 1 Chemotechn., 5 Chem. techn. Angestellte, 2 Laboranten, 6 Lehrlinge, 4 Büroangestellte, 2 Reinmachefrauen

Berechtigung zur Ausbildung von Praktikanten

2. Berlin

Landesanstalt für Lebensmittel-, Arzneimittel- und gerichtliche Chemie Berlin

A: 1000 Berlin 12 (Charlottenburg), Kantstr. 79, F: (030) 306 60 34/35, 307 20 34

Strahlenmeßstelle 1000 Berlin 12, Soorstr. 84, F: 302 50 26–29, 301 80 20

Tr: Land Berlin, Senator für Gesundheit und Umweltschutz

Amtsbez: Berlin (West), E: 2 000 750

S: Arzneimitteluntersuchungen und chemisch-toxikologische Untersuchungen. Einfuhruntersuchungen von Erzeugnissen des Weingesetzes. Prüfstelle für Qualitätsbranntwein aus Wein. Auslandsfleischbeschau. Überprüfung von Vorratslagern und des Nährwertes von Fertigmahlzeiten für Gemeinschaftsverpflegung. Ausbildung von Praktikanten der Lebensmittelchemie. Radioaktivitätsmessungen an Lebensmitteln, Trink-, Oberflächen- und Abwässern. Personendosismessungen (Auswertung von Dosisfilmen und Thermolumineszensdosimetern).

L: Senatsrat *Dr. Hans Wollenberg*

V: Chemiedirektor *Prof. Dr. Karl-Heinz Beyer*

Wiss.M: Chemiedirektoren: *Dr. Lieselotte Leichter, Dr. Karlheinz Baranowsky, Günter-Eugen Halder, Dr. Hans Kastner,* Oberchemieräte: *Dr. Dietrich Klinge, Dr. Dieter Strauß, Frau Renate Steinmetz, Dr. Harald Spengler, Dr. Rudolf Weber, Dr. Andreas Mahling,* Chemieräte: *Frau Christel Drossel, Frau Brigitte Jäger, Herr Heino Harms, Frau Jutta Krause, Frau Ilse Arndt,* Wissenschaftl. Angestellte: *Dr. Hans-Joachim Schieblich, Dr. Klaus Zipfel, Dr. Dieter Winkler, Frau Sabine Krebs, Herr Heinz Findeisen, Herr Arnold Fried, Herr Udo Morfeld* (Physiker), *Frau Hiltrud Schumann,* Weinkontrolleur: *Reg. Oberinspektor Jochen Caspary*

Techn.M: 34 Chemisch-technische Assistentinnen, 7 Laboranten, 8 Laborarbeiter/ Hilfslaboranten

Verwaltung: 1 Reg.Amtmann, 1 Reg.Hauptsekretär, 2 Reg.Obersekretäre, 8 Verwaltungs-Angestellte, 6 Angestellte im Schreibdienst, 1 Bote, 1 Hausmeister

3. Bielefeld

Chemisches Untersuchungsamt Bielefeld

A: 48 Bielefeld, Oststr. 55, F: (0521) 512657

Tr und Amtsbez: Stadt Bielefeld und die angeschlossenen Kreise Gütersloh, Herford, Lippe und Minden-Lübbecke E: 1 440 000

S: Wasseruntersuchungen (chem. u. bakt.), Abwasseruntersuchungen, Blutalkoholbestimmungen, toxikologische und gerichtsmedizinische Untersuchungen, chem. u. chem.-technische Untersuchungen für Behörden, Handel und Industrie

L: Oberchemiedirektor *Dr. Gerhard Nagel*

V: Chemiedirektor *Ekkehard Wand*

Wiss.M: Oberchemieräte *Dr. Hans Sommer, Horst Meyer,* Chemierat *Dr. Gerhard Becker,* Dipl.-Chem. *Dr. Rudolf Brammer*

Techn.M: 1 Lebensmittelkontrolleur (zugleich chem.-techn. Assistent), 8 chem.-techn. Assistenten, 4 Laboranten, 1 chem.-techn. Angestellter, 3 Laborgehilfen (2 halbtägig), 2 Bürokräfte, 2 Schreibkräfte, 5 Putzfrauen (davon 4 halbtägig)

4. Bochum

Chemisches Untersuchungsamt der Stadt Bochum

A: 4630 Bochum, Carolinenglückstraße 27, F: (0234) 69 8726

Tr: Stadt Bochum

Amtsbez: Städte Bochum, Herne, Witten, E: 720 000

S: Schwerpunktanalytik auf dem Gebiet der Lipidsubstanzen, Umweltchemikalien, Toxikologie, klinisch-chemische Untersuchungen, Blutalkoholuntersuchungen, Wasser- und Abwasseruntersuchungen, Abfallstoffe, Bodenverunreinigungen

Der Leiter des Amtes ist gleichzeitig Amtschemiker für die Städte Bochum und Herne.

L: Leitender Städt. Chemiedirektor *Dr. Georg Fritsch*

V: Städt. Chemiedirektorin *Dr. Auguste Mankel*

Wiss.M: Oberchemierätin *Ilse Kaiser,* Chemierat z. A. *Wilfried Malinka,* Chemierätin z. A. *Birgit Oeding,* Chemierat z. A. *Dr. Ralf Turley,* Dipl.-Chem. *Dr. Artur Harz*

Techn.M: 2 Chemieingenieure, 2 Chemotechniker, 15 Chemielaboranten(-innen), 6 Auszubildende f. d. Ausbildungsberuf Chemielaborant, 1 Verwaltungsamtsinspektor, 1 Verwaltungsangestellte ($^1/_2$-tägig), 3 Schreibkräfte, 1 Milchkontrolleur, 3 Putzhilfen

5. Bonn

Chemisches und Lebensmitteluntersuchungsamt der Stadt Bonn

A: 53 Bonn, Immenburgstraße 20

Tr: Stadt Bonn

Amtsbez: Stadt Bonn, Rhein-Sieg-Kreis E: 680 000

S: Untersuchungen von Wasser und Abwasser, (chem. und mikrobiologisch) toxikologisch-, pharmazeutisch-chemisch und chemisch-technische Untersuchungen, Zolluntersuchungen, Untersuchungen auf Pflanzenschutzmittelrückstände, mikrobiologische Untersuchungen

L: Ltd. Chemiedirektor *Prof. Dr. Wilhelm Pelz*

V: Städt. Chemiedirektor *Dr. Walter Brauns*

Wiss.M: Oberchemierat *Dietmuth Eichenauer,* Chemierätin z. A. *Irmgard Heimann-Geib,* Stadtchemiker *Dr. Hans Vogel*

Techn.M: 9 Chemotechniker, 1 Verwaltungskraft, 1 Schreibkraft, 2 Laborgehilfinnen

Das Untersuchungsamt bildet Praktikanten aus.

6. Braunschweig

Staatliches Chemisches Untersuchungsamt Braunschweig

A: 3300 Braunschweig, Hallestraße 1, F: (0531) 6 22 31 / 33

Tr: Land Niedersachsen

Amtsbez: Städte Braunschweig, Helmstedt, Salzgitter, Wolfenbüttel, Wolfsburg; Landkreise Gifhorn, Helmstedt, Wolfenbüttel, E: 870 400

S: Amtliche Meßstation für Umweltradioaktivität D 0853 MP, Weinkontrolle, Wasser- und Abwasseruntersuchungen, Schwerpunktsamt für: Untersuchungen von Gemüse und Gemüseerzeugnissen, Tabak und Tabakwaren, Bedarfsgegenständen (ohne Kosmetika) einschließlich Verpackungsmitteln, Kunststofferzeugnissen, alkoholhaltigen Lebensmitteln sowie Vitaminbestimmungen

L: Chemiedirektor *Dr. H. Brouër*

V: Chemieoberrat *Dr. G. Brandenburg*

Wiss.M: Chemieoberrätin *B. von Bruchhausen,* Chemieoberrat *G. Porzig,* Chemieoberrat *Dr. K. Rohleder,* Chemieoberrätin *G. Hermann,* Chemieoberrat *Dr. M. Ritz,* Lebensmittelchemiker *D. Eppert*

Techn.M: 14 chem.-techn. Assistenten/Assistentinnen, 3 Laborhilfskräfte

Verw.M: 3 Büroangestellte

Berechtigung zur Ausbildung von Bewerbern der Lebensmittelchemie.

7. Bremen

Staatliche Chemische Untersuchungsanstalt Bremen

A: St.-Jürgen-Str. (Areal des Zentralkrankenhauses) 2800 Bremen

F: (0421) 4492 5447; Institutsleiter 4492 5448, Fernschreiber Senat Bremen Nr. 024 4804 Staatl. Chem. Unters. Anstalt;

Tr: Freie Hansestadt Bremen

Amtsbez: Land Bremen mit den Städten Bremen und Bremerhaven E: 600 000

S: Amtl. Untersuchungsstelle für Wein; Untersuchung von ausländischem Fleisch und Fett (chem.), Untersuchung von Trinkwasser, Abwasser und Brauchwasser aller Art (chem.)

L: Chemiedirektor *Dr. Friedrich Koppe*

V: Chemiedirektor *Heinrich Apel*

Wiss.M: Oberchemierat *Lutz,* Oberchemierat *Neumann,* Chemiedirektor *Dr. Nat,* Oberchemierätin *Stolze,* Oberchemierat *Lohse,* Chemierätin *Eißner*

Weinkontrolleur: Weinamtmann *Max Robert Kirschner*

Techn.M: 15 chem.-techn. Assistenten(-innen), 1 Verwaltungsoberinspektor, 3 Verwaltungsangestellte, 2 Stenotypistinnen, 5 Lohnempfänger(-innen)

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8. Darmstadt

Staatliches Chemisches Untersuchungsamt Darmstadt

A: 6100 Darmstadt, Hügelstraße 26, F: (06151) 1 27 69

Tr: Land Hessen

Amtsbez: Städte Darmstadt, Lampertheim, Offenbach, Rüsselsheim, Viernheim; Landkreise Bergstraße, Darmstadt, Dieburg, Groß-Gerau, Odenwaldkreis, Offenbach; E: 1 400 000

S: Untersuchung von Trink- und Brauchwasser, Glycerinanalysen; Schwerpunktaufgaben bei Lebensmitteln: Untersuchungen von Aromen, Essenzen und Fruchtsäften

L: Chemiedirektor *Dr. Wolfram Schulz*

V: Chemieoberrat *Otto Maier*

Wiss.M: Chemieoberrat *Dr. Friedrich Hüter,* Lebensmittelchemikerin *Gisela Haggag*

Techn.M: 9 Chemotechnikerinnen bzw. chem.-techn. Ass. bzw. Chemielaboranten 1 Verwaltungsangestellte als Büroleitender Beamter, 2 Schreibkräfte, 1 Spül- und Reinemachefrau

9. Dortmund

Chemische Untersuchungsanstalt der Stadt Dortmund

A: 4600 Dortmund 1, Hövelstr. 8, F: (02 31) 54 22 36 45 – 49 (Durchwahl)

Tr. und Amtsbez: Stadt Dortmund, E: 631 000

S: Blutalkoholbestimmungen, Export- und Zoll-Untersuchungen, Wasser und Badewasser, klinisch-chemische und toxikologische Untersuchungen, Untersuchung von Gewerbe- und Industrie-Müll für Deponien

L: Chemiedirektor *Hans Doyen*

V: Oberchemierat *Werner Bromby*

Wiss.M: Oberchemierätin *Gerlinde Hövel,* Oberchemierat *Gert Krauskopf*

Techn.M: 8 Chemotechniker(-innen), 1 Laborant, 1 Apothekerassistent, 2 Schreibkräfte, 2 Putz- und Spülfrauen

10. Düsseldorf

Chemisches und Lebensmitteluntersuchungsamt der Landeshauptstadt Düsseldorf

A: 4000 Düsseldorf 1, Lambertusstraße 1, Postfach 1120, F: (02 11) 8 99 32 58

Tr. und Amtsbez: Stadt Düsseldorf, E: 675 000

S: Kunststoffanalysen, Auslandsfleischbeschau, Zolluntersuchungen von Branntwein, chemisch-technische und toxikologische Untersuchungen

L: Direktor *Dr. Horst Vogel*

V: Oberchemierat *Dr. Egbert Gerstmann*

Wiss.M: Chemierätin *Heidi Ganoulis-Spellmeier,* Chemierätin *Elke Kirbach,* Chemierat *Dr. Gunter Josst,* Chemierätin z. A. *Hildegard Buhmann*

Techn.M: 4 Chemotechniker(-innen), 1 biologisch-technische Assistentin, 5 Laboranten(-innen), 1 Verwaltungsangestellte, 2 Halbtagsschreibkräfte, 1 Laborhilfe

Das Untersuchungsamt bildet Praktikanten aus.

11. Duisburg

Chemisches und Lebensmitteluntersuchungsamt der Stadt Duisburg

A: 41 Duisburg 1, Pulverweg 39, F: (02 03) 28 13 24 87

Tr: Stadt Duisburg

Amtsbez: Stadt Duisburg, E: 607 000

S: Luft- u. Abwasseruntersuchungen, Spurenanalytik (Pestizide, Schwermetalle, Benzpyren)

L: Leitender Stadtchemiedirektor *Dr. Willi Schneider*

V: Städt. Oberchemierat *Dr. Dieter Schenker*

Wiss.M: *Dr. H. Sommerling,* Dipl.-Chemiker, *Gunhild Scholz,* Lebensmittelchemikerin, *Robert Kronenberg,* Städt. Oberchemierat

Techn.M: 1 Chemie-Ing., 3 Chemotechniker, 3 Chemotechnikerinnen, 1 Praktikant, 5 Laborantinnen, 4 Laboranten, 2 techn. Angestellte, 1 Stadtoberinspektor, 1 Stenotypistin, 3 Putzhilfen

12. Emden

Chemisches Untersuchungsamt der Stadt Emden

A: 2970 Emden, Columbus-Hochhaus, Nordertorstraße 41, F: (0 49 21) 2 74 70

Tr: Stadt Emden, E: 55 000

S: Untersuchung von Lebensmitteln und Bedarfsgegenständen, chemisch-technische, klinisch-chemische, toxikologische und serologische Untersuchungen, Untersuchung von Trink-, Bade-, Oberflächen- und Abwasser (chemisch und bakteriologisch), Getreide, Mineralölen und anderen Produkten aus dem Hafenumschlag. Sonstige technische Untersuchungen im Rahmen der Arbeitssicherheit.

L: Chemiedirektor *Dr. Fritz Günther*

V: Chemieoberrat *Ottmar Burckhart*

Wiss.M: Chemieingenieurin *Ingrid Oostinga*

Techn.M: 1 Chemotechnikerin, 1 chem.-techn. Assistentin, 3 Chemielaborantinnen, 1 Chemielaborant, 1 Verwaltungsangestellte, 1 Schreibkraft, 5 Chemielaboranten-Lehrlinge, 2 Reinemachfrauen

Die Untersuchungen im Rahmen der amtlichen Lebensmittelüberwachung sind zur Zeit dem Staatlichen Chemischen Untersuchungsamt Oldenburg zugewiesen.

13. Erlangen

Landesuntersuchungsamt für das Gesundheitswesen Nordbayern

Fachbereich Chemie, Erlangen mit Außenstellen in Würzburg und Regensburg

A: 8520 Erlangen, Henkestraße 9–11, Postfach 3229, F: (09131) 25021 und 25022

Tr: Land Bayern, Staatsministerium des Innern

Amtsbez: Reg.Bezirk Mittelfranken (ohne Stadt Nürnberg) und Oberfranken mit den **Stadtkreisen** Ansbach, Bamberg, Bayreuth, Coburg, Erlangen, Fürth (Bay.), Hof, Schwabach und den **Landkreisen** Ansbach, Bamberg, Bayreuth, Coburg, Erlangen-Höchstadt, Forchheim, Fürth (Bay.), Hof, Kronach, Kulmbach, Lichtenfels, Neustadt (Aisch) – Bad Windsheim, Nürnberger Land, Roth, Weißenburg – Gunzenhausen, Wunsiedel i. Fichtelgebirge, E: 2100000 (Gesamtbezirk 4272000)

S: Schwerpunktsanstalt f. Fleisch- und Wurstwaren, Kunststoffe, Keramik

L: Oberchemiedirektor *Dr. Walter Sperber*

V: Chemiedirektor *Dr. Hans Raum*

Wiss.M: ChD *Rudolf Giehl,* ChD *Dr. Hans Ruff,* ChD *Friedrich Wilhelm Schmidt,* OChR *Dr. Klaus Danziger,* OChR *Dr. Hans-Jürgen Dömling,* ORChR *Dr. Hans Jäckl,* ORChR *Emil Kleemann,* OChR *Dr. Hans-Hermann Miserre,* OChR *Dr. Volkmar Schwarz,* ChRin Fr. *Regina Rießner,* Lebensmittelchemiker *Dr. Erwin Hemmer,* Lebensmittelchemiker *Dr. Günter Römer,* Lebensmittelchemikerin Fr. *Theresia Sandmeier,* Lebensmittelchemiker *Dr. Hans-Joachim Tkotz*

Techn.M: 1 Lebensmittelkontrolleur, 16 chem.-techn. Assistent(innen)en, 10 Laborantinnen, 2 Auszubildende als Chemielaboranten

Verwaltung: 1 Amtsrat, 4 Verwaltungsangestellte, 3 Schreibkräfte, 2 Hausverwaltung, 7 Reinemachfrauen

Außenstelle Regensburg

A: 8400 Regensburg, Donaulände 7, Postfach 329, F: 0941/53033

Amtsbez. und Spezialgebiete: Untersuchung von Lebensmitteln und Bedarfsgegenständen im Regierungsbezirk Oberpfalz, Blutalkoholbestimmungen für ganz Bayern, Schwerpunktanstalt für die Untersuchung von Fetten und Ölen für Nordbayern, E: Regierungsbezirk Oberpfalz (einschl. kreisfreier Städte) ca. 970000

L: Leitender Chemiedirektor *Dr. Walter Stadelmann*

V: Chemiedirektor *Dr. Max Josef Schmid*

Wiss.M: Oberchemieräte: *Matthias Böttger, Dr. Herbert Otteneder, Dr. Miklos Nagy;* Chemieräte: *Dr. Peter Binnemann, Erwin Bortmes;* Lebensmittelchemiker: N.N.

Techn.M: 4 chem.-technische Assistenten(-innen), 13 Laboranten(-innen)

Verwaltung: 1 Regierungsamtmann, 5 Schreibkräfte, 1 Hausmeister, 8 Arbeiterinnen für Reinigungsarbeiten (teilbeschäftigt)
Berechtigung zur Ausbildung von Praktikanten

Außenstelle Würzburg

A: 87 Würzburg, Theaterstraße 23, Postfach, F: (09 31) 5 06 64, 5 06 65

Amtsbez: Reg.-Bez. Unterfranken mit den Städten Aschaffenburg, Schweinfurt, Würzburg und den Landkreisen Aschaffenburg, Bad Kissingen, Haßberge, Haßfurt, Kitzingen, Main-Spessart Karlstadt, Miltenberg, Rhön-Grabfeld Bad Neustadt/Saale, Schweinfurt und Würzburg, E: 1 202 000

S: Erst- und Zweitgutachterstelle für Auslandsweine; Untersuchungsstelle für die Amtliche Qualitätsprüfung für Qualitätsweine mit Prädikat für ganz Bayern; Untersuchung und Amtliche Qualitätsprüfung für Qualitätsbranntwein aus Wein für ganz Bayern. Schwerpunktlabor für die Untersuchung aller dem Weingesetz unterliegenden Erzeugnisse, Obstmuttersäfte, Fruchtsäfte, Spirituosen und weinähnliche Getränke für Nordbayern (Reg.-Bez. Unterfranken, Mittelfranken, Oberfranken, Oberpfalz); Untersuchung von Wasser

L: Chemiedirektor *Dr. Hans-Jürgen Schöne*

V: Chemiedirektor *Dr. Hans Staritz* (zugleich Abt.-Leiter)

Wiss.M: Abt.-Leiter: Chemiedirektor *Dr. K. Hildenbrand*, die Oberchemieräte *Dr. P. Kreutzer, L. Schmiedel, G. Senninger, Dr. H. Wagner, Dr. S. Wallrauch*, Chemierat *Dr. Gr[illegible]ner*

Weinkontrolleure: *H. Mayer, J. Scholz, K. Weltner*

Lebensmittelkontrolleur: *H. Reimann*

Techn.M: 7 chem.-techn. Assistenten(-innen), 10 Laboranten(-innen), 1 Verw.Beamter, 6 Verw.Angestellte, 1 Hausmeister, 1 Kraftfahrer, 5 Laborhilfen

14. Eschweiler

Chem. und Lebensmitteluntersuchungsamt des Kreises Aachen

A: 5180 Eschweiler, Steinstraße 87, F: 0 24 03/60 04 u. 60 05

Tr: Kreis Aachen

Amtsbez: Kreis Aachen, Stadt und ehemaliger Kreis Düren, E: 584 000

L: Chemiedirektor *Hans Beindorf*

V: Oberchemierat *Dr. Theodor Vondenhof*

Wiss.M: Chemierätin *Mechthild Beulmann*, Chemierätin *Gudrun Wolfrum*

Techn.M: 1 Chemie-Ing., 2 Laboranten, 3 Laborantinnen, 3 Schreibkräfte, 1 Spülfrau, 1 Putzfrau, 1 Hausmeister

Nach Genehmigung: Praktikanten-Ausbildung

15. Essen

Chemisches Untersuchungsamt der Stadt Essen

A: 43 Essen 1 (Ruhr), Lichtstraße 3, F: (02 01) 23 55 67 u. F: Stadt Essen, Durchwahl: (02 01) 1 81-33 45

Tr. und Amtsbez: Stadt Essen, E: 684 000

S: Untersuchung von tierischen Fetten im Rahmen der amtlichen Auslandsfleischbeschau, Chemische Trink-, Grund- und Abwasseruntersuchungen, Blutalkoholbestimmungen, Arzneimitteluntersuchungen, toxikologische und klinisch-chemische Untersuchungen, Untersuchung von Umweltchemikalien

L: Städt. Chemiedirektor *Dr. Hans Böddeker*

V: Oberchemierat *Fritz Bertram*

Wiss.M: Oberchemierat *Dr. Günther Zebger,* Chemierätin *Dr. Angela Bauer,* Chemierätin *Ancke Pardieck,* N.N.

Techn.M: 1 Chemie-Ing., 5 Chemotechnikerinnen, 3 chem. Assistent., 1 Laborgehilfin, 1 Beamtin, 1 Sekretärin, 1 Stenotypistin, 6 Putzfrauen

16. Flensburg

Städtisches Untersuchungsamt Flensburg

A: 2390 Flensburg, Rathaus, Am Pferdewasser 1, F: 0461-85878/9

Tr: Stadt Flensburg

Amtsbez: Stadt Flensburg, Kreis Schleswig-Flensburg (teilweise), Nordfriesland, E: 340000

S: Auslandsfleischbeschau, Wasser und Abwasser

L: Chemiedirektor *Dr. Werner Lorenzen*

V: Oberchemierätin *R. Friedrich*

Techn.M: 4 Laborantinnen, 2 Laborantenlehrlinge, 1 Büroangestellte, 1 Spülfrau

17. Gelsenkirchen

Amtliche Lebensmitteluntersuchungsanstalt (Institut für Lebensmittelchemie) der Stadt Gelsenkirchen

A: 465 Gelsenkirchen, Kurt-Schumacher-Str. 4, F: (0209) 1691 – bei Durchwahl 1692300

Tr: Stadt Gelsenkirchen

Amtsbez: Stadt Gelsenkirchen, E: 350000

S: Vitaminbestimmungen, Schädlingsbekämpfungsmittel, schädliche Schwermetalle

L: Chemiedirektor *Dr. Franz Matt*

V: Oberchemierat *Hans-Joachim Niemöller*

Wiss.M: Oberchemierätin *Helene Storp*

Techn.M: 3 Chemotechniker, 2 Chemielaboranten, 1 Büroangestellte, 2 Lebensmittelkontrolleure

Berechtigung zur Ausbildung von Praktikanten

18. Gießen

Staatliches Chemisches Untersuchungsamt Gießen

A: 63 Gießen, Marburger Str. 54, F: (0641) 32051 und 36116

Tr: Land Hessen

Amtsbez: Städte Gießen und Wetzlar, Landkreise Dillkreis, Gießen, Limburg-Weilburg, Vogelsbergkreis, Wetzlar, Wetterau, E: 1000000

S: Untersuchung von Trink- und Grundwasser (chem. und bakt.)

L: Chemiedirektor *Dr. habil. Rudolf Thalacker*

V: Chemiedirektor *Dr. habil. Erich Muskat*

Wiss.M: Oberchemierätin *Magdalene Pfeiffer,* Chemierat *Dr. Ernst Kaltwasser,* Chemierätin *Ingeborg Kaltwasser,* Lebensmittelchemikerin *Alice Stelz*

Techn.M: 6 chem.-techn. Assistenten, 1 Inspektor, 2 ganztägige und 2 halbtägige Verwaltungsangestellte, 1 Laborarbeiter, 3 halbtägige Reinemachefrauen.

Berechtigung zur Ausbildung von Praktikanten der Lebensmittelchemie. Der Leiter und sein Stellvertreter sind Mitglieder der Prüfungskommission für die Hauptprüfung der Lebensmittelchemiker (Teil B) in Gießen und als Habilitierte mit der Lehre beauftragte Mitglieder des Lehrkörpers der Universität in Gießen.

19. Hagen

Chemisches Untersuchungsamt der Stadt Hagen

A: 5800 Hagen, Pappelstraße 1, F: (0 23 31) 20 72 47 15 (Durchwahl)

Tr: Stadt Hagen

Amtsbez: Stadt Hagen. Ennepe-Ruhr-Kreis, Märkischer Kreis, E: 1 020 000

S: Staatlich anerkanntes Schwerpunkt-Untersuchungsamt für Pestizid-Rückstandsanalytik, Blutalkohol, Umweltschutzuntersuchungen

L: Leitender Chemiedirektor *Dr. Bernd Müller*

V: Chemiedirektorin *Dr. Ruth Moslener*

Wiss.M: Oberchemierat *Dr. Heinrich Stamm,* Chemierat *Fritz Krauch,* Chemierat *Dr. Lothar Böschemeier,* Chemierat *Dr. Udo Rösener,* Lebensmittelchemiker *Christian Gertz,* N.N.

Techn.M: 3 Chemotechniker, 16 Laboranten, 1 Amtsinspektor, 1 Sekretärin, 4 Schreibkräfte, 1 Hausmeister, 5 Spül- und Reinigungskräfte

20. Hamburg

Chemische und Lebensmitteluntersuchungsanstalt im Hygienischen Institut der Gesundheitsbehörde der Freien und Hansestadt Hamburg

A: Gorch-Fock-Wall 15, 2000 Hamburg 36, F: (0 40) 349101

Tr. und Amtsbez: Freie und Hansestadt Hamburg, E: 1 739 000

S: Chemische Auslandsfleischbeschauuntersuchungen, Zolluntersuchungen von Wein (Erst- und Zweitgutachten), Radioaktivitätsuntersuchungen von Lebensmitteln (ohne Trinkwasser), Untersuchung von Arzneimitteln, Suchtmitteln, Bedarfsgegenständen (im Sinne des LMBG), Vitaminbestimmungen, Pestizidbestimmungen

L: Direktor Professor *Dr. Erich Schneider*

V: Wissenschaftlicher Direktor *Professor Dr. Johs. Wurziger*

Wiss.M: Wissensch.Dir.: *Dr. Josef Indinger, Dr. Hans Ketels, Dr. Werner Meine, Dr. Marie-Luise Strache-Ihloff,* 1 Stelle z. Zt. unbesetzt

Wiss. Räte und Oberräte: *Dr. Georg Dickhaut, Hans Hagemann, Dr. Margareta Meine, Dr. Erwin Spell, Dr. Margarete Warmbier*

Wiss.Ang: *Dr. Kurt Boek, Ursula Coors, Wolfgang Frede, Brigitte Hambrecht, Dieter Kokal, Barbara Seiffert, Erwin Wölfing.*

Weinkontrolleur: Gewerbeamtmann *Walter Kettern*

Techn.M: 25 techn. Ass., 6 Laboranten, 4 Büroangestellte, 5 Spül- und Putzfrauen, 1 Versuchstierpflegerin

Der Leiter ist o. Professor für Lebensmittelchemie an der Universität Hamburg. Die Untersuchungsanstalt hat die Berechtigung zur Ausbildung von Praktikanten der Lebensmittelchemie.

21. Hamm

Chemisches Untersuchungsamt der Stadt Hamm

A: 47 Hamm, Nordenwall 25, F: 0 23 81/10 16 05-6 11

Tr: Stadt Hamm

Amtsbez: Stadt Hamm und die Kreise Soest, Unna, Hochsauerland, E: 1 077 000

S: Blutalkoholbestimmungen, Umweltschutz, gerichtschemische Untersuchungen

L: *Dr. Paul Joppien,* Ltd. Chemiedirektor

V: *Klaus Weigelt,* Oberchemierat

Wiss.M: Frau *A. Brockmann,* Chemierätin z. A., Frau *A. Wichelhaus,* Chemierätin z. A., Frau *J. Pander, Dipl.Ing., Dr. H. Hellwig,* Lebensmittelchemiker, Frau *Dr. A. Leifert,* Lebensmittelchemikerin

Techn.M: 1 Chem.techn. Assistentin, 5 Chemotechniker, 5 Chemielaboranten, 1 Laborgehilfin, 2 Auszubildende, 1 Verwaltungsleiter, 6 Bürokräfte, 2 Spül- und Putzhilfen
Berechtigung zur Ausbildung von Praktikanten.

22. Hannover

Chemisches Untersuchungsamt der Landeshauptstadt Hannover

A: Großer Kolonnenweg 11, 3 Hannover 1, F: (0511) 168-8103

Tr: Landeshauptstadt Hannover

Amtsbez: (LK = Landkreis, S = Stadt, G = Gemeinde) LK Grafschaft Schaumburg mit G Auetal, G Bad Nenndorf, S Hessisch Oldendorf, S Obernkirchen, S Rinteln, S Rodenberg; LK Hameln-Pyrmont mit S Hameln, S Bad Pyrmont; LK Hannover mit S Barsinghausen, S Garbsen, S Langenhagen, S Lehrte, S Neustadt am Rübenberge, S Springe, S Wunstorf; S Hannover; LK Nienburg mit S Nienburg; LK Schaumburg-Lippe, E: 1515000

L: Chemiedirektor *Dr. Eberhard Scheller*

V: Chemieoberrat *Dieter Kretschmer*

Wiss.M: Chemieoberrätin *Dr. Ruthild Donner,* Chemierätin *Lore Knechtel,* Chemieoberrätin *Ingeborg Lenze*

Techn.M: 8 Chem.techn. Assistenten, 1 Laborant, 2 Büroangestellte, 1 Hausmeister, 3 Reinigungshilfen

Berechtigung zur Ausbildung von Bewerbern der Lebensmittelchemie (2 Stellen)

Es ist vorgesehen, das Amt in die Trägerschaft des Landes Niedersachsen zu übernehmen und den Amtsbezirk zu erweitern.

23. Hildesheim

Staatliches Chemisches Untersuchungsamt Hildesheim

A: 32 Hildesheim, Markt 5/6, F: (05121) 34119

Tr: Land Niedersachsen

Amtsbez: Landkreise Alfeld, Gandersheim, Göttingen, Goslar, Hildesheim, Holzminden, Northeim, Osterode, Peine; Städte und Gemeinden Alfeld, Bad Gandersheim, Bad Harzburg, Bad Lauterberg, Bad Sachsa, Braunlage, Einbeck, Goslar, Göttingen, Hann.Münden, Herzberg, Hildesheim, Holzminden, Kreiensen, Liebenburg, Osterode, Peine, Samtgemeinde Oberharz in Clausthal-Zellerfeld, St. Andreasberg, Vienenburg, E: 1189000

S: Untersuchungen von Aromen, Essenzen, Backwaren, Fruchtsäften

L: Chemieoberrat *Dr. Hans-Joachim Kleinau*

V: Chemieoberrätin *Charlotte Kochan*

Wiss.M: Chemierat *Dr. Wilfried Arndt,* Lebensmittelchemikerin *Dr. Renate Kohnen,* Lebensmittelchemikerin *Angelika Pfropfe*

Techn.M: 2 Chemotechniker, 8 Chemotechnikerinnen, 2 Verw.Angestellte, 1 Laborgehilfe, 2 Raumpflegerinnen

24. Karlsruhe

Chemische Landesuntersuchungsanstalt Karlsruhe mit einer Außenstelle in Mannheim

A: 7500 Karlsruhe 1, Hoffstraße 3, F: (0721) 135-3611

Tr: Land Baden-Württemberg

Amtsbez: Regierungsbezirk Karlsruhe (außer Stadtkreis Pforzheim, Landkreis Calw und Enzkreis) Stadtkreise: Baden-Baden, Heidelberg, Karlsruhe, Mannheim, Landkreise: Freudenstadt, Karlsruhe, Odenwald, Rastatt, Rhein-Neckar, E: 2028000

S: Zolluntersuchungen von Wein und Fetten, Biozid-Rückstandsuntersuchungen, chemische und mikrobiologische Untersuchung von Wasser (Trink-, Bade-, Oberflächen-

und Abwasser), Abfalluntersuchungen, Blutalkoholuntersuchungen, Arzneimitteluntersuchungen für ganz Baden-Württemberg; weitere Schwerpunkte: Vitamine, kosmetische Mittel

L: RChD *Dr. Horst Berg*

V: RChDin *Isolde Wenzler*

Wiss.M: RChD.: *Dr. Steffi Andler, Elisabeth Baumanns,* RPhD *Dr. Renate Vöcks;* ORChR: *Dr. Ottfried Begemann, Dr. Wolfgang Eyrich, Wolfram Fischer, Johannes Schmitt, Eberhard Stadler, Dr. Gerhard Walther;* ORPhR *Dr. Klaus Eichner;* RChR *Dorothee Attig, Ilse Jacobs;* Lm-Chemiker: *Hildegard Bauer-Aymanns, Angelika Geist, Renate Oberdieck*

Techn.M: 1 Lebensmittelkontrolleur, 1 Weinkontrolleur, 8 Chemotechniker, 5 techn. Assistenten, 18 Laboranten, 12 Laboranten in Ausbildung, 1 Laborarbeiter

Die Anstalt bildet Praktikanten der Lebensmittelchemie und Laboranten aus.

Verw: 1 Reg.Hauptsekretär, 1 Amtsmeister, 7 Schreibkräfte und Verwaltungsangestellte, 5 Hilfskräfte im Reinigungsdienst.

Außenstelle Mannheim

(Abteilung VI der CLUA Karlsruhe)

A: 6800 Mannheim 1, C 6, 1; F: (0621) 292-2234

S: Chemische und mikrobiologische Untersuchung von Wasser (Trink-, Bade-, Oberflächen- und Abwasser) für die Städte Heidelberg, Mannheim, sowie die Kreise Rhein-Neckar und Odenwald; Fleisch, Fleischerzeugnisse, pharmakologisch wirksame Stoffe

L: RChD *Wilhelm Schnuse*

V: ORChR *Dr. Klaus Wenker*

Wiss.M: ORChR *Dieter Roggan;* LM-Chemikerin *Marlies Kruhm*

Techn.M: 4 Chemotechniker, 7 Laboranten, 1 Laborarbeiter

Verw: 1 Reg.Oberinspektor, 3 Schreibkräfte, 2 Hilfskräfte im Reinigungsdienst

25. Kassel

Staatliches Chemisches Untersuchungsamt Kassel

A: 35 Kassel, Bodelschwinghstraße 2, F: 05 61-1 27 81 und 1 27 83

Tr: Land Hessen

Amtsbez: Reg.-Bez. Kassel mit dem Stadtkreis Kassel und den Landkreisen Kassel, Werra-Meißner, Hersfeld-Rotenburg, Fulda, Schwalm-Eder, Marburg-Biedenkopf und Waldeck-Frankenberg, E: 1 436 000

S: Wasseruntersuchungen

L: Chemiedirektor *Dr. Max Stoltze*

V: Chemieoberrat *Hans Zinn*

Wiss.M: Chemieoberrat *Dr. Harmen Greve,* Chemieoberrätin *Ursula Steinberg,* Dipl.Chemiker *Dr. Joachim Sondermann,* Lebensmittelchemiker *Kasem Namasi-Bagherzadeh*

Techn.M: 11 Chemotechniker und Laboranten, 1 Inspektor als Büroleitender Beamter, 3 Schreibkräfte, 1 techn. Angestellter, 2 Laborarbeiterinnen

Berechtigung zur Ausbildung von Praktikanten

26. Kiel

Nahrungsmitteluntersuchungsamt (chemisch) der Stadt Kiel

A: 23 Kiel-Suchsdorf, Eckernförder Straße 421, F: (04 31) 31 35 11, 31 38 70

Tr. und Amtsbez: Stadtkreise Kiel und Neumünster; Landkreise Dithmarschen, Pinneberg, Plön, Rendsburg-Eckernförde, Schleswig-Flensburg (Teilgebiet Schleswig), Segeberg, Steinburg, E: 1 508 000

S: Bestimmung von Schädlingsbekämpfungsmitteln (Obst, Gemüse, tierische Lebensmittel)

L: Städt. Chemiedirektorin *Dr. Hildegard Hansen*

V: Städt. Oberchemierätin *Rosemarie Blandau*

Wiss.M: Dipl.-Ing. und LM-Chemikerin *Dr. Ingeborg Michna,* Städt. Chemierat z. A. *Dr. Rainer Lanksch,* die Lebensmittelchemiker *Hans-Jürgen Lange, Hermann Gallasch*

Techn.M: 2 Chemotechniker, 6 techn. Assistentinnen, 2 Laborantinnen, 1 Verwaltungsbeamter (gemeinsam mit dem Städt. Laboratorium der Stadt Kiel), 2 Schreibkräfte, 3 Putzfrauen

Berechtigung zur Ausbildung von Praktikanten.

Die Stadt Kiel unterhält außerdem ein chemisch-technisches Untersuchungsamt unter der Bezeichnung „Städtisches Laboratorium Kiel – Fachinstitut für Gas, Wasser und Abwasser" in 23 Kiel-Wik, Herthastraße 24/30, F: (0431) 40752331. Die Tätigkeit erstreckt sich praktisch auf das ganze Land Schleswig-Holstein. Als weitere Aufgaben übernimmt dieses Amt die Ausstellung von Gas-Certifikaten für Schiffahrt, Handel und Gewerbe, die Untersuchung von Brennstoffen sowie bakteriologische Untersuchungen von Wasser und Abwasser. Dem Leiter des Amtes, Städt. Chemiedirektor Dipl.-Chem. *Dr. Arno Heinke,* stehen der Städt. Oberchemierat *Dr. Heinrich Schlenger,* die Mikrobiologin *Dr. Lore Beuermann,* die Chemie-Ing. *Georg Hofmann* und *Hans-Heinrich Hargens,* sieben techn. Mitarbeiter, ein Verwaltungsbeamter (gemeinsam mit dem Nahrungsmitteluntersuchungsamt), zwei Schreibkräfte und zwei Putzfrauen zur Seite.

27. Koblenz

Chemisches Untersuchungsamt Koblenz

A: 5400 Koblenz, Neversstraße 4–6, F: (0261) 391264 und 391265

Tr: Land Rheinland-Pfalz

Amtsbez: Regierungsbezirk Koblenz; Städte: Koblenz; Landkreise: Altenkirchen, Bad Neuenahr-Ahrweiler, Bad Kreuznach, Birkenfeld, Cochem-Zell, Mayen-Koblenz, Neuwied, Rhein-Hunsrück-Kreis, Rhein-Lahn-Kreis, Westerwaldkreis, E: 1379800

S: Untersuchungen von Wein, Fleisch- und Wurstwaren

L: Ltd. Regierungsdirektor *Dr. Anton Eckert*

V: Chemiedirektor *Dr. Reinhard Ristow*

Wiss.M: Chemierat *Manfred Bernau,* Chemierat *Kurt Breitbach,* Oberchemierat *Karl Gödl,* Lebensmittelchemikerin *Gabriele Hoppe,* Oberchemierätin *Ute Pöhlemann,* N.N.

Techn.M: 8 Chemotechniker, 10 Laboranten, 1 technische Hilfskraft, 3 Praktikanten der Lebensmittelchemie, 2 Chemotechniker in Ausbildung, 1 Lebensmittelkontrolleur, 3 Weinkontrolleure, 1 Verw.-Beamter, 4 Schreibkräfte, 1 Kraftfahrer, 4 Hilfsarbeiter in Laboratorien

28. Köln

Institut für Lebensmittel- und Wasseruntersuchungen

A: 5 Köln 1, Eifelwall 7, F: (0221) 20931

Tr. und Amtsbez: Stadt Köln, E: 994000

S: Das Institut gliedert sich in: Abt. Lebensmittelchemie: Lebensmittelkontrolle mit Amtsbezirk und Weinkontrolluntersuchungen für den Reg.-Bez. Köln, Zolluntersuchungen von Auslandsweinen einschl. Dessert- und Brennweinen, Ausstellung von Attesten für Ausfuhrlebensmittel, Einfuhruntersuchungen von Auslandsfett und Auslandsfleisch

Abt. Wasser- und Abwasser: Untersuchung von Trink-, Brauch- und Abwasser, Schwimmbadwasser, Wasser- und Bodenproben bei Ölschäden.

Abt. Mikrobiologie: bakt. Untersuchung von Lebensmitteln, Wasser und Abwasser, Mikrobiolog. Kontrolluntersuchungen in Operationsräumen und Intensivstationen.

L: Chemiedirektor *Gerd Günther*
V: Oberchemierat *Dr. Dietrich Hausding*
Wiss.M: Oberchemierat *Klaus Gundermann*
Oberchemierat *Gottfried Nacken*, Lebensmittelchemikerin *Edeltraut Flecken-Gauglitz*
Techn.M: 2 Techniker, 3 Chemotechniker, 4 Laboranten, 1 Praktikant, 2 Bürokräfte, 1 Weinkontrolleur (Regierungsamtmann *Gabriel Pillmayer*)

29. Krefeld

Chemisches Untersuchungsamt der Stadt Krefeld
A: 415 Krefeld, Steinstr. 97, F: (0 21 51) 63 22 94, E: 234 300
Tr. und Amtsbez: Stadt Krefeld
S: Auslandsfleischbeschau; Untersuchung von Wasser und Abwasser (chem. und bakt.); Blutalkoholbestimmungen und toxikologische Untersuchungen; techn. Untersuchungen für sämtliche städt. Dienststellen; Untersuchung von Wasser, Boden- und Materialproben auf Umweltschadstoffe; Luft- und Staubuntersuchungen (anerkannte Meßstelle i.S.d. § 7 Abs. 3 des Immissions-Schutzgesetzes)
L: Chemiedirektor Dipl.-Chem. *Matthias Plum*
V: Lebensmittelchemikerin *Ilse Zimoski*
Wiss.M: Dipl.-Chem. *Johannes Kulka*
Techn.M: 6 Chemotechniker(innen), 1 Laborantin, 3 Büroangestellte, 1 Techn. Hilfskraft/Fahrer, 2 Reinemachefrauen

30. Leverkusen

Chemisches Untersuchungsamt der Stadt Leverkusen
A: Düsseldorfer Str. 147, 5090 Leverkusen 3, F: (0 21 71) 40 22 70
Tr: Stadt Leverkusen
Amtsbez: Stadt Leverkusen, Rheinisch-Bergischer-Kreis, Oberbergischer Kreis, E: 652 200
S: Untersuchung von Trinkwasser (bakteriologisch und chemisch) im Rahmen des Bundes-Seuchengesetzes; Untersuchung von Bade-, Brauch- und Abwasser; Untersuchungen und Begutachtungen im Rahmen des Umweltschutzes; Mitwirkung bei Ölkatastrophen und Müllproblemen
L: Chemiedirektor Dipl.-Ing. *Albrecht Pareik*
V: Oberchemierätin *Marianne Marx*
Wiss.M: Pharmazeutischer Chemiker *Franklin Fajar*, 1 Lebensmittelchemiker N.N.
Techn.M: 6 Chemotechniker(-innen), 2 Laboranten(-innen), 1 Laborhelferin halbtags, 1 Probeentnehmerin
Verw: 1 Verwaltungsangestellte, 2 Schreibkräfte (davon 1 halbtags)
Das Amt bildet Kandidaten der Lebensmittelchemie aus

31. Lübeck

Städtisches Untersuchungsamt Lübeck
A: 2400 Lübeck, Katharinenstr. 35, F: (04 51) 1 28 63 und 12 92 42
Tr: Hansestadt Lübeck
Amtsbez: Hansestadt Lübeck, Landkreise Hzgt. Lauenburg, Ostholstein und Stormarn, E: 740 000
S: Zolluntersuchung von Auslandswein, Auslandsfett und Auslandsfleisch, Untersuchungen im Zuge des Umweltschutzes, Untersuchungen von Trink-, Bau- und Abwasser

L: Städt. Chemiedirektor *Dipl.-Chem. Werner Schwabe*
V: Städt. Oberchemierätin *Hildegard Kreissl*
Wiss.M: Lebensmittelchemiker *Veit Morgenroth*
Techn.M: 8 Laborantinnen, 4 Laborlehrlinge, 2 Verwaltungsangestellte, 2 Reinemachefrauen

32. Lüneburg

Staatliches Chemisches Untersuchungsamt Lüneburg
A: 3140 Lüneburg, Wilschenbrucher Weg 10, F: (0 41 31) 4 34 83
Tr: Land Niedersachsen
Amtsbez: Gemeinden Hermannsburg, Schneverdingen; Städte Bergen, Buchholz, Buxtehude, Celle, Cuxhaven, Lüneburg, Munster, Soltau, Stade, Uelzen, Verden, Winsen; Landkreise Bremervörde, Celle, Fallingbostel, Harburg, Land Hadeln, Lüchow-Dannenberg, Lüneburg, Osterholz-Scharmbeck, Rotenburg, Soltau, Stade, Uelzen, Verden, Wesermünde, E: 1 400 000
S: Wasseruntersuchungen, toxikolog.-chemische und techn. Untersuchungen, Schwerpunktaufgaben bei Lebensmitteln: Fette und Öle, Obst und Obsterzeugnisse, Honig, Pilze
L: Chemiedirektor *Dr. Werner Kaske*
V: Chemieoberrat *Dr. Bruno Westbunk*
Wiss.M: Chemierat *Ekkehart Wilkens,* Chemieoberrat *Dr. Gunter Hensel,* Lebensmittelchemikerin *Siegrid Eichhoff,* Lebensmittelchemikerin und Apothekerin *Frauke Behm*
Techn.M: 12 chem.-techn. Assistenten(-innen) bzw. Chemielaboranten, 2 Laboranten-Lehrlinge, $3^1/_2$ Büroangestellte, 2 Lohnempfänger

33. Mainz

Chemisches Untersuchungsamt Rheinhessen
A: 6500 Mainz, Am Zollhafen 12, F: (0 61 31) 6 20 76 und 6 20 77
Tr: Land Rheinland-Pfalz
Amtsbez: Städte Alzey, Bingen, Ingelheim, Mainz, Oppenheim, Osthofen, Worms, Landkreise Alzey-Worms, Mainz-Bingen, E: 510 000
S: Zollweinuntersuchungen (ohne besonderen Amtsbezirk), Lebensmitteluntersuchungen, Arzneimitteluntersuchungen, Schwerpunktaufgaben: Kunststoffuntersuchungen, Essenzenuntersuchungen, Kosmetika, fremde Stoffe in Lebensmitteln (Amtsbezirk für die Arzneimitteluntersuchungen und Schwerpunktaufgaben ist das Land Rheinland-Pfalz)
L: Ltd. Reg.-Direktor *Dr. Eugen Hieke*
V: Chemiedirektorin *Dr. Gertrud Braun*
Wiss.M: Chemiedirektor *Bernhard Sage,* Apothekendirektor *Dr. Ekkehard Winde,* Oberapotheker: *Brigitte Grüne,* Oberchemieräte: *Annerose Kreisel, Theodor Massing,* Chemieräte: *Hannelore Bebiolka, Klaus Dunkel, Dietrich Heise, Jutta Pagenkopf, Helmut Streit,* Apotheker: *Dietrich Demmer,* LM-Chemiker: *Dr. Helmut Starke*
Techn.M: 4 Weinkontrolleure, 1 Lebensmittelkontrolleur, 1 Chemieingenieur, 1 Getränkeingenieurin, 13 Chemotechnikerinnen, 6 Laboranten, 1 Verwaltungsleiter, 1 Reg.-Inspektor, 9 Verwaltungsangestellte (davon 4 Halbtagskräfte), 1 Kraftfahrer, 4 Reinigungsfrauen, 1 Arbeiter

34. Mettmann

Chemisches und Lebensmitteluntersuchungsamt des Kreises Mettmann

A: 402 Mettmann, Düsseldorfer Str. 26, F: (0 21 04) 79 04 32

Tr. und Amtsbez: Kreis Mettmann, E: 469 000

S: Untersuchung von Trinkwasser, Abwasser und Industrieabfällen
Blutalkoholbestimmung

L: Ltd. Chemiedirektor *Dr. Günther Hofmann*

Wiss.M: Oberchemierätin *Hiltrud Klein,* Oberchemierat *Heinz Zipf,* Lebensmittelchemikerin *Gabriele Schulz*

Techn.M: 4 chem.-techn. Assistenten(-innen), 3 Laborantinnen, 1 Laborantinnenlehrling, 2 Verwaltungsangestellte, 2 Raumpflege- bzw. Spülfrauen
Berechtigung zur Ausbildung von Praktikanten.

35. Moers

Chemisches Untersuchungsamt des Kreises Wesel

A: 4130 Moers, Goethestraße 1, F: (0 28 41) 20 27 92-4

Tr: Kreis Wesel

Amtsbez: Kreis Wesel und Kreis Kleve, E: 670 000

S: Untersuchungen von Wasser und Abwasser, Blutalkoholbestimmungen, toxikolog. Untersuchungen, Bedarfsgegenstände aus Metall und Umweltschutzuntersuchungen

L: Ltd. Kreischemiedirektor *Günther Loges*

V: Kreis-Chemikerin *Liselotte Friessem*

Wiss.M: N.N., N.N.

Techn.M: 5 Chemotechniker(-innen), 8 Laboranten(-innen), 2 Büroangestellte, 3 Reinigungshilfen, 2 Praktikanten
Der Amtsleiter ist Sachverständiger der Gütegemeinschaft Zinngerät e.V. 4000 Düsseldorf 1, Kasernenstraße 13

36. München

Landesuntersuchungsamt für das Gesundheitswesen Südbayern
Fachbereich Chemie (mit Außenstelle Augsburg)

Tr: Freistaat Bayern, Bayer. Staatsministerium des Innern

Amtsbez. Reg.Bez. Oberbayern, Niederbayern, Schwaben, E: 6 060 000

S: Zolluntersuchungen von Weinen einschließlich Dessertweinen und Brennweinen, Fetten und Fleisch; Untersuchung von Wasser (chem.); Obergutachterstelle der Auslandsweinkontrolle, Beratung in Fragen der Trinkwasserchlorung.
Ausbildung und Prüfung von Praktikanten der Lebensmittelchemie, Ausbildung von Anwärtern für den mittleren Überwachungsdienst.
Für ganz Bayern: Untersuchung von Arzneimitteln aufgrund des Arzneimittelgesetzes; Untersuchung von Giften im Vollzug der Giftverordnung; Untersuchung von Tabak und Tabakerzeugnissen; Untersuchung von Wasser und Lebensmitteln auf Radioaktivität

L: Oberchemiedirektor *Dr. Hans Gspahn*

V: Ltd. Chemiedirektor *Dr. Walter Köberlein,* Chemiedirektor *Dr. Eugen Tell* (beide auch Abt.Leiter)

I: Dienststelle München

A: 8 München 40, Lothstr. 21, Postfach 40 11 80, F: (0 89) 18 80 01

Wiss.M: Abt.Leiter: Chemiedirektor *Dr. Günther Höllerer,* Chemiedirektorin und Apothekerin *Dr. Elisabeth Rickerl;* Sachgebietsleiter: Die Oberreg.-Chemieräte(innen) *Anton Bauger, Friederike Bigi, Paul Blasenbrei, Dr. Adolf Gerl, Dr. Hartmut Morcinek,*

Dr. Gerda Österreicher, Dr. Josef Rachor, Dr. Alfred Rappl, Ute Ruschenburg; Oberreg.-Pharmazierätin *Dr. Änne Lissau;* die Oberchemieräte(innen) *Dr. Ulrich Barth, Dr. Alfred Buckl, Dr. Klaus v. Grundherr, Dr. Jürgen Hoffmann, Dr. Heinz Hupf, Dr. Irmhilt Tell, Dr. Wolfgang Wiegand;* die Chemieräte(innen) *Dr. Klaus Fischer, Helga Redl, Dr. Manfred Röhrle, Dr. Wilfred Waiblinger,* Lebensmittelchemiker(innen) *Hannelore Boos, Dr. Dieter Jahr, Dr. Gerhard Leutner, Dr. Dieter Sparrer, Dr. Lutz Walther*

Kontrolleure: 1 Weinkontrolleur (Reg.-Amtmann) 1 Weinkontrolleur (Reg.OInsp.), 1 Milchkontrolleur, 1 Lebensmittelkontrolleur

Techn.M: 1 Ingenieur, 31 Chem.Techn.Assistenten(innen), 9 Laboranten(innen)

Verwaltung: 1 Oberamtsrat, 17 Büroangestellte

Sonstiges Personal: 1 Amtsmeister als Hausverwalter, 1 Kraftfahrer, 5 Laborhelfer, 9 Reinigungsfrauen

II: Außenstelle Augsburg

A: 89 Augsburg 1, Annastr. 16, Postfach 11 19 24, F: (08 21) 3 06 12

Wiss.M: Abt.Leiter: Chemiedirektor *Karl Gordt;* Sachgebietsleiter: Die Oberreg.-Chemieräte *Dr. Herbert Günther, Reiner Uhlig;* die Oberchemieräte(innen) *Dr. Siegmund Ehrenstorfer, Irmgard Ehrenstorfer, Dr. Werner Stoya*

Kontrolleure: 1 Milchkontrolleur, 1 Getränkekontrolleur

Techn.M: 9 Chem.Techn.Assistenten(innen), 3 Laboranten

Verwaltung: 5 Büroangestellte

Sonstiges Personal: 1 Hausverwalter, 4 Reinigungsfrauen

37. Münster

Chemisches Landes-Untersuchungsamt Nordrhein-Westfalen

A: 44 Münster, Sperlichstr. 19, F: (02 51) 7 90 58

Tr: Land Nordrhein-Westfalen; Minister für Arbeit, Gesundheit und Soziales, Düsseldorf

Amtsbez: Stadt Münster und die Kreise Borken, Coesfeld, Steinfurt, Warendorf, E: 1 300 000

S: Arzneimitteluntersuchungen, Wein- und Spirituosenkontrolle, Radioaktivität und Strahlenbelastung, Pestizide, Vitaminbestimmungen, Mikrobiologie, Kunststoffanalysen, Kosmetika, Ausbil. v. Leb-Praktikanten

L: *Prof. Dr. Wilhelm Groebel,* Leitender Regierungschemiedirektor

V: *Dr. Dorothea Schweitzer,* Reg.-Chemiedirektorin

Wiss.M: Reg.-Pharmaziedirektorin *Dr. Mechthild Meyer,* Oberreg.-Chemieräte *Dr. Helmut Baumann, Dr. Hans-Albert Meemken, Hans Meseke,* Reg.-Chemierät(e)innen *Marlu Austenfeld, Dr. Hans Büning-Pfaue, Dr. Hans Wilhelm Hembeck, Hans Hennig, Renate Hennig,* Reg.-Chemierat z. A. *Dr. Utz Tannert,* Lebensmittel-Chemiker(in) *Dr. Kai Habersaat, Ulrike Hahn*

Weinkontrolleure: Reg.-Amtmann *Erich Hausen, Gabriel Pillmayer*

Techn.M: 11 chemisch-techn. Assistentinnen und 15 Chemielaborant(en)innen, 5 Labordienste, 3 Reinigungsdienste, 5 Büroangestellte

38. Nettetal

Chemisches Untersuchungsamt des Kreises Viersen

A: 4054 Nettetal 2 – Kaldenkirchen, Königspfad 7, F: (0 21 57) 60 13

Tr: Kreis Viersen

Amtsbez: Kreis Viersen und Krs. Kleve (Bereich des ehemaligen Krs. Geldern), E: 350 000

S: Zolluntersuchungen, Chem. Auslandsfleischbeschau, Untersuchung von Wasser und Abwasser, techn. Untersuchungen

L: Kreis- Chemiedirektor *Rudolf Röttger*
V: Chemierat *Peter Schultz*
Wiss.M: Lebensmittelchemiker G. W. *Schieron*
Techn.M: 1 Chemie-Ingenieur, 1 Chemotechnikerin, 5 Laboranten, 2 Laboranten-Lehrlinge, 1 Bürokraft, 1 Putzfrau, 1 Stundenhilfe

39. Neuss

Chemisches und Lebensmittel-Untersuchungsamt für die Stadt Mönchengladbach und den Kreis Neuss
A: 4040 Neuss-1, Königstr. 34, F: (02101) 12316 (voraussichtlich ab 1. 1. 1976 528-1)
Tr: Kreis Neuss
Amtsbez: Kreis Neuss, Stadt Mönchengladbach, E: 664000
S: Zolluntersuchungen, Auslandsfleischbeschau (Fette), Untersuchungen von Wasser (chem. u. bakt.) Abwasser, Schwermetalle, Pflanzenschutzmittelrückstände
L: Oberchemiedirektor *Karl Stein*
V: Chemiedirektorin *Ilse Gallien*
Wiss.M: Oberchemierätin *Dr. Edith Meunier;* Chemierat *Nikolaus Henrichs;* Lebensmittelchemikerin *Sieglinde Brinckman*
Techn.M: 1 Chemie-Ing., 5 Chemotechniker, 1 Techn. Assistentin, 3 Laboranten, 1 Techn. Angestellte, 1 Bürokraft, 2 Schreibkräfte (halbtags), 2 Spülhilfen, 3 Putzhilfen

40. Nürnberg

Chemische Untersuchungsanstalt der Stadt Nürnberg
A: 8500 Nürnberg, Hauptmarkt 1, F: (09 11) 16 24 18
Tr. und Amtsbez: Stadt Nürnberg, E: 501000
S: Untersuchungen von Wasser (chem.), Luftuntersuchungen, Zolluntersuchungen von Fett und Fleisch, techn. Untersuchungen, Pilzberatung, Außendienst für Lebensmittelüberwachung
L: Leitender Chemiedirektor *Dr. Bruno Trinczek*
V: Chemiedirektor *Dr. Ernst Pietschmann*
Wiss.M: Oberchemierat *Dr. Otto Weber,* Oberchemierat *Dr. Ernst Beil,* Oberschemierat *Dr. Herbert Hahn*
Techn.M: 1 Chemie-Ingenieur, 2 Chemotechniker(-innen), 5 Chemielaboranten(-innen), 2 Auszubildende für den Beruf Chemielaborant, 1 Spülfrau, 1 Hausmeister, 3 Angestellte
Außendienst: 1 Lebensmittelingenieur, 2 Verwaltungshauptsekretäre, 1 Verwaltungsobersekretär, 3 Verwaltungssekretäre, 1 Angestellter, 4 Angestellte in der Ausbildung für die Laufbahn des mittleren Überwachungsdienstes zum Schutz der Verbraucher

41. Oberhausen

Chemisches Untersuchungsamt Oberhausen
A: 4200 Oberhausen, Buschhausener Str. 77, F: 0208/825-2879, – 2208, – 2224, – 2212
Tr: Stadt Oberhausen
Amtsbez: Stadt Oberhausen, Stadt Mülheim-Ruhr, E: 430000
S: Zolluntersuchungen; Wasser- und Abwasseruntersuchungen (chemisch und mikrobiologisch), technische, physiologisch-chemische und toxikologische Untersuchungen, Umweltschutz
L: *Prof. Dr. Friedrichkarl Jekat,* Lebensmittel-Chemiker
V: Lebensmittel-Chemiker *J. Walta*

M: 1 Chemie-Ingenieur, 1 Chemo-Techniker und 7 weitere technische und nichttechnische Angestellte, ferner (zeitweilig) 1 Praktikant, 2 Diplomanden/Doktoranden sowie 2 Auszubildende für den Chemielaboranten-Beruf und 3 Kräfte zum Spülen und Reinigen

42. Offenburg

Chemische Landesuntersuchungsanstalt Offenburg mit Außenstelle Freiburg

A: 7600 Offenburg, Gerberstraße 24, F: 0781/72001 u. 72002

Tr: Land Baden-Württemberg

Amtsbez: Städte Achern, Emmendingen, Freiburg, Kehl, Konstanz, Lahr, Lörrach, Offenburg, Rottweil, Schramberg, Singen, Tuttlingen, Villingen-Schwenningen, Weil, Landkreise Breisgau-Hochschwarzwald, Emmendingen, Konstanz, Lörrach, Ortenaukreis, Rottweil, Schwarzwald-Baarkreis, Tuttlingen, Waldshut, E: 2305100

S: Wasser und Abwasser (chem. u. bakt.) Zolluntersuchungen (Auslandsfleisch, Branntweine u. Maischen), Qualitätsprüfungen von Branntwein aus Wein; Schwerpunkte: Obstbranntweine und Branntweine aus Wein

L: Ltd. Reg.-Chemiedirektor *Dr. Hermann Sattel*

V: Reg.-Chemiedirektor *Dr. Heinz Krieger*

Wiss.M: Reg-Chemiedirektor *Hermann Treiber,* Oberreg.-Chemieräte: *Stefan Nosko, Dr. Martin Eichner,* Reg.-Chemierat *Franz Josef Schlebusch,* Lebensmittelchemikerin *Gabriele Schneider,* Lebensmittelchemiker: *Dr. Ulrich Hartmann, Erwin Schmuck,* N.N., N.N., N.N.

Techn.M: 3 Staatliche Weinkontrolleure, 1 Lebensmittelkontrolleur, 20 techn. Angestellte, 4 Lehrlinge, 6 Verwaltungsangestellte, Putz- und Spüldienst

Außenstelle Freiburg i. Br.

A: 7800 Freiburg i. Br., Stefan Meierstraße 17, F: 0761/36019

L: Reg.-Chemiedirektor *Hellmut Ratz*

Wiss.M: Oberreg.-Chemierätin *Helga Gaumnitz,* Lebensmittelchemiker *Reiner Scheide,* N.N.

Techn.M: 7 techn. Hilfskräfte, 3 Lehrlinge, 2 Verwaltungsangestellte, Putz u. Spüldienst

43. Oldenburg

Staatliches Chemisches Untersuchungsamt

A: 2900 Oldenburg, Philosophenweg 36, F: (0441) 26126

Tr: Land Niedersachsen – Sozialministerium

Amtsbez: Verwaltungsbezirk Oldenburg mit den Städten Delmenhorst, Nordenham, Wilhelmshaven, Oldenburg, den Landkreisen Ammerland, Cloppenburg, Friesland, Oldenburg, Vechta und Wesermarsch; Regierungsbezirk Osnabrück mit den Städten Bentheim, Haren, Haselünne, Lingen, Meppen, Nordhorn, Papenburg, Schüttorf und den Landkreisen Aschendorf-Hümmling, Bentheim, Lingen und Meppen; Regierungsbezirk Aurich mit den Städten Aurich, Emden, Leer, Norden und den Landkreisen Aurich, Leer, Norden und Wittmund, E: 1650000

S: Wasseruntersuchungen, Arzneimittelprüfstelle, Pestizid-Labor und Kosmetik-Labor für das Land Niedersachsen, Schwerpunkt für Fleisch und Fleischerzeugnisse sowie diätetische Lebensmittel

L: Chemiedirektor *Dr. Reimar Smid*

V: Chemieoberrat *Dr. Hans Seidel*

Wiss.M: Chemieoberrätin *Marlies Schneweis,* Dipl.- und Lebensmittelchemikerin *Erika Martienssen,* Lebensmittelchemikerin *Iris Gutsch,* Lebensmittelchemikerin *Eva*

Buntrock, Pharm.-Oberrat *Dr. Werner Backe,* Chemieoberrat *Helge Wabbels,* Chemierat *Gerold Heinje,* Lebensmittelchemiker *Hans-Uwe v. Grabowski* und N.N.

Techn.M: 18; 4 Angestellte für Büro- und Registraturdienst, 4 Lohnempfänger für Laborhilfs- und Reinigungsdienst

44. Osnabrück

Chemisches Untersuchungsamt der Stadt Osnabrück

A: 45 Osnabrück, Meller Str. 2, F: (05 41) 57 23 73

Tr: Stadt Osnabrück

Amtsbez: Stadt Osnabrück; Landkreise Osnabrück, Grafschaft Diepholz, Grafschaft Hoya; E: 640 000

S: Zolluntersuchungen von Schmalz; Wasser- und Abwasseruntersuchungen

L: Chemiedirektor *Dr. Elmar Gottschalk*

V: Lebensmittelchemikerin *Hildegard Ochs*

Techn.M: 4 Chemotechniker(-innen), 1 Verw.-Angestellte, 1 Putz- u. Spülfrau

45. Paderborn

Chemisches Untersuchungsamt des Kreises Paderborn

A: 479 Paderborn, Aldegrever Str. 10–14, F: (0 52 51) 2 08-4 38

Amtsbez: Kreise Höxter und Paderborn, E: 360 000

S: Untersuchung von Trink-, Brauch- und Abwasser sowie Flußwasser; Untersuchungen im Rahmen des Umweltschutzes; enzymatische Analysen; phys.chem. Untersuchungen; Blutalkoholbestimmungen

L: Kreis-Chemiedirektor *Hans Kummer*

Wiss.M: Oberchemierätin *Dr. Antonie Pisarzewski,* Lebensmittelchemiker *Benedikt Steinki,* zeitweilig 1 *Dr. med. Hygieniker*

Weitere Kräfte: 6 Chemo-Techniker(innen), 1 landw.techn. Assistentin, 1 Lebensmittel-Technologin, 2 Chemie-Laboranten(-innen), 1 Laborgehilfe, 1 Spülfrau, 2 Lehrlinge, 2 Schreibkräfte, 1 Verwaltungsbeamter

46. Pforzheim

Chemisches Untersuchungsamt

A: 7530 Pforzheim, Westliche Karl-Friedrich-Str. 235, F: (0 72 31) 3 00 24 44

Tr: Stadt Pforzheim

Amtsbez: Stadtkreis Pforzheim, Enzkreis, Kreis Calw, E: 400 000

S: Wasser, Abwasser, Hydroxidschlämme

L: Stadtchemiedirektor *Dr. H. Wieser*

V: Stadtoberchemierätin *Frau A. Horvath*

Wiss.M: Lebensmittelchemikerin *Kirsten Wackernah,* Lebensmittelchemikerin *Eva-Maria Sohnius,* Lebensmittelchemikerin und Pharmazeutin *Ursula Schröder,* Diplom-Chemikerin *Ingrid Rückert*

Techn.M: 2 Chemotechniker, 1 Chemotechnikerin, 1 Laborant, 1 Laborantin, 2 Laborantenlehrlinge, 2 Büroangestellte, 2 Lohnempfänger

47. Recklinghausen

Chemisches Untersuchungsamt Recklinghausen

A: Paulusstr. 45, 4350 Recklinghausen, F: (0 23 61) 2 35 85

Tr: Kreis Recklinghausen

Amtsbez: Kreis Recklinghausen (einschl. der ehemals kreisfreien Städte Recklinghausen und Castrop-Rauxel) Stadt Bottrop, E: 754 000

S: Blutalkoholbestimmung, Fleischerzeugnisse, Milcherzeugnisse, Pesticide

L: Chemiedirektor *Dr. Ekkehard Krüger*

V: Oberchemierätin *Annelore Dingeldey-Reißer*

Wiss.M: Chemierätin z. A. *Ute Köder,* Lebensmittelchemiker *Béla Szabó*

Techn.M: 6 Chemotechniker, 7 Laboranten, 2 Lehrlinge

Sonstige M: 3 Büroangestellte, 1 Hausmeister, 3 Lohnempfänger für Reinigungsarbeiten (teilbeschäftigt)

48. Remscheid

Chemisches Untersuchungsamt der Stadt Remscheid

A: 563 Remscheid, Hastener Str. 15, F: (0 21 91) 19 79 17-8

Tr. und Amtsbez: Stadt Remscheid, E: 140 000

S: Wasser- und Abwasseruntersuchungen (chemisch und bakteriologisch), Blutalkoholbestimmungen, technische Untersuchungen, (Dieselkraftstoff), sämtliche chemische Arbeiten für die Stadt Remscheid

L: Chemiedirektorin *Dr. Käte Boekhoff*

V: Chemierat *Dr. R. Wiese*

Techn.M: 2 Chemotechniker, 1 Laborant, 1 Laborhilfe, 1 Schreibkraft, 1 Putzhilfe

Lebensmittelkontrolleur: 1

59. Saarbrücken

Chemisches Untersuchungsamt für das Saarland

A: 6600 Saarbrücken 1, Charlottenstraße 7, F: (06 81) 5 30 41/42

Tr. und Amtsbez: Saarland, E: 1 106 000

S: Einfuhruntersuchungen auf Grund der Weinüberwachungs-Verordnung; Chemische Untersuchungen im Vollzug der Auslandsfleischbeschau; Chemische Untersuchungen im Vollzug landesrechtlicher Vorschriften (Qualitätsprüfungen für Milch und Milcherzeugnisse; für Qualitätsweine, Qualitätsschaumweine und Qualitätsbranntweine aus Wein); Chemische Untersuchungen im Vollzug des Futtermittelgesetzes

L: Direktor *Dr. Robert Fey*

V: Oberregierungschemierat *Dr. Günther Becker*

Wiss.M: Oberregierungschemierätin *Anna Klauck,* Oberregierungschemierat *Dr. Otto Hett,* Oberregierungschemierätin *Dr. Hilde Lang,* Regierungschemierat *Peter Collet,* Lebensmittelchemiker *Dr. Erik Landschreiber,* Lebensmittelchemiker *Wolfgang Didié*

Techn.M: 1 Weinkontrolleur, 4 Chemotechniker, 11 Chemielaboranten, 3 Lehrlinge, 1 Verwaltungsangestellter, 3 Büroangestellte, 1 techn. Angestellter, 1 Reinemachefrau

50. Siegen

Chemisches und Lebensmittel-Untersuchungsamt Siegen (Staatlich anerkanntes Institut für Abwasseruntersuchungen)

A: 5900 Siegen 1, Koblenzer Str. 73, F: (02 71) 3 37 74 85

Tr. und Amtsbez: Kreise Siegen und Olpe, E: 413 000

S: Untersuchung von Trinkwasser (chemisch und bakteriologisch), Brauchwasser, Abwasser, Oberflächenwasser und Grundwasser; Blutalkoholbestimmungen, technische Untersuchungen, Auslandsfleisch- und Zolluntersuchungen, Luft- und Staub-Untersuchungen, Abfallstoffuntersuchungen

L: Ltd. Chemiedirektor *Dr. Richard Kliffmüller*
V: Chemiedirektorin *Ursula Rückert*
Wiss.M: Oberchemierätin *Thekla Book*, Chemierat *Dr. Peter Hädicke*
Techn.M: 3 Chemotechniker, 1 Chemotechnikerin, 1 biologisch-technische Assistentin, 3 Laborantinnen, 3 Laboranten, 1 Verwaltungsangestellte, 1 Kreisamtmann, 2 Schreibkräfte (davon 1 halbtags), 4 Lehrlinge, 1 Raumpflegerin
Berechtigung zur Ausbildung von Praktikanten der Lebensmittelchemie

51. Sigmaringen

Chemische Landesuntersuchungsanstalt Sigmaringen
A: 748 Sigmaringen, Hedingerstraße 2/1; F: (07571) 4037-4038
Tr: Land Baden-Württemberg
Amtsbez: Reg.-Bez. Tübingen, E: 1500000
S: Grund-, Fluß- und Abwasseruntersuchungen, Schwerpunktlaboratorium für Sondermüll, Schwerpunktlaboratorien für Untersuchung von Fruchtsäften und alkoholfreien Getränken sowie weinähnlichen und schaumähnlichen Getränken
Blutalkoholuntersuchungen in den umliegenden Landkreisen
L: *Dr. Ch. Reinhard*
V: Reg.-Chemiedirektor *Hans Biehler*
Wiss.M: Reg.-Chemiedirektor *Dr. Hans Brutscheck;* Oberreg.-Chemieräte *Rochus Bergmann, Irmgard Cutka, Leni Eulenberger, Egon Faulhaber, Franz-Nils Mühlbrecht, Karl Ramsperger, Heinrich Treiber, Ilse Wolff,* Reg.-Chemierat *Dr. Udo Anders;* Chemierätin *Friederike Tittgemeier;* Dipl.-Chem. *Dr. Koch*
Techn.M: 24 techn. Mitarbeiter, 1 Weinkontrolleur, 1 Lebensmittelkontrolleur
Verwaltung: 6 Verwaltungs- und Schreibkräfte
Berechtigung zur Ausbildung von Lebensmittelchemiker-Praktikanten und Laboranten-Lehrlingen

52. Speyer

Chemisches Untersuchungsamt Speyer
A: 672 Speyer/Rh., Kleine Pfaffengasse 9–11, Postfach 806, F: (06232) 5930, 4188
Tr: Land Rheinland-Pfalz
Amtsbez: Städte Frankenthal, Kaiserslautern, Landau/Pf., Ludwigshafen/Rh., Neustadt/Weinstr., Pirmasens, Speyer, Zweibrücken; Landkreise Bad Dürkheim, Donnersbergkreis, Germersheim/Rh., Kaiserslautern, Kusel, Landau-Bad Bergzabern, Ludwigshafen/Rh., Pirmasens, Zweibrücken, E: 1340000
S: Schwerpunkte: Biocide, Radionuklide, Säuglings- und Kindernahrung, Hülsenfrüchte und Reis, Südfrüchte, Kartoffelerzeugnisse, Bedarfsgegenstände und Spielzeug aus Metall, Auslandswein
L: Ltd. Regierungsdirektor *Edmund Gilbert*
V: Chemiedirektor *Hans Setzkorn*
Wiss.M: Oberchemierat *Otto Endres,* Oberchemierat *Dr. Franz Roth,* Oberchemierätin *Johanna Schmidt,* Chemierätin *Dr. Ingrid Eberhard,* Chemierat *Gerhard Helbing,* Chemierat *Josef Ottmann,* Chemierat *Axel Welter,* Lebensmittelchemikerin *Nevenka Novaković,* Lebensmittelchemiker *Ulrich Siebel,* N.N.
Techn.M: 18 Chemotechniker(innen), chem.-techn. Assistenten(innen), Laboranten und technische Angestellte, 1 Lebensmittelkontrolleur, 4 Weinkontrolleure, 6 Verwaltungs- und Schreibkräfte, 2 Kraftfahrer, 1 Laborarbeiter, 5 Spül- und Reinemachefrauen

53. Stuttgart

Chemische Landesuntersuchungsanstalt Stuttgart

A: 7000 Stuttgart 1, Breitscheidstr. 4, Postfach 1219, F: (07 11) 20 50-47 11 oder 20 50-1

Tr: Land Baden-Württemberg

Amtsbez: Regierungsbezirk Stuttgart (außer Stadtkreis Stuttgart): Stadtkreis Heilbronn; Landkreise Böblingen, Esslingen, Göppingen, Heidenheim, Heilbronn, Hohenlohe-Kreis, Ludwigsburg, Main-Tauber-Kreis, Ostalbkreis, Rems-Murr-Kreis, Schwäb. Hall, E: 2900000

S: Zolluntersuchung von Weinen, Auslandsfleischbeschau, Biozid-Rückstandsuntersuchungen, Untersuchung von Kunststoff-Bedarfsgegenständen, chemische Untersuchung von Wasser und Abwasser sowie Oberflächengewässern bei Fischsterben, Blutalkoholuntersuchungen, Überwachung der Umweltradioaktivität (letzteres zentral für Baden-Württemberg)

L: Leitender Reg.-Chemiedirektor *Dr. Heinz Sperlich*

V: Reg.-Chemiedirektor *Hans Miethke*

Wiss.M: Reg.-Chemiedirektoren(-innen): *Gudrun Dörner, Dieter Stoll;* Oberreg.-Chemieräte(-innen): *Eberhard Krüger, Ingeborg Mößner, Waltraut Nonnweiler, Dr. Ulrich Rüdt;* Reg.-Chemieräte(-innen): *Dr. Willi Frank, Marlies Götz, Annemone Heffter, Dr. Gunhild Hempel, Dieter Mack, Dr. Margarete Quintenz, Dr. Friedrich Wall;* Lebensmittelchemiker(-innen): *Dr. Endre Biró, Dr. Saad El-Dessouki, Dr. Fritz Hack, Diethild Herbolzheimer, Isolde Stephani,* 3 N.N. (gesperrt)

Techn.M: 2 Lebensmittelkontrolleure, 3 Weinkontrolleure, 45 chem.-techn. Assistenten, 3 Chemielaboranten, 1 Maschinenmeister

Verwaltung: 1 Reg.-Amtmann, 1 Verwaltungsangestellte, 7 Schreibkräfte, 2 Hilfskräfte im Reinigungsdienst

Die Anstalt bildet bis zu 11 Praktikanten aus

54. Stuttgart

Chemisches Untersuchungsamt der Stadt Stuttgart

A: 7 Stuttgart 1, Stafflenbergstraße 81, F: (07 11) 2 16-34 73

Tr. und Amtsbez: Stadt Stuttgart, E: 600000

S: Enzymatische Analyse; Untersuchung von Trinkwasser (chem. u. bakt.), Mineralwasser einschl. großer Heilwasseranalyse sowie Bade-, Brauch- und Abwasser; Blutalkoholbestimmungen; toxikologische Untersuchungen; Emissionsspektralanalyse für Spurenelemente und Kriminaltechnik; Radioaktivitätsmessungen; klimatologische Untersuchungen und Begutachtungen, Bekämpfung der Luftverunreinigung und des Lärms; chemisch technische Untersuchungen von Heiz- u. Treibstoffen, Baustoffen; Korrosionsprüfungen usw., Mitwirkung bei Ölunfällen und Müllproblemen

L: Oberchemiedirektor *Dr. Reinhold Barchet*

V: Chemiedirektor *Dr. Heinz Jori*

Wiss.M: Chemiedirektor *Dr. Werner Hennig,* Oberchemieräte *Frau Dr. Brigitte Bergner, Dr. Manfred Kächele, Dr. Klaus Ruck, Hans Seibold, Dr. Horst-Dieter Stein, Dr. Paul Vogt, Dr. Gerhard Wilk;* Chemieräte *Manfred Feucht, Dr. Klaus Harzer;* Lebensmittelchemiker *Franz Kuretschka;* Klimatologiedirektor *Karl Schwalb,* Klimatologiedirektor *Dr. Franz Robel,* Dipl.-Phys. *Anselm Riekert,* Dipl.-Met. *Ulrich Hoffmann*

Techn.M: 1 Bauingenieur, 24 Chemotechniker, 2 Chemielaboranten, 2 Phys.-Technische Assistenten

Verwaltung: 1 Stadtoberinspektor, 6 Verw.-Angestellte, 7 Frauen im Reinigungsdienst, 1 Hausmeister u. Kraftfahrer, 1 Kraftfahrer, 1 Laborhelferin.

Das Amt bildet Kandidaten der Lebensmittelchemie und Chemotechnikerpraktikanten aus.

Der Leiter des Amtes ist Lehrbeauftragter der Universität für gerichtliche Chemie. Die wissenschaftlichen Mitarbeiter unterrichten an Schulen für Diät-Assistentinnen, Hauswirtschaftsleiterinnen und Wirtschafterinnen

55. Trier

Chemisches Untersuchungsamt Trier

A: 55 Trier, Maximineracht 11 a, F: (0651) 48175 und 42475

Tr: Land Rheinland-Pfalz

Amtsbez: Reg.-Bezirk Trier mit der Stadt Trier und den Landkreisen Bernkastel-Wittlich, Bitburg-Prüm, Daun und Trier-Saarburg, E: 472300

S: Für den nördlichen Landesteil:
Pestizidanalytik; für Rheinland-Pfalz: Untersuchung von Milcherzeugnissen, Eiprodukten und Pilzerzeugnissen, von Lebensmitteln auf Mykotoxine, von Bedarfsgegenständen und Spielwaren aus Holz und Textilfaser; Untersuchung von Wein, weinhaltigen und weinähnlichen Erzeugnissen, Fruchtsaftanalytik, Pilzberatung

L: Ltd. Regierungsdirektor *Dr. Richard Woller*

V: Chemiedirektor *Dr. Karl Franzen*

Wiss.M: Chemiedirektorin *Brigitte Holbach,* Oberchemierat *Dr. Ernst Laub,* Oberchemierat *Wolfgang Olszowski,* Chemierätin *Ingeborg Didié,* Chemierat *Dr. Hans-Jörg Opfermann,* Lebensmittelchemikerin *Birgit Wortberg*

Weinkontrolleure: Weinbau-Amtmann *Franz-Leo Berres,* Weinbau-Amtmann *Peter Frick,* Weinbau-Amtmann *Ernst Thielen,* Weinbau-Oberinspektor *Günter Breithaupt,* Weinbau-Oberinspektor *Peter Lupbrand*

Chemie-Ingenieure: *Guntram Kugel, Franz Waligorski*

Techn.M: 11 Chemotechnikerinnen, 9 Praktikanten, 1 Laborantenlehrling

Verwaltung: 1 Amtsinspektor, 4 Verw.-Angestellte, 1 Hausmeister, 6 Hilfskräfte im Reinigungsdienst (1 ganztägig, 5 halbtägig)

56. Wiesbaden

Staatliches Chemisches Untersuchungsamt Wiesbaden (mit Außenstelle in Frankfurt am Main)

A: 6200 Wiesbaden, Hasengartenstraße 24, F: (06121) 79007-08

Tr: Land Hessen, Hessischer Sozialminister

Amtsbez: Städte Wiesbaden, Bad Homburg v. d. H., Landkreise: Main-Taunus-Kreis, Hoch-Taunus-Kreis, Rheingau-Kreis, Unter-Taunus-Kreis, Main-Kinzig-Kreis (Hanau, Gelnhausen, Schlüchtern), E: 1200000

S: Weinkontrolle für das Land Hessen, Einfuhruntersuchungen von Weinen, und anderen Erzeugnissen des Weinrechts, Umweltradioaktivität für das Land Hessen, einschl. Reaktorüberwachung, Trinkwasseruntersuchungen im Reg.Bez. Darmstadt, Oberflächen- und Abwasseruntersuchungen und Überwachung der Anlagen im Reg. Bez. Darmstadt, Untersuchung und Beurteilung von Schwimmbadwasser, Untersuchung von Waschmitteln für das Land Hessen, Untersuchung von Arzneimitteln (Arzneimittelprüfstelle) für das Land Hessen, Untersuchung von Giften für das Land Hessen

L: Ltd. Chemiedirektor *Dr. Adolf Roth*

V: Chemiedirektor *Dr. Willi Germans,* Pharmazieoberrat *Dr. Peter Horn,* N.N.

Wiss.M: Chemieoberrat *Otto-Ernst Beckmann,* Lebensmittelchemiker *James Ellis,* Regierungsrätin *Dr. Irmgard Franke,* Regierungsoberrätin *Dr. Barbara Graack,* Chemierat *Hanz Klein,* Chemieoberrätin *Doris Schöttler,* Chemierat *Dr. El Abdu Shirbini,* Regierungsoberrat *Dr. Georg Sturm,* Lebensmittelchemikerin *Ingrid Teschner,* Chemieoberrätin *Wiltrud Thieme,* Lebensmittelchemiker und Apotheker *Rudolf Völler*

Techn.M: 3 Weinkontrolleure, 29 Chemotechniker, Chemielaboranten, Laboranten, techn. Angestellte, 1 Verwaltungsbeamter (Büroleiter), 9 Verwaltungs- und Schreibkräfte, 7 Arbeiter (Laborgehilfen, Laborarbeiter, Kraftfahrer), 4 Reinigungskräfte, 4 Praktikanten der Lebensmittelchemie (Teil B der Prüfungsordnung).

Außenstelle Frankfurt am Main

A: 6000 Frankfurt am Main, Deutschordenstraße 48, F: 0611/675001

Amtsbez: Stadt Frankfurt am Main (ausschließlich Lebensmitteluntersuchung), E: 650000

L: Ltd. Chemiedirektor *Dr. Adolf Roth* (Amtsleiter des Staatlichen Chemischen Untersuchungsamtes Wiesbaden)

V: Lebensmittelchemiker, Apotheker und Diplomchemiker *Dr. Werner Rödder* (halbtags)

Wiss.M: Lebensmittelchemikerin *Ulrike Schwarz*

Techn.M: 3 Chemotechniker und Chemielaboranten, 1 Schreibkraft (halbtags)

57. Wuppertal

Chemisches Untersuchungsinstitut der Städte Wuppertal und Solingen

A: Sanderstr. 161, 56 Wuppertal 2, F: 0202-563 6206/61 32/64 74/66 01

Tr: Stadt Wuppertal

Amtsbez: Städte Wuppertal und Solingen, E: 590000

S: Fleischwaren, Fischerzeugnisse, Pestizide, Biozide, Blutalkoholbestimmungen, Untersuchung von Trink-, Brauch- und Abwasser

L: Ltd. Chemiedirektor *Dr. L. Bertling*

V: Oberchemierat *A. Winkelmann*

Wiss.M: Chemierat z. A. *Dr. Delventhal,* Chemierat z. A. *Dr. Seibold, Dr. Dresselhaus*

Techn.M: 11, 1 Praktikantenstelle

B. Verzeichnis der Untersuchungsämter in den einzelnen Ländern

Baden-Württemberg	(6):	Karlsruhe mit Außenstelle Mannheim Offenburg mit Außenstelle Freiburg i. Br. Pforzheim, Sigmaringen, Stuttgart (2)
Bayern	(3):	Erlangen mit Außenstellen Regensburg und Würzburg, München mit Außenstelle Augsburg Nürnberg
Berlin	(1):	Berlin
Bremen	(1):	Bremen
Hamburg	(1):	Hamburg
Hessen	(4):	Darmstadt, Gießen, Kassel, Wiesbaden mit Außenstelle Frankfurt am Main
Niedersachsen	(7):	Braunschweig, Emden, Hannover, Hildesheim, Lüneburg, Oldenburg, Osnabrück
Nordrhein-Westfalen	(26):	Aachen, Bielefeld, Bochum, Bonn, Dortmund, Düsseldorf, Duisburg, Eschweiler, Essen, Gelsenkirchen, Hagen, Hamm, Köln, Krefeld, Leverkusen. Mettmann, Moers, Münster, Nettetal, Neuß, Oberhausen, Paderborn, Recklinghausen, Remscheid, Siegen, Wuppertal
Rheinland-Pfalz	(4):	Koblenz, Mainz, Speyer, Trier
Saarland	(1):	Saarbrücken
Schleswig-Holstein	(3):	Flensburg, Kiel, Lübeck

C. Orts- und Gebietsverzeichnis

(Die nachgestellten Ziffern bezeichnen die Nummern des zuständigen Untersuchungsamtes im Teil A. Den Ortsnamen sind die Postleitzahlen vorangesetzt).

–	Aachen (Kreis)	14
5100	Aachen (Stadt)	1
7080	Aalen	53
6209	Aarbergen	56
7590	Achern	24
2807	Achim	32
6962	Adelsheim	24
4422	Ahaus	37
4730	Ahlen (Westf.)	37
2070	Ahrensburg	31
5483	Ahrweiler	27
8890	Aichach	36
7470	Albstadt	51
3220	Alfeld	23
4234	Alpen	35
6146	Alsbach (Bergstr.)	8
6762	Alsenz (Obermoschel)	52
6320	Alsfeld	18
5990	Altena	19
5230	Altenkirchen (Ww)	27
8262	Altötting	36
8064	Altomünster	36
8755	Alzenau (Ufr.)	13
6508	Alzey	33
8450	Amberg	13
–	Ammerland (Kreis)	43
5470	Andernach	27
6747	Annweiler	52
8800	Ansbach	13
7604	Appenweier	42
6509	Armsheim	33
5770	Arnsberg (Westf.)	20
3548	Arolsen	25
8594	Arzberg	13
8750	Aschaffenburg	13
4497	Aschendorf	43
–	Aschendorf-Hümmling (Kreis)	43
6224	Aßmannshausen	56
5952	Attendorn	50
3262	Auetal	22
8900	Augsburg	36
7960	Aulendorf	51
2960	Aurich	43
6113	Babenhausen (Hess.)	8
8943	Babenhausen (Schw.)	36
6533	Bacharach	27
7150	Backnang	53
8202	Bad Aibling	36
4574	Badbergen	44
6748	Bad Bergzabern	52
5920	Bad Berleburg	50
8582	Bad Berneck	13
5582	Bad Bertrich	27
2357	Bad Bramstedt	26
5484	Bad Breisig	27
8788	Bad Brückenau	13
7952	Bad Buchau	51
3490	Bad Driburg	45
6702	Bad Dürkheim	52
5427	Bad Ems	27
7570	Baden-Baden	24
7847	Badenweiler	42
4515	Bad Essen	44
7107	Bad Friedrichshall-Jagstfeld	53
3353	Bad Gandersheim	23
3388	Bad Harzburg	6
6430	Bad Hersfeld	25
5462	Bad Hönningen	27
6380	Bad Homburg v.d.H.	56
5340	Bad Honnef	5
8730	Bad Kissingen	13
8742	Bad Königshofen (Grabfeld)	13
8112	Bad Kohlgrub	36
6550	Bad Kreuznach	27
3422	Bad Lauterberg	23
7263	Bad Liebenzell	46
5439	Bad Marienberg	27
6990	Bad Mergentheim	12
6552	Bad Münster am Stein	27
5358	Bad Münstereifel	1
6350	Bad Nauheim	18
3052	Bad Nenndorf	22
5483	Bad Neuenahr	27
8740	Bad Neustadt (Saale)	13
4970	Bad Oeynhausen	3
2060	Bad Oldesloe	31
6482	Bad Orb	56
3280	Bad Pyrmont	22
8230	Bad Reichenhall	36
4502	Bad Rothenfelde	44
6427	Bad Salzschlirf	25

4902	Bad Salzuflen	3
7525	Bad Schönborn	24
7953	Bad Schussenried	51
6208	Bad Schwalbach	56
2407	Bad Schwartau	31
2360	Bad Segeberg	26
6483	Bad Soden (b. Salmünster)	56
6232	Bad Soden (Taunus)	56
3437	Bad Sooden-Allendorf	25
7267	Bad Teinach	46
8170	Bad Tölz	36
6368	Bad Vilbel	18
8182	Bad Wiessee	36
3590	Bad Wildungen	25
7107	Bad Wimpfen	53
8532	Bad Windsheim	13
8939	Bad Wörishofen	36
2903	Bad Zwischenahn	43
8591	Bärnau	13
7292	Baiersbronn	24
7460	Balingen (Württ.)	51
8600	Bamberg	13
2072	Bargteheide	31
3013	Barsinghausen	22
2830	Bassum	44
6587	Baumholder	27
8580	Bayreuth	13
8163	Bayrischzell	36
6440	Bebra	25
4720	Beckum	37
5152	Bedburg (Erft)	14
8432	Beilngries	13
5413	Bendorf (Rh.)	27
8174	Benediktbeuern	36
5060	Bensberg	28
6140	Bensheim	8
4442	Bentheim	43
8240	Berchtesgaden	36
3103	Bergen (Kreis Celle)	32
6000	Bergen-Enkheim	56
5150	Bergheim (Erft)	14
5070	Bergisch-Gladbach	30
–	Bergstraße (Landkreis)	8
1000	Berlin	2
5550	Bernkastel	55
4558	Bersenbrück	44
7122	Besigheim	53
5780	Bestwig	20
5240	Betzdorf	27
7950	Biberach (Riß)	51
3560	Biedenkopf	25
4800	Bielefeld	3
7555	Bietigheim	53
6530	Bingen	33
6588	Birkenfeld (Nahe)	27
5520	Bitburg	55
7902	Blaubeuren	51
4290	Bocholt	37
4630	Bochum	4
3205	Bockenem	23
8373	Bodenmais	36
7030	Böblingen	53
8443	Bogen	36
4508	Bohmte	44
5300	Bonn	5
5407	Boppard	27
4807	Borgholzhausen (Westf.)	3
4433	Borghorst	37
4280	Borken (Westf.)	37
2972	Borkum	43
4250	Bottrop	47
3492	Brakel	45
4550	Bramsche	44
5423	Braubach	27
5551	Brauneberg	55
6333	Braunfels (Lahn)	18
3389	Braunlage	23
3300	Braunschweig	6
6604	Brebach (Saar)	49
7814	Breisach	42
–	Breisgau-Hochschwarzwald (Kreis)	42
2800	Bremen	7
2850	Bremerhaven	7
2140	Bremervörde	32
7518	Bretten	24
5790	Brilon	20
2805	Brinkum b. Bremen	44
6454	Bruchköbel	56
7520	Bruchsal	24
6831	Brühl (Baden)	24
5040	Brühl (Rheinland)	14
6967	Buchen (Odw.)	24
2801	Buchholz b. Bremen	32
8938	Buchloe	36
4967	Bückeburg	22
6470	Büdingen (Hess.)	18
7580	Bühl i. B.	24
4980	Bünde	3
4793	Büren (Westf.)	45
5584	Bullay	27
8872	Burgau (Schwaben)	36

3183	Fallersleben	6
3032	Fallingbostel	32
7012	Fellbach	53
8501	Feucht	13
8805	Feuchtwangen	13
5950	Finnentrop	50
2390	Flensburg	16
6093	Flörsheim (Main)	56
8550	Forchheim (Oberfr.)	13
3558	Frankenberg (Eder)	25
6710	Frankenthal	52
6000	Frankfurt (Main)	56
5020	Frechen	14
5949	Fredeburg	20
7800	Freiburg (Breisgau)	42
8228	Freilassing	36
8050	Freising	36
7290	Freudenstadt	24
8904	Friedberg (Bay.)	36
6360	Friedberg (Hessen)	18
6382	Friedrichsdorf (Taunus)	56
7990	Friedrichshafen	51
–	Friesland	43
2908	Friesoythe	43
3580	Fritzlar	25
8080	Fürstenfeldbruck	36
8510	Fürth (Bayern)	13
6149	Fürth (Odenwald)	8
8958	Füssen	36
6400	Fulda	25
7560	Gaggenau	24
7160	Gaildorf	53
7487	Gammertingen	51
3011	Garbsen	22
8261	Garching (Alz)	36
8100	Garmisch-Partenkirchen	36
6473	Gedern	18
2054	Geesthacht	31
8586	Gefrees	13
5130	Geilenkirchen	1
6222	Geisenheim (Rheingau)	56
7340	Geislingen (Steige)	53
4170	Geldern	38
6460	Gelnhausen	56
4650	Gelsenkirchen	17
8780	Gemünden (Main)	13
3573	Gemünden (Wohra)	25
4504	Georgsmarienhütte	44
7182	Gerabronn	53
6728	Germersheim	52
7562	Gernsbach	24
6084	Gernsheim	8
5530	Gerolstein	55
8723	Gerolzhofen	13
6412	Gersfeld	25
8901	Gessertshausen	36
5820	Gevelsberg	19
6300	Gießen	18
3170	Gifhorn	6
3568	Gladenbach	25
2208	Glückstadt	26
4180	Goch	35
7320	Göppingen	53
3400	Göttingen	23
3380	Goslar	23
6394	Grävenwiesbach	18
8352	Grafenau (Ndb.)	36
8018	Grafing	36
–	Grafschaft Diepholz	44
–	Grafschaft Hoya	44
–	Grafschaft Schaumburg	22
3523	Grebenstein	25
4048	Grevenbroich	39
8399	Griesbach (Rottal)	36
6103	Griesheim (Hessen)	8
3212	Gronau (Leine)	23
4432	Gronau (Westf.)	37
3432	Großalmerode	25
6454	Großauheim üb. Hanau	26
6301	Großen Linden	18
6080	Groß Gerau	8
6451	Großkrotzenburg üb. Hanau	56
8754	Großostheim	13
6114	Groß Umstadt	8
6112	Groß Zimmern	8
6310	Grünberg (Hessen)	18
6718	Grünstadt	52
8870	Günzburg	36
4830	Gütersloh	3
5270	Gummersbach	30
8820	Gunzenhausen	13
5238	Hachenburg	27
6253	Hadamar	18
5800	Hagen (Westf.)	19
6342	Haiger	18
7452	Haigerloch	51
4802	Halle (Westf.)	3
4358	Haltern	47
5884	Halver	19
2000	Hamburg	21

3250	Hameln	22
5249	Hamm (Sieg)	27
4700	Hamm (Westf.)	20
8783	Hammelburg	13
6450	Hanau	56
3000	Hannover	22
3510	Hann.-Münden	23
–	Harburg (Kreis)	32
8856	Harburg (Schwaben)	36
4472	Haren	43
4473	Haselünne	43
7612	Haslach (Kinzigtal)	42
6981	Hasloch (Main)	13
8728	Haßfurt	13
6733	Haßloch (Pfalz)	52
6234	Hattersheim (Main)	56
4320	Hattingen (Ruhr)	19
7450	Hechingen	51
2240	Heide (Holst.)	26
6900	Heidelberg	24
7920	Heidenheim a. d. Brenz	53
7100	Heilbronn	53
2447	Heiligenhafen	31
5138	Heinsberg (Rhld)	1
3330	Helmstedt	6
5870	Hemer	19
5202	Hennef	5
6148	Heppenheim (Bergstr.)	8
7834	Herbolzheim (Breisgau)	42
6348	Herborn	18
5243	Herdorf	27
4900	Herford	3
3102	Hermannsburg	32
4690	Herne	4
7033	Herrenberg	53
8562	Hersbruck	13
5974	Herscheid	19
6742	Herxheim bei Landau	52
3420	Herzberg (Harz)	23
5120	Herzogenrath	14
–	Herzogtum Lauenburg	31
3253	Hessisch Oldendorf	22
6056	Heusenstamm	8
5912	Hilchenbach	50
3200	Hildesheim	23
8543	Hilpoltstein	13
4517	Hilter (Teutob. W.)	44
6203	Hochheim (Main)	56
6832	Hockenheim	24
8552	Höchstadt (Aisch)	13
–	Hochsauerland	20
–	Hochtaunus-Kreis	56
5410	Höhr-Grenzhausen	27
3470	Höxter	45
8670	Hof (Saale)	13
3520	Hofgeismar	25
6238	Hofheim (Taunus)	56
8729	Hofheim (Ufr.)	13
5850	Hohenlimburg	19
–	Hohenlohe-Kreis	53
3450	Holzminden	23
3588	Homberg (Bez. Kassel)	25
6313	Homberg (Ohm)	18
6650	Homburg (Saar)	49
7240	Horb	24
4934	Horn-Bad Meinberg	3
3092	Hoya	44
2872	Hude (Oldbg.)	43
6418	Hünfeld	25
5030	Hürth	14
6303	Hungen	18
2250	Husum	16
4530	Ibbenbüren	37
6580	Idar-Oberstein	27
6270	Idstein	56
7551	Iffezheim	24
7918	Illertissen	36
7717	Immendingen	42
8970	Immenstadt	36
6507	Ingelheim	33
8070	Ingolstadt	36
8715	Iphofen	13
5860	Iserlohn	19
8045	Ismaning	36
7972	Isny	51
2210	Itzehoe	26
2933	Jade	43
2942	Jever	43
5170	Jülich	14
6104	Jugenheim (Bergstr.)	8
8756	Kahl (Main)	13
6750	Kaiserslautern	52
4192	Kalkar	35
4132	Kamp-Lintfort	35
6744	Kandel	52
7842	Kandern	42
2340	Kappeln (Schlei)	26
6367	Karben	18
7516	Karlsbad	24

3522	Karlshafen	25
7500	Karlsruhe	24
8782	Karlstadt (Main)	13
3500	Kassel	25
5448	Kastellaun	27
8950	Kaufbeuren	36
7640	Kehl	42
8420	Kelheim	36
6233	Kelkheim (Taunus)	56
8584	Kemnath	13
4152	Kempen (Ndrh.)	38
8960	Kempten (Allgäu)	36
7832	Kenzingen	42
4307	Kettwig	15
2300	Kiel	26
5883	Kierspe (Westf.)	19
5242	Kirchen (Sieg)	27
8671	Kirchenlamitz	13
3575	Kirchhain (Bez. Kassel)	25
7312	Kirchheim (Teck)	53
6719	Kirchheimbolanden	52
6570	Kirn	27
8710	Kitzingen	13
4190	Kleve	35
8763	Klingenberg (Main)	13
5033	Knapsack	14
5400	Koblenz	27
8113	Kochel	36
5000	Köln	28
6240	Königstein (Taunus)	56
5330	Königswinter	5
8493	Kötzting	36
7750	Konstanz	42
3540	Korbach	25
7014	Kornwestheim	53
4051	Korschenbroich	39
4193	Kranenburg (Ndrh.)	35
4150	Krefeld (Stadt)	29
5910	Kreuztal	50
6239	Kriftel (Taunus)	56
8640	Kronach	13
6242	Kronberg (Taunus)	56
8909	Krumbach (Schwaben)	36
7118	Künzelsau	53
8650	Kulmbach	13
6798	Kusel	52
5420	Lahnstein	27
7630	Lahr	42
6734	Lambrecht (Pfalz)	52
6840	Lampertheim	8
8380	Landau (Isar)	36
6740	Landau (Pfalz)	52
–	Land Hadeln	32
8910	Landsberg (Lech)	36
8300	Landshut	36
6790	Landstuhl	52
6070	Langen (Hessen)	8
3012	Langenhagen	22
6456	Langenselbold	56
3095	Langwedel	32
6312	Laubach (Oberh.)	18
6531	Laubenheim (Nahe)	27
6970	Lauda	53
2058	Lauenburg (Elbe)	31
8560	Lauf	13
8229	Laufen	36
7128	Lauffen (Neckar)	53
7958	Laupheim	51
6420	Lauterbach (Hess.)	18
2950	Leer	43
3160	Lehrte	22
4920	Lemgo	3
4540	Lengerich	37
5940	Lennestadt	50
7250	Leonberg	53
7514	Leopoldshafen	24
5868	Letmathe	19
7970	Leutkirch	51
5090	Leverkusen	30
6302	Lich	18
8620	Lichtenfels	13
3384	Liebenburg	23
6250	Limburg (Lahn)	18
8990	Lindau	36
5253	Lindlar	30
4450	Lingen Ems)	43
5460	Linz (Rhein)	27
–	Lippe	3
4780	Lippstadt	20
4972	Löhne (Westf.)	3
7850	Lörrach	42
2842	Lohne (Oldbg.)	43
8770	Lohr	13
6223	Lorch (Rheingau)	56
7073	Lorch (Württ.)	53
6143	Lorsch	8
7140	Ludwigsburg	53
6700	Ludwigshafen (Rh.)	52
4990	Lübbecke	3
2400	Lübeck	31
3130	Lüchow	32

–	Lüchow-Dannenberg (Kreis)	32
5880	Lüdenscheid	19
4710	Lüdinghausen	37
3140	Lüneburg	32
4670	Lünen	20
–	Märkischer Kreis	19
6735	Maikammer	52
8302	Mainburg	36
–	Main-Tauberkreis	53
–	Main-Taunuskreis	56
6500	Mainz	33
8304	Mallersdorf	36
6800	Mannheim	24
3550	Marburg (L)	25
8831	Markt Berolzheim	13
8536	Markt Bibart	13
8713	Marktbreit	13
8772	Marktheidenfeld	13
8952	Markt Oberdorf	36
8590	Marktredwitz	13
8015	Markt Schwaben	36
4370	Marl	47
2222	Marne	26
8215	Marquartstein	36
7133	Maulbronn	53
5440	Mayen	27
6922	Meckesheim	24
4005	Meerbusch	39
7758	Meersburg	51
5882	Meinerzhagen	19
2223	Meldorf	26
4520	Melle	44
8744	Mellrichstadt	13
3508	Melsungen	25
8940	Memmingen	36
5750	Menden (Sauerland)	19
5442	Mendig	27
4470	Meppen	43
6640	Merzig	49
5778	Meschede	19
4020	Mettmann	34
7418	Metzingen (Württ.)	51
6120	Michelstadt (Odenwald)	8
8160	Miesbach	36
8760	Miltenberg	13
8948	Mindelheim	36
4950	Minden	3
–	Mittelfranken (Rg. Bez.)	13
8102	Mittenwald	36
2410	Mölln	31
4050	Mönchengladbach	39
4130	Moers	35
5108	Monschau	14
6521	Monsheim	33
5430	Montabaur	27
8052	Moosburg (Isar)	36
3413	Moringen	23
6950	Mosbach (Baden)	24
7130	Mühlacker	53
8260	Mühldorf (Inn)	36
6052	Mühlheim (Main)	8
4330	Mülheim (Ruhr)	41
7840	Müllheim (Baden)	42
8660	Münchberg	13
8000	München	36
7420	Münsingen	51
4400	Münster i. W.	37
3042	Munster	32
8110	Murnau	36
8470	Nabburg	13
5992	Nachrodt (Westf.)	19
7270	Nagold	24
8674	Naila	13
5408	Nassau (Lahn)	27
6952	Neckarelz	24
6903	Neckargemünd	24
7107	Neckarsulm	53
4054	Nettetal	38
8858	Neuburg (Donau)	36
5982	Neuenrade	19
3585	Neuental	25
6078	Neu-Isenburg	8
8430	Neumarkt (Opf.)	13
2350	Neumünster	26
8462	Neunburg v. W.	13
6680	Neunkirchen (Saar)	49
4040	Neuß	39
8530	Neustadt (Aisch)	13
8632	Neustadt b. Coburg	13
2430	Neustadt (Holstein)	31
3057	Neustadt a. Rbge.	22
8482	Neustadt (Waldnaab)	13
6730	Neustadt (Weinstr.)	52
7910	Neu-Ulm	36
5450	Neuwied	27
6369	Nidderau	56
2260	Niebüll	16
–	Niederbayern (Rg. Bez.)	36
3070	Nienburg	22
8860	Nördlingen	36

2980	Norden	43
2890	Nordenham	43
2000	Norderstedt	26
–	Nordfriesland	16
4460	Nordhorn	43
3410	Northeim	23
8500	Nürnberg	40
–	Nürnberger Land	13
7440	Nürtingen	53
8103	Oberammergau	36
–	Oberbayern (Rg. Bez.)	36
–	Oberbergischer Kreis	30
–	Oberfranken (Rg. Bez.)	13
–	Oberharz	23
4200	Oberhausen	41
–	Oberhessen	18
4962	Obernkirchen	22
–	Oberlahnkreis	27
8753	Obernburg	13
7238	Oberndorf (Neckar)	51
–	Oberpfalz (Reg. Bez.)	13
6051	Oberroden	8
8980	Oberstdorf	36
6370	Oberursel	56
8474	Oberviechtach	13
2912	Ocholt	43
8703	Ochsenfurt	13
7955	Ochsenhausen	51
5511	Ockfen	55
–	Odenwald-Kreis	24
7110	Öhringen	53
6050	Offenbach (Main)	8
7600	Offenburg	42
2440	Oldenburg (Holstein)	31
2900	Oldenburg i. O.	43
–	Ostalb-Kreis	53
5960	Olpe	50
7603	Oppenau	42
6504	Oppenheim	33
–	Ortenau-Kreis	42
7601	Ortenberg (Baden)	42
6474	Ortenberg (Hessen)	18
4500	Osnabrück	44
6960	Osterburken	24
3360	Osterode (Harz)	23
–	Osterholz-Scharmbeck	32
–	Ostfriesland	43
6522	Osthofen	33
–	Ostholstein	31
6754	Otterberg	52
2178	Otterndorf	32
5063	Overath	30
4790	Paderborn	45
4490	Papenburg	43
8433	Parsberg	13
8390	Passau	36
8570	Pegnitz	13
3150	Peine	23
8122	Penzberg	36
8068	Pfaffenhofen (Ilm)	36
8340	Pfarrkirchen	36
7530	Pforzheim	46
7417	Pfullingen	51
6102	Pfungstadt	8
5555	Piesport	55
2080	Pinneberg	26
6780	Pirmasens	52
8350	Plattling	36
8835	Pleinfeld	13
5970	Plettenberg	19
7310	Plochingen	53
2320	Plön	26
7067	Plüderhausen	53
5540	Prüm	55
4570	Quakenbrück	43
5608	Radevormwald	30
7760	Radolfzell	42
7550	Rastatt	24
4030	Ratingen	34
2418	Ratzeburg	31
6096	Raunheim	8
7980	Ravensburg	51
4350	Recklinghausen	47
4242	Rees	35
8370	Regen	36
8400	Regensburg	13
8673	Rehau	13
6101	Reichelsheim (Odw.)	8
2057	Reinbek	31
2067	Reinfeld	31
6101	Reinheim (Odw.)	8
5480	Remagen	27
5630	Remscheid	48
–	Rems-Murr-Kreis	53
2370	Rendsburg	26
7410	Reutlingen	51
4840	Rheda	3
4134	Rheinberg	35

8972 Sonthofen 36
6443 Sontra 25
7208 Spaichingen 42
6720 Speyer 52
3257 Springe 22
2160 Stade 32
4960 Stadthagen 22
4424 Stadtlohn 37
3457 Stadtoldendorf 23
8652 Stadtsteinach 13
8623 Staffelstein 13
8130 Starnberg 36
7813 Staufen (Brsg.) 42
6497 Steinau (Main-Kinzig-Kreis) 56
– Steinburg (Kreis) 26
– Steinfurt (Kreis) 37
3282 Steinheim (Westf.) 45
7768 Stockach 42
5190 Stolberg (Rhld.) 14
– Stormarn (Kreis) 31
8440 Straubing 36
7000 Stuttgart 54
2838 Sulingen 44
8458 Sulzbach-Rosenberg 13
2818 Syke 44

7951 Tannheim 51
2801 Tarmstedt 32
6972 Tauberbischofsheim 53
6204 Taunusstein 56
4542 Tecklenburg 37
8180 Tegernsee 36
8641 Tettau 13
7992 Tettnang 51
8907 Thannhausen (Schw.) 36
8593 Tirschenreuth 13
7820 Titisee-Neustadt 42
8261 Tittmoning 36
8261 Töging (Inn) 36
2082 Tornesch 26
2117 Tostedt 32
5580 Traben-Trabach 55
8220 Traunstein 36
8830 Treuchtlingen 13
7740 Triberg 42
5500 Trier 55
5210 Troisdorf 5
7218 Trossingen 42
7400 Tübingen 51
8939 Türkheim (Wertach) 36
7200 Tuttlingen 42
8132 Tutzing 36

7770 Überlingen 51
4182 Uedem 35
3110 Uelzen 32
5564 Ürzig 55
2082 Uetersen 26
8704 Uffenheim 13
7900 Ulm 51
4750 Unna 20
– Unterfranken (Rg. Bez.) 13
– Untertaunuskreis 56
7417 Urach 51
6390 Usingen 56
3418 Uslar 23

7143 Vaihingen (Enz) 53
5414 Vallendar 27
2930 Varel 42
7570 Varnhalt 24
2848 Vechta 43
5620 Velbert 34
3090 Verden (Aller) 32
8374 Viechtach 36
3387 Vienenburg 23
6806 Viernheim 8
4060 Viersen 38
7730 Villingen 42
8313 Vilsbiburg 36
8358 Vilshofen (Ndb.) 36
2132 Visselhövede 32
4973 Vlotho 3
6620 Völklingen 49
– Vogelsbergkreis 18
8483 Vohenstrauß 13
8712 Volkach (Main) 13

3583 Wabern 25
6618 Wadern 49
6480 Wächtersbach 56
6833 Waghäusel 24
7050 Waiblingen 53
5220 Waldbröl 30
3544 Waldeck 25
7035 Waldenbuch 53
7112 Waldenburg (Württ.) 53
3445 Waldkappel 25
8494 Waldmünchen 13
8595 Waldsassen 13
7890 Waldshut 42

D. Untersuchungsstellen der Bundeswehr

1. München

Institut für Wehrpharmazie und Lebensmittelchemie
A: 8 München, Dachauer Straße 128, Tel.: (089) 130001
L: Oberstapotheker PD Dr. Trapmann
V: Oberfeldapotheker Dr. Lippke

2. Kiel

Chemische Untersuchungsstelle der Bw I
A: 2300 Kronshagen b. Kiel, Kopperpahler Allee 120, Tel.: (0431) 587071 – 73
L: Oberfeldapotheker Apenburg
V: Oberstabsapotheker Gottstein

3. Hannover

Chemische Untersuchungsstelle der Bw II
A: 3 Hannover, Gehägestraße 20, Tel.: (0511) 531 – 2986
L: Oberfeldapotheker Spenner
V: Oberstabsapotheker Kunzemann

4. Düsseldorf

Chemische Untersuchungsstelle der Bw III
A: 4 Düsseldorf, Lenaustraße 29, Tel.: (0211) 633001 – 2290
L: Oberfeldapotheker Dr. Kroß
V: Oberstabsapotheker Dr. Beck

5. Koblenz

Chemische Untersuchungsstelle der Bw IV
A: 54 Koblenz, Jakob-Kaiser-Straße 6, Tel.: (0261) 71010
L: Oberfeldapotheker Dr. Reich
V: Oberfeldapotheker Dr. Stiersdorfer

6. Stuttgart

Chemische Untersuchungsstelle der Bw V
A: 7 Stuttgart-Bad Cannstatt, Nürnbergerstraße 184, Tel.: (0711) 566111
L: Oberfeldapotheker Jerg
V: Oberfeldapotheker Dr. Feucht

E. Weinkontrolleure

Baden-Württemberg:

Reg.-Bez. Freiburg: Reg.-Oberinspektor *Kurt Holschuh,* Reg.-Oberinspektor *Günther Kraus,* Reg.-Inspektor *Manfred Dietterich* bei der Chemischen Landesuntersuchungsanstalt Offenburg. Reg.-Inspektor *Dietterich* ist auch Weinkontrolleur für die Kreise Calw, Freudenstadt, Rastatt und die Stadt Baden-Baden im Reg.-Bez. Karlsruhe

Reg.-Bez. Karlsruhe: (ohne die vorgenannten Kreise): Weinkontrolleur *Huber* bei der Chemischen Landesuntersuchungsanstalt Karlsruhe

Reg.-Bez. Stuttgart: die Weinkontrolleure *Kimmig, Schrempf* und N.N. bei der Chemischen Landesuntersuchungsanstalt Stuttgart

Reg.-Bez. Tübingen: Weinkontrolleur *Alfred Klein* bei der Chemischen Landesuntersuchungsanstalt Sigmaringen

Bayern:

Reg.-Bezirke Oberbayern, Niederbayern und Schwaben: Reg.-Amtmann *H. Sträter* und Reg.-Oberinspektor *I. Ritter* beim Landesuntersuchungsamt Südbayern in München

Reg.-Bezirke Unterfranken, Mittelfranken, Oberfranken und Oberpfalz: die Weinkontrolleure *H. Mayer, J. Scholz* und *K. Weltner* bei der Außenstelle des Landesuntersuchungsamtes Nordbayern in Würzburg

Berlin:

Reg.-Oberinspektor *Jochen Caspary* bei der Landesanstalt für Lebensmittel-, Arzneimittel- und gerichtliche Chemie in Berlin

Bremen:

Weinamtmann *Max Robert Kirschner* bei der Staatlichen Chemischen Untersuchungsanstalt in Bremen

Hamburg:

Gewerbeamtmann *Walter Kettern* bei der Chemischen und Lebensmittel-Untersuchungsanstalt Hamburg

Hessen:

Techn. Amtmann *Erhard Schick,* techn. Amtmann *Hans-Günther Stettler* beim Staatl. Chemischen Untersuchungsamt Wiesbaden, techn. Oberinspektor *Rolf Nahm* in 3581 Geismar, Schulweg 13

Niedersachsen:

Amtmann *Karl-Friedrich Müller* und techn. Angestellter *Manfred Fischer* beim Staatlichen Chemischen Untersuchungsamt Braunschweig

Nordrhein-Westfalen:

Reg.-Amtmann *Erich Hausen* beim Chemischen Landesuntersuchungsamt Münster, Reg.-Amtmann *Gabriel Pillmayer* beim Chemischen Landesuntersuchungsamt Münster und beim Institut für Lebensmittel- und Wasseruntersuchungen in Köln

Rheinland-Pfalz:

die Weinkontrolleure *Kinnen, Merz* und *Rosenbaum* beim Chemischen Untersuchungsamt Koblenz

Weinbauoberinspektor *Herbert Blesius,* Weinbauamtmann *Arno Decker,* Weinbauamtmann *Walter Gag* und Weinbauinspektor *Günter Steffen* beim Chemischen Untersuchungsamt Rheinhessen in Mainz

Weinbauamtmann *Heinz-Dieter Engling,* Weinbauamtmann *Friedrich Bohlander,* Weinbauamtmann *Helmut Schreck* und Weinkontrolleur *Wolfgang Diehl* beim Chemischen Untersuchungsamt Speyer

die Weinkontrolleure *Berres, Breithaupt, Frick, Lupbrand* und *Thielen* beim Chemischen Untersuchungsamt Trier

Saarland:

Reg.-Amtsrat *Lando Grimm* beim Ministerium des Innern. Untersuchung der Proben im Chemischen Untersuchungsamt für das Saarland in Saarbrücken

Schleswig-Holstein:

Weinkontrolleur *Alfons Presch* bei der Landesregierung, Ministerium für Ernährung, Landwirtschaft und Forsten in Kiel, Düsternbrooker Weg 106. Die Proben werden in den örtlich zuständigen Untersuchungsämtern Flensburg, Kiel oder Lübeck untersucht

F. Verzeichnis der Gegensachverständigen

a) Namensverzeichnis

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Dr. Kurt Fikentscher, 5000 Köln-Braunsfeld, Linnicher Straße 50, F. (0221) 492737 (Dr. Schwäbe)

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b) Örtliches Verzeichnis

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Augsburg: Hallermayer
Bad Kreuznach: Haase-Aschoff
Berlin: Abel, Gnadt, Herzfeld, Hess, Langner, Lenk, Parlow, Reisch, Schmidt, Sinell
Bernkastel-Kues: Kuntz
Bielefeld: Helweg
Bochum: Cordes, Rothe
Bonn: Sültemeier
Braunschweig: Nehring, Pook
Bremen: Hofmann, Jenssen, Melzer, Talpay
Bückeburg: Blindow
Darmstadt: Schade, Weichel
Düsseldorf: Grün, Lorenz, Ritz
Frankfurt/M: R. Fresenius, Janecke, Kerndl, Philippi
Freiburg: Merten
Gauting: Graner
Gießen: Bartels, Kielwein
Hamburg: Buschkiel, Eggert, Gilbert, Körl, Mülhens, Starke, Wiertz
Hannover: Lienhop, Wirts
Heidelberg: Sinn-Baumann
Hildesheim: v. Broen
Hockenheim: Piorr

Ingelheim: Idstein
Karlsruhe: Heimann, Nitzsche, Schäfer, Sorns
Kassel: Lieber, Scheicht
Kempten: Beyer, Mair-Waldburg
Kirchseeon: Mauracher
Koblenz: Haushahn
Köln: Fikentscher, Kurz
Lahnstein: Stähler
Landau: Künkele
Leonberg: Schrempf
Limburg: Kribben
Lörrach: Heppeler
Ludwigshafen: Kuhlmann, Mischon, v. Nagel, Sontag
Mainz: Borneff
Marburg: Böhme
Meinerzhagen: Rasche
München: Böhm, Bötticher, Döring, Glas, Lukas, Schilcher, Vogel
Neustadt (Weinstraße): Trauth
Nürnberg: Ara, Burkon, Knorr, Neef, Pöhlmann, Schwarz
Offenbach: Schmidt
Osthofen: Eckert
Pleidelsheim: Apel
Saarbrücken: Lehmann
Stuttgart: Bostel, Pieldner
Taunusstein: R. Fresenius, W. Fresenius
Traben-Trabach: Völcker
Weissenthurm: Schade

G. Berufsstatistik

(nur für die Untersuchungsämter)
Stichtag: 1. 10. 1975
Anstellungsverhältnisse
(Die Angaben von 1952 und 1956 sind auf die jetzigen Verhältnisse übertragen)

		1952	1956	1964	1969	1971	1975
Bes. Gr.	B	0	0	0	0	0	1
	H	2	2	2	1	1	1
	A 16	0	0	0	4	15	27
	A 15+Z	0	0	0	0	2	1
	A 15	0	3	11	39	60	92
	A 14+Z	0	0	0	18	34	14
	A 14	30	41	77	140	121	154
	A 13+Z	19	27	33	2	8	4
	A 13	81	98	136	92	80	89
	A 12	2	1	0	0	0	0
BAT	I	7	0	0	5	6	7
	II	10	4	25	97	81	82
	III	96	97	74	4	1	1
		247	273	358	402	409	473

Alters-Staffelung

Alter	
61–65	22 Kollegen und Kolleginnen
56–60	23 Kollegen und Kolleginnen
51–55	60 Kollegen und Kolleginnen
46–50	79 Kollegen und Kolleginnen
41–45	59 Kollegen und Kolleginnen
36–40	89 Kollegen und Kolleginnen
31–35	86 Kollegen und Kolleginnen
bis 30	55 Kollegen und Kolleginnen

ORGANIZATION OF THE FOOD INSPECTION SERVICES
STAFFING AND EQUIPMENT OF THE FOOD INSPECTORATES

Circular Order of the Ministry of the Interior dated 23 November 1965 - VI B5 - 27.03.30.

1. Progress in food science and food technology, which are being taken account of increasingly in the directives of the European Economic Community and regulations based on the Food Law, are constantly imposing wide-ranging new tasks upon the inspectorates involved in food monitoring. In particular these demand more comprehensive and more thorough investigations than used to be the case, in order to check (by methods since refined) whether the legal regulations promulgated in the interests of consumer protection are being observed. The food inspectorates therefore have to be staffed with specialists and equipped with facilites in such a manner that they can perform their investigation assignments by using modern scientific and practical knowledge and can issue expert pronouncements. A sufficiently large useful floor area is required so that the apparatus necessary for modern food analysis can be set up.

2. Generally speaking, the specialist staff and apparatus needed in a food inspectorate can be usefully and economically employed if the catchment area covers a region with at least 500 000 inhabitants. However, mainly to help concentration of the administrative work, an investigation region of 750 000 to 1 000 000 should be aimed for, but, to prevent relatively large geographical distances, the catchment areas should be "rounded off" as far as this is feasible and the inspectorates distributed as evenly as possible across the territory of North Rhine-Westphalia. Certain variations in the sizes of the catchment areas will result from the differences in the population numbers of the catchment area authorities attached to the individual inspectorates and in the number of food factories in the catchment area.

3. To establish detailed particulars for the staffing of a food inspectorate, experience shows that, for each 150 000 inhabitants, it is necessary to employ one food chemist and two to three technical assistants in order to carry out the inspection assignments required by the legal regulations. An inspectorate with a catchment area of 750 000 inhabitants should accordingly be staffed by a manager, four food chemists and at least ten technical assistants.

4. So far as material facilities are concerned, every inspectorate should have available the following equipment and apparatus which is not built in. The figures in brackets refer to the number of such items required for a catchment area of 750 000 to 1 000 000 inhabitants:

Analytical balances (10)
Precision balances, measuring to about 1 kg (10)
Mohr balances (3)
Muffle furnaces (4)
Vacuum drying cabinet with vacuum pump
Distillation equipment (14)
Freezer chests (2)
Multiple heaters (9)
Electric extraction apparatus in series (2)
Rotary vacuum evaporators, equipment for thin layer and paper chromatography
Magnetic stirrers (8)

Shaking machines (3)
Sets of analytical weights, gold-plated, calibrated (2)
Decimal balance, with weights
Laboratory drying cabinets (5)
Incubation cabinets (20)
Sterilizers (2)
Refrigerators (10)
Surface evaporators (5)
Electric heating baths and water baths in series (5)
Electric water baths, individual (50)
Demineralization plant
Equipment for producing double-distilled water

Quartz lamps (7)
Titration equipment (10)
Laboratory mills (2)
Stirring rods (3)
Laboratory cutter

Conductivity meter
Wall clocks (with brief period timers) (6)
Spectrophotometer (with accessories)
Immersion refractometers (3)
UV lamp
Gas chromatograph
IR spectrograph (with accessoiries)
Dissolving equipment (15)
Centrifuges (including milk centrifuges) (5)
Electric mixers (6)
Platinum dishes
Polarimeters (2)
Photometers (4)
Time switches (5)
Flame photometer (with accessories)
Refractometer (Abbé and Butter-R)(2)
Microscopes (2)
Binocular magnifying glasses (4)

Other useful equipment:

Equipment for photomicroscopy
Photocopier
Cylinders for N_2, CO_2, H_2, O_2, He, C_2H_2, propane
Rinsing machines (2)
Reading device for microfilm
Calculators (3)
Transport trolleys (7)
Viscometer
Flash point tester
Nitrogen-determining apparatus
Controlled climate cabinet.

5. The staffing and apparatus require a usable floor area of about 100 m2 in an inspection institute for each 100 000 inhabitants of the catchment area. However, the laboratories should not be housed in large halls, as they used to be. Instead each working group, consisting of one food chemist and some two to three technical assistants, should be accommodated in its own relatively small or medium-sized laboratory premises of some 50 m2 floor area.

In an inspectorate with a catchment area of some 750 000 to 1 000 000 inhabitants, the rooms housing the laboratories, together with additional rooms for special purposes, would consist of approximately the following:

Chemical laboratories for general food investigations (5)
Milk laboratory
Physical measurement rooms (2), one of which is equipped with blackout facilities
Laboratory for water investigations
Microbiological laboratory
Photographic laboratory
Room for chromatography
Incineration room/gas chamber
Kitchen for experiments
Small main laboratory
Storage cellar for chemicals and glassware
Weighing room
Side room for microbiological work
Forensic laboratory
Extraction room
Washing room for laboratory equipment
Packaging and sample room
Room for substances representing a fire hazard (possibly as a bunker in the open air).

6. The foregoing points are intented to act as a guide to those responsible for food monitoring.

To the: Presidents of the governments,
Districts within Länder and municipalities outside districts,
Local authority bodies responsible for public order.

ANNEX 4

List of the veterinary inspection offices responsible for official food supervision

(Inspection institutes)

Office/Institute	Address	Financing Body	Administrative district
Baden-Württemberg			
Staatliches Tierärztliches Untersuchungsamt Aulendorf	796 Aulendorf Löwenbreitstr. 20	Land Baden-Württemberg	Regierungsbezirk Tübingen
Tierhygienisches Institut Freiburg	78 Freiburg Elsässer Str. 116	Land Baden-Württemberg	Regierungsbezirk Freiburg
Staatliches Tierärztliches Untersuchungsamt Heidelberg	69 Heidelberg Czernyring 22	Land Baden-Württemberg	Regierungsbezirk Karlsruhe (ohne Kreis Calw)
Staatliches Tierärztliches Untersuchungsamt Stuttgart	7 Stuttgart 1 Azenbergstr. 16	Land Baden-Württemberg	Regierungsbezirk Stuttgart und Kreis Calw des Regierungsbezirks Karlsruhe
Bayern			
Landesuntersuchungsamt für das Gesundheitswesen Südbayern - Fachbereich Veterinärmedizin -	8042 Oberschleißheim Veterinärstr. 2	Freistaat Bayern	Regierungsbezirke Oberbayern, Niederbayern, Schwaben
Landesuntersuchungsamt für das Gesundheitswesen Nordbayern - Fachbereich Veterinärmedizin -	85 Nürnberg Flurstr. 20	Freistaat Bayern	Regierungsbezirke Ober-, Mittel- und Unterfranken, Oberpfalz
Veterinäramt der Landeshauptstadt München	8 München Thalkirchner Str. 106	Landeshauptstadt München	Landeshauptstadt München
Berlin			
Landesveterinäruntersuchungsamt Berlin	1 Berlin 37 Wilskistr. 55	Land Berlin	Gebiet des Landes Berlin
Bremen			
Staatliches Veterinäruntersuchungsamt Bremen	28 Bremen Utbremer Str. 67	Land Bremen	Gebiet der Stadt Bremen
Staatliches Veterinäramt Bremerhaven	285 Bremerhaven-Fischereihafen, Halle X, Abt. 1-2	Land Bremen	Gebiet der Stadt Bremerhaven

Office/Institute	Address	Financing Body	Administrative district
Hamburg			
Veterinäruntersuchungs-anstalt Hamburg	2 Hamburg 6 Lagerstr. 36	Freie und Hansestadt Hamburg	Gebiet der Freien und Hansestadt Hamburg
Hessen			
Staatliches Veterinäruntersuchungsamt Frankfurt/Main	6 Frankfurt/Main-Niederrad Deutschordenstr. 48	Land Hessen	Städte Darmstadt, Frankfurt/Main, Offenbach, Wiesbaden, Landkreise Bergstraße, Darmstadt, Dieburg, Groß-Gerau, Hochtaunus, Main-Kinzig, Main-Taunus, Odenwald, Offenbach, Rheingau, Untertaunus
Staatliches Veterinäruntersuchungsamt Gießen	63 Gießen Marburger Str. 54	Land Hessen	Stadt Gießen Landkreise Dillkreis, Gießen, Limburg-Weilburg, Vogelsberg, Wetterau, Wetzlar
Staatliches Veterinäruntersuchungsamt Kassel	35 Kassel Druseltalstr. 61	Land Hessen	Regierungsbezirk Kassel
Niedersachsen			
Staatliches Veterinäruntersuchungsamt Braunschweig	33 Braunschweig Dresdenstr. 6	Land Niedersachsen	Verwaltungsbezirk Braunschweig, Landkreise Gifhorn, Lüchow-Dannenberg, Lüneburg und Uelzen, Städte Lüneburg und Wolfsburg (Regierungsbezirk Lüneburg), Landkreise Alfeld, Hildesheim-Marienburg, Holzminden, Peine, Stadt Hildesheim (Regierungsbezirk Hildesheim)
Staatliches Veterinäruntersuchungsamt Hannover	3 Hannover Eintrachtweg 17	Land Niedersachsen	Regierungsbezirk Hannover, Landkreise Hannover, Celle, Fallingbostel und Soltau, Stadt Celle (Regierungsbezirk Lüneburg)
Staatliches Veterinäruntersuchungsamt Oldenburg	29 Oldenburg i.O Philosophenweg 38	Land Niedersachsen	Regierungsbezirke Aurich und Osnabrück Verwaltungsbezirk Oldenburg

Office/Institute	Address	Financing Body	Administrative district
Staatliches Veterinäruntersuchungsamt Stade	216 Stade Heckenweg 6	Land Niedersachsen	Regierungsbezirk Stade, Landkreis Harburg (Regierungsbezirk Lüneburg)
Staatliches Veterinäruntersuchungsamt für Fische und Fischwaren Cuxhaven	219 Cuxhaven Schröderstr. 15	Land Niedersachsen	Land Niedersachsen
Tierärztliches Institut der Landwirtschaftl.Fakultät der Universität Göttingen	34 Göttingen Groner Landstr. 2	Land Niedersachsen	Landkreise Duderstadt, Einbeck, Göttingen, Hann. Münden, Northeim, Osterode und Zellerfeld, Stadt Göttingen (Regierungsbezirk Hildesheim)
Nordrhein-Westfalen			
Staatliches Veterinäruntersuchungsamt Arnsberg	577 Arnsberg Zur Taubeneiche 10-12	Land Nordrhein-Westfalen	Regierungsbezirk Arnsberg
Staatliches Veterinäruntersuchungsamt Detmold	493 Detmold Berliner Allee 1	Land Nordrhein-Westfalen	Regierungsbezirk Detmold
Staatliches Veterinäruntersuchungsamt Krefeld	415 Krefeld Deutscher Ring 100	Land Nordrhein-Westfalen	Regierungsbezirke Düsseldorf und Köln
Staatliches Veterinäruntersuchungsamt Münster	44 Münster von-Esmarch-Str. 12	Land Nordrhein-Westfalen	Regierungsbezirk Münster
Rheinland-Pfalz			
Landesveterinäruntersuchungsamt	54 Koblenz Blücherstr. 34	Land Rheinland-Pfalz	Gebiet des Landes Rheinland-Pfalz
Saarland			
Staatliches Veterinäruntersuchungsamt Saarbrücken	66 Saarbrücken Hellwigstr. 8-10	Land	Gebiet des Saarlandes
Schleswig-Holstein			
Veterinäruntersuchungsamt Schleswig-Holstein	235 Neumünster Max-Eyth-Str. 5	Land Schleswig-Holstein	Gebiet des Landes Schleswig-Holstein

Working Party of Experts on Chemicals in Foodstuffs

At its 22nd meeting on 23/24 January 1974 in Berlin the Working Party of Experts on Chemicals in Foodstuffs of the Länder and the Federal Health Office drew up the following statement (see Federal Health Gazette 5 (1962) 208; 9 (1966) 93 and 304; 10 (1967) 525; 14 (1971) 198; 15 (1972) 123; 16 (1973) 104; 303 and 358; 17 (1974) 290).

Is ginseng a taste-producing substance within the meaning of Article 4(a)(2) of the Foodstuffs Law.?

Ginseng root and extracts produced from it should be regarded as "foreign substances" within the meaning of Article 4(a)(2) of the Foodstuffs Law. Although there is a definite taste, this is non-specific and negligible and does not justify classification as a taste-producing substance. In addition, these substances are mainly consumed in the Federal Republic of Germany because of their medicinal (tonic) effect and not for their taste properties.

ANNEX 4

List of public health laboratory services and corresponding institutions in the Federal Republic of Germany

	Place	Destination	Financing Body	Address
1	Aachen	Inst.f.med. Mikrobiol. u. MU-Stelle	Land	51 Aachen Goethestr. 27-29
2	Aurich	MUA	Land	296 Aurich Luchtenburger Weg 24
3	Berlin	Landes-MUA	Land	1 Berlin 41 Rubensstr. 111
4	Berlin	MUA I	Land	1 Berlin 65 Augustenburger Platz 1
5	Berlin	MUA II	Land	1 Berlin 19 Fürstenbrunner Weg 3
6	Berlin	MUA III	Land	1 Berlin 47 Juchaszweg 1
7	Bielefeld	Hyg.-bakt.Inst. u. MUA	Stadt	48 Bielefeld 1 Jakobuskirchplatz 3
8	Bochum	Bakt.-serolog.Inst.	Stadt	463 Bochum Westring 28-30
9	Bonn	Inst. f. med. Mikrobiol. u. MU-Stelle	Land	53 Bonn Venusberg
10	Braunschweig	MUA	Land	33 Braunschweig Hallestr. 1
11	Bremen	Hygiene-Institut	Land	28 Bremen St. Jürgenstr.
12	Darmstadt	MUA	Land	61 Darmstadt 2 Wilhelminenstr. 2
13	Dillenburg	MUA	Land	634 Dillenburg Wolframstr. 23
14	Dortmund	Hygiene-Institut	Stadt	46 Dortmund Hövelstr. 8
15	Duisburg	Inst.f.Labor-Med.	Stadt	41 Duisburg Pulverweg 39
16	Düsseldorf	Landes-MUA	Land	4 Düsseldorf Auf'm Hennekamp 70
17	Düsseldorf	Inst.f.med.Mikrobiol. u. Virol. u. MU-Stelle	Land	4 Düsseldorf Moorenstr. 5

*Bakt.U = Bakteriologisches Untersuchungs...	(Bacteriological inspection.....)
LUA = Landesuntersuchungsamt	(Landinspection office)
MU = Medizinaluntersuchungs...	(Public health .....)
MUA = Medizinaluntersuchungsamt	(Public health laboratory service)

Place	Designation	Financing Body	Address
18 Erlangen	LUA Nordbayern, Fachbereich Med.	Land	852 Erlangen Eggenreuther Weg 43
19 Eschweiler	MU-Stelle	Land	518 Eschweiler Parkstr. 2
20 Essen	Inst.f.med.Mikrobiol. u. MU-Stelle	Land	43 Essen Hufelandstr. 55
21 Frankfurt	Inst.f.med.Mikrobiol. u. MU-Stelle	Land	6 Frankfurt Paul-Ehrlich-Str. 40
22 Freiburg	Hygiene-Institut u.MUA	Land	78 Freiburg Hermann-Herder-Str. 11
23 Fulda	MUA	Land	64 Fulda Marquardstr. 31
24 Gelsenkirchen	Hygiene-Institut	Verband	465 Gelsenkirchen Rotthauser Str. 19
25 Gießen	Hygiene-Institut u. MU-Stelle	Land	63 Gießen Friedrichstr. 16
26 Göttingen	Hygiene-Institut u. MU-Stelle	Land	34 Göttingen Kreuzbergring 57
27 Hamburg	Hygiene-Institut u. MUA	Land	2 Hamburg 36 Gorch-Fock-Wall 15-17
28 Hannover	MUA	Land	3 Hannover 91 Auestr. 30
29 Heidelberg	Hygiene-Institut u. MUA	Land	69 Heidelberg Thibautstr. 2
30 Homburg	Hygiene-Institut u. MU-Stelle	Land	665 Homburg/Saar Landes-Krkh., Bau 5
31 Karlsruhe	Zentral-Labor	Stadt	75 Karlsruhe Moltkestr. 14
32 Kiel	Hygiene-Institut u. MUA	Land	23 Kiel Brunswiker Str. 2-6
33 Koblenz	MUA	Land	54 Koblenz Neverstr. 4-6
34 Köln	Hygiene-Institut u. MU-Stelle	Land	5 Köln 41 Goldenfelsstr.21
35 Krefeld	Hygiene-Institut u. MUA	Stadt	415 Krefeld Lutherplatz 40
36 Landau	MUA	Land	674 Landau Bodelschwinghstr. 19
37 Lübeck	MUA bei der med. Hochschule	Land	24 Lübeck Ratzeburger Allee 160

Place	Designation	Financing Body	Address
38 Lüneburg	MUA	Land	314 Lüneburg Wilschenbrucher Weg 6
39 Marburg	Hygiene-Institut u. MU-Stelle	Land	355 Marburg Pilgrimstein 2
40 Menden	Zweiginstitut des Hyg. Inst. Gelsenkirchen	Verband	575 Menden Galbreite 22-26
41 Moers	Bakt. U.-Amt	Kreis	413 Moers Goethestr. 1
42 München	LUA Südbayern, Fachbereich Med.	Land	8 München 19 Lazarettstr. 62
43 Münster	Landes-MUA	Land	44 Münster von-Stauffenberg-Str. 36
44 Münster	Hygiene-Institut u. MU-Stelle	Land	44 Münster Westring 10
45 Nürnberg	Hygiene-Institut	Stadt	85 Nürnberg Flurstr. 17
46 Oldenburg	Hygiene-Institut	Land	29 Oldenburg Huntestr. 12
47 Osnabrück	MUA	Land	45 Osnabrück Alte Poststr. 11
48 Regensburg	LUA Nordbayern Fachber. Med., Außenstelle	Land	84 Regensburg Landshuter Str. 22
49 Saarbrücken	Staatl. Inst. f. Hyg. u. Infekt.-Krankh.	Land	66 Saarbrücken Malstatterstr. 17
50 Siegen	Zweiginstitut des Hyg. Inst. Gelsenkirchen	Verband	59 Siegen Wichernstr. 44
51 Stade	MUA	Land	216 Stade Heckenweg 4
52 Stuttgart	Landes-MUA	Land	7 Stuttgart-N Azenbergstr. 16
53 Stuttgart	Hygiene-Institut	Stadt	7 Stuttgart 1 Hohestr. 28
54 Trier	MUA	Land	55 Trier Maximineracht 11 b
55 Tübingen	Hygiene-Institut u. MUA	Land	74 Tübingen Silcherstr. 7
56 Wiesbaden	MU-Stelle	Stadt	62 Wiesbaden Schwalbacher Str. 81

Place	Designation	Financing Body	Address
57 Wuppertal	Hygiene-Institut	Stadt	56 Wuppertal-Barmen Heusnerstr. 40
58 Würzburg	LUA Nordbayern, Fachbereich Med., Außenstelle	Land	87 Würzburg Luitpoldstr. 1

Modern systems of quality monitoring used by official departments

C. CASTANG - Chef du Service de la Répression des Fraudes, et du Contrôle de la Quality, Paris

Introduction: The activity of quality monitoring

Inspection of documents
1. Nature of the documents scrutinized
2. Powers of the testing officials

Second-tier monitoring
1. Checking the internal monitoring in undertakings
2. Checking the certification of products

Production monitoring
1. The importance of production monitoring
2. An example: delicatessen products

Organoleptic tests
1. Organoleptic properties of foodstuffs
2. Sensory analysis: a means of evaluating organoleptic properties
3. The conditions of sensory analysis
4. Results and limits of sensory analysis
5. The use of sensory analysis

Direct or visual hygiene checks
1. Aspects of hygiene in the preparation of foodstuffs
2. Health aspects of the products proper

Advertising control
1. Voluntary preventive control
2. Compulsory preventive control

Direct monitoring of labelling.

INTRODUCTION: THE ACTIVITY OF QUALITY MONITORING

Quality control is tending to become an autonomous activity, a speciality with its own rules, terms of reference and methods. It is becoming more complex and authoritative during its development.

The principles are as follows:

- the test must be effective;
- the test must be fair, i.e. errors of interpretation mus be eliminated, and
- the test must be easy in order to be accepted.

It is clear that conventional testing, which is based on sampling, does not always conform to the above conditions.

- The laboratory can provide only data which can be obtained by analysis; and this in turn is dependent on scientific knowledge, laboratory equipment and suitable specialists.
- The laboratory evaluates a sample; but is this sample representative? Is its composition abnormal? Statistical checks would be the answer, but are they feasible for public testing officials?
- To be reasonably efficient, the analysis must be repeated. This entails the risk that the person concerned may regard the repetition as a sign of suspicion or feel it to be a nuisance.

All these reasons show that modern testing departments are right in trying to develop new techniques.

INSPECTION OF DOCUMENTS

Documentary inspections are all those involving detailed examination of the various book-keeping, commercial and technical documents of the undertaking.

1 - Nature of the documents scrutinized

- Book-keeping documents

These are mainly annual accounts and can be used for accurately evaluating the stocks of goods at the beginning or end of the accounting period.

The exact composition of the product can be found by examining the analytical accounts, more particularly the "cost-price" lists.

- Commercial documents

These include invoices recording purchases (starting materials, additives, other materials, cleaning products) and sales of finished products, order slips, delivery notes, correspondence, specifications defining the properties of the products bought or sold, and advertising.

- Technical documents for the efficient operation of the undertaking, e.g.:
- manufacturing lists (showing the composition of the products);
- records of certain technological processes (temperature curves and auto-analysers); and
- analysis reports.

2 - Powers of the testing officials

Documents which are statutorily required (e.g. annual accounts, invoices, certificates of transactions, etc.,) must be submitted to the inspectors on request. In the event of refusal, penalties are imposed in accordance with the Act of 18 July 1912 (Obstruction of Officials) or Articles 13 of the Act of 1 August 1905 in application of Article 6 of the Decree dated 22 January 1919.

The same applies to other, optional documents if the inspector learns of their existence.

In all cases, the right is one of consultation and not of seizure (in accordance with the case law of the Appeal Court).

SECOND-TIER MONITORING

Second-tier monitoring is designed to check the existence, authenticity and results of tests made either by the undertaking on this own products or by an independent organization on the products of a number of undertakings in order to certify the quality.

Second-tier monitoring relates mainly to the documents deriving from internal testing by the undertaking. The object is always to judge the manner of operation of the undertaking (e.g. the existence of a test, the methods used, the frequency, results and interpretation).

1 - Checking the internal monitoring in undertakings

Undertakings may themselves carry out three types of internal monitoring, the results of which can be subsequently evaluated by the testing officials.

- Analytical testing by a factory laboratory, a group laboratory attached to the head office or an external private or public laboratory.

In this manner, undertakings can check raw materials (their nature, composition and hygienic qualities) and the finished or semi-finished prodcts.

- Checks are made on certain obligatory paramaters such as the moisture content of a delicatessen product, the fat/dry ratio of a cheese, the true proportion of a constituent shown on the label, the phosphates content of a delicatessen product, and the level of microbial contamination.
- Tests are made of the behaviour of the product, variations in moisture content and suitability for preservation.

- Direct internal checking is done at the time of manufacture or packing, if required, using instruments which are simple but give results within a short time. Checks are made of quantities and certain quality criteria such as:
- the density of a covering syrup or juice, the size of preserved vegetables, the presentation of the product (dressing of vegetables, presence of foreign substances or non-standard constituents, evaluation of the amounts of covering fat or bacon in various meat products).

- Internal testing by the use of contractual procedures. Numerous undertakings prepare "specifications" containing their requirements for the constituents, additives and preparation of the raw materials which they need.

The specification can be used to find the level and nature of the undertaking's requirements, and thus frequently gives very accurate descriptions of the raw materials.

It may thus be found that:

- a particular undertaking uses a number of different kinds of fat indiscriminately and the fats are mixed with antioxidants or emulsifiers, which should be shown on the label of the final product, or
- a particular apéritif biscuit includes "onion flavour" containing sodium glutamate and powdered potatoes, which in turn contain BHA, sodium bisulphite and glycerol monostearate.

2 - Checking the certification of products

The function of the official inspection departments is to check the proper application of the technical regulations for preparing the product in question, and in general to check the efficiency of the approved system.

The check relates to the operation of the certification system and the certifying body and to the manner of production.

For example, in the case of poultry having a certificate of quality, the supervisory official must check a number of matters, namely:

The operation of the certifying body

. Is the frequency of the internal inspections sufficient? Are the results of these inspections faithfully recorded? What action do they lead to?

. Are the partners in the production or sales chain those who have been formally accepted during the approval procedure? (This relates to the problem of sub-contracting, e.g. for slaughtering poultry.)

The method of breeding

. Is the strain the agreed one? There are frequent instances when strains are substituted and problems result, including the difficulty of complying with the method of feeding during a given breeding time, which leads to obligatory rationing of the animals or premature slaughtering. Next, a check is made on the hatchery operators and the stock breeders, the certificates of origin being examined and compared with the commercial documents.

. Is the breeding time complied with? Are sanitary gaps left between the breeding of two herds? To this end, a test must be made on the production planning of the certifying body and unexpected visits must be made to farms which are suitably chosen according to the stage in the breeding period.

. A check must be made to see whether the feeding and prophylactic operations are properly performed (e.g. by visiting farms, checking the formulae at the food manufacturer's premises and sampling and analysis if required).

. Are the breeding conditions complied with - e.g. the area of grass, the lighting and equipment (ventilation) of the breeding establishments and the density of breeding?

The method of preparation or manufacture

. Is the farm equipment satisfactory (in particular with regard to hygiene)?

. Is the production process complied with? In practice, this can be established by directly checking the process and by indirect checks.

Labelling and advertising

PRODUCTION MONITORING

1 - The importance of production monitoring

Knowledge of a product may also be obtained mainly from the assessment which the inspection departments can make the manufacturing undertaking.

It was for this reason that production monitoring was established in France in 1963.

Production monitoring is a preventive check which supplements conventional legal controls. It has led to the establishment of relations of mutual trust with manufacturers, these relations being informal but very efficient.

When the tests are being made, the maximum information about the undertaking, its legal structure, organization, its products (list, volume, circulation), the methods of manufacture and the internal test conducted by the firm, are collected and filed.

The production chain and raw materials can be sampled in addition to the observations made and the information collected.

The sampling cannot result in litigation. The results are communicated to the undertaking, which can compare them with its own results.

This does not prevent conventional statutory tests from being conducted on the same goods at the retail stage. In cases of infringement, the information collected over a long period during production tests will make it easier to prepare files.

In addition, the direct contact with the skilled workers and the resulting information can be used to avoid a number of minor irregularities, particularly in labelling.

Finally, the monitoring official himself benefits from the contacts, in that he is better informed about questions of food technology.

2 - An example: delicatessen products

The case of a conventional check

The case of a laboratory which is analysing a delicatessen sample, the product is presented as follows:

Delicatessen = moisture content + proteins + lipids + glucides + minerals.

The moisture content is limited by the HPD (= moisture over defatted product).

Proteins are not subject to quantitative but only to qualitative rules (e.g. the ratio of collagen to proteins).

Phosphates (P_2O_5), nitrates and nitrites are also limited by law and are conventionally added.

These analyses may lead to insufficient or even incorrect conclusions owing to the possibilities of camouflage by certain techniques.

1) The HPD will be more favourable to the manufacturer if the glucide ratio is raised. This results in the sometimes excessive use of glucide fillers or drying agents.
2) The proportion of glucides fluctuates, since fermentable sugars vary with time.
3) Unless special, complex measurements are made (e.g. histological and serological), it is impossible to determine the origin of the proteins, e.g. meat, dairy produce, eggs and vegetables.

It was thought that the collagen/protein ratio was the ultimate weapon in limiting the illicit addition of low-value raw materials (e.g. pork rind, tendons and aponeuroses), but it has stimulated the imagination of certain manufacturers. There has been an increased use of pork rind and caseinate emulsions in which the collagen/protein ratio is less than the standard, so that they can be added with impunity.

It is impossible by analysis to determine the quantity of high-grade raw materials (e.g. liver and kinds of meat given on the label).

The case of production monitoring

First, it is essential to list the raw materials and additives kept in the undertaking.

The real composition of the prodcts can be ascertained from the observations made at the storage and manufacturing sites and an examination of the manufacturing lists, provided that the check is made with the required knowledge and skill. It is possible to evaluate the nature and quality level of the constituents, the use of various additives, and their technical and economic importance in manufacture.

For example, for each article it is possible to find out the following:

- the amounts of lean meat and/or offal (proportion and species of animal), fat, jelly, water (or ice), glucide binders or fillers (starch, starch derivatives lactose), protein binders (egg-white, plasma, milk derivatives, vegetable protein concentrates, etc.), prowdered skimmed milk emulsiifers (soluble lactoproteins), salt, spices, polyphosphates and other additives.

During analysis, these various constituents occur in one or more of the protein, glucide or lipid fractions, usually without any possibility of determining the source. A well-devised factory check, on the other hand, can immediately show and enable a first judgment to be made on:

- the proportions of fat and lean meat, the presence or absence of a sufficient amount of high-quality constituents (game, liver, truffles, etc.) or of second-class constituents (mechanically crushed or "superfine" meat, small game, pork rind), and;
- the amount, if any, and the justification for the presence of, powdered milk, various glucide or protein fillers, or additives such as lactoproteins which should be confined to emulsions; during analysis such constituents cannot be distinguished from powdered milk, the use of which has not the same justification.

If necessary, these direct observations can be supplemented by sampling and action by the laboratory, which will be guided in its research and can confirm any irregularities in the composition of the products.

There is thus a complementary relation between the two forms of testing; the results, besides being cumulative, have a synergistic effect. Another advantage of this kind of action is that the workers and the inspecting personel exchange information and add to one another's knowledge.

5)

ORGANOLEPTIC TESTS

1 - The organoleptic properties of foodstuffs

Conventional methods of analytical testing (i.e. chemical, physical or microbiological) can show whether products are harmless and conform to established standards but are not always sufficient to determine their organoleptic properties and their quality, which are indispensable conditions for the products to be accepted by the consumer.

Organoleptic properties, which are physical or chemical properties but are perceived by the sense organs, are very important in the choices of food and the satisfaction received by the consumer.

According to the Association Française de Normalisation (AFNOR), the word "organoleptic" denotes all those properties of a product, food or drink included, which stimulate the various sensory receptors involved, before, during and after consumption.

In food technology it has become necessary to check the organoleptic properties of food in order to find out how appetizing the food is and how it will be received by the consumer. The subject is thus of appreciable commercial importance.

With regard to the inspection departments, organoleptic tests have become an important aid in the technical or scientific appraisal of the quality of a product with respect to its definition, presentation, labelling, packing, conditions of preservation, distribution and sale. It is increasingly tending to become the primary method used in quality control.

In addition, an organoleptic examination of the articles under test can rapidly show any irregularity (such as oxidation or a strange flavour), so that a more efficient test procedure can be employed.

2 - Sensory analysis: a means of evaluating organoleptic properties

Sensory analysis can be defined as "the set of methods whereby the sense organs perceive a certain number of properties of objects or food (DEPLEDT). It can be illustrated as follows. If we say that two drinks differ in taste, smell or colour, we are making objective statements. However, the appreciation or enjoyment of these drinks is sensory and subjective. Incidentally, "subjective" should not be confused with value judgments. The statement that a food is highly sugared is subjective, whereas the statement that it is too sugary is a value judgment.

Sensory analysis is peculiar in that it is carried out by an observer who is both the measuring apparatus and the interpreter. This observer must be able to separate the domain of interpretation from the domain of illusion and imagination, and this requires personal gifts and continuous education and training.

Sensory analysis can be used to define the quality of food products or the properties of non-edible products. It can be used either for testing or for research. It is useful for defining a product, checking a raw material, ensuring that the quality of articles remains constant, classifying food, checking the efficiency or harmlessness of packing, measuring the shelf life, etc.

3 - The conditions of sensory analysis

Sensory analysis has the following two aspects:

- The reception of data, which are obtained by dint of adequate sensitivity and keenness of perception, although an attempt is made to perceive them

by methods permitting evaluation, measurement and appreciation, i.e. by "sensory metrology". To this end, AFNOR have already proposed standards relating to keenness of taste, the vocabulary of ensory analysis, comparison tests on pairs of articles, the places used for sensory analysis, the glasses used for wine-tasting, etc.

- The cerebral response, which is intellectual by nature but may be influenced by individual behaviour.

Sensory metrology has criteria relating mainly to sampling, since only part of the batch under examination can be evaluated. There are also certain indispensable requirements. Tasting must be done:

- in the same place;
- at the same time and for the same length of time, and;
- in an identical manner.

With regard to the cerebral response, it is necessary to test the sensitivity or acuteness of the observer's thresholds, i.e. the following:

- the perceptibility threshold;
- the identification threshold, and;
- differential thresholds, i.e. the smallest quantitative value of a sensory stimulus which gives rise to a perceptible difference in intensity of sensation.

It will thus be possible to make corrections from one observer to another or give the observer a correction coefficient for a particular test.

In its most spectacular form, a sensory analysis session will involve 10 to 20 persons, each in a specified place. The following strict conditions must all be observed: absence of noise, moderate room temperature, absence of external smells, similar surroundings and equipment for all the judges, similar standard presentation of samples, and a moderate number of samples to avoid sensory fatigue.

The most efficient tests, which are preferred by the inspection departments in France, appear to be the following:

a) Marking and notation tests.

The judges use the same methods of transcription and marking. Usually, marks are given in a structured scale of value with qualifying remarks, e.g. in the sensory analysis of pasteurized butter.

Marks are given for smell, taste, appearance, texture and distribution of water, but with qualifying remarks, e.g.:

Smell

. Delicate, fresh, perfectly perceptible	3
. Without neutral odour, slightly burned or acid	2
. Burned, malted, acid, yeasty	1
. Rancid	0

Taste

. Pure, fresh, pleasant taste	10
. Same qualities but less perceptible, without any defects	9
. Natural, neutral, flat, flavourless	8
.....	
. Cheesy taste, metal oxide	5
Rancid, greasy	5

b) Analytical and descriptive tests

A quantitative or qualitative description is given of one or more sensory attributes. The intensity of each of these specific attributes of the product is marked according to a fixed scale (cheese) or described qualitatively (powdered milk).

4 - Results and limits of sensory analysis

Data supplied by sensory analysis can be treated mathematically, depending on its importance and the manner in which it is expressed. Use may even be made of multidimensional analysis, when a large number of factors are involved (e.g. the geographical and social origin of the taster, his age, sex and sensory sensitivity).

In France the organoleptic attributes of pasteuized butter are collected on punched cards and processed by computer.

The results obtained by sensory analysis have been made the basis of certain wide-ranging observation:

- the subjective organoleptic quality, as perceived by the individual, is felt differently at the group level;
- the organoleptic quality expressed by the group can be used to judge tendencies and to establish ranges of quality level;
- the qualitative estimates are constant, irrespective of the social group or occupation involved, provided the judges are competent, and;
- agreements or disagreements can be analysed and interpreted in most cases.

This latter remark indicates the limits to organoleptic appreciation, which were partly set out earlier, with a few brief explanations. The weakness of sensory analysis is that it is linked to human behaviour and the operations cannot be made scientifically rigorous, even if multiplied. The progress in sensory physiology will, we hope, reduce the difficulty of analysis, but analysis cannot ever be made simpler by making tastes uniform.

5 - The use of sensory analysis

Sensory analysis is now used in France by law as an additional examination for certain food products. The following are three examples:

- Wine and liqueurs - French and EEC law has introduced the notion of "tasting", which is performed on certain wines before sale. The notion has become increasingly important and the method, though purely subjective, has gradually become uniform. Tasting is essential for basic-grade French wines, higher-quality wines and, of course, for wines from designated regions. This tasting, which may result in down-grading, involves all the senses, both separately and together.
- Coffee - The regulations lay down certain criteria which can be checked only by the senses, e.g. the number of defects determined by visual examination, or defects of taste. The flavour of coffee is at present tasted by professionals, but is not yet officially laid down. It is certain, however, that what ought to be tested is the quality of the product as consumed, since even a standard raw material does not always give satisfaction.
- Spices and flavours - A visual examination will show the nature of the raw materials used, more particularly in the case of whole or powdered mixtures, and detect irregularities (foreign substances) or adulteration (fillers, etc.).

DIRECT OR VISUAL HYGIENE CHECKS

These macroscopic hygiene checks have not been classified among organoleptic checks since they are based on established technical or scientific criteria. However, the frontiers are movable, as in the case of organoleptic tests; the rancidity of butter or the attributes of curds may be judged one way in Europe and another way in Africa or Asia.

"Macroscopic" hygiene checks relate firstly to the preparation of the product and to the environment insofar as it can cause adverse effects or contamination.

A particular sterilized product (such as milk) may have been collected under deplorable hygienic conditions; when sterilized, it will be completely harmless but of poor quality (organoleptically).

Macroscopic hygiene checks precede the associated conventional biochemical, physical or bacteriological investigations. They follow rules relating to a precise, well-ordered method, providing a first line of defence against harmful effects. The rules relate, for example, to:

1 - Aspects of hygiene in the preparation of foodstuffs

- Aspects of hygiene in breeding and milking.
- Monitoring the treatment of crops.
- Aspects of hygiene in agricultural food factories, offices, equipment and material.
- Personnel hygiene (gloves, caps, aprons), wash-stands, cloakrooms, lavatories, etc.
- Aspects of hygiene in the storage, sale and transport of foofstuffs.
- Checking the refrigerator circuit, etc.

2 - Health aspects of the products proper

The most perishable products are foodstuffs of animal origin. The test criteria vary with the foodstuff and involve the following:

- the shape, volume, appearance (swelling of cheeses and of certain prepacked products, deformation of diseased or stale fish, leaky, swollen or broken food tins), and
- the colour and smell; dull colour of fish; vinegary smell of confectionary, custard; non-homogeneous regions in products which have been frozen, thawed and refrozen, e.g. ice-cream, or which have been melted and resolidified, e.g. chocolate; multiple soiling of milk with blood, juice and dust, or of egg products with shells, feathers, excreta, etc.

There is a long list of patient, careful enquiries which the health officer must carry out in order to protect public health.

ADVERTISING CONTROL

Advertising has the dual purpose of informing, i.e. of making trade-marks, goods and services known, and of convincing, i.e. of making people buy. It is a relatively recent mass phenomenon, a controversial subject and always in the news. In 1977 French advertising represented an investment of almost 14 thousand million francs, or 0.82% of the national income, still a relatively low percentage compared with countries such as the USA, the UK or the Federal Republic of Germany. Advertising is, of course, a wide crossroads at the intersection of various economic, commercial, social and human sciences. Since it is a communications technique, it is also one of the largest users of the graphic arts, such as design, photography, typography and the cinema.

Because of its aims, means and methods, advertising may distort the conditions of fair competition and mislead the consumer. For this reason, a check has to be made on allegations, statements or advertising layouts in order to eliminate deceptive advertisements, untrue slogans or, in general, advertising which is false or misleading.

Advertising, which is born of the imagination and changeable by nature, is naturally transient and should therefore preferably be controlled by preventive means.

The checks are made by the public authorities and also by the advertisers themselves. Advertisers, advertising agents and media, of course, have an understandable interest in ensuring that the public has some confidence in advertising. For this reason, advertisers' associations such as the Bureau de Vérification de la Publicité (BVP) have attempted to discipline their profession and combat the abuses to which it leads. To this end, they refer to an international code of fair practice in advertising, established by the International Chamber of Commerce (ICC), based on the principle that advertising must be decent, true, fair and in conformity with the laws of the country in which it is practised.

The basic French Act on the subject is relatively recent (27 December 1973) and is both a modern and a convenient weapon, having dissuasive effects which fully support a priori checks. The advertiser is obliged to prove his statements, and a flexible, wide definition of offences, as laid down in Swedish law, is combined with additional penalties as stipulated in the USA, Belgium or Switzerland - i.e. corrective announcements, rapid cessation of the advertising, and publication of the judgement. The main maximum penalties have also recently (10 January 1978) been increased to two years' imprisonment and a fine of 250 000 francs, i.e. up to 50% of the expenses of the advertising constituting the offence.

This French Act has been the main basis of the recent proposal for a Council Directive (European Communities) relating to the approximation of the laws, regulations and administrative provisions of the Member States concerning misleading and unfair advertising.

In the four years during which the Act has been in force, the restrictive checks have resulted in about 2000 court actions and 1300 decisions. Preventive checks, on the other hand, play an obviously important part in effectively protecting the consumer and defending fair competition in products. Probably several thousand checks are made per year.

There are two main types of preventive check made by public authorities. Each has two aspects:

1 - Optional preventive control

On the initiative of the advertisers

A check is made for the purpose of obtaining information. Advertisers, advertising agencies or legal practices apply to the government for advice before publicity campaigns. The number of checks is in proportion to the dissuasiveness of the law.

For example, a firm wished to advertise sweets under a trade mark containing the word "fruit" although the sweets contained certain artificial flavours.

In this case, however, the Government does not accept the use of the term "fruit" unless the flavour comes from natural substances in fruit. Consequently, the firm had to choose between dropping the word "fruit" from its trade mark or making exclusive use of natural flavours.

In another case, it was required to know the extent to which reference to freshness was acceptable in the sale of poultry. According to the regulations three conditions must be observed before a product is called fresh:

- when the product is sold, it must have the same organoleptic and hygienic attributes as it had during manufacture or production;
- it must not have been preserved by chemical products or physical processes other than refrigeration and pasteurization in certain cases, and;
- the packaging must bear a limiting date which in no case may exceed 21 days.

On Government initiative

The main case is that where abuses have been found in certain sectors and the Government contacts the relevant associations so that they can inform their members of the existing rules. Similarly, when advertising is clearly not false or deceptive in the legal sense but still open to criticism because it is ambiguous, the public authorities send a formal notice or summons to the advertisers so that changes can be made in the future.

For example, advertising for a beer gave the impression that it was of Irish origin, in view of the illustration and certain terms used in the text. The advertisers were required to provide a visible, legible statement indicating that the beer was really brewed in France by a French manufacturer.

2 - Compulsory preventive control

These checks are made by mixed-membership committees including public authority representatives, advertisers and consumers. Several thousand proposed advertisements are examined annually by the following two official committees:

- the Consultative Viewing Committee, instituted by the Régie Française de Publicité (RFP) for radio and television advertising controlled by the French State, which has a television monopoly, and;
- the Advertising Control Committee, which advises the Minister for Public Health before granting advertising permits, which are necessary not only for drugs and contraceptives but also for "products" presented to the public as beneficial to health (e.g. mineral waters, certain cosmetic and hygiene products and certain dietary or food products).

The Régie Française de Publicité (French Advertising Authority)

The extent of checks made at this level relates not only to the number of proposals studied or viewed (2231 scenarios in 1977 and 1683 films representing a total of 1 165 010 724 minutes of broadcasting, but also to the audience and to the impact of television and to the repercussions which these checks have on the other media. One of the main advertising principles is that repetition is equated with reputation ; consequently, slogans, signature tunes

and themes and illustrations accepted on television - frequently the basic medium - are afterwards shown on the other media (e.g. the press, hoardings, cinema and radio). Advertisers, therefore, would be very unwise to disregard the advice given on television advertising since otherwise they will be liable to prosecution if they use other media for advertising refused by the RFP. Such was the case of a widely used dairy trade mark and its product "amour de fruit", which could not be called "compote" since it contained added water and additives and was thus classified under fruit desserts

Numerous examples could be given of the continuous work performed by the RFP for almost 10 years.

- A number of trade marks were rejected owing to their deceptive nature, e.g. "QUICK CREME" (for products not containing cream) was altered to "JACQMINE", and "FERME DU MANET" (for an industrial cheese) was replaced by "AIL et FINES HERBES de GERVAIS".

- Other examples:

  • The advertisement for a branded cheese, shown as coming from Provence (whereas in reality only the herbs used for flavouring the product came from this region) had to carry the overprint "manufactured in Anjou". The correction, of course, had to be carried by all the media.

  • An advertiser wished to sell in France a sandwich spread imported from Italy under a trade-mark including the word "CHOCO" whereas the composition consisted mainly of lean cocoa, fruit pulp and an additive not permitted for this kind of product. According to the French regulations, this spread could not be sold under the existing trade mark, since it contained not chocolate but merely a small amount of lean cocoa. Consequently, the advertiser had to change the composition of his product (by introducing chocolate and leaving out the prohibited additive) before selling it under the existing trade mark and advertising it in France.

The Ministry of Health Advertising Control Committee

This operates on the same round-table principle as the RFP but examines proposals for all media, provided health is involved.

Its work, like that of the RFP, has resulted in the preparation of interpretative or information memoranda which are made available to advertisers and advertising agencies. The director general of the State-owned company has made an indirect approach via a circular which supplements the television and radio advertising regulations and combines all the rules which have been progressively applied since 1968 in order to prevent the spread of false, unfair or ambiguous advertising.

At the Health Department, guidelines have been prepared on mineral waters and cosmetic and hygienic products presented as beneficial to health. A third memorandum is in preparation with regard to dietary products. The following are examples from these memoranda:

- the conditions of use of the terms "natural", "pure" and "balanced" for mineral waters, and;
- a list of words considered to refer to diseases or physiological disorders and therefore reserved for drugs. The list relates to the following categories: hair products, slimming products, treatment products, and products for the face, legs and bust.

This preventive system, which has been set up by both the advertisers (BVP) and the public authorities, largely eliminates abuses and consequently eliminates the main criticisms levelled against advertising in general. The actions of the RFP have been particularly useful and have succeeded, amongst other things, in causing television advertising to be well accepted by French viewers.

In addition, preventive checking of advertising helps to meet the main objective pursued by the Government, that of preventing the spread of false or unfair statements likely to harm consumers and honest competitors.

DIRECT MONITORING OF LABELLING

The main purpose of labels on foodstuffs is to inform the purchaser about the nature, composition, attributes and special properties of the food.

Some of this information is supplied voluntarily by the manufacturer for the purpose of information and promotion.

Other information is obligatory by law, i.e. it constitutes the minimum information required for making an informed purchase.

French labelling regulations date from 1972. Firstly, they state the information which must be given on the labels of prepacked food (i.e. name, composition, quantity, identification of a responsible manufacturer and, in some cases, the date after which the product must not be sold). The regulations also determine the manner in which this information must be provided.

The regulations also state in principle that no food may be sold except for what it really is, i.e. the information provided voluntarily by the manufacturer must not result in confusing the purchaser.

Consequently, the monitoring of food labels is extremely important for the consumer. It involves checks which, as in the case of advertising, can be made beforehand or afterwards.

The official making the checks intervenes beforehand by advising the manufacturer when preparing the labels, either after the manufacturer has voluntarily submitted proposed labels or by making a production check as previously described.

Professional associations are also called upon to play an important part as intermediaries between the Government and the manufacturers.

Subsequent restrictive controls are based mainly on direct observation; sampling and analysis are unnecessary except to provide confirmation in certain cases.

In general, the control of labelling relates to the following points:

- the presence and legibility of all the obligatory information, such as the percentage of an ingredient mentioned in the name;
- the commercial name must be correct, sufficiently accurate and in conformity with the regulations or culinary use and tradition. To this end, the name has to be compared with the list of ingredients;
- checks are also made for the presence of prohibited additives, on whether the limiting date of sale has been passed, on whether the specified storage conditions have been complied with, and on the truth or ambiguity of the statements, which are also compared with other statements and in particular with the composition (e.g. in the case of a product described as pure and natural whereas its composition shows the presence of chemical preservatives).

Possibilities for international co-operation in the repression of fraud and infringements of food law

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1. Introduction

Before embarking on the substance of my paper, I should like to apologize in advance to delegates for presenting only a brief and incomplete report. I would simply add that, as everyone must be aware, my subject of possibilities for international co-operation in the repression of fraud and the punishment of offences against food regulations is very wide-ranging and virtually unexplored. I therefore had to decide to concentrate on a number of general problems without going into details and specific cases, which will have to be dealt with at a later stage.

Secondly, I should like to explain that in dealing with the repression of offences against the food regulations I have confined my remarks strictly to methods and procedures and have not touched on problems of legal substance concerning the regulations in force in Member States. In this connection, however, I might add that there now appears to be a very urgent need to produce a common definition of certain legal/scientific concepts which are used in the regulations of all Member States but not with the same meaning and scope. For example, the term "danger" can be understood and interpreted as meaning "possible source of injury", "possible source of danger" or "compliance with conditions encuring that a product will be harmless". And in this context, I would remind delegates that in Italy, under pressure from an informed and anxious public, a number of major administrative and legislative measures have been adopted or are under consideration, all based on the concept that any food product which is not known for certain to be completely harmless (so far as is known to science, of courst) shall be regarded as dangerous.

This, of course, involves preventive inspection, which therefore precedes the suppression and elimination at source of the too frequent risk that a product is found to be dangerous only after consumers have suffered from its injurious or dangerous effects. (This, for example, is what is being done very laboriously in Italy in the delicate case of bioproteins.)

In my view, therefore, preventive controls are much more important than subsequent punishment, and this is an area where international co-operation in the exchange of experience, scientific material and means of assessment is essential both for the protection of European consumers and in order to avoid economic distortions which would favour countries with fewer scruples.

2. The various forms of punishment. Penal sanctions

At present, offences against the food regulations are punishable by three kinds of penalty in Member States:

a) penal sanctions;

b) administrative penalties;

c) civil penalties.

For the purpose of this report, the third type can be ignored because any action taken in the matter has to be brought by an individual claiming material damage and in such cases the principles of private international law will naturally apply.

As regards penal sanctions and administrative penalties, this is not the place to explore the often substantial differences which exist in this respect between the members of the Community. It would, therefore, seem appropriate to adopt the concept defined in the Protocol to the draft EEC agreement establishing common regulations on penal measures to protect the financial interests of the Community where it is provided in para. 3 of Article 1 in Chapter I that the "term 'penal sanctions' shall also include penalties imposed by an administrative authority, provided there is a right of appeal to a judicial authority. The expression 'penal law' or any other expression in which the term 'penal' is used shall be interpreted accordingly".

This report is therefore confined to cases of offences which are punishable by law as defined above.

3. Possible cases

If, on the territory of one Member State, a breach of the regulations is committed by a producer from another country who has exported the offending product, there are three possible cases:

1) the offence is a breach of the domestic laws of both countries which have already been harmonized within the meaning of Article 100 of the Treaty setting up the EEC or of regulations, with immediate executive effect for the purposes of national law, adopted under the terms of para. 2 of Article 43 of the Treaty;
2) the offence is in breach of the domestic laws of both countries but these laws have not been harmonized within the Community;
3) the offence is a breach of the law in only one of the two countries.

Clearly, the first case raises the fewest problems. If, in fact, a food product is in breach of the harmonized legislation of two countries, separate criminal proceedings will be brought against the producer, importer and seller of the product in both countries and these proceedings will naturally be in accordance with national law and the penalties imposed will be those provided for under the terms of the domestic legislation in force at the place where the proceedings are brought.

The position is similar in the second case with the proviso that non-harmonization may give rise to problems if the penalties are not the same and the regulations for starting proceedings differ (on application or officially). As regards penalties, it can at once be observed, however, that the problem should be partly eliminated by the proposal already made that penal sanctions should also include penalties imposed by administrative authorities (provided there is a right of appeal through the courts).

The third case is the most difficult and may produce two different situations. The most frequent is, of course, the situation where the offence is a breach of the law in the importing country only, and not in the country where the food product is produced. But the opposite case is also possible and the offence would then have to be established through proceedings started by the authorities in the producing country alone.

4. General and particular problems

The best solution would clearly be complete harmonization of all national food laws together with identical penalties and procedures agreed at Community level. The Community would also have to devise uniform methods of analysis and inspection and to provide an appropriate system for exchanging information between the authorities of each State.

The first point to stress in every case is that a country which discovers that food products from another country are in breach of the regulations should duly inform the country of origin. In that case, if the fact constitutes an offence in both countries "the proceedings could be transferred" in accordance

with an arrangement already provided for under international criminal law. Under this procedure, the State under whose jurisdiction the offence was committed can request the State in which the accused person is resident (or the State on whose territory he is at the time) to proceed in the case in accordance with its own penal law and criminal procedures. Clearly this solution in no way prejudices the jurisdiction of Member States in respect of offences committed abroad; furthermore, it respects existing national legal systems to the fullest possible extent.

At this point, however, the problem may arise that Member States have different definitions of an "offence committed abroad".

For example, scrutiny of Italian legislation shows that under the terms of Article 6 of the Penal Code "the offence shall be considered as having been committed on the territory of the State if the act of commission or omission constituting the offence took place wholly or in part within that territory or if the occurrence resulting from the act of commission or omission took place within that territory".

For example, if a foreign producer exports adulterated or tainted foodstuffs to Italy and those foodstuffs are put on sale in Italy, the Italian legal authorities will bring a criminal action not only against the Italian vendors but also against the foreign producer (who, in accordance with Italian procedure, will be asked to elect defending counsel and domicile in Italy for the court proceedings).

In my opinion, therefore, the following action should be taken to prevent two sets of proceedings from being started:

1) the State which estatblishes that a foreign producer is in breach of the law should always inform the other State immediately;
2) the State which establishes that a foreign producer is in breach of the law should decide, in accordance with its own legislation, whether the offence was committed by the foreign producer on its territory or in another country and, in the latter case, should request the authorities in the second State to proceed against the producer in accordance with its national legislation;
3) the State should inform each other of the outcome of the proceedings and of any penalties imposed.

Clearly, if this is done, both States will be able to "recognize" the sentence and all its possible consequences (entry in criminal records, additional penalties, etc.). The real problem, therefore, is the case where an offence involving two countries is an offence in only one of them.

Clearly, the only way to solve this problem is by the harmonization of all national food laws and this is greatly to be desired.

5. Problem of jurisdiction

Another problem is that of determining which authority is competent to bring cases to the knowledge of the authorities in the other country. I believe that the best arrangement would be to work through the legal or administrative authority which is empowered under national law to investigate the case (cognizance ratione materiae) and has such jurisdiction for the place where the offence was reported (cognizance ratione loci).

This avoids lengthy administrative procedures and allows direct contact between the authorities dealing with the matter in the two countries, who may also be able to exchange further information with a view to better harmonization of effective legal action in the individual member countries.

6. Specific proposals

It is now possible to suggest in outline the terms of a convention which could be proposed to member countries for immediate adoption, pending complete

harmonization at Community level, which is the ultimate goal. Following the lines of the Protocol mentioned earlier on the subject of common regulations on penal measures to protect the financial interests of the Community, the basic principles might be as follows.

CHAPTER I

SCOPE OF THE CONVENTION

Article 1

The terms of the present Convention shall apply to all breaches of legislation and regulations laying down requirements in respect of the composition, packaging and labelling of food products.

Article 2

To be drafted: this article will define the precise meaning of the terms "food products", "composition", "packaging" and "labelling".

Article 3

For the purposes of this convention, the expression "penal sanctions" shall include penalties imposed by an administrative authority provided there is a right of appeal to a judicial authority.

The expression "penal law" or any other expression including the term "penal" shall be interpreted accordingly.

CHAPTER II

TRANSFER OF PROCEEDINGS

Article 4

Any Member State which establishes that an offence under the terms of Article 1 has been committed by a person from another country shall in all cases inform the said other country and, acting through the authority with territorial jurisdiction for the place where the offence is reported, may also transmit a request that proceedings be started to the State in which the accused person or one of the accused persons is normally resident or to the State in which the accused person or one of the accused persons is at the time, if it (the State which establishes the offence) considers that it cannot proceed directly against the accused person or one of the accused persons.

Article 5

Each Member State shall be competent to prosecute any offence covered by the terms of Article 1 in respect of which another Member State has asked that proceedings should be brought in accordance with the terms of Article 4.

Article 6

The provisions of the foregoing articles shall in no way limit the jurisdiction of each Member State in respect of legal proceedings, as provided by the terms of its own legislation.

Article 7

Each Member State shall give due consideration to requests for proceedings under the terms of Article 4. If the Member State to which such a request is addressed decides not to proceed or that it is unable to proceed, it shall at once inform the requesting State, through its competent authorities, stating the grounds for its decision.

Article 8

In a Member State which brings proceedings in accordance with the foregoing articles, penal legislation and the rules of criminal procedure in force in that country shall apply.

To this end, the Member State to which the request is addressed shall regard the fact constituting the offence alleged to have been committed in the requesting State as equivalent to the corresponding facts which constitute the offence when prosecuted under the terms of its own legislation.

Article 9

If proceedings are brought by more than one authority in respect of the same act, each of the Member States concerned shall inform the other Member State of the proceedings brought within its own territory and of the outcome of such proceedings.

Article 10

All procedures carried out in the requesting State in accordance with the terms of legislation and regulations in force in that State shall have the same status in the Member State to which the request is addressed as they would have had if they had been carried out by the authorities of the said Member State, but such granting of equal status shall not have the effect of conferring upon such procedures greater value as proof than they have in the requesting State, with the sole exception of violation of constitutional principles of the State to which the request is addressed.

Article 11

Any interruption of the limitation period in proceedings, by due action in the requesting State, shall be effective in the State to which the request is addressed and vice versa.

CHAPTER III

LEGAL ASSISTANCE

Article 12

If so requested by the competent authorities of one State, the competent authorities of any other State shall provide the fullest possible legal assistance for any action taken to punish offences covered by the terms of Article 1.

Article 13

Legal assistance may be refused if the Member State to which the request is addressed considers that compliance with the request might be prejudicial to the maintenance of order or contrary to the general principles of its own legislation.

Article 14

The reasons for refusing to give legal assistance must be stated.

7. Conclusions

These notes and proposals are quite clearly inadequate and merely offer an outline as a basis for discussion. A working party should therefore be set up to go further into the practical aspects of the subject, on the basis of the foregoing remarks and of subsequent contributions at this important congress.

We all recognize that every advance in protecting the consumer is a step towards achieving one of the fundamental aims of the EEC, which is to improve the quality of life in a Europe where the term "progress" takes on a meaning beyond that of purely quantitative growth.

OPINIONS OF THE CONSUMERS AND THE OPERATORS WITH REGARD TO FOOD LAW ENFORCEMENT

Consumers: F. CUSTOT, Membre de Comité Consultatif des denrées alimentaires, Directeur du Laboratoire, Coopératif pour l'Information, la Protection et la Représentation des Consommateurs, Saint-Prix (1)

In order that the consumer of foodstuffs may consider that his interests are really protected, foodstuffs proposed for consumption must, in particular:

- not present a danger to health, taking into account known scientific data, and considering that a doubt must always be interpreted to the benefit of the consumer;
- be described and presented fairly, excluding all misleading descriptions of their characteristics, of their properties and, eventually (dietetic products), of the effects which one could expect by their consumption.

Without a doubt, producers and sellers of food products most often restrict themselves to respecting these conditions. But the consumer cannot rely upon their good will alone : he expects that the public authorities sanction those who would not respect them.

This implies a set including the regulations, the control, and the penalizations, in which control is a major link, the key to consumer protection.

In this report, we will try to explain how the consumers regard the control of foodstuffs, and what they expect from this. In so doing, we shall take into account opinions common to consumer associations of the European Economic Community, while utilizing mainly a limited experience : that of the Cooperative Laboratory for Consumer Information, Protection and Representation (Laboratoire Coopératif pour l'Information, la Protection et la Représentation des Consommateurs), an association which has been active in France since 1955, working essentially in the area of foodstuffs, to defend the interests of the consumer.

1 - The consumers of the Nine countries wish for better control

It should first be remembered that, when consumer organisations carry out analyses, or have them carried out, on consumer products, foodstuffs in particular, the products used are always bought at the retail trade level, under the same conditions in which an isolated consumer could acquire them. That is to say that it is, above all, this control which interests consumer organisations, even if they recognize that other investigations at other levels can be useful or necessary. It is useful to know how much nitrates or nitrites a pork butcher puts into his ham; it is essential to know how much is contained in the ham at the moment of purchase.

Several decades of experience in these analyses, in numerous countries, have led the consumer organisations:

- to establish quite numerous insufficiencies in the control of foodstuffs ;
- to request better control and to act in order to realise this aim.

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(1) Laboratoire Coopératif pour l'information, la protection et la représentation des consommateurs, 16 rue Maignan Larivière, 95390 Saint-Prix, France.

Of course, establishing the insufficiency (and the insufficiencies) of the controls in no way means, a priori, that those who practise them are implicated. On the contrary, these insufficiencies are most often known to and regretted by the competent services, who are victims of them more than they are responsible for them, and who alone are rarely in a position to apply a remedy.

A - Not enough funds

The main cause of these shortcomings lies, in our opinion, in the insufficiency of material means reserved for control, it being understood that by the word control, we mean the inspection as well as the laboratories, whether or not they belong to a single organisation. This insufficiency of means hints at a serious underestimation of the importance of control on the part of the public authorities, and finally of those who are politically responsible. If the Ministers who periodically publish statements which aim to assert that the consumers are perfectly protected, knew the cost of this type of assertion, they would express themselves in a more measured manner, or see themselves silenced by the Finance Minister.

One could furthermore wonder whether this underestimation of control by the politicians does not reflect a comparable reaction on the part of a notable position of the population : which militant of a consumer organisation has never had to explain the exact role of a Repression of Frauds Inspector to an audience which is, a priori, more inclined to see the latter as the agent of administrative, i.e. police pestering, than the natural protector of consumer, interests?

It remains that the consumer organisations struggle perseveringly, but, it must be said, without much success, to increase the means granted to the control services. These means are certainly increasing, and sometimes even more quickly than other budgetary donations, but the necessary upheaval does not take place.

We are used to recalling that, in a country like France, each citizen has to put up with an expenditure which is one hundred times higher for advertising than for control. Comparison is not reason, certainly, but advertising does say, does it not, "buy, and buy without worry", and is not control just that condition for buying without worry ?

The lack of means results in insufficient manpower and laboratories. It also results in the difficulty of recruiting sufficiently qualified people (laboratory personnel, vets and sanitary officials).

This raises the problem of the wage level, which not only concerns trade unions, but also, for this reason, the consumers.

B - Disrespect of the laws

A second reason for the insufficiencies of the control protecting the consumers is that the control services sometimes, and the ministerial cabinets more often, accept the interpretation or the modification of the regulations according to pressures exerted by the lobbies representing the interests of industry, agriculture, trade, etc.

Circulars or ministerial orders can, for example, decide to depart from certain obligations: thus, wine is not subject to the labelling regulations common to pre-packed foods and beverages. Thus, boric acid has been tolerated in France for 46 years as " a temporary measure" in order to conserve certain farm butters, in spite of the unfavourable opinion of hygiene experts.

Or some circulars order control agents "not to raise an infraction" in the case where a product does not conform to such and such a legal obligation. In general, this practice is motivated by the concern, which may be legitimate, of taking into account temporary technical or economic difficulties, or to lengthen the settling-in period. But it can create really damaging situations for the consumer.

The fact that for consumer associations can bring a civil action before the courts now allows, in certain countries including France, an objection to be brought, if necessary, to this practice of not "raising" an infraction which well and truly exists. In the same way, a civil action can provide an opportunity to reopen a file classified "no further action" by the administration or the public prosecutor, or even to cancel a transaction (1) which was abusively concluded, as has been seen in Belgium. But it is still necessary, and we will come back to this point, that the consumer associations be informed.

It can also happen that the Administration's means of control are used in directions which the consumer organisations do not judge as having the greatest priority: for instance, in France a few years ago, at a moment when real problems of pesticide residues in certain foodstuffs with a wide consumption existed, a vast action was undertaken in a narrow sector: that of the salesmen of so-called "natural" products, of whom certain undoubtedly had to be sanctioned, but of whom many more were only small offenders acting in good faith.

C - Incomplete Regulations

A third reason for insufficient control may simply arise from the absence of regulations, and in particular from the absence of orders executing laws and decrees, or from the existence of an obsolete, out-of-date or unsatisfactory regulation. It is obvious that the consumer associations cannot be satisfied with controls carried out in the area of food colouring, if it is allowed to colour egg biscuits yellow, or to use tartrazine, which provokes allergies. Neither can they be satisfied on seeing the directive on fruit juices, which allows filtration through asbestos, hampering the efforts of the national control services which are trying to prohibit the use of this dangerous material in the foodstuffs industry.

Of course, the consumer organisations are endeavouring to obtain that adequate regulations be issued, modified or adapted in all of these cases.

D - Finally, numerous objective difficulties can be quoted, which leave the control services more or less defenceless in specific situations. Four examples will illustrate these difficulties and will at the same time show how the consumer associations try to intervene in order to modify the situation:

- Microbiological quality of ice-cream in France during the 60's: in the absence of orders executing the Decree on the quality of various types of ice-cream, it was not possible to carry out a control of their microbiological quality; on the other hand, the small-scale production of types of ice-cream at that time made it difficult to impose a general respect of the good manufacturing practices. In pointing out the anomalies to the public, and in recalling the wishes - not followed up - of the Conseil Supérieur d'Hygiène, the Cooperative Laboratory provoked a series of official controls and then an improvement in the regulations;
- Labelling of foodstuffs and beverages: in France, until 1972, no general regulations on this subject existed. Moreover, certain regulations contradicted others, (for instance, a vinegar which contained a colouring matter had to carry the mention "contains colouring matter", but an artificially coloured syrup was not subject to any labelling obligations, which led to believe in a fruit-based colouring.) Thanks to the pressure exerted by the consumer associations, and together with these, the public authorities elaborated and enforced new arrangements which not only inform

(1) On this occasion, let us point out that the consumer organisations, in the area of foodstuffs frauds and falsifications, are hostile to the procedure of transactions which, among other disadvantages, does not give an opportunity of informing the public of the offence committed.

the consumers, but facilitate control, and even encourage manufacturers and traders themselves to introduce a control;

- Control of advertising: although the previous texts of 1905 and 1912 foresaw in principle a certain control of advertising, the state of mind during the years 1955-60 did not allow this control to be carried out. Several consumer associations in France tackled this problem, in spite of the relentless efforts of the advertisers, and in 1963 obtained the voting of a first bill. But the problem of the burden of proof still remains: it can be extra-ordinarily difficult for the control services to prove that an advertising claim is false (e.g. to prove that such a toothpaste does not affect tooth decay) when it is natural to request that the authors of the claim produce the proof. A new battle of opinion took place, where one tried to render this "reversal of the burden of proof" a legal bugbear. But a second law has been voted, which finally says that the consumer organisations are right, and which makes it easier to carry out controls;
- Opening to the control of private premises and documents. Against the theory according to which the manufacturer does what he likes in his factories, control only intervening in the case of finished products, the consumer organisations maintain that the protection of the consumer must come before all other considerations, no matter how respectable these are.

But since the analysis of the finished product, which there is no question of waiving, may, in certain cases, present analytical difficulties and also sampling problems, it justifies the right of the control services to enter factories, warehouses, slaughterhouses, restaurants, as well as to see the laboratories of producers or distributors and to control, with the support of documents, the existence and the seriousness of private controls which are carried out there.

In France the recent regulations on quality control, as well as the powers enjoyed by the veterinary services, form, in our opinion, good examples for generalisation.

Let us say that we deem it essential, and this symposium should lay the foundations, to endow the European Economic Community with an embryo of the common organisation of control (which we call among ourselves the Interpol of Frauds, but for which it would no doubt be suitable to find a more appropriate ... and more reassuring denomination).

2 - The objections to this request for better control

When the consumer representatives demand improved control, diverse objections are frequently raised. We would like briefly to examine some of them here.

A - The cost of control

It is obvious that control costs money and that, as consumer or as taxpayer, it is the public who pays. In this respect, it can be claimed that the request for improved control can go against the economic interests of the consumer.

This argument is far from being invalid, but it is difficult to examine it precisely, because of the obscurity which, from the consumer's point of view, envelopes the mechanisms of price formation. As far as it can be known, the best-equipped businesses as far as control is concerned reserve only some thousandths of their turnover for this area, and it is, therefore, doubtful that a big increase in this figure could greatly influence prices. In addition, control avoids incidents which are sometimes costly, can contribute to the reduction of waste, promotes fair competition which is supposed to reduce sales prices at the consumer level.

In any case, the demand for better control justifies itself by assurances lavished as much by the public authorities as by the manufacturers, farmers, traders, on the high degree of protection from which the EEC consumers would benefit. Therefore, if one refuses to raise the control to this level for cost reasons, then one must have the courage to say so.

B - The objection of protectionism

Control could be used, under the pretext of giving a better and better protection to the consumers, but in reality as a means of imposing the freedom of exchange.

We do not reject this objection, but would like to point out that it is not, in fact, an argument against control but against certain unrealistic demands: if a state fixes a limit for the copper or lead content in imported tinned sardines which is much lower than that which toxicologists require, and such that no product can satisfy this limit, that has nothing to do with the concern of consumer protection. It is solely a means which the state reserves of closing its borders to such and such merchandise as and when it wishes. When such cases exist, they are generally the result of pressure from the food industry, from agriculture, fishing and trade, but never from the consumers.

The aim pursued by the consumer organisations when they demand better control is to improve the protection of the consumers, and not to impede exchange. Obviously, conflict could well arise if those who are responsible for facilitating exchange within the EEC try to acheive this aim by proposing that all member states be aligned with that one in which the consumer protection is the least developed in the sector concerned. On the contrary, we want Community regulations and control to be principally inspired, in every case, by the national regulations and control which best protect the consumer. But within these limits, our collaboration may be counted upon to study and define a system of control which is compatible with the development of exchange foreseeen by the Treaty of Rome.

C - Second frequent objection: control would be a brake on innovations

Before discussing this objection, one should linger a moment on the notion of innovation itself, more especially in the area of foodstuffs, and notice that this denomination covers, in fact, quite different things.

There are, first of all, the products which are claimed to be new, but which are not: only the presentation, the packing and the format have changed.

Then there are those which really are new, at least in some important aspects:

- they either provide traditional nutriments at less cost (proteins of leguminous or cruciferous plants);
- or they have an improved nutritional value ("mother's" milk, diet foods);
- or they allow an easier or quicker preparation (soluble coffee, instant mashed potato) or a better conservation or transport (concentrated, dried or HIST milk);
- or, finally, they have new tastes (extreded cereals, spun and flavoured proteins, artificial powders for drinks).

In the face of these innovations, which they often appreciate, but not always and not all, the consumer is driven to asking questions:

- about the sales price, often high;
- about the counterpart of the incorporated service (is it really the same coffee, the same mashed potato as that which I used to prepare ?);
- about the techniques used (industrial preparation methods, adjuvants and additives) and about their eventual hygienic consequences.

It is therefore natural that they expect from the control (control of finished products, factories, labelling and advertising) the guarantees which are likely to respond to their questions, which are, very naturally, much more numerous than for traditional products. Particularly regarding new additives, the relative brake on innovation which the admissibility conditions constitute (non-poisonousness, technological necessity, absence of fraud, possibility of control), is entirely approved by the consumer organisations.

In the case of novel foods based on raw materials not previously used as a food, and revolutionary processes, a reporting system of toxicological and nutritional testing has to be achieved before the product can be cleared for sale. Here again we have a useful brake.

Let us add that, for these new products more than for the others, the question arises of knowing what the consumers really want: do their purchases really express their free choice, or are they only the consequence of advertising pressure combined with skilful application of sales methods? Innovation ? Perhaps, and according to particular cases, but certainly not always and not at any cost.

But the politicians who, as we have seen, are already partially hostile to control because it costs a lot of money, and because it inconveniences the dominant pressure groups, are in another way inclined to see in the innovations a miracle remedy (thanks to the hoped-for development of exports) to the economic difficulties. It is, therefore, natural that they be sensitive to the argument that control puts a brake on innovation, and it is not less natural that the consumer associations see things differently.

On the whole, our conclusion will be: yes, control could put a brake on non-stop innovation, and, from the consumers' point of view, there is no reason to regret it.

D - Other objections to improved control

Those which are raised for all types of control and which are linked to the legitimate respect of the rights of those subjected.

It is impossible to enter into too much detail here, and we would simply like to point out:

- the problem of the representativeness of the controlled samples. It is important to take into account the conditions, and particularly the rhythm of production, as well as the evolution of modern trade. But, simultaneously, it is normal to require the producers and traders to perfect their own controls as well as their technology, the final aim being that no consumer be misled;
- the difficulties inherent in the control of particularly perishable products, for which the conservation of witness samples (for expert appraisal) poses specific problems;
- the question of sharing the responsibilities, in the case of an infraction, among the producer, the transporter and the trader. In this respect, it is important not to underestimate the responsibility incurred, because of advertising, by the announcer: if the publicity for brand X declared that the coffee or the margarine are excellent, this obviously means that they are excellent not only when they come out of the X factory, but also in the place where the consumer can, in fact, purchase them, i.e. in the shops, and not only in the most modern ones. In the case of an established anomaly, the producer cannot get out of it simply by saying that it is the fault of the trader. In fact his advertising claim obliges him to take into account the "normal" conditions of distribution, which, moreover, are not the same according to the region and the type of businness.

3 - Information about control

"The obligation to be ruled", said the French scientist Jean Rostand, "gives us the right to know".

The consumers do not only claim information about products and services; they also want to know precisely how they are protected against deceptions, nuisance and eventual dangers. And because control is an essential element of this protection, the consumer associations consider that the control organisation should be known, and that the results of the controls should be published.

Private enterprises which carry out controls have, of course, the right to keep the results secret, but they should know that taking advantage of such a control enhances the most banal advertising. The consumers are far from indifferent to the fact that the producers and traders carry out controls, but they can take these controls seriously only if, via their organisations, they have the possibility of checking their existence and their results.

As for the official control, which is carried out in the interests of the consumer and at the expense of the taxpayer, it should be obvious for everyone that nothing dealing with it should be concealed from public opinion.

We consider it necessary to examine this question on the Community level in order to take into account not only the experience of member countries, but that of other states:

- on the principal of the access which citizens have to documents held by the administration (law and practice in the Scandinavian countries, Denmark obviously, but also Sweden; spirit and applicaton of the Freedom of Information Act of the U.S.A.);
- on the publication of the results of controls as is practised in certain countries (Switzerland: Report of the activities of cantonal laboratories published in "Travaux de Chimie Alimentaire et d'Hygiène" (Works on Food Chemistry and Hygiene); U.S.A.: the magazine "F.D.A. Consumer", edited by the Food and Drug Administration; British reports such as those on antibiotics, or lead or mercury in foodstuffs, or those which make public the results of a Commission of Enquiry after an epidemic or poisoning, for example);
- on the holding back of information as is still practised in certain countries such as France, particularly regarding the control of fish and shellfish, or the content of artificial radio-elements in foodstuffs.

Let us add that the exercising of a civil action in Justice by the consumer associations supposes that they have access to information which allows them to act when the rights of the consumer are disputed. It would be particularly abnormal that the consumers, after having paid as taxpayers for the controls to be carried out, be obliged to pay a second time as members of the associations so that these latter finance analyses which would only reveal facts already known to the official control services.

4 - The training of controllers. Their liaisons with the various social partners

This subject in itself would require a whole report. We will limit ourselves here to some considerations likely to contribute to a later study in more depth.

The agents charged with the control are, according to us, above all defenders of the consumer, and it is desirable that they have continued and trustful relationships with the consumer organisations, as is the case in most of the EEC member countries.

These agents are also charged with watching over the fairness of competition, and it is necessary for them to be well informed of all technical evolutions in agriculture and breeding, in industry, in trade. In this connection, they must also be in contact with these sectors, while avoiding being too influenced by them. In fact, all question of the good or bad will of the producers put aside, the agents of control must know that the laws of the market and of competition can lead businesses to adopt practices which can, in certain cases, reveal themselves to be damaging to the interests of the consumer, and that their role is, obviously, not to allow these practices.

This sometimes leads to subtle contradictions, the solution to which is difficult to find.

Example: in order to improve the struggle against dishonest practices and unfair competition, the French regulations on the repression of frauds, dating

from the beginning of this century, imagined the possibility of making the professional unions participate in the repression of infractions, giving them the possibility of approving agents paid by them (1). The intention is excellent, but it may give the professions a regrettable means of pressure, which the consumers and their associations could not approve.

Another example, of a totally different kind: among the types of professional training particularly suitable for agents charged with the control of foodstuffs, we find veterinary training. But for a certain number of decades, the veterinary profeesion has followed an evolution which, from the consumers' point of view, is worthy of attention.

Originally, a vet is a doctor for animals; he takes care of them, and if possible, cures them, and thanks to his advice to the breeder, he protects the consumers from the consequences of illnesses and treatments. His role can equally be preventive, according to a parallel scheme.

But today, vets are also zoo-technicians, and many vets act first and foremost as such, the other role having become an accessory one. For them, it is no longer a question of curing or preventing illnesses, but of making the animals grow as quickly as possible; the question of knowing whether these animals (those of industrial breeding) are "normal" or "sick" does not arise (provided, and this is an important point, that the consequences of the zoo-technical treatments for the consumers be taken into consideration), because what matters is the speed of the production (of meat, eggs, milk...), the fat content, the structure, etc., and, of course, the cost.

We take it for granted that the vet who has undergone this "modern" training is a quite different type of man from the vet of the past; his technical aptitude to the defence of the consumer is certainly excellent, but his psychological aptitude to the same end may well no longer be of the same quality, unless a particular effort is made in training.

In any case, and whatever the original training may be for the agents charged with control, it will be necessary to see to it that they are constantly informed of technical evolution, as well as to assure that they never lose sight of the essential aim of control, which is, we repeat, above all to defend the consumer.

We have been following with interest for a number of years the activities of the national training and improvement centre of the French service for the repression of frauds and for quality control. The centre seems to us to have successfully and very usefully combined the two aspects of this permanent training by appealing not only to officials and to University graduates, but also to manufacturers and consumers. In addition, by the regular organisation of study days, to which personalities from the various University and economic sectors are associated, the centre provides a very interesting contribution to the consideration of many current problems concerning foodstuffs and control.

5 - Control and Regulations

Although, chronologically, control comes after the elaboration of regulations, it must be one of the factors to be taken into account for this elaboration. Before giving a definite form to the regulations, it is, indeed, necessary to know how their enforcement will be controlled, and even who will carry out the controls.

It happens that the following sentence is heard: such a process (or such an additive) should be authorized in foodstuffs because it is not possible to disclose its use, and, should it be prohibited, the European industry would be in an inferiority situation.

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(1) The consumer associations have, theoretically, the same possibilities. But, because of a lack of means they are not able to take advantage of them.

This reasoning, which is conceivable if the interests of the industry alone are considered, (or of agriculture, or trade), is obviously not acceptable from the consumers' point of view.

For us, a process (or an additive) should be accepted only if the conditions which guarantee the consumer are met.

Should this not be the case, and supposing in an extreme case that no control could be possible, it would be necessary to prohibit the process or additive, and close the borders to food products which are suspected of having been treated in this way. This type of protectionism, in extreme cases, appears to us to be perfectly acceptable because it is really founded upon the concern of protecting the consumer.

But in the majority of cases a certain control is possible, and if not on the finished product, it may be at the place of production. Moreore, it happens that certain countries outside the Community demand this type of control for certain products.

From the consumers' point of view, only that which is controllable should be authorized. For example, the existence of methods of control and the existence of laboratories able to apply them practically and regularly must be preliminary conditions to the authorisation of an additive, a treatment, or a new product.

During the course of an enquiry carried out by the Cooperative Laboratory in 1977, we questioned 199 laboratories situated in the nine countries of the EEC, the list of which had been taken from a European directory of laboratories and research centres.

We asked them which were the substances which they were capable of identifying and quantitatively titrating among the substances appearing on the list of thickeners, emulsifiers and gelifiers of which the authorisation was foreseen by the draft proposal for a directive on the fine bakery, rusk, biscuit and cake industries.

According to the 69 answers collected, every fourth laboratory titrated none of the 47 additives listed and every fourth laboratory titrated a maximum of six of these additives. Certain additives were titrated by practically no laboratories, while among these additives there were several for which toxicological problems were likely to arise (sucroesters and sucroglycerides, spans tweens, etc.).

The conclusion that we can draw from this enquiry is that the control structure (in this case the structure of the laboratories) existing in the EEC does not permit the consumers to be given the guarantees which the text of the Directive, however, claims to assure them.

During a later study, which is currently being undertaken, on the control in the laboratory of the reglementary characteristics of foodstuffs as they result from directives in force, we have ascertained, for example, that the control of 43 pesticides, the residues of which in fruit and vegetables are limited by the Directive 76/895 of 23.11.76, poses serious practical problems. For instance, according to the answers already received, certain pesticides on the list are never titrated (aramite, barbane, binapacryl, dodine, TEPP) and others are seldom titraded (chlorobenzilate, diallate, propoxur, amitrole, chlorbenzide, chlorfenson, chloroxuron, dinosebe, perthane, phosphamidon, folpet, toxaphene).

In the case of other directives, similar problems seem to arise: a certain number of specifications required in the directives are not controllable in the laboratory because of the absence of appropriate methods of analysis in; the case of the existing methods, it is far from certain that there are in each of the member states sufficient laboratories capable of putting them into force.

It would be desirable that, at the end of the process of elaboration of directives (but before their presentation to the Council) a Commission report jointed to the proposal deals, in a detailed manner, with the possibilities of practical execution of the controls of which the directive supposes the execution.

We think that this process would, moreover, lead to putting an end to certain controversies, such as that which refers to the optimal length of the lists of additives authorized in foodstuffs: long lists, with many additives, might provide more facility for the industry and more variety for the purchasers; they might even allow, from the toxicological point of view, a "distribution of the risks" (even though the risks of possible inter-action among the additives be then multiplied); but practically, only short lists would allow the consumers to be given the guarantee that what is required is really controlled.

Conclusion

The aim of the control is first to make sure that the consumer is properly protected, and then to ascertain that the conditions of a fair competition are observed.

Control systems existing in member countries are far from being similar, particularly with regard to their centralization level. A task for the EEC Commission should be to help and develop the positive sides of the various systems: in decentralized systems a better opening to consumers, in centralized systems better possibilities for sharing of expertise, monitoring for heavy metals, PCBs, hormones, pesticides and so on.

Another task should be to promote a sort of food interpol, beginning to establish a system of notifying each other when they reject any food.

Control needs truth. Consumers should not be told that they are protected if there is not enough money for the control.

The EEC Commission should:

- publish data about controls carried out and not carried out, their results, and the penalties, in the different member countries;
- make available to the public a better estimate of the cost of the control, compared to the other elements of the product prices (raw materials, processing, marketing, packages, advertising; etc.;
- take into better account the real possibilities of control, when preparing directives.

For consumers' organizations, the most important control, which it is out of the questions to give up, is the control of the food as sold in the retail market or for catering (cantees, restaurants, etc.).

But for different reasons, controls are also necessary at former stages, including factories, warehouses, slaughterhouses, etc. On the other hand, the control of the commercial information, bound to the product (labels, advertising, but also vulgarization if inspired by producers) should be developed and improved.

Control has no meaning if not followed, when necessary, by proper penalties. Consumers do not wish to have controllers, over zeaeous but they expect severe and exemplary penalties when health is threatened and/or unfairness is proved. Prohibition of manufacturing and selling must be possible ("negative licensing"). The rule (and not the exception) must be to publicize the penalties.

Industry: F. RUF, Direktor für Lebensmittelwesen,
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I

Legislation and Enforcement

Independent of any national peculiarities it is the purpose of food legislation to protect the consumer's health and prevent deception. A subsidiary purpose is the protection of Industry and Commerce against dishonest competition.

If Food Legislation is to realize both of these demands, two basic conditions need to be fulfilled:

- we need a clear; reasonable and practicable Food Law and;
- effective Food Control, and the enforcement of the food law by the courts.

I assign equal importance to both of these demands because legislation and law enforcement are inseparably linked. To enforce a law correctly, it first has to be properly formulated.

We all know that good legislation is one of the most difficult tasks in forming our economy and society. A law should not only be "right" as far as its contents are concerned but also logical in structure. It should be clear, concise and to the point and yet cover the subject matter as completely as the purpose demands. Finally, it should be flexible enough not to be overtaken by the fast change of circumstances. This means above all that it must beware of superfluous perfectionism.

This difficult task is rendered even more complicated by the fact that the food law requires constant adjustment to the latest scientific standards. Therefore food legislation and the enforcement of food laws can be realized only by continuous cooperation between the scientist and the legal expert.

Difficult as legislation on a national level may be, the harmonization of the food law which is supposed to apply to all nine EEC member states - all of which have their own food-law traditions - is a far more complicated task. After all, the harmonization we are striving for cannot merely consist of the search for the smallest common denominator. If such efforts are to result in a comprehensive and practicable European Food Law, we must start with the definition of food-law terms and end with the equality of the legal consequences resulting from the difinitions and facts. How difficult it is to define the terms so that they will be accepted by all is shown by the first working paper of the commission on the "Ausarbeitung von Begriffsbestimmungen des Lebensmittelrechts" containing definitions of such terms as food, additive, technological aid, contaminant, consumer, etc. It will take a lot of patience and detailed work before definitions acceptable to all will be obtained. And yet, such definitions are merely the foundations on which a uniform European Food Law is to be built.

At this time I can merely touch the problems of food legislation and harmonization. The point I wanted to make was to draw to your attention the interdependence between the quality of the contents of a food law and the effectiveness of enforcement: for effective enforcement a good food law is absolutely indispensable.

II

1. The Necessity of Control

The consumer, who is to be protected by the food law, generally has no means of determining whether or not a food corresponds in every respect to the standards set by the food law. In realization of this fact an Official Food Control Authority was established as a necessary partner to legislation. The existence of such authorities dates back far into history. For example, since 493 B.C. the aediles in Rome were responsible for supervising the markets and the foods sold there.

2. Who controls?

While the necessity of food control is an undisputed point, the question of who should enact it in our time calls for a much more differentiated answer.

Superficial consideration of this problem may all too quickly lead to the opinion that food control should be the responsibility of official authorities. This is certainly one correct answer. However, the work of a well-organized public food-control authority does not suffice to guarantee full control because it has to be limited to spot checks. Furthermore, the duties of the public food control authorities are so diversified that the number of spot checks is limited right from the beginning.

Therefore, to enforce the food-law directives efficiently, a second and just as important system to support official control is needed: Corresponding self-imposed inspection by the food manufacturers themselves. In general, every up-to-date manufacturer of food products has instituted a comprehensive quality control system that is applied either by expert employees or free-lance scientists. The purposes of prophylactic quality control by the manufacturer are not exactly the same as those of the public control authorities. Besides control for compliance with the regulations stipulated by the food law, the products are also controlled as to their compliance with the product and market concepts developed by the manufacturer. This means that the self-imposed control is aimed rather at rating the "overall" quality to make sure the market and consumer will accept the product.

All of this means that both, official food control and the self-imposed inspection by the food manufacturers (inc. the food trade), have principally the same objectives and complement each other.

Realizing this connection it is obvious that the corresponding interests of official and self-imposed control should be more efficiently used to enforce the food law than has been done in the past.

Certain attempts in this direction can be found in the Weights & Measures Act of the European Communities and in other considerations that are being made in the United States at the present time: this concept is based on the voluntary self-imposed product control by the manufacturer himself. These controls exceed the required demands for diligence and the aim is to have the public authorities acknowledge them as a guarantee of compliance with the legal directives so that foodstuffs and materials that are marked with a proper control symbol merely need to be subjected to supplementary official control which is confined to checking the effectiveness of the voluntary self-inspection by the manufacturer. The discussion of this concept could be based on the "General Principles of the World Health Organization (WHO) for Good Practices in the Manufacture and Quality Control of Drugs" which contain a skeleton list of demands as regards, for example,

- personnel (education);
- sanitation;
- raw materials;
- manufacturing operations;
- labelling and packaging;
- quality control system;
- self-inspection.

An evaluation of the experiences made in drug manufacturing will certainly provide important information as basis for further discussions.

The realization of this concept on a fairly large basis by official acknowledgement of quality control by the manufacturers and the scientific experts employed by them would, on the one hand, relieve the official food control authorities of a lot of routine work and would, on the other, lead to a partnership which would result in a considerable improvement of practice-related law enforcement rather than more legislative and executive activities. For this purpose a working group consisting of experts from the various fields concerned could be established to serve as mediator.

3. What is controlled?

The second group of problems which we see in connection with the "enforcement of the food law" concerns the question: "What is to be controlled?" Today, the protection of the consumer requires a large number of different controls all of which cannot be performed with the same intensity. It will therefore be necessary to set priorities. In this connection it is generally agreed that the protection of the consumer against harmful products must have priority over the protection against deceit. However, such a rough differentiation does not suffice. Within the field of health protection itself priorities are required. To do this, risk analysis is needed which is aimed at certain groups of substances and the composition of foodstuffs. Thus it will be possible to recognize the greatest risks and to make up a list of priorities of food control according to importance.

Groups of substances deserving particular attention in this respect are, for example,

- fertilizers;
- plant pesticides and other agricultural chemicals;
- preserving and anti-spoilage agents;
- products resulting from the degradation or reaction of the above substances in foods of plant origin;
- residues of additives used in feeds and veterinary medicines in foods of animal origin;
- environmental contaminants like arsenic, lead, cadmium, mercury, chlorinated and polycylic hydrocarbons; sulphur dioxide, nitrous gases, but also;
- biological substances of natural origin like mycotoxins etc. in foods of plant and animal origin.

The periodic joint performance of such risk analyses by both the public food control authorities and industry would facilitate the development of an efficient food control programme without involving the danger of "calculable" official inspection.

4. Place and Time of Control

The efficient enforcement of the food law also depends on when and where food control is performed.

It would be a mistake to confine official food control to the plants of the food manufacturers, all the more so as these are in general subject to detailed self-inspection.

If we want to eliminate the source burdening the foodstuffs with the substances mentioned before, it will be absolutely necessary to shift control to the original production, because the food processing industry cannot completely put right by subsequent cleaning and improved processing techniques what was neglected in the original production. The importance of demanding control of the original production, i.e. the basic raw materials that are subsequently

processed, is emphasized by the fact that on average 72% of the original production is industrially processed for nutrition. The food processor cannot decontaminate such original products, he can only reject them, but he cannot make sure that contaminated material does not get back into the food sector through some other channels.

In this connection still another problem requires attention. The legislation in nearly all EEC countries states that the importation of certain foodstuffs depends on the recognition of the food processing company, on the report or presentation to the official authorities concerned, or an examination or the submission of an official examination certificate. In this connection I should like to mention the directives pertaining to the importation of egg products or rennet exchangers in the Federal Republic of Germany.

Experience has shown that, for example, the examination certificates presented for meat products do not bear up against unbiassed review. This situation should be remedied by means of uniform EEC directives covering the conditions for the admission of attested experts authorized to make out examination certificates.

Another demand to be made in this connection is the preparation of uniform directives pertaining to the minimum requirements with regard to personnel (i.e. professional qualification) as well as laboratory equipment and other technical facilities needed for the work to be done by the official laboratories. Special attention should also be given to the proper distribution of work to these institutes.

Such distribution of work would not only permit aimed analyses of the relevant materials, it would also provide the possibility of automated analytical processing, thereby increasing the sample throughput.

Improvement of the present situation in the direction just described would make it possible to extend the mutual acknowledgement of controls, simultaneously reducing the customs controls at the border as well competitive distortions.

5. How is Control performed?

Immediately linked to the question of what is to be controlled is the problem of how control is to be performed. This problem can only be solved horizontally, i.e. by "harmonized food control". The basic demand is as follows:

"Development of uniform procedures for the taking of samples and the analyzing of foods, materials and objects in accordance with control plans agreed upon between public authorities and industry."

One essential condition for developing and safeguarding the quality of foodstuffs is an objective analysis of what is happening to quality. Such analyses call for:

- correct sampling for representative testing;
- determination of characteristics of technological and analytical methods for control tests;
- mathematical criteria for the required number of surveys;
- determination of quality criteria by means of admissible tolerances for defined values.

This demand for statistical procedures for drawing samples as well as for analyzing foods is based on the fact that the product characteristics resulting from biological or technical processes are always subject to distribution and therefore cannot be limited to absolute maxima or minima. The characteristics are distributed over a certain range, the distribution curve, the knowledge of which is the condition for making a final evaluation as to whether a food product was manufactured in compliance with the obligation for diligence. The distribution patterns are quality measures of production, if "quality" is defined as quality of agreement between standards and actual values.

In contrast to the statistical distribution of homogenous sample material, more and more samples have to be evaluated whose characteristics are affected exclusively by the sample taken. The only means of avoiding discrepancies between the individual samples is by using a sample-taking procedure which provides a representative random sample with calculable distribution around the true value of the total volume subject to evaluation, thereby permitting a reliable statement about the quality criterion on which a view is being sought.

Also, within the European Communities it has become evident that there is a trend to postpone the development of sampling procedures for foodstuffs, materials and objects in favour of technological and analytical methods of control.

As the analytical results of a random sample decide whether a lot is to be rated by food control as "unobjectionable" or "objectionable", the sampling procedure is of vital importance. This applies particularly to investigations pertaining to the microbial contamination of foodstuffs. Without going into further detail I should like to draw attention to the "General Principles for establishing Microbiological Criteria for Food" (ALINORM 78/13 A, App. VIII) presented by the Codex Committee for Food Hygiene. The directives contained therein deserve not only full agreement but need to be taken into consideration by the EEC, if projected microbiological criteria, the evaluation of analytical results, microbiological limits and also the sampling plans are to provide significant statements as to the presence or absence of certain microorganisms or their products of metabolism, like toxins and mycotoxins.

Industry cannot live with the permanent uncertainty that it might be faced with complaints which arise due to the lack of proper evaluation principles. We need proper methods today rather than tomorrow. It is not acceptable that we just wait for improved methods. They must be determined together with the standards.

In this connection let me say one word about applying statistics in making a judgement about measureing data. Experience has shown that it is a prevalent mistake to assume that it takes a large amount of data to permit statistically correct statements. Even though it is correct that a minimum number of correct data is required to obtain reliable quality ratings of any product, only their evaluation and combination into standard data and the performance of statistical tests to decide about homogeneity, outliers, variances to standard, or significant deviation of a mean value from the standard must become a conditio sine qua non. This means it is not the individual sample that has to be within the limits prescribed by law or otherwise, but that the whole lot must not deviate from a given mean value more than the prescribed tolerances allow.

It cannot be the only task of food control to supervise; its most important task should be to advise. Counselling and advice will create not only mutual confidence - i.e. reduce mistrust - they also mean getting to know each other's problems and are an encouragement to search together for solutions. Again this calls for the establishment of a joint working group composed of members of both official food control and industry. Such a working group could not only achieve the desired cooperation but could also make recommendations for more effective control: For this the Codex Alimentarius Commission can give us various examples.

What I have said so far makes clear that the methods of examination as well as the competence and abilities of the experts performing food control should meet highest demands. But the scientific standard of the individual experts should not only be high, it should be uniform in all countries of the European Communities. This demand for uniformity forces us to take steps for a uniform EEC education and advanced training system of the scientific experts as well as the non-scientific food inspectors. These persons should not only be given an insight into the food trade, they should also be trained in food processing plants, not simply through attending lectures. This part of their education should take place in plants in various EEC countries.

Let me say a few words of criticism about the organizations concerning themselves - besides the official authorities and the food industry - with the examination of foods. For instance, if consumer associations perform "food investigations" - apparently generated mainly by mistrust in the food industry but also partly in the official food control authorities - they must accept measurement on the same technological and scientific scale as industry and official authorities, if their findings are to be acknowledged.

The question of how to control leads to another question, namely: How many controls are to be performed? Regardless of the importance of any measure to improve the protection against deception and damage to health, it must also be taken into consideration that increases in the number of controls which will have to be borne by the consumer and which are not always adequately related to the results achieved.

This can be demonstrated by citing as an example the EEC Commission's directive on plastics as translated into German Law. The system applied at the present time by the Federal Health Office on the basis of the "Recommendations by the Plastics Commission" permits an appropriate distribution of liability among all parties concerned. Based on the recommendations, the plastics producer can give a guarantee for his products because their composition allows a definite statement about their harmlessness to health.

Based on the producer's certificate and on account of his knowledge of the additional manufacturing supplies, the plastics processor can give a further clearance certificate, thereby meeting the conditions imposed on the party responsible for channelling objects and materials into the trade.

Based on the certificate the packer of foodstuffs can assume that the composition of the plastic packaging material corresponds to the recommendations of the Federal Health Office. All he has to do is to concern himself in each particular case with the technical suitability of the packaging which is his responsibility.

Each of the three partners will thus be responsible for that part of the system in which he is an expert and for which he has the required knowledge.

The system described above will not function any more if its compliance with the law can be checked only by means of migration data obtained when the materials and objects are in contact with foodstuffs.

We are facing a corresponding problem in the directive on vinyl chloride in materials and objects in contact with foods which has already been accepted by the Council. The formulation of the directive permits the interpretation that the packaging materials as well as the foodstuffs that have come into direct contact with them need to be examined. However, since the permissible VC content of the foodstuff cannot be exceeded, if the VC content in the packaging material is within the permissible limits, the compulsory duplication of this control work will reduce the intensity of control in more important areas and will mean losses to our economy.

But just this demand, that the cost to be incurred be in proper relation to the results to be achieved, is also a demand made by industry of the Commission.

6. Legal Proceedings

Let me now say some critical words about the legal proceedings concerning the enforcement of standards prescribed by food law. If practically every food-law directive - no matter how small the effects on the functioning of the common market may be - can be harmonized today, then the prosecution of offences also should be subject to harmonization. Equal competitive conditions for everyone also call for equal control and sanctions.

This standardization of measures to be taken in the case of food-law violations is required in the following fields:

- civil law including product and/or producer liability;
- administrative law and;
- criminal law.

Two examples may serve to explain the problems involved:

In Document No. KOM (76) 372 of July 23, 1976 the EEC Commission submitted a proposal for a directive concerning producer liability which presents a number of problems to the food industry and trade. In this connection I should like to draw your attention to the following question.

Assuming a deep-frozen food, properly produced, is found to be spoiled by microbial contamination at the time of sale to the final consumer, and further assuming that the spoilage was caused by an interruption in the deep-freeze chain of which the manufacturer is unaware: Who will be held liable for the damage?

Another example:

Article 9 of a proposed Council directive on "The Approximation of the Laws of the Member States relating to the Labelling, Presentation and Advertising of Foodstuffs for Sale to the Ultimate Consumer" prescribes that the minimum shelf life of a food is to be stated in the form of a date. As we all know, the "minimum shelf life" or "minimum durability" is the time that passes until the quality of a product has been reduced to a minimum value. This limit will vary from product to product and needs to be determined accordingly.
This minimum applies to all characteristics determining the value of a food, and special reference is made to them.

It is undoubtedly a fact that the consumer, who buys foods that have been provided by the producer with information as to their minimun durability, will always take the "freshest" and leave the "older ones" on the shelf. He will do this also when the "older" foods are absolutely unobjectionable or even when longer storage means better quality as in the case of certain beverages or hard sausages like salami.
The shelf life given by the manufacturers contains considerable safety margins which take into consideration the manifold external influences the product might be exposed to on its way from the manufacturer to the ultimate consumer.

However, after the expiration date a product will have to be considered as "deficient", because its value for normal usage, i.e. its market value, has not only been reduced considerably, regardless of whether or not the product itself has changed or whether a later expiration date would have been justified. The salesmen shall not be held responsible for this shortcoming, if the customer knows of it or does not realize it due to his own gross negligence.

According to article 1 of the proposed directive the manufacturer shall be liable "for damages causes by a mistake regardless of whether he was aware of the mistake or could have been aware of it". This leads to the question of liability and, simultaneously, to the question of who will have to bear the cost for the return of goods required by the food law as well as the cost incurred as a result of the legal regulations pertaining to liability.

Both problems could be solved by the following:

- a tolerance arrangement resulting from industry's responsibility to limit the shelf life of its products, permitting an overstepping of at least 3 months of the minimum durability date, at all levels of trade, provided the shelf life of the product is more than 12 months;
- a legal arrangement covering the individual responsibilities of producer/ tollpacker and trade.

3 - Conclusions

Summarizing the above the following recommendations are made to the Commission of the European Communities:

1. formulation of a clear, reasonable and flexible Food Law with equal legal consequences for all member states as a basis for effective law enforcement by the Food Control Authorities and Law Courts.
2. Establishment of a Working Group consisting of members from the Administration and Industry and Commerce to work out recommendations for:
   a) the improvement of food control by means of closer cooperation;
   b) the relief of the public control authorities by official recognition of industry's self-imposed control activities.
3. Development in stages by public control authorities and industry of a control programme following various priorities in order to identify certain groups of substances and/or special problems (risk analysis).
4. Shifting essential parts of certain controls to the original production.
5. Development of uniform directives pertaining to the admission of free-lance scientists authorizing them to examine foods and materials in contact with food which is traded among the member states of the European Communities.
6. Preparation of uniform rules pertaining to the minimum personnel qualifications and minimum requirements as regards equipment and facilities of public control laboratories, and proper consideration of reasonable distribution of work.
7. Development of uniform reference methods concerning sampling and analysis of foodstuffs and materials in contact with food according to control plans to be agreed upon between public control authorities and industry.
8. Uniform education and advanced training of scientists and food inspectors in food processing plants in various countries of the European Communities.
9. Relief of industrial and official food control capacity of reducing unnecessary duplication of work.
10. Constant review of the directives for their relevance to consumer protection to ensure that the costs to be incurred will be in adequate relation to the objectives.
11. Equal control of and equal sanctions against all members resulting in "harmonized" enforcement of the food law and equal competitive conditions.

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Introduction

From the trade aspect, "inspection of foodstuffs" is a topic associated with a whole spectrum of problems and factual circumstances. Within the scope of a short paper it is difficult to provide even an fairly comprehensive description of these. Consequently, when the nature of the problem has been outlined in the following, i.e. the precepts governing trade in the area of tension between producer and consumer and the resulting requirements (Part I), the most important problem areas will be condensed into a few topics and considered in a second section (Part II).

Part I: Nature of the problem

To ensure that this topic is not studied purely in isolation, the following precepts will provide the corner-stones which are indispensable if trade is to play an active part in the economy. No trade in foodstuffs can divorce itself from these basic principles; and it is only in conjunction with these that effective inspection of foodstuffs appropriate to the circumstances can benefit the consumer and meet the essential requirements of the economy at large.

- Trade is the necessary relationship in the economy as a whole between industry and primary production on the one hand and the consumer on the other;
- Trade is also an end in itself; it creates and maintains employment, plays a decisive part in boosting the gross national product, and is therefore a highly integrated factor in the further growth and expansion of the Member States and the Community in particular;
- Trade ensures that the consumers are provided with food;
- The system involving the various functions of trade has grown up organically. Complex and dynamic in nature, it thrives essentially on the entrepreneurial freedom of the individual;
- The terms of the Treaty of Rome contain various stipulations which:
  - . prohibit measures whose actions are tantamount to quantity limitations;
  - . permit measures enacted in order to protect the health and lives of persons, animals and plants;
- The consumer protection scheme of the Community gives pride of place among its aims to the consumer's right to protection of his health.

Between these various rights and obligations, the food trade has to develop its philosophy, carry out its functions and realize the limitations to the load it can accept. It is into this system of legal, economic, moral and social demands that the complex of food testing and inspection has to be incorporated in order to:

. satisfy the consumer's right to protection of his health;

. provide clear demarcations between the specialist responsibilities of industry, agriculture and trade;

. ensure that the tasks of the trade can continue without unjustifiable or undue impediment.

The inspection of foodstuffs is fundamentally necessary; of this fact there should be not doubt. But the task in the following is to determine very accurately to what extent which groups of food should be tested and inspected, at which stage, by whom, according to what criteria and at whose expense.

Part II: Aspects of the inspection of foodstuffs from the trade viewpoint

Aspect 1: Foodstuffs are always inspected at the stage where responsibility lies for production/packaging and transport/offer for sale

The task of trading is to pass on merchandise. Hence it constitutes the essential link between production and the consumer. If one ignores cases in which individual stages in trading are known to produce the goods which they themselves market or admit to being so involved, the function of distributing the goods (trading) is unrelated to that of producing them. In other words, among the differences between the laws which trades have to obey and those governing production one important point is:

The producer or grower of a product has precise knowledge of the production process or ripening process, as well as the composition of the product, and, to the extent that he can influence the product he has full responsibility for it. The trader, however, irrespective of whether he is a wholesaler or retailer, takes delivery of the finished product and passes it on without processing. In principle, this function does not impose on him any liability for the composition or quality of the goods. Hence the trading stages can be responsible only for deficiencies or changes in the goods that occur during the supply or sale of the goods, that is, in the period of time over which the trader exercises influence.

Consequently all the inspections of foodstuffs related to the composition of the product, its "inner" quality, the use of additives, colourants, crop protection agents, antibiotics, antioxidants, etc., must take place at the production stage. From the legal, administrative and financial aspects, the responsibility for inspections within the scope outlined rests with the producer, grower or packer, as the case may be.

To explain this requirement the following points may be men. oned:

- the advantage of inspection at the first stage is that it c n be carried out rapidly, since the producer's range of products is restricted and there is a limit to their composition and use of additives.
- Any complaints can be easily localized and rectified. This provides more effective protection for the consumer, obviates unnecessary expense for the recall of goods already distributed and enables any questions as to responsibility to be settled at once.
- The inconvenience to which the retailer is subjected by inspections to determine the composition of food is confined to the normal and proper level.
- The principle of relativity between responsibility and liability is more satisfactorily adhered to.

In this connection it ought to be mentioned that, with regard to food inspections in particular, there are substantial differences between

. the wholesaler in the EEC;

. the importer/wholesaler of goods from non-EEC countries;

. the specialist retailer;

. the general retailer.

If, to begin with, one leaves aside the questions of imports from states outside the European Economic Community, there remains the substantial difference between the wholesaler, who specializes in particular lines in the vast majority of cases, and the person whom we will call the normal food retailer. To exist in the face of competition, virtually every food retailer nowadays needs to offer a more-or-less comprehensive range of goods. In some circumstances this may amount to as many as 7 000 different products. With a few exceptions and slight differences from one country to another, the days when there were specialists such as dairy produce retailers, greengrocers, and exclusive retailers of coffee or tea are past and gone. However, if a food

retailer does offer a full range of goods, these will make him subject to every relevant food law regulation, and he will be completely responsible for the composition, condition, quality and designation of the products on offer. If one considers only the case of the Federal Republic of Germany, a food retailer there has to observe some 220 laws and regulations. This is unreasonable.

Another example from Germany illustrates, for instance, what obligations - not to speak of other impositions - a greengrocer is subject to. If all the consignments of fruit and vegetables supplied to a West German city were inspected on a random sampling basis to determine crop protection agent residues precisely in accordance with the letter of the law, then with a daily quantity of some 900 tonnes of fruit and vegetables this would mean 900 checks daily or 225 000 annually. From general experience, the normal staffing requirement for a laboratory that determines pesticide residues is one chemist and two chemical/technical assistants, who will usually be able to carry out up to 500 tests per year. At a price of DM 225 per analysis, the result of investigating the 225 000 samples would be:

. work for 450 chemists and 1500 chemical/technical assistants;

. a working time of 300 eight-hour working days;

. a total cost of DM 50 625 000 for all analyses required to be carried out at the wholesale stage.

These two cases show, by way of suggestion, where the problems lie, since:

. it is unreasonable and inexpedient to make the retailer solely responsible for the composition, i.e. in the final event for the "inner" quality of the product (prepacked goods and loose goods) or for the external characteristics and quality changes that occur when the goods pass through the various trade channels;

. it is a matter for concern when the legislator imposes requirements in respect of quality and quantity on inspections in the food sector if these requirements cannot be met because of a shortage of laboratories and experts in the relevant state sector and that of private industry.

As a result, the following requirement arises:

Foods of which the trade takes delivery in prepacked form should always be inspected at the production stage. This principle applies also to prepacked agricultural produce. In this case in particular it is especially important for the inspections to be carried out as closely as possible to the source, so that any residues of crop protection agents present in a quantity beyond the permitted limit can be determined immediately. On the other hand the trade, regards itself responsible for all inspections of foodstuffs which, like fresh fruit and vegetables, reach the trade unpacked as loose goods and are sold by the trade to the consumer either in their original state or after packaging.

What has been stated in the foregoing has made no reference yet to the varying origins of the goods or the different trading stages. The aim has so far been merely to establish the principle, to which there are a large number of exceptions.

The problem of imports

For European trade, whose activities are based on the Treaty of Rome, it is correct to speak of imports only in references to transfers of goods from a country outside the European Economic Community into Common Market territory. The territory of the nine Member States is regarded by us as a single entity. It should be recalled here that the EEC Commission in its Ri proposal on producer liability also proceeds from this principle.

In line with the view that it has already expressed on this matter, the trade - in all its stages - feels responsible to the consumer in respect of imported goods - both prepacked and loose - for their conformity with the

legal stipulations of the recipient countries, i.e. also for appropriate inspection. However, it must be recognized in this connection that, in various sectors and in various countries, state bodies themselves conduct inspections at their own expense and thus relieve the trade of this task.

An exception to this rule is, of course, the importer who, although bringing into the Community an edible substance (e.g. groundnuts, walnuts, spices), supplies them here not to the end consumer but to an industry engaged in further processing. In this case the duty of inspection and checking obviously lies with this further-processing industry in accordance with the principle set out above.

For foodstuffs transferred from one EEC Member State (the producer country) to another, the principle of the common, unified market applies. Hence, trade among all the nine Member States is governed by what has been stated in the foregoing.

Inspection of keeping properties, presentation and packaging

On the basis of the maxim that every stage is answerable for effects on the product which occur within its sphere of competence, the food wholesaler or retailer has to ensure, by inspection of the goods he transports, stores and offers for sale, that:

. the packaging is not damaged;

. the foods are not subjected to undue heat or cold;

. storage complies with the regulations;

. regulations on product designation are complied with;

. storage life expiry dates are observed.

If inspections covering these points are conducted by the food Inspectorates, the relevant stage of the trade is responsible in accordance with the pertinent regulations. To this extent it is also in the interests of these wholesalers and retailers to take appropriate measures to ensure the unchanged quality and presentation of the foodstuffs. By special training of its expert staff the trade has been endeavouring for years to provide careful monitoring of foodstuffs, both during their time at the wholesale stage and also especially in the retail trade, where special product knowledge is required and the condition and keeping-properties of the food are checked automatically.

Aspect 2: Recognition of foreign inspection certificates (Countries within and outside the EEC)

In compliance with the concept of a common market and a uniform "community of rights", certificates issued by inspecting and monitoring authorities within the Community have to be legally valid throughout the entire Community territory. For instance, it would not be permissible for goods tested and certificated in France to be inspected again when transported to Denmark. The inspection certificate acts as a type of forwarding document. This scheme presupposes that the inspection methods are harmonized (Aspect 6).

In principle, inspection certificates from countries outside the EEC should be treated in the same manner. Although the difficulties involved in recognizing such inspection reports in the EEC are obvious, the Community should proceed to recognize certificates from countries outside the EEC within the scope of its competence in external trade. This should be done by means of bilateral agreements. The course to be followed to reach such agreements is, of course, tedious and time-consuming, but more rapid and effective success would be possible on the basis of absolute reciprocity by involving the FAO/WHO Commission of the Codex Alimentarius. It is already established practice in various supplier countries of the EEC for foodstuffs destined for export to be subject to state inspections and for corresponding inspection certificates

to be issued especially as evidence of the inspections and conformity with the relevant legal and administrative regulations. In addition, voluntary inspections, too, are carried out at the production site in individual sectors according to the requirements of the recipient countries as governed by the locally valid standards. Frequently these are hygiene inspections (e.g. in the case of meat or milk).

In this connection reference should also be made to the following point. On the same scale as that on which customs tariffs and quantitative restrictions are being reduced in Community trade and world trade, greater prominence is being gained by import regulations relating to food law and food hygiene. National import prohibitions and import restrictions brought into force in the Community for hygienic reasons can no longer perform their former efficient protective function and are now justifiable only when consumer protection cannot be provided in any other manner.

To the same extent that import inspections are being reduced, however, regulations must be brought into force which ensure that imported food is not detrimental to health. Thought should be given here to moving an increasing number of hygienic measures into the production factories and exporting countries or to compiling a code of hygiene stipulating minimum hygienic requirements which are recognized throughout the world.

Another factor of fundamental importance, especially for trade in fresh fruit and vegetables with countries outside the EEC, is the virtually uncontrolled use of crop protection agents throughout the world at the primary production stage. If one ignores the basic question of the usefulness of such substances, the fact remains that they are too frequently employed quite arbitrarily; no attention is paid to maximum quantity regulations in the country of destination, and the task of inspecting produce for these substances when is crosses the frontier into the EEC poses identification problems during analysis which themselves constitute a massive cost factor. The example quoted in the foregoing concerning consignments of fruit and vegetables to a West German city is evidence enough. In this instance in particular it is strongly advisable to reach standardized rules throughout the world for the use of these products (Aspect 5) and to make the inspection certificates universally valid.

Aspect 3: Self-help within the trade by inspection groups

Until the entire problem of food inspection is satisfactorily resolved, the trade must try to resort to self-help.

Food monitoring has been undergoing reorganization for some time because it has shown itself scarcely adequate either in terms of staff or in terms of material, for the multiplicity of tasks brought about by the increased standard of living, technical progress and administrative creativity. The example given above to show the numerical demands for chemists and laboratory technicians is sufficient evidence of this. Here also, concentration is being used as a rational expedient. Points of emphasis are being formed by concentrating the various inspection institutes upon particular assignments. Special laboratories are being established on a much greater scale than hitherto.

In these efforts by the monitoring bodies to adapt to the modern conditions of technology in the food sector and also to the trade structures, more intensive co-operation with the food trade in a prophylactic manner and on a greater scale than hitherto practised should enable a reduction to be made in infringements of the food laws and thus also a reduction in the workload of these bodies. This would require a greater information flow, which would have to be directed in the first instance at food retailers, since it is they who still bear the entire responsibility for observing all the legal regulations relating in any way to trade in foodstuffs.

What is more, this also imposes new requirements on the trade. As the state has become increasingly aware of its duty to the consumer in public law, there has been an increase in the requirements of the trade for qualified additional inspection with which the trade can provide evidence of meeting its

obligations to exercise due care. Thus, in the last few years voluntary inspection groups have been formed in the food trade in the individual countries of the Common Market, these groups on the one hand co-operating closely with the state authorities and departments and on the other hand conducting specific investigations of foodstuffs which, in certain circumstances, are more problematical and involve difficulties with their keeping properties or to which the trade is required to devote particular care (e.g. deep-frozen or readily perishable goods). The demands being placed upon food inspection are now indisputable greater. Wider-reaching and more intensive inspections are necessary, and legal regulations which have been introduced have to be checked with sophisticated methods in the interests of consumer protection. The trade plays an active part here as far as its responsibilities require.

Aspect 4: Standardization of sanctions imposed for contravention of food law regulations

In order not to result in undesired distortions of competition, a standardized European system of inspection must also ensure the greatest possible degree of uniformity in any sanctions imposed when legal or administrative regulations in the Member States of the Community are infringed. In fact, complete equality of treatment will never be possible. The problem lies in the nature of the different systems of criminal law and, so far as infringements and the associated fines are concerned, also in the different currency levels.

In principle, however, it should be possible to reach the point where the majority of trivial infringements of food regulations are no longer dealt with under criminal law, as is still the case in most Member States. Regrettably, experience has shown that substantial quantities of goods have been supplied to the countries whose inspection regulations have imposed the least stringent demands. Besides the undesirable aspect of exploiting the law to competitive advantage, this also has the far more untoward effect of producing a variation in the inspection standard and thus also in the level of consumer protection. Moreover the present ruling in (criminal) food law on responsibility reveals a discrepancy within the future civil law liability for defective products as envisaged by the draft guideline of the EEC Commission already mentioned.

Aspect 5: Harmonization of the legal and administrative regulations on the approval and use of additives, foreign substances, etc., in foodstuffs

Within the EEC the Commission has for years been instrumental in preparing conditions of acceptance and use for all manner of substances that can be added to a foodstuff, either during the growth of plants or animals, or in the processing of end products, or to provide the foodstuffs with keeping properties. The Commission has also had these conditions adopted by the Council as binding on the Community. These conditions are directed primarily at goods produced in the Community but also apply to all other goods in circulation, i.e. those imported from countries outside the EEC.

It would be a good idea if the Community could also reach worldwide agreement on hygienic regulations in order to combat the bacteriological and toxicological difficulties still confronting many countries of the world in this sector. This, too, would need to be done under the auspices of the FAO/WHO Codex Alimentarius. It is likely to prove the most difficult task of all as the initial situations differ so greatly, but every effort must be made in the face of the demand for protection of consumer health (which ought to be regarded as a matter of course all over the world). So far as the minimum hygienic values and the controls on the use of additives are concerned, the idea here in quite general terms would be to decentralize inspections and arrange for them to be conducted by experts of the associations in the supplier countries themselves, as already successfully practised, in some cases for years, for fish and apples.

Aspect 6: Harmonization of inspection methods

The standardization of conditions of acceptance will remain incomplete unless the analysis methods are governed by identical criteria and until every individual case is judged identically in all countries. The reasons why this requirement is so important for the trade are that trades must be able to depend exclusively on economic analyses, that it generally has no laboratory facilities of its own and, finally, that it has to assume the liability to the consumer for all eventualities, even those due to variations in analysis methods.

Apart from this, practice appears to differ from one country to another, e.g. with regard to the quantities taken for examination. Understandably, the duration of the checks likewise has repercussions on the quality of the batch as a whole; each situation is treated differently, so that in one instance the batch is held up until testing is complete, whilst on another occasion a batch is not even retained for testing at all. Especially in the case of fresh goods this has direct results on their quality and life. Sampling of apples, strawberries, or dairy products, which involves holding up a consignment, will have quite a different effect on the quality of the produce after a two-day examination than would an identical inspection of sardines or processed vegetables. These cases, which have been given only by way of example, will show how essential it is that the methods of inspection, too, should be included in the standardization of the system it is aimed to create.

Part III: Conclusions

In conclusion, the following aspects should be borne in mind as being of great importance from the viewpoint of the European food trade:

1. inspection of foodstuffs is an absolute necessity;
2. inspection should take place on the basis of the cause principle and that of relativity:
   - for prepacked goods: at the producer stage;
   - for loose goods at the trading stage;
   - for goods from outside the EEC: at the import stage.
3. A better approach than that of inspection with its far-reaching consequences is that of preventive co-operation between the state food inspectorate on the one hand and industry and trade on the other.
4. Methods of analysis and conditions for the acceptance and use of food additives must be harmonized throughout the world. So, too, must hygiene requirements.
5. Sanctions must follow standardized principles and, in the majority of petty cases, should not be subject to the standards of criminal law.

COLLABORATION BETWEEN MEMBER STATES ON FRONTIER REGIONS
EXPERIENCE GAINED IN THE GEOGRAPHICAL ZONE OF SAAR, LORRAINE AND LUXEMBOURG

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Introduction

In a world aspiring to cooperation beyond national frontiers, the sluggishness and rigidity of administrative procedures constitute an obstacle and a handicap to trade.

Suitable means of facilitating trading across frontiers are direct and informal cooperation between representatives of the responsible authorities in the countries concerned, meetings between the heads of these authorities with a view to exchanging views on courses of action and a common desire to find solutions to problems which arise.

At the same time, however, it is necessary to enforce the rules of fair competition in trade across frontiers, to facilitate trade between countries and to ensure better protection of the health of the consumer.

It is on the basis of these considerations that contact is established between those responsible for monitoring trade between border areas.

Origin and history of contacts between the Saar, Lorraine and Luxembourg

Contacts between the French fraud and quality control department and the Saar authorities are based on the agreements concluded between the French Republic and the Federal Republic of Germany to settle the Saar question. The Treaty signed in Luxembourg on 27 October 1956 provides for a special procedure concerning fraud and falsification perpetrated on either territory. After its return to the Federal Republic of Germany on 1 January 1957, contacts between the Saar and France were the responsibility of the divisional inspectors responsible for the Alsace and Lorraine regions.

Investigation reports drawn up by competent officials were used as a basis for criminal proceedings if they respected the procedural formalities of the country on whose territory the proceedings were to take place.

These provisions, which were no doubt applied during the two-year transitional period after the return, are now of only historic value.

Contacts between France and Luxembourg, which are of far more recent origin, are not founded on any legal basis established between the Grand Duchy of Luxembourg and France.

However, for a number of years the common problems of the two areas concerning wine have fostered closer contact between the French fraud and quality control department and those in charge of the Luxembourg Wine Station at Remich when drawing up the wine register.

Subsequently, because of the importance of Franco-Luxembourg trade and experience with the Saar, it seemed essential to extend "good neighbour" relations to other sectors of activity, where supervision devolves on the Institute of Hygiene and Public Health, the food inspection department, under the authority of the Ministry of Public Health.

Since 1974 the fraud and quality control department, which is responsible for relations with the Luxembourg authorities, has, to some extent, been able to achieve the same objectives as in the Saar with the officials of the Institute of Hygiene and Public Health.

These relations are obviously allied to the importance of the trade among the three countries and due primarily to their geographical position. The Moselle Département has a common frontier of around 200 km with Federal Germany and about 60 km with the Grand Duchy of Luxembourg. The Grand Duchy and the Saar are practically identical in size (2 586 km and 2 500 km) and their respective populations are 350 000 and 1 100 000. This area therefore constitutes a powerful community, and is both a decision-making centre and a principal level of governement, responsible for the implementation of laws, decrees and regulations.

Objectives

A number of difficulties are bound to arise with trade between border areas and it is necessary to find practical and rapid solutions.

Taking account of obstacles encountered in the past, action taken should be aimed at achieving the following basic objectives:

exchange of information
cooperation with investigations
the handling of specific problems

1. Exchange of information

Information may be exchanged in various ways, e.g. through direct and personal contacts with our counterparts abroad. Obviously it is essential that preventive or punitive action against imports should not be interpreted by our opposite numbers abroad as discrimination based on administrative protectionism against imported products.

Likewise, on grounds of sovereignty and the equality of citizens, a State cannot allow goods to be sold on its territory if they fail to comply with national law.

An attempt should be made to solve the problem by informing the individual through direct preventive action, so that he does not conduct trading activities likely to harm the trade as a whole.

It is therefore necessary to inform traders of their rights and duties. In particular,"cowboy" firms cannot be allowed to ruin the efforts made on foreign markets by honest exporters operating in compliance with the laws of the countries concerned.

In the interest of the countries involved, excellent cooperation is therefore needed, in frontier areas, between the different national inspection departments. Information and consultation are essential for effective, coordinated action.

2. Cooperation concerning investigations

A thorough investigation of a given problem is possible only if all the factors involved are known. The point is that in frontier regions these factors are often specific to the different territories. Direct cooperation between those responsible is therefore indispensable and an exchange of information and documents is necessary.

In the course of such an investigation, which may relate to analysis reports or to the labelling of accompanying papers of exported products, the exporter is informed of any anomalies observed. His attention is drawn to the difficulties he may encounter if he fails to comply with the regulations of the importing country.

The investigation report, drawn up by the inspector of the department concerned, makes it possible to assess the exporter's good or bad faith, an important and determining factor for subsequent exports.

In many cases the joint examination of analytical documents leads to the granting of a period of grace during which the products in dispute can be brought into line, after which expulsion or legal proceedings will ensue. Extending investigations and the provision of information beyond frontiers makes it easier to track down a foreigner guilty of fraud or falsification who might otherwise go unpunished.

3. The handling of specific problems

In many cases it is impossible to detect certain frauds and also to track down a foreigner guilty of fraud or falsification.

In the first case, when imported goods have undergone processing which is prohibited, say in Luxembourg, leaving no discernible traces, the fraud will not be discovered and cannot be punished.

In the second case, if an infringement is detected, liability rests with the importer.

However, the criminal liability of the importer conceals a very important problem: a foreigner guilty of fraud may go unpunished. Not only is he practically out of reach, but the competent authorities of his country are generally not informed of what he has done.

Mutual administrative assistance and the development of cooperation, the principal purpose of which is to ensure fair play, have made possible special surveillance of exporters whose dishonest practices might jeopardize the reputation of the products concerned.

By way of example, a consignment of poor-quality wines from France to the Federal Republic of Germany through the Grand Duchy of Luxembourg was intercepted and seized at the border when the same goods were to be sent to Luxembourg as a basic wine from Federal Germany. Co-operation in the inspection of documents made it possible to monitor the goods and to record the fraudulent change of designation of the product on the accompanying documents. The perpetrator of this fraud was prosecuted and convicted.

The following is another case of fraud. As the manufacture of fruit wine is forbidden in France, a French producer was exporting to Luxembourg an alcoholic dilution composed of cider, poor-quality alcohol (alcool rétro), red wine and water. When it came to labelling the bottles his colleague in Luxembourg christened this product "fruit wine" (vin de fruits).

Thanks to the close cooperation of the inspection departments, this traffic was intercepted and the person resposible was taken to court.

There are also cases of exporters who, wishing to comply with the legislation of the importing country and avoid any difficulty with the inspection departments of either country, take the initiative to find out about the rules on labelling and the composition of products. Thanks to direct cooperation between the different departments, the desired information can be obtained almost immediately.

Results obtained

Without wishing to draw up a detailed balance sheet of all results obtained through cooperation between border areas, let us quote a few examples of successful ventures.

Excess pesticide residues on fruit and vegetables sampled on Luxembourg markets are reported in the form of a table indicating the names and adresses of the French consignors, the sampling date and the amount recorded.

For some years there has been a reduction in pesticide residues on fruit and an increase in those on vegetables as well as a change in the nature of the pesticide found.

After the producers were contacted these amounts were brought down to acceptable levels. Similarly for dairy products and cold meats, where the main points criticized were anomalies in labelling, composition and colouring, it was possible to obtain compliance after the manufacturers had been contacted.

Matters concerning wines, spirits and liqueurs are generally dealt with in cooperation with the Inspector of the body that deals with registered designations of origin, as certain products with misleading designations or descriptions are looked upon with a certain amount of suspicion.

Meetings

The experience acquired as a result of the contacts between France and the Saar and France and Luxembourg testifies to the value of developing exchanges of information through contacts and joint consultation meetings.

These meetings, which are both friendly and professional, as well as instructive and rewarding, take place in a cordial and friendly atmosphere without a rigid agenda. Their essential purpose is to find solutions to all problems relating to food, to see to it that rules on the protection of the health of the consumer and those on fair competition are observed more faithfully in trans-frontier trade.

These meetings are held about twice a year in each of the three countries in turn. This close cooperation has allowed our respective authorities to obtain excellent results and to facilitate trade between our three countries, while avoiding certain long and often less effective administrative procedures.

Benelux experience

It should also be noted that similar contacts exist between the Benelux member countries.

Luxembourg has a common frontier with Belgium in the west and north, but the legal situation is different from that with respect to France and the Federal Republic of Germany. As a result of the Benelux Treaty and the Belgium-Luxembourg Economic Union, the geographical frontier is not a customs frontier. Customs checks are carried out, but this is done at the point of sale within the country rather than at the Belgian-Luxembourg frontier. Obstacles to the free movement of goods which occasionnally emerge between Belgium and Luxembourg as a result of these checks are normally examined and the problems settled during periodic meetings of the Benelux Member States. These meetings are also an excellent opportunity for personal contacts between the representatives of the inspection bodies of the three member countries.

As a result of these meetings, various problems concerning specific cases can be settled directly.

Final considerations

It can be concluded from all this that these contacts take place in a well-defined area, but in a community spirit. It is the climate of mutual trust, friendly atmosphere and, above all, personal contact which are essential for the success of such an experiment. However, one is entitled to wonder if such informal cooperation, which is possible for specific areas, is also possible on a much larger scale.

What one can hope for at Community level, however, is that good cooperation between inspection bodies and the mutual exchange of information will help the effective and reasonable application of harmonized regulations.

ADDRESS BY MR. RICHARD BURKE, MEMBER OF THE COMMISSION OF THE EUROPEAN COMMUNITIES, BRUSSELS

Ladies and Gentlemen,

Over the last two and a half days you have discussed national food law enforcement systems, ways and means of food law enforcement, and you have listened to the opinions of those affected by or involved in this enforcement.

You have I am sure been asked to reflect on why food law exists in the first place, and on how we go about drawing it up and putting it on to the statute books.

Let us examine for a moment the question : why have we got food law at Community level ? This question can be answered in at least two ways. While each answer is right as far as it goes, neither is complete in itself.

The first answer, and the one most often given and most easily accepted, is that we have a considerable volume of trade in foodstuffs between the Member States. Such trade is often seriously hampered by substantial differences between the Member States' legislations. In order to avoid this situation, it is necessary to have Community rules on the most important areas which are commonly the subjects of "food law", and thus to remove barriers to trade.

This answer, while being reasonable as far as it goes, is clearly not adequate in itself. It responds to the concerns set out in Article 2 of the Treaty, but it gives rise to another question.

This second question is : why are there, or can there be, differences between the food laws of the Member States ?

There are at least two answers to this question. One is that Member States may seek, through legislative means, to protect this or that segment of the food industry. That is the less polite answer.

The other answer is that opinions may differ between Member States as to what the requirements of consumer protection are, and as to the best means of ensuring that these requirements are met.

The general aims of food law could, I think, be summarized as follows :

- firstly, to ensure honesty in trading and equal conditions for competition,
- secondly, to ensure that food does not contain substances or ingredients which make it harmful to health ;
- thirdly, to ensure that the production and processing of food take place under conditions which ensure that it remains safe,
- fourthly, to ensure that it reaches the consumer in a satisfactory condition,
- fifthly, to ensure the freedom of movement of foodstuffs throughout the Community, so that consumers and processors can reap the benefits of a common market.

I believe that it is important to emphasise this. The benefits of which I speak can be very substantial indeed. A corpus of enlightened Community food law gives the consumer an expanding range of choice in foodstuffs, and the assurance that the law takes account of his reasonable requirement for the protection of health and safety. To the food processor, it offers the chance to compete in a Community-wide market, in the knowledge that, if he

conforms to the prescriptions of the law, he will not be suddenly and arbitrarily cut off from any part of that market.

The achievement of these objectives requires a series of judgments, and judgments can differ. Because judgments and the basis on which they are made are not identical, we have widely different solutions and emphases.

Food law at Community level could be described as the balance resulting from the combination of nine sets of judgments being brought to bear on one suggested solution.

The result will be a single set of prescriptions, applicable in all of the Member States, rather than a set of nine different systems.

You will see that I distinguish two main reasons for the existence of Community food law. The first one, that is, the answer to my first question, arises from the Treaty commitment to setting up a common market.

The second reason can be inferred from the answer to my second question. It is to protect the health and safety of the consumer.

In my view, the second reason is really the fundamental one. It is possible to imagine free trade without food law, as we know it. In a prior stage, it is possible to imagine consumer protection without free trade. Here, we touch the heart of the matter. Whether in food law or in any other area of Community legislation, it is the welfare of the individual which must be the prime motivation. The Common Market is, I find, sometimes erroneously depicted as the interaction of producer interests i.e. an affair concerned essentially with equitable conditions on the supply side. It must not be forgotten that no market can exist without having a demand side also and therefore that consumers are an integral part of and not an adjuct or accessory to, the Common Market. Their rights to protection and, more positively, to the promotion of their interests derive from that fundamental fact, of which our European Community must never lose sight.

When the fundamental reasons for the existence of food law are considered in this way, the importance of effective enforcement is put in its proper perspective.

I turn now to the question of how we develop food law and pass it into legislation.

At the root of our action lies a recognition of the fact that the stability of our societies depends on the observance of the rule of law by the majority of our citizens. They observe the rule of law because they assent to it, and it is this consensus which is the foundation of order in society. Without this consensus, there is in a democratic system no way of securing the widespread observance of the law. The smaller the degree of consensus, the more elaborate must be the enforcement machinery.

If you reflect on it, I believe that you will find ample illustration of this principle in your daily experience, in cases ranging from tax law to regulations on dog licences and on speed limits.

Consensus is thus the key to effective law in a democratic system. Consensus is reached by agreement on aims, followed by the objective study of available information. These two stages lead to the drawing of conclusions by those who are to be required to observe the law, those for whose benefit the law is proposed and those whose duty it is to secure the observance of the law.

It is this procedure which produces laws which are observed by the majority.

In the European Community, we recognize the value of consensus. It is for this reason that the drafting of Community legislation takes on its own particular character.

The specific aims of our food law are to be found in successive harmonization programmes (subjects of frequent discussion), and in our 1975 Programme for a consumer protection and information policy.

The process of drafting Community legislation is a very open one. Successive working papers on a given topic are discussed with Government experts and with the interest groups involved. Our purpose in proceeding in this fashion is to identify as far as possible the area of consensus and to build this into legislation, while respecting the Treaty provisions.

I would not pretend that this procedure always produces the right answer, but I believe that it gives us an opportunity of examining all of the main issues in a framework of open discussion.

The law cannot be a static and unchanging quantity. This is particularly the case in relation to food law. Habits change, albeit slowly. Techniques and technology change, both at production and processing level. Many of the foodstuffs we consume today are noticeably different from the products we called by the same names twenty years ago.

Laws which deal with the composition and treatment of changing products must themselves evolve if the basic aims are to continue to be met. The development of scientific knowledge identifies risk where none, or little, was previously thought to exist.

In circumstances of this kind, the law must keep pace with the development of knowledge.

I should like, if I may, to digress for a moment on the question of the risk element in foodstuffs.

It is often said that too much attention is paid to claims that risks of one kind or another arise from the consumption of certain foods or ingredients, and that risk is a normal part of human life.

My view is that people should not be expected to accept a risk simply because life is full of risks. There is no such thing as absolute safety, but that dictum is no argument for the acceptance of unnecessary risk, however minimal.

To return to the main point, I would say that the adaptation of food law to changes in habits, techniques, technology and knowledge is another area in which our Community system is firmly based on the search for consensus, illuminated by expert advice. The same procedures of consultation apply as when we are drafting new legislation, and we also have the benefit of the opinions of technical advisory committees.

Up to now, I have spoken about the "why" and "how" of Community food law. I have done so in the hope of encouraging you in the work that will certainly result from your deliberations here.

The final shape of any piece of legislation determines the burden placed on those who must enforce it. Your task is particularly heavy.

Mr. Kinch has shown me a calculation which indicates how large your remit actually is. Assuming an average bodyweight of 60 kg; if consumers in the Community limited themselves to the required energy intake of 12.5 grams of food per kilogram of bodyweight, the total volume of food consumption by our 262 million people would come to 196 000 tonnes per day. I would suspect that the actual figure is in excess of that. On my reckoning, that means an annual consumption in the region of 70 million tonnes of food.

Given this enormous quantity, I think that the quality of foodstuffs, as they arrive in our shopping baskets, represents a tribute to those who produce, process and distribute it, and in particular to those whose task it is to ensure that the standards laid down are actually observed.

I could wish, as I am sure you often do, that there were less need for enforcement of the law. Consensus notwithstanding, however, no law is effective unless it is clear that it will be enforced.

One of the Commission's tasks is to provide the right environment for fruitful dialogue. Such dialogue is, as I have explained, an important part of the process of drawing up our legislation. It must equally be an important part of the process of law enforcement. This is one of the reasons for holding this symposium. It seemed important to us to act as a catalyst in introducing to one another those in the Member States with overall responsibility for assuring the observance of our laws and enforcing penalties for breaches. The sharing of experience and knowledge in this area will contribute enormously to making enforcement effective where it is needed, and will facilitate concerted action at Community level in the face of any threat to our food supply.

I believe that your deliberations have been successful and will contribute to your ability to discharge the important responsibilities confided in you.

ROUND TABLE

with the participation of officials from national departments concerned with the regulation and inspection of foodstuffs and the Commission's departments

I. INTRODUCTION

1. The Round Table was chaired by Professor Eckert, Ministry for Youth, Family and Health, Federal Republic of Germany.

   Its task was to identify certain lines of force in the contributions and views presented at the symposium and to draw up a series of recommendations. It would be for the meetings held within the framework of the Community institutions under the established procedures to draw conclusions as such and to take any action which may be appropriate.

2. It was found that the symposium highlighted four fields which required particular attention:

   - opportunities for cooperation in the field of food inspection,
   - measures to improve inspection procedures,
   - informing the public,
   - exchanges of experts.

3. It was the general opinion that other subjects would also benefit by more extensive study, but the participants in the Round Table, because of the limited amount of time available to them, could do no more than touch upon them and had therefore to restrict themselves to mentioning them for the record. They did, however, stress the fact that this symposium must be regarded merely as a first step and a far from comprehensive summary of the many problems raised by food inspection and that, consequently, other meetings of a similar type seemed to be called for.

II. RECOMMENDATIONS DRAWN UP BY THE ROUND TABLE

Listed below are the recommendations which the participants in the Round Table drew to the attention of the departments of the Commission and of the national administrations, as appropriate. They invite the competent authorities to take the necessary initiatives to implement them.

1. The First series of recommendations relates to possibilities for cooperation on the question of food inspection

   These recommendations cover

   - fields requiring closer and more systematic cooperation,
   - operational measures facilitating the organization of cooperation.

   1.1 Fields requiring closer and more systematic cooperation

      1.1.1 Appearance of an immediate danger to human health

         When a Member State discovers on its territory a product which could constitute an immediate danger to human health (for example microbial deterioration, contamination) and where this product is likely also to be put on to the market in another Member State, the first Member State should inform the other Member States and the Commission without delay.

1.1.2 Infringements of legislation (whether harmonized or not) in force in the Member State of destination

When a Member State finds that a particular product originating in another Member State does not conform to its internal regulations (whether harmonized or not), this Member State should inform the Member State of origin in all cases where such action appears justified. Where appropriate, this Member State should also inform the Commission in order that the Member State of origin can, in the interests of improved trade, remedy the situation disclosed.

1.1.3 Application of harmonized provisions

The Commission's departments should regularly hold exchanges of views on possible measures to be taken in the event of detected infringements against harmonized provisions.

In such cases, concerted action may be agreed between Member States, taking into account the practical feasibility of such action.

1.1.4 Other concerted action

In certain urgent cases (for example threats, sabotage), it may be appropriate to coordinate the attitudes of Member States and to decide upon concerted action.

1.2 Operational measures facilitating the organization of cooperation

1.2.1 Setting up of a network of points of contact

The wide differences observed in the constitutional and administrative structures of Member States call for a pragmatic solution facilitating contacts between Member States on the one hand and between the Commission and the Member States on the other hand. These contacts and the speed with which they can be set up are of particular importance where urgent measures need to be taken to safeguard public health.

It is therefore desirable that each Member State and the Commission designate a point of contact which is able to respond, particularly in an emergency situation. The network thus set up must be based upon existing administrative structures.

The information exchanged between the different points of contact must, of course, be covered by the standards of discretion usually observed in such matters.

1.2.2 Role of the Standing Committee on foodstuffs

This Committee seems to be the most appropriate institutional framework for exchanges of information and to be best equipped to decide upon concerted action, notwithstanding the intervention of the network of points of contact in cases where a formal meeting could not be convened for reasons of extreme urgency.

2. The second series of recommendations relates to measures designed to improve food inspection

These recommendations relate to

- the stages at which inspection must enter the process
- inspection by undertakings themselves
- methods of analysis
- quality control.

2.1 Stages at which inspection must enter the process

In order to be effective, inspection must be carried out at all stages in production, manufacture and distribution. However, control at the stage of production and manufacture is a priority requirement because of its preventive value.

2.2 Inspection by the undertakings themselves

It is worthwhile encouraging and developing a system of strict inspection by the undertakings themselves which would make it possible to reduce the frequency of official inspections.

In certain special cases, inspection by undertaking must be made compulsory. An example might be the clarifying of wines by potassium ferrocyanide ("blue finings") which requires skilled personnel.

2.3 Methods of analysis

The need to have modern and reliable methods of analysis must be stressed. In addition, care must be taken to ensure that the instruments available are adaptable so that old methods can be replaced rapidly by more recent and more effective methods.

2.4 Quality control

Inspection which also covers the quality of foods is necessary in the interests both of better consumer protection and of ensuring fairness in business transactions.

3. The third series of recommendations relates to informing the public

The participants in the Round Table drew up two recommendations relating to

- the periodic publication of reports
- informing the public of measures designed to ensure consumer protection.

3.1 Periodic publication of reports

The Commission was invited to examine whether it would be worthwhile instituting a periodical publication on infringements detected and measures taken to deal with them.

3.2 Informing the public of measures designed to ensure consumer protection

The Commission was also invited to examine the possibility of providing the public with better information on all the measures contributing to consumer protection in the field of foodstuffs.

4. Fourthly, the participants in the Round Table drew up a recommendation on exchanges of experts

The Commission was invited to promote exchanges of experts specializing in food inspection between Member States.

III. Points which it was not possible to examine at the Round Table

It was not possible to examine or study the following points in detail at the Round Table

- the setting up of a data bank
- installation of specialist laboratories
- procedure for and methods of sampling
- official inspection certificate accompanying the goods
- sanctions for infringements.

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