

Food Standards; Their Place in Modern Society

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Some nine years ago, in May 1968, I had the pleasure of addressing the Annual Meeting of the Association of Public Analysts on the topic "Food Standards, Today and Tomorrow"¹. While much of the content of that paper is still relevant today, many changes have occurred. There is perhaps an even greater need today to review the place food standards have come to assume in our society and indeed in most western societies. It is appropriate to use the term "Food Standards" to mean those codified requirements which either fully, as in regulations, or partially, as in Codes of Practice, have been given the force of Law. But we must keep in mind that the objectives to be sought are not just legal phrases but adequate "food standards", which encompass the quality, variety, safety and nutritional value of the food available to the public. "Food standards" interpreted in this latter way have an especial importance for those on lower incomes for whom price is a limitation on their choice of foods. It is as an aid to maintenance of such food standards that statutory Food Standards have importance. Preoccupation with regulation for its own sake, together with the misuse of regulations to serve ends other than to benefit directly the consuming public, may well conflict with the maintenance and enhancement of the standard of food which can be made available by the food industry or, alternatively, may lead to higher costs.

When I last spoke to you, we were at the end of a decade in which society had been permeated by a spirit of optimism, accompanied by rising standards of living, low unemployment, growing resources and expanding education. Confidence in the power of science to provide increased resources, in return for a diminished working effort, although somewhat eroded, had not been completely lost. The identity of "bigger" with "better" could still be argued—we had yet to experience the impact of local government reorganisation and of British Leyland! Public criticism of the application of science had been largely concentrated on the uses of nuclear energy. But condemnation of "chemicals" in food, artificial fertilisers, pesticides and the pollution of rivers and the air was being increasingly voiced. The fallacy of attempting to create an urban community by confining its residents to high-rise flat dwellings had already been exposed. But economic growth remained the target of both industry and politicians and, indeed, such growth had been the reality of the decade, which had allowed other developments to follow in its train.

In this period of economic growth, the pace at which food legislation was being extended in the United Kingdom remained fairly leisurely. The work begun by the Food Additives and Contaminants Committee (F.A.C.C.), which had the long-term aim of limiting the use of all additives to permitted lists, was providing a sound and defensible basis for the continuing use of food additives. The increased work which these reviews of classes of food additives occasioned had required the separation of F.A.C.C. from the Food Standards Committee (F.S.C.) in 1964. F.A.C.C. then became a sister committee of and frequent collaborator with the F.S.C. It was still possible at that time for the two committees to operate with a mainly common secretariat.

We face today, in the late 1970s, a different economic and scientific climate. There is no longer confidence in the inevitability of growth in production, nor is science accepted as so evidently good in itself that more of it must be better. Various sectors of the consumer and environmental movements have blossomed. Economic events have had a sharp impact on the food industry, including dramatic rises in some raw material prices. Although partly protected from the industrial recession by the primacy of human needs for food, the food industry has had to meet pressures from the public and from government to keep prices stable which have been of greater intensity than those affecting most other commodities and industries. The operations of the market have been distorted by food subsidies and by price controls. The latter have given fresh impetus to the search for suitable substitutes for expensive raw materials. The use of these substitutes may sometimes be of no detriment to the final food product but on other occasions they may cause a perceptible loss of quality. In all areas of commercial and industrial life, new legislation has imposed additional tasks which have had to occupy the attention of senior management. With this influx of new laws has come an inevitable reaction to the imposition of any additional legislation, however acceptable it might be in isolation. Even when such legislation is recognised to have great merit, it cannot be expected to be greeted with enthusiasm by those for whom it creates fresh tasks.

It might perhaps have been thought that the present period of economic stress was one in which the protection of the consumer and of the honest manufacturer and trader by the food laws and the regulations made under them could have been allowed to continue largely undisturbed, on the broadly satisfactory basis which had been reached by the late 1960s. A number of factors have conspired to prevent such a breathing space. Public pressures, carefully fostered by newspapers and television, have been quick to demand action to deal with actual and apparent instances where food, its production, its handling, its hygiene and its possible effect on health have fallen short of public expectation. So cyclamates were precipitately banned, date marking was reviewed with higher priority than were the Bread and Flour Regulations, water in food becomes public enemy number 1, especially for the BBC, the brewers have had to defend their product publicly and more and more information is being demanded on the food label by consumer organisations.

But perhaps the greatest single factor which has complicated food law and the procedures by which food legislation in the U.K. has been developed is the entry of the U.K. into the Common Market and the activities of the Commission of

the European Economic Community (EEC). These will be considered in more detail later. It can be forcibly argued that the burden of non-productive work which the so-called harmonisation of food legislation in the EEC has occasioned, not only for Ministry officials, but also for the food industry, for the organisations of consumers and enforcement agencies, including the A.P.A., and not least for F.A.C.C. and F.S.C., is out of all proportion to any gain in freeing from legal constraints trade in foodstuffs between the member states. A small compensation has been the bond of sympathy engendered between U.K. officials and those in various U.K. organisations which have been involved in these discussions and negotiations in the EEC. In a number of subject areas, this had led to an agreed common U.K. viewpoint which otherwise might have been difficult to achieve.

In the period we now face, it is vital to maintain the best features of the system of food legislation which we in the U.K. have evolved since 1875, while cautiously extending it to remedy the illogical unevenness, in respect of the foods affected, of its application. Protection of the consumer's health is the first requirement of good food law, with, secondly, the prevention of deception. The latter is linked with the retention of the essential identity of well established foods. Thirdly, there is the need to minimise needless restrictions and to frame food laws in such a way that manufacturers have room for innovation and for technical development. Any such innovations and changes must not imperil observance of the first two requirements which have clear priority. All three requirements are linked by the concept of keeping restrictive compositional requirements for individual foods to the necessary minimum, while providing the maximum useful information to be given to the purchasing public, in forms that can be understood, at least by the majority.

The National Food Survey

In the United Kingdom those responsible for food policy, for public health and for food legislation as well as all engaged in the production and distribution of food are fortunate to have for their guidance the work of the National Food Survey Committee². The National Food Survey estimates food expenditure and consumption on a continuing basis, with records back to 1940, in a form which can be analysed for nutritional information and also related to income, family size, region of the country, etc. Few countries can match this resource, the current usefulness of which would be greatly enhanced if means could be developed to include within it the expenditure and nutritional contribution of the increasing proportion of food which is consumed outside the home in canteens, cafes and restaurants. The impending publication of the completely revised version of McCance and Widdowson's *The Composition of Foods*³ will lend added precision to the nutritional data in the Food Survey.

The preceding paragraphs have given a sketchy outline of some of the circumstances which currently affect and in the future will influence the consideration of Food Standards in the U.K. The recent publication of the papers given at the Symposium to celebrate the Centenary of the Sale of Food and Drugs Act 1875 has made available a number of views on the same topic⁴.

The contrast in that volume between the papers by G. K. Lawrence, who spoke as Chairman of the Food and Drink Industries Council and P. Goldman of the Consumers' Association, illustrates the gap in outlook and approach which F.S.C. and F.A.C.C. are repeatedly called on to bridge. To illustrate in more detail the way in which food standards are currently developing, with some attention also to the bodies that aid, inform and argue with F.S.C. and F.A.C.C. and also with government departments, I shall now turn to specific topics of current and future interest. Firstly, however, I shall refer briefly to your own Association and its long connection with F.S.C. and F.A.C.C.

The Association of Public Analysts and the Food Standards Committee

Opposing views on the desirable extent and scope of food legislation have a long history. To resolve some of these, a Departmental Committee on the Composition and Description of Food was convened in 1931 and reported to Parliament in 1934—publication of its report was delayed until 1938⁵. In discussing the need for regulations to lend precision to the Food and Drugs (Adulteration) Act 1928, it records: "The Society of Public Analysts, for instance, advocated the institution of a comprehensive system of definitions and standards which will ultimately embrace all articles of food". The Food Manufacturers' Federation were "not in favour of any wholesale system of standards and definitions" but "recognised that some measure of control on these lines was inevitable and expressed themselves as strongly opposed to the use of misleading descriptions". Some witnesses for particular trades, "without expressing any opinion on the general principle, considered it undesirable that the articles in which they were interested should be regulated in this way". Echoes of these latter sentiments are still heard by the F.S.C., for foods by no means insignificant in relation to dietary intake.

I would like, however, to quote again from the report of the Departmental Committee a significant passage: "The Society of Public Analysts have placed before us a full statement of their views. They visualise the fixing of standards or definitions for everything on the market in the way of food or drink. They realise that to do this would involve much exploratory work and that many interests would need to be consulted. Their view is that the institution of a comprehensive system of standards and definitions and the consideration of the descriptions that should be given of compounded foods would be a very lengthy work. They state that: "the Society is strongly of the opinion that the work should be given to a *permanent body that should have no other duties*". Its view is that a Statutory Advisory Committee should be formed by the Minister of Health, consisting of representatives of the Ministry, Public Analysts, manufacturers and consumers. This Committee should meet at regular intervals and discuss all matters relating to the administration of the Food and Drugs Act and all work coming within the purview of the Public Analyst, and it would delegate to Sub-Committees the consideration of particular problems as it might think desirable. On each of these Sub-Committees would be co-opted persons interested in the particular subject to be considered. The Committee would make recommendations to the Minister of Health. It would deal with food

standards and definitions, labelling and description of foods, processes of analysis, and similar questions, and it should on request state definitely, with regard to any ingredient of a food, the interpretation of the term "injurious to health".

Other organisations giving evidence also advocated the setting up of an Advisory Committee, the County Councils Association going so far as to propose that its recommendations should be binding so that the Minister of Health would be required to follow them. The Departmental Committee unwisely rejected the recommendations apparently mainly on the grounds that those making submissions "seem not to have been aware that the Ministry of Health at present have an efficient Foods Department well equipped with expert knowledge in regard to foods and with its own laboratories, the main object of which is the protection of the consumer".

Despite this objection, the seed of the idea had been firmly planted, to bear fruit in the creation of the F.S.C. after the end of the Second World War. No doubt the Society of Public Analysts returned to the theme and reinforced its arguments when it was giving assistance to the Ministry of Food during the Second World War. The establishment of the F.S.C. in 1947-48 followed essentially the lines the S.P.A. had advocated, except that the Ministers it served included the Minister of Food and the Secretary of State for Scotland with the Minister of Health. So the Food Standards Committee and, indirectly, F.A.C.C. also, are able to trace their lineage from the ideas of the Society, now Association, of Public Analysts. The F.S.C. is indebted to the A.P.A. not only for its origins but also for the outstanding service which members of the A.P.A. have given as members of the committee. R. W. Sutton's 19 years of service on F.S.C., from 1948 to 1967, will probably never be equalled. Indeed he had seen previous service on the wartime interdepartmental committee concerned with food standards which preceded F.S.C. He was succeeded by R. A. Dalley, who continues ably to serve the Committee. F.A.C.C. have similarly been aided by Dr J. F. Hamence and more recently A. J. Harrison. The A.P.A. has contributed many memoranda and also, most usefully, representative collections of analytical data for foodstuffs which are under review by F.S.C. Some concern must be felt that the pressures of the current economic situation, as interpreted and applied by the present generation of local authorities, may limit the investigatory work and the development of new analytical methods which have in the past been among the major contributions of the Public Analyst to the enforcement of food law and, indeed, to analytical chemistry.

The Terms of Reference of the Food Standards Committee

Not infrequently, questions are put to members of F.S.C. and I suspect F.A.C.C. also, from the food industry, from consumers and from those concerned with enforcement, enquiring what action the F.S.C. is going to take about some issue of current interest. The Committees advise Ministers only on those issues which are specifically referred to them by Ministers and their duties are complete on an issue once a report has been submitted. Normally, Committee members do not even see the submissions received by Ministers which result

from the publication of a Committee Report. It is clearly possible for some detailed point to be referred again to a Committee by Ministers but for F.S.C. this is rare. The different character of the work of the F.A.C.C. makes it more appropriate that, following submissions based on an F.A.C.C. Report, that Committee is asked to consider the effect the new submissions might have on their previous recommendations. It is perhaps useful to emphasise the need for organisations, in commenting on the published reports, to make clear the areas of agreement as well as points of dissent.

F.S.C. members have personal views on matters which might require to be reviewed, which not infrequently coincide with the official viewpoint of current priorities. There are opportunities, formal and informal, to make individual and Committee views known. The general opinion of the Committee some years back was that it would be wise to begin a review of the consequences of the development of new forms and sources of high protein foods. This comment was made before their use became widespread and it was accepted by Ministers, so that novel proteins were referred to the Committee. This was, in a number of ways, an exceptional review. The recommendations in the resulting report⁶ could not immediately be implemented at all fully, because those which referred to the limits of meat replacement and to the mode of declaration of the presence of the protein components were clearly relevant to the review of meat products which F.S.C. was just undertaking. So, unusually in this instance, many submissions concerning the Report on Novel Protein Foods were seen by the Committee as part of the review of meat products. It must be said that, in the last five years, the pressure on the time of the Committee of reviews required by Ministers in which there was an element of urgency has left little opportunity for the Committee to suggest fresh subjects on its own initiative!

Changes in the Committee's Method of Operation

The simultaneous conduct of several major reviews (currently Water in Foods, Meat Products, Labelling, Claims and Misleading Descriptions and Infant Foods, with Beer and Soft Drinks only recently concluded) has strained the Committee's resources and those of the Ministries which assist it. Additionally, as explained below, matters currently in negotiation within the EEC may be referred out of turn to the Committee for urgent consideration. The Committee meets only monthly, making it difficult for the full Committee to give the detailed consideration to many of these areas that their importance warrants. At the same time the Committee has been insistent that the pattern of its reports should be maintained, including the reviews of background information and full discussions of the issues that have become their hallmark. So, in the last three years, a system of subdivision of the Committee into *ad hoc* groups of three members has been built up. These groups are charged with converting, in each review, general decisions of the Committee into draft report form for reconsideration by the Committee. They also work out some of the detail. The two groups concerned with labelling summarise issues in a form which enables the full Committee to take the required decisions. For the final stage of each

review, however, the full Committee reassumes complete charge. The Committee and the groups are assisted for each review by a small team of officials, normally drawn from Food Standards and Food Science Divisions of M.A.F.F., but assisted by others from D.H.S.S. and the Scottish Home and Health Department, where appropriate. Valuable service is also given to the Committee by the expert Assessors appointed for reviews in which the Committee feels the need for advice from outside its own ranks.

Although the group system has been invaluable in making possible the expediting and completion of recent reports, it should not (and indeed does not) replace the function of the Committee acting as a whole. It is to be hoped and is I think intended, but intentions do not always become reality, to limit in future the number of reviews which the Committee has to handle at any one time to more manageable proportions. This would be welcomed by the Committee and also by the various bodies which prepare, with great care, submissions for it. Such a lessening of pace would be especially welcome to the food industry itself for the reasons given in my introduction. Such rationing of the development of food legislation would be consistent with the need to limit any fresh burdens to be placed on industry. By careful selection, the level of proper protection for consumers would not be materially reduced.

National Food Legislation and the Harmonisation of Food Law by the EEC

British industry, consumer organisations and the Ministries concerned have now had ample opportunity to observe and to influence the course of those EEC discussions and negotiations which are aimed at the harmonisation of food regulations within the EEC. Experience has amply demonstrated that such harmonisation can only succeed in its objectives either where it is concerned with so-called horizontal provisions, common to all foods, as is the case for labelling and for the control of food additives, or where there is a substantial trade in the particular foods across national boundaries. Even in the latter instance, food companies which have extensive export business have been and are well accustomed to tailoring their specifications and labels to meet different national regulations. So it perhaps still remains to be demonstrated that the vertical EEC Directives and Regulations for particular foods or groups of foods have any useful purpose to serve or are indeed effective for their stated purpose.

In relation to Directives concerned with additives, the EEC Scientific Committee for Food has to serve the combined U.K. functions of the Toxicity Subcommittee of the Committee on Medical Aspects of Chemicals in Food and the Environment (D.H.S.S.) and F.A.C.C. itself. National considerations sometimes arise, as in the selection of permitted sulphur dioxide levels, where its use in wines causes widely differing intakes, depending on national wine consumption. Such national differences do not intrude for additives to such an extent as to render the aim of harmonisation unachievable. The more authorities which are involved in reviewing evidence on additive safety, the fewer additives, in general, in each class appear to be acceptable. Most of the time, the food industry can cope with rather more restricted numbers of additives. The high and increasing

costs of the full safety testing of food additives mitigates currently against many new additives being submitted to replace those which may be deleted. However, with artificial sweeteners there is so large a potential market that an investment in safety testing is a clearly worthwhile commercial enterprise.

The Food Standards Committee encountered the direct consequences of EEC harmonisation procedure first in the deliberations leading to the Cocoa and Chocolate Directives 1973-75 and finally to the Cocoa and Chocolate Product Regulations 1976 which implement them in the U.K. The composition of products called chocolate had for a long time been a matter of concern to Public Analysts and the enforcement authorities and this concern was also reflected in the intention of Ministers, prior to U.K. membership of the EEC, to call for a review by F.S.C. at the appropriate time. On entry into the EEC, the U.K. was rapidly involved in discussions concerning a draft directive which quite inadequately recognised the types of chocolate made and consumed in the U.K. Their acceptability by U.K. consumers was hardly in doubt as consumption per head of chocolate in the U.K. was appreciably higher than on the continent. The F.S.C. was asked to review the subject as a matter of urgency and was able to take into account a number of viewpoints, including those of manufacturers and consumers. A report was prepared and given a restricted circulation. It served to reinforce the views already accepted and advocated by Ministry negotiators, that some means of accommodating the compositional requirements of U.K. chocolate types would have to be found in the directive. This was indeed done, to the reasonable satisfaction of U.K. interests. The comment might well be made, however, that the method of achieving it is barely "harmonisation" and, indeed, it would require careful argument to establish that the final provisions represented any progress in that direction. Separate provision for the use of 5 per cent. of fats alternative to cocoa butter was made for the U.K. It is interesting to speculate on the recommendations which a review by F.S.C. on cocoa and chocolate would have made, free of the EEC context.

Perhaps most important of all are the current negotiations concerning a labelling Directive. The emphasis now placed on the early completion of work by the EEC on this directive has cut completely across the conduct of the F.S.C. review of labelling. It seems very unlikely that, at least for the United Kingdom's internal trade, the provisions of the new directive and the U.K. regulations to implement it will represent any significant advance on the Labelling of Food Regulations 1970 (as amended). Indeed, skilled drafting will be required to convert the directive, if it retains largely the form of the current draft, into U.K. law. Although no one would suggest that the 1970 U.K. Regulations could not in some respects be clarified or improved, their main provisions have been widely accepted as reasonable and workable. The new directive will largely be judged in the U.K. by how far it permits the retention in U.K. law of most of the existing general provisions of the 1970 regulations. Meanwhile F.S.C., in order to assist officials and others involved in negotiations connected with the EEC draft, will make available short reports of limited scope on labelling questions. These must appear in advance of a general report if they are to exert any influence on the EEC negotiations. F.S.C. has already

reported on the transition from the calorie to the kilojoule as it affects labels, making recommendations which have caused some comment!

The Committee has had no part in the discussion of the attempts, apparently directed to increasing the sales of dairy products within the EEC, which would eliminate the use of the word "cream" from the permitted name of the U.K. version of ice cream as well as from the titles of non-dairy products at present allowed to use it and even from the name cream cracker, as letters in *The Times* have indicated.

In the past, the F.S.C. has objected to the imposition of restrictions which are not necessary, especially when they are advocated to serve ends other than to protect either consumers or honest traders and manufacturers. By such actions, all sound principles are lost and food law becomes a mixture of expediency and of the consequences of competing pressures of interest groups. Additionally there is concern at any measures which might increase the proportion of saturated fat in the diet, for which dairy products are one of the main sources.

Much more could be said on the probable future relationship between EEC food law and that of this country. Recently the difficulties encountered in formulating some of the draft commodity directives concerned with foods which are sold and consumed where they are produced have led to a rather more realistic attitude on the part of the Commission. So bread, beer and soft drinks draft directives have vanished and a very limited and more relevant programme retained.

The F.S.C. has issued a short report concerning the draft jams directive, in which it reluctantly accepts the continental concept of a two-tier structure for the compositional requirements for jams. It remains to be seen what proportion of U.K. jam will, if the directive is approved and implemented by new U.K. regulations, be modified to exploit the lower category which requires less fruit than the present regulations. The two-tier structure will only serve any useful purpose if an appreciable proportion of U.K. jam, additional to the current speciality jams which already have high fruit contents, is made to come within the first category and so conform to the appropriate requirements of the directive for fruit content and absence of sulphur dioxide.

While the F.S.C. must have regard for future developments in the EEC, it must still be its prime duty to advise Ministers, on the same basis as in the past, in the light of how it sees the body of U.K. food law developing as a coherent whole, with due regard for the special features of each problem.

Regulation or Information?

Control of the composition of foods by minimum statutory limits of at least key ingredients has served consumers well in the past. A floor has been put below which the content of these ingredients shall not fall. It is, however, difficult and sometimes impossible to distinguish by the use of compositional limits in this way between the different qualities of raw material. In meat products, for example, not only do the proportions of connective tissue and fat which may be taken as part of the meat vary widely but the quality of the

muscle tissue itself differs sufficiently to justify, for example, the price difference between fillet steak and stewing steak.

The more closely compositional limits are drawn, the less is the reputable manufacturer able to use his experience and knowledge to maintain constant quality, combined with a stable price for a product, by appropriate raw material adjustments. The margarine manufacturer would indeed face difficulties and the housewife would have to meet price increases, if the proportions of vegetable and other fats used in margarine manufacture were laid down in detail in a compositional standard.

An alternative approach is to disclose to the purchaser more fully than in the past such information as will be seen to be significant, e.g. the percentage of fruit juice in squashes, the quantity of meat in meat products with perhaps an indication of the figure for fat. This approach has been used by the Committee in its recent review of beer⁷. A series of recommendations, some of which are in Table I, are aimed at providing information to the public. They include the

TABLE I
F.S.C. RECOMMENDATIONS FOR THE STRENGTH
CLASSIFICATION OF BEER

Original gravity range, O.G.	Approx. alcohol by volume, <i>per cent.</i>	Rating in <i>X</i> symbols	Permitted descriptions
Up to 1035	Up to 3.4	X	Light
1035 up to 1041	3.4 to 3.8	XX	Special, Heavy
1041 up to 1047	3.8 to 4.3	XXX	Export, I.P.A.
1047 up to 1062	4.3 to 6.1	XXXX	Strong
1062 and above	Over 6.1	XXXXX	Extra strong, Barley wine

need to declare beer strength by its *X* rating, the malt content, the method of conditioning, the method of dispensing and the level of carbonation. These recommendations contrast sharply with the mandatory rules in West Germany concerning the exclusive use of malt in brewing beer for German consumption. Elsewhere in the world a number of countries limit the use of adjuncts to a fixed percentage.

A single quantitative indication of composition, such as per cent. fruit in jam or per cent. meat in meat products or the combination of two such indicators, per cent. meat and per cent. textured soya protein product in an extended meat product, if clearly displayed, may do much to aid the discriminating purchaser. It cannot, however, be seriously contended that any form of complete disclosure of composition, whether in nutritional terms or otherwise, will do more than confuse the majority of purchasers, or give an enterprising marketing expert a chance to display his skill while disguising the real nature of the product.

Consumer organisations have generally welcomed the concept of requiring the

percentage declaration of the major and/or characterising ingredient of multi-ingredient foods and some reputable manufacturers also welcome it, provided it gives, at the same time, greater freedom in formulation. There are, however, fears from some quarters that, if minimal levels of the more expensive ingredients are not required, the less scrupulous manufacturer may allow the product standard to fall. He will rely on a lower price to direct attention away from the lower percentage declaration of an ingredient. Some also would regard freedom for products to respond to the direct pressure of competition in this way as desirable. It does not follow that all such changes, although making use of less expensive ingredients, would necessarily produce products which were inferior in nutritional terms.

Codes of Practice

The F.S.C. encounters, in a number of its reviews, problems in which the complexity of the issues involved, the uncertainties about which requirements are best specified for incorporation in a regulation (which may then not be revised for ten years) and the rapid pace of change as new and modified products come on the market, all make it unreasonable to recommend statutory requirements at the present time. It is in such areas that a Code of Practice can usefully provide sufficient guidance to manufacturers as well as having some value for enforcement authorities. To be effective, Codes of Practice must be negotiable between parties which have an ultimate common interest which influences their approach to the negotiations. Experience of discussions between industry and the Ministry of Agriculture, Fisheries and Food (M.A.F.F.) concerning both EEC and Codex Alimentarius standards suggest that M.A.F.F. could negotiate valid and practical Codes with manufacturers. Unfortunately, legal opinion has regarded such action as outside the powers of Ministers under the Food and Drugs Act 1955.

The alternative route to create a Code of Practice with more general acceptance than agreement limited only to manufacturers is through negotiations between a manufacturers' association and the Local Authorities' Joint Advisory Committee on Standards (L.A.J.A.C.). While, on occasion, useful Codes have been agreed in this way, often disagreements result which cannot readily be resolved.

It is difficult to see an acceptable way out of this situation without amendment of the Food and Drugs Act 1955—indeed the time cannot be far distant when a new Act should be considered, which would relegate much of the detail in the present act to regulations. The new Act could then provide powers to allow Ministers to negotiate Codes of Practice, to be used where it is clear that such Codes would provide a more flexible approach. Codes are especially useful for new products which need a preliminary period of partial control before the provisions for regulations can be formulated with confidence.

Enforcement

The extremely important topic of enforcement has been the occasion of some comment in preceding sections. Points which require current emphasis are,

firstly, that there is every indication that enforcement of compositional regulations in the future will require new and more sophisticated methods of analysis. Secondly, the increased proportion of food now processed in some form or other requires an adequate level of sampling carefully planned to maintain a satisfactory level of control. This is especially true when manufacturers are being squeezed between rigorous price controls and rising raw material costs. Thirdly, caterers, many of whom are ignorant of food law, supply an ever growing proportion of the food consumed in the U.K. Some caterers are themselves using today techniques derived from the food industry—as in the cook/freeze system—so that food supplied by caterers requires at least the same degree of external control as the products of the food industry itself, since internal control is likely to be inferior in catering operations. Action is urgently needed to improve compliance with food law by the caterer. Not least in this respect is the need to inform the caterer better concerning his obligations. Fourthly, the long tradition of advice and mutual aid between manufacturers and enforcement authorities, in particular as represented by Public Analysts, is one to be retained and extended. In this respect, the Code of Professional Conduct of the Institute of Food Science and Technology of the U.K. requires its members in the food industry to do their best to ensure conformity with food law of all food in the manufacture of which they play a part. Although many technical staff in industry previously saw this as a role they should fulfil, it is now an obligation for a substantial fraction of the technical staff employed by the food industry.

Whatever changes may come in the future through the European link or from other causes, voluntary conformity by industry with food laws, in the design of which industrial staff have played a part, which are enforced by local authority staff willing to accept that deliberate breaches of the law are, on the whole, exceptional, is still the most powerful system to safeguard the interest of the public. It is the justification for the inclusion in regulations of some provisions which are difficult or impossible to enforce.

It must be evident that the views expressed in this paper are personal, although some reflect current thinking in the F.S.C. My own knowledge of the subject has its origins in my work with my colleagues on the Committee, aided by the devoted work of those officials of the Ministries which serve the F.S.C., in particular, from M.A.F.F. I must also acknowledge the aid received from the efforts of all those organisations which make submissions to the Committee or which help in other ways. Historically pre-eminent in this respect has been the assistance received from the Association of Public Analysts.

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