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New Legislation and Official Literature issued during 1974

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Each year, in the current period of change, it becomes more difficult to decide which pieces of legislation should be put into a review of this kind and which should be left out.

There are many people becoming involved in legislation, each group dealing with its own part, but increasingly it seems that analysts are in danger of being regarded as mere tools which might or might not help other officials in the enforcement of the various Acts and Regulations. Thus they tend either to be left out of the various discussion groups, or to have to keep track of so many of them that the mere problems of analysis are in danger of being forgotten altogether. Yet a great deal of enforcement depends upon an analysis, and such is the nature of analysis that very often the analyst will not find something if he does not know what he is expected to be looking for! Local Government reorganisation has increased the difficulty, by changing the former routes by which information diffused into analysts' departments.

Analysts were grumbling, years ago, that elaborate legislation existed to prevent food adulteration, yet the vendor had only to add his adulterant in the form of excess packaging which would benefit nobody but himself, and nobody could restrain him. In times like these, we are supposed to be conserving consumable resources. We also find that in many organisations one of the first areas to be chosen for making economies is the laboratory service. On the money thus saved we find bandwagon riders setting up a Waste Management Advisory Council. Unfortunately the Government's Green Paper on the subject of packaging and waste did not find its way to the laboratories. Perhaps this is the Environmental Health Officer's province, or perhaps a Waste Disposal Officer's special interest, but it certainly needs chemical expertise.

Another promoter of food adulteration in Great Britain is the Ministry of Agriculture, Fisheries and Food. An example is salmon paste. Whereas the trade formerly had a code of practice which distinguished between salmon paste made with a fish component derived entirely from salmon and a related commodity which it called 'fish paste salmon' in which only 25 per cent. of the fish component was salmon, the Ministry's 'Fish and Meat Spreadable Products Regulations' allow both commodities to be sold as 'salmon paste', the 25 per cent. of salmon in the latter being said to be sufficient to 'characterise' the product. Perhaps MAFF is really short for Maffia, a possibility which might also account for the secrecy about EEC methods of analysis which has been so evident until recently.

EEC Methods of Analysis

A list so far available is as follows:

AGRICULTURAL PRODUCTS:

Regulation	1061/69	Starch, macaroni, milk fat, mannitol
Regulation	924/74	Amendments

ANIMAL FEEDING STUFFS:

Regulation	1216/68	HCN, ash, calcium carbonate, chlorides, mustard oil, lactose, potassium, sodium, sugar, theobromine, urea, lupin alkaloids, urease activity in soya products
Directive	70/524	Additives
Directive	71/250	Moisture, volatile nitrogen bases, phosphorus, crude oil and fat
Directive	71/393	Starch, crude protein, crude protein soluble in acid pepsin, pepsin activity, gossypol, tetracyclines
Directive	72/99	Moisture in fats and oils, magnesium, crude fibre, Vitamin A, Vitamin B ₁ , Vitamin C
Directive	73/46	Starch, amprolium, ethopabate, dinitolmide, nicarbazin, Vitamin K ₃
Directive	74/203	Starch, amprolium, ethopabate, dinitolmide, nicarbazin, Vitamin K ₃
Directive	74/63	Maxima for undesirable substances
111/10388/67		Proposed Methods of Analysis for Fertilisers

ANTIOXIDANTS

Secondary Legislation of the EEC Volume 26 contains information about purity criteria for antioxidants and preservatives.

CASEIN AND CASEINATES

Regulation	756/70	Moisture, fat, free lactic acid, ash, milk protein
Regulation	455/73	Amendments and total bacteria, coliform count, thermophilic bacteria count
Regulation	2940/73	Amendments with milk protein other than casein, lactose, thermophilic organisms

There are proposed analytical methods in circulation bearing the general reference code GTMA, for the determination of free acidity of acid casein, moisture, fat, pH, scorched particles, protein, lactose, ash and microbiological tests for yeasts, moulds and bacteria. One of these was made available to analysts by the MAFF, namely that coded GTMA/X1/A/4—No. 62/73: 'Colorimetric Determination of Lactose in Casein', but it proved to be rather baffling, having an accuracy no better than twenty per cent. and a general appearance of having been put together by somebody who had never been inside a laboratory. Thus there were directions to add several precise quantities of reagent instead of making the solution up to a definite volume after necessary

reagents had been added, and it cheerfully directed the operator to add 5 ml of concentrated sulphuric acid by means of a pipette to an aqueous solution—a curiously hazardous operation to advocate, in the year of the Health and Safety at Work Act. Further enquiries revealed that this unfortunately was not intended to be a rough method only for intervention purposes.

CEREALS

Regulation	162/67	Wheat and rye flour—ash
Regulation	768/69	Wheat, rye, barley, maize and durum wheat, broken grains, grain impurities, sprouted grains, miscellaneous impurities, live pests, moisture
Regulation	1397/69	Flour, groats and meal of certain cereals—determinations as in 768/69
Regulation	2706/71	Certain products processed from cereals—peroxidase activity

CITRUS FRUITS

Directive	427/67	Qualitative and quantitative analysis of biphenyl, orthophenylphenol, sodium orthophenylphenate
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HONEY

Proposed methods based on Codex Alimentarius. A new Directive number EEC/409/74 on Honey was issued in 1974.

OIL SEEDS

Regulations	1470/68 1012/71	Sampling, determination of oil, impurities, moisture
Regulation	282/67	Oil content, moisture and impurities in colza, rape and sunflower seeds
Regulation	2377/74	Amendments

OLIVE OIL

Regulation	618/72	Treatment of sample with activated alumina, reaction of olive residue oil, neutralisation and decolorisation of olive oil in the laboratory, analysis of the sterol fraction of fatty substances
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PROCESSED FRUIT & VEGETABLES

Regulation	865/68	Dry soluble residue by refractometer
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SUGAR

Regulation	1265/69	Ash, colour, colour in solution, polarization, invert sugar, moisture
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WINES

Regulation	1539/71	S.G., alcohol, total dry extract, reducing sugars, sucrose, ash, alkalinity of ash, total acidity, volatile acidity, non-volatile acidity, tartaric acid, citric acid, sulphur dioxide, pH
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POULTRY

Draft Regulation R/309/74 (AGRI 71) drip loss

Legislation under the Food and Drugs Act

This legislation overlaps with that of the EEC in some areas. The most obvious of these is in connection with wine. Statutory Instrument 1974, No. 1175, termed 'The Common Agricultural Policy (Wine) (Amendment) Regulations 1974', in fact, merely added EEC Regulation 2247/73, Regulation 2805/73 and Regulation 3282/73 to the schedule of Community Provisions which appeared in S.I. 1973, No. 1341.

The Common Agricultural Policy (Wine) Regulations, 1973

These regulations were to do with marketing, coupage and sulphur dioxide. Most of the EEC Wine Legislation is in the HMSO publication 'Secondary Legislation of the European Communities Subject Edition Volume 41—Wine 1973', but the official methods of analysis have not yet been translated into English. There is still something unfamiliar about the wording in the introductions to EEC harmonisation regulations, where they tell that the Minister and the Secretary of State are designated for the purposes of section 2(2) of the European Communities Act, 1972 to act, in exercise of the powers conferred upon them thereby, to make regulations.

A circular, FSH 3/74, was issued on 28 February to explain that overall responsibility for administration of the wine regulations rests with the Minister acting through HM Customs and Excise, the Wine Standards Board, and local authority enforcement bodies—the last mentioned being responsible for the retail outlets' compliance with rules for composition and description. Paragraph 8 of the circular draws attention to the rules in Regulation (EEC) 816/70 in which table wines and light wines were expected to have an 'Actual Alcoholic Strength' not less than 14·8° proof, and a 'Total Alcoholic Strength' of not more than 26·2° proof. Exceptionally, specified wines might go up to 29·7° total proof. EEC 'Quality Wine' would have 'Total Alcoholic Strength' not less than 15·6° proof, and 'Liqueur Wine' (*i.e.* Port and Sherry) would have 'Actual Alcoholic Strength' between 26·2° and 38·4° proof, with 'Total Alcoholic Strength' not less than 30·6° proof. There are also standards for pressure in sparkling wine of not less than 3 atmospheres, and for semi-sparkling wine of between 1 and 2·5 atmospheres. There are limits for total acidity, volatile acidity and, according to the type of wine, limits of between 200 and 400 parts of SO₂ per million. The labelling arrangements will recognise EEC table wines, EEC quality wines and wines from other countries, but questions of documentation or alternatively, of marked closures for bottles, will be dealt with by the Wine Standards Board. There is a possibility that containers with a capacity of more than 5 litres may be moved without documents, provided that they are identifiable. Co-operation between the Wine Standards Board and the local authorities is expected to deal with any dispute about which types of wine are being offered. Use of names such as Burgundy, Pommard, etc., is reserved for

quality wines produced in specified regions. Such wines may be denoted by the initials of that phrase or by those of the French equivalent phrase, namely 'VDPRD'. Other national phrases which denote such quality are: 'Appellation Contrôlée' (AC), 'Vin délimité de qualité supérieure' (VDQS), 'Denominazione di Origine Controllata' (DOC or DOCG) and 'Qualitätswein' or 'Qualitätswein mit Prädikat'. The labels on quality wines will show the region in which they were grown and one of these phrases. If a geographical description is to be given with non-quality wine, it is expected that a prominent brand name will also have to be shown. One thing which will not be allowed is a term like 'Spanish Sauternes'. Most British wines are not made from fresh grapes and are therefore not considered to be 'wines' by the EEC. The same is true of vermouths, etc.

A letter from MAFF on 2 September 1974, bearing the reference FTE, stated that technical guidance on relevant provisions of the '1954 International Convention for the Unification of Methods for the Analysis and Appraisal of Wines' would soon be made available to analysts, and a Ministry guidance leaflet was circulated by the Wine Standards Board of the Vintners Company, on 28 October.

The major Food and Drugs Act Legislation to appear in 1974 concerned additives. The changes were essentially due to harmonisation with EEC Legislation. *The Preservatives in Food Regulations, 1974, S.I. 1974 No. 1119* replace those of 1962 and the amendment regulations of 1971. Almost immediately, the MAFF issued FS 5077, *Proposals for Preservatives in Food Regulations* to amend and supersede S.I. 1974 No. 1119. The main reason for the changes is the incorporation of all the EEC purity criteria for preservative chemicals. The opportunity has been taken to make some minor changes in the regulations. Some of the provisions still appear a little strange. Thus the application of smoke solutions is still sufficient to merit the description 'smoked' and Regulation 10 still allows as a defence that preservative (permitted or not) in non-scheduled foods, is due to its use to protect the food whilst in storage. It is also a little odd that bacon and ham may contain more than one permitted preservative, each to the maximum allowed individually. With the variations which occur in glucose syrup it will be difficult to assess borderline cases with the 'Glucose drinks containing not less than 23.5 lb of glucose syrup per 10 gallons of the drink' which appears in Schedule 2. The oddest items however, are the methods of analysis laid down for citrus fruit. Unfortunately they are probably not negotiable since they strive to interpret EEC legislation. It is also unfortunate that the 2:4:7: trinitrofluorenone reagent which is required should carry the name BDH, a firm which does not supply it. Why the two preservatives, 2: hydroxybiphenyl and biphenyl, could not have been extracted together is not clear. In spite of the prescribed six hours extraction time, the recovery of 2: hydroxybiphenyl is apparently liable to be only of the order of 80 per cent, and one wonders if the original draft of the method is sacrosanct, or if one might use the modifications of *The Analyst*, 1963, p. 36. In view of the enormous financial

pressures now placed upon laboratories, routine examinations would probably be better done by G.L.C., on an ether or ethyl acetate washing of the peel. It will not take many EEC methods of analysis like this one to close the Public Analyst laboratories firmly and finally. The new Regulations make one improvement, for they recognise thiabendazole as a preservative. The method of analysis for preservatives in citrus fruit is said to be under review.

Proposals for new Preservative in Food Regulations, which were issued in August, probably indicated that regulations, modified to the recommendations of the Food Additives and Contaminants Committee Report of 1972, were still in incomplete draft form when the deadline for harmonisation with EEC legislation loomed up. The proposals seek to change some definitions, and to accept that food which contained an excess of permitted preservative was 'unfit'. They prevent the use of 'carry-over' provisions which gave an extra margin of preservative allowance for some compounded foods, and they will permit the use of hexamethylenetetramine and the related chemical, formaldehyde, as a preservative for another food additive, namely dimethylpolysiloxane emulsion. Further proposals (FS 5077) were issued in December. These suggest purity criteria for hexamethylenetetramine and the addition of 'freeze drinks' to the list of specified foods. 'Freeze drinks' are soft drinks sold for conversion into ice lollies in a home refrigerator without first being diluted.

The Antioxidant in Food Regulations, 1974 revoke those of 1966. The main differences are the proposed purity criteria for antioxidants which have been laid down by the EEC. In the one document we now have reference to the four vitamin C derivatives in common use, the tocopherols of commerce, octyl, dodecyl and propyl gallates, BHA, BHT, and ethoxyquin. One schedule shows the foods and the limits of related antioxidants which are permitted, and another limits the diluents to be used for antioxidant preparations to water and fat (including edible oil) of sufficient purity. Provision is made for the adequate labelling of antioxidants sold as such, and the existing prohibition on the presence of antioxidant in food specifically intended for babies is retained.

The Miscellaneous Additives in Food Regulations, 1974 appear to have been the most difficult of these regulations to draft. The definitions include descriptions of acid, base, anti-caking agent, anti-foaming agent, buffer, firming agent, glazing agent, humectant, liquid freezant, mineral hydrocarbon, packaging gas propellant, release agent and sequestrant. Food is to be treated as being 'unfit' if it contains substances intended for any of these purposes but which are not included in the Regulations. This may pose an enforcement problem in some authorities, since District Councils normally consider themselves to be the authorities to enforce Sections 8 and 9 of the Food and Drugs Act, 1955. Port Health Authorities may also enforce the regulations.

There are 133 additives listed, some of which stimulate frivolous conjecture. Thus in this context one may tend to overlook the use of bentonite for clarification purposes and suppose that somebody proposes to eat it. Shellac, carnauba wax and beeswax make one think of the possibility of submissive rituals involving food quality boot polish. The use of sodium sesquicarbonate in

bath salts revives memories of libellous stories of the medicinal efficacy of pontifical bathwater. Does the sodium edetate allowed in brandy dissolve one's bones, which must then be restored with edible bone phosphate? In what food would one find 1:4 Heptonolactone?

Proposals to amend the Miscellaneous Additives Regulations appeared a month after the Regulations. These provided for the application of EEC labelling requirements to phosphates and for the inclusion of dichlorodifluoromethane as a permitted liquid freezant. It seems that this chemical provides a means of successfully freezing over-ripe fruit, reduces the processor's food-dehydration losses on freezing, and enables small items of food to be frozen as individual pieces instead of as congealed solid blocks. An explanatory supplemental report FAC/REP/19 of the Food Additives and Contaminants Committee accompanied the proposals.

Proposals to amend the Fluorine in Food Regulations, 1959 (FS5457) were issued in December. This would prevent a clash between the limits for fluorine in acid phosphates complying with EEC specifications listed in the Miscellaneous Additives in Food Regulations, and those laid down in the Fluorine in Food Regulations.

Proposals for Revised Emulsifiers and Stabilisers in Food Regulations appeared in August, from the MAFF. Once again the purpose of the proposals is to give effect to recommendations made in reports of the Food Additives and Contaminants Committee (of 1970 and 1972) and to implement the provisions of EEC Directive 329/74. It is proposed to omit Regulations 2(1) and 4(1) of the existing Emulsifiers and Stabilisers in Food Regulations, 1962, since substances which may be added to cream are controlled by Regulations 5 of the Cream Regulations. Provisions for reconstituted cream are given in Section 47 of the Food and Drugs Act read with the Cream Regulations. Provision is also made for the purity and labelling of the respective additive substances and for the types of gum allowed in cheese manufacture.

The Cheese (Amendment) Regulations, 1974, S.I. 1974, No. 1122 amended the definition of Emulsifying Salts and made changes in the colouring materials permitted for use in Cheese.

The Food Additives and Contaminants Committee Supplementary Report on Solvents in Food, 1974 (FAC/REP/17) explained why *iso*-propyl alcohol and propylene glycol had now been accepted as Group A additives for use in food.

The Food Standards Committee Second Report on Bread and Flour, 1974 could perhaps be regarded as a typical modern document which mocks the whole concept of unadulterated food. However, we must concede that bread is not made from flour alone, and report that the booklet contains a good summary of the history of bread and an interesting essay on flour. Paragraph 49 gives a figure of 1.85 per cent. fibre for wholemeal flour, which could be used as a basis for the evaluation of wholemeal bread. The word 'flour' used alone continues to be understood to be wheatflour, and a short dissertation on EEC bread and flour legislation draws attention to the fact that self-raising flour is almost unknown on the continent of Europe. Future provision for it should be in the Bread and

Flour Regulations and not in the Self-Raising Flour Regulations. It was remarked that EUR Bread could contain no added nutrients and no processing aids other than ascorbic acid. A chapter on 'Flour Products Other than Bread' refers to biscuits and cakes. The Committee seeks no extension of regulations to include flour confectionary and biscuits, but it makes a recommendation that butter biscuits should contain fat of which at least two thirds is butterfat. Butter cakes should be made with all the added fat butterfat. The Committee was against designations such as 'containing butter', unless at least 5 per cent. of the cake crumb was butter, and they disagreed with the use of terms such as 'half the fat is butter' where the main names could not be justified without the use of such terms. Paragraph 122 stated that they had been unable to get general agreement on this matter with representatives of the cake trade. Thirty-nine recommendations were made and these included discontinuation of the addition of nicotinic acid to flour, a changed definition for bread, that the term 'light' when applied to bread should be considered to be a slimming claim, that yeast-stimulating agents, excipients and diluents should be specified in future regulations and that there should be designation changes in connection with the existing terms Wheaten, Wheat Germ, Gluten, Starch Reduced, Enriched, etc., as applied to bread. There is also a useful reference to the new S.I. unit which will replace the Calorie. Thus, $1 \text{ Cal} = 1 \text{ k cal} = 4184 \text{ joules} = 4184 \text{ kilojoules (kJ)}$.

Future reviews were promised for 'The Colouring Matter in Food Regulations' and for 'Food Labelling' with special reference to the definition of 'main ingredient', the use of coined names for foods, misleading descriptions and illustrations, claims, generic terms in lists of ingredients, exemptions from declaration of ingredients and nutritional information on labels. The labelling review is probably running parallel with consideration of a draft EEC Proposal for a Council Directive on Food Labelling, 2206/V1/74-E. This was circulated by the MAFF to trade interests in September, but not to Public Analysts.

One matter which may not be resolved concerns the labelling of dry soup powders. A Food Standards Committee Report on Soups in 1968 and a former Code of Practice drafted by the manufacturers, stated that the appropriate designation for such products was 'Soupmix', but the EEC seems likely to accept the one word 'Soup' for any dry or canned soup products, and manufacturers are reluctant to make special provision for British practice.

Another EEC working document, on Oils and Fats, 1326/V1/74-E, was given limited circulation. In April, the Food Standards Committee announced by *Press Notice, No. 133* that it intended to consider standards for beer. In October, a *Press Notice, No. 318*, announced that the Food Additives and Contaminants Committee proposed to consider 1-aspartyl-phenyl-alanine methyl ester as a possible new artificial sweetener in food, and *Press Notice, No. 322* announced that the Food Standards Committee intended to make a review of infant foods. There was also some evidence from MAFF correspondence (FS 2990H) that the wet nature of some canned cured meat was causing concern and might lead to a review of the Meat Product Regulations.

Food contamination is also occupying official minds, and there was a meeting between the MAFF, the DOE, the DHSS and Local Authority Representatives on 17 December at which environmental contamination of food was discussed. Total diet studies of lead, mercury and some other metals were recommended, but although sums of money for sampling were suggested, nobody seemed to consider the cost of the determination of metals down to the limits required, so it was a comfort to see in the FAO/WHO Expert Consultation document, FAD/FCM/74.1 FAO:ESN:MON 74.1 by Kermode and Malik (Rome, 7-11 October 1974), that there were statements about sensitivity which were much more realistic than the 0.001 mg/kg which had been mentioned at the meeting. This document said that the lowest level of lead normally capable of determination was 0.01 mg/kg, or, with special modifications, 0.005 mg/kg. An individual laboratory might be able to get internal replicates in the 0.01 mg/kg bracket, but it would be very unwise to use whole population averages which assumed random laboratory agreement of such accuracy.

A paper called 'Basic Aspects of Flavouring' presented by J. J. Jenkins of Food Industries Limited to an International Seminar at Solingen was made available to the APA in 1974, and this showed that there is control of flavouring additives in food in Germany, Norway, Switzerland, Poland and Bulgaria while partial control exists in many other countries. The EEC hopes for legislation controlling flavours by 1978.

Everything mentioned thus far in this review has concerned international legislation, or additives and contaminants. There was also an HMSO Report which exploded a few myths. 'Food and Nutrition Research' tells us that sugar is not necessarily bad for us and that so little is known about nutrition that very large programmes of research are still called for.

The remaining domestic food law confined its advances to a little legislation on milk, meat and shellfish, thus:

The Milk (Special Designation) (Amendment) Regulations, 1974, S.I. 1974 No. 62, and Circular FSH 2/74, transferred the enforcement and licensing connected with the Milk (Special Designation) Regulations from Food and Drugs authorities (*i.e.* Counties) to District Councils. They also introduced conditions to be observed when milk is sterilised by a continuous flow method.

The Milk (Great Britain) Amendment (No. 2 and No. 3) Orders, S.I. 1974 Nos. 1549 and 1707, increased milk prices, restoring the special highest price for Channel Islands and South Devon milk. These orders served to remind some people that 'Kedassia' milk might command a special price. Kedassia milk proved to be milk taken from the cows in the presence of a Rabbi. It was learned that Express Dairies sell it 'untreated' and Unigate sells it 'pasteurised'.

A communication from the Milk and Milk Products Division of the MAFF dated 22 March 1974, dealt with approved chemical agents for cleaning dairy equipment. This is in connection with Regulation 27 (6) of the Milk and Dairies (General) Regulations, 1959. It reminded manufacturers of the several classes of agent used and gave methods of testing some of them. The hypochlorite solutions mentioned had to contain between 9 and 12 per cent. by

weight of available chlorine (not falling below 8 per cent. on storage at 15.5°C) and to contain not less than 0.7 per cent. by weight of sodium chlorate and not more than 2 per cent. caustic soda.

The Diseases of Animals (Approved Disinfectants) (Amendments) Order, 1974, S.I. 1974 No. 799, brings up to date the disinfectants approved for use in cases of Foot and Mouth Disease, Swine Vesicular Disease, Fowl Pest, Tuberculosis, etc.

The Authorised Officers (Meat Inspection) Regulations, 1974, S.I. 1974 Nos. 391, 1211 and 1806, (with amendments 1 and 2), deal with the qualifications required by officials authorised to administer the Meat Inspection Regulations 1963 as amended by The Meat Inspection (Amendment) Regulations 1966—a controversial subject under the proposals of the EEC.

The Importation of Meat (Wrapping Materials) Revocation Order, 1974, S.I. 1974 No. 820, removed restrictions on meat wrapping which were imposed in 1932.

The Molluscan Shellfish (Control of Deposit) Order, 1974, S.I. 1974 No. 1555, prohibited movement of molluscs into certain designated tidal waters and adjacent land.

A letter from LAJAC, Ref. 3B/S/HL.21/2, draws attention to a Divisional Court case, *Campbell's Soups v. Hilbert* in which Messrs. Campbells lost an appeal against the application of the 35 per cent. meat standard to a 'Ready Meal' on whose label an ingredients list correctly headed with the word 'meat' was held to be a claim that meat was a 'major' ingredient. In fact, this is a very technical argument since it referred to a situation where meat and vegetables were present in quantities which allowed for a resolution of the dilemma by a trivial increase in the quantity of vegetable used. The Ministry was not prepared to make amending regulations and one could almost believe that it may not be a promoter of food adulteration after all.

Curious things were going on in other areas of the food field. The British Standards Institution issued a Draft Standard, (document 74/50180 DC) for the methodology to be adopted for sensory analysis of food. One feels tempted to say that there are people currently dabbling with consumer affairs who have much more time on their hands than Public Analysts have ever had.

Those people who have time should read: 'Justice of the Peace and Local Government Review Reports' for 20 July 1974, p. 440. It quotes Lord Hailsham on the conviction in the case *Smedleys v. Breed*. This dealt with the finding of a caterpillar in a can of peas, and Messrs Smedleys said that it was an unavoidable consequence of the process of picking and canning peas. The description of how Lord Hailsham concluded that the caterpillar was not 'unavoidable' shows that adequate use of English requires precise thinking on a scale attainable by very few people. One can but enviously admire.

The universities and the professional bodies have recently been abandoning a former requirement for prospective science students to show proficiency in the use of English.

Medicines

LEGISLATION UNDER THE MEDICINES ACT

The Medicines (Interim Prescription Only) (No. 1) Order, 1974, S.I. 1974 No. 7111. Forty-nine medicinal products are listed for sale only by a pharmacist in accordance with a doctor's prescription. Six classes of person are exempt from the general prohibition on sale, among whom are Public Analysts and sampling officers. A second Order, *S.I. 1974 No. 2167*, was issued later in the year. REVOKED

The Medicines (Renewal of Applications for Licences and Certificates) Regulations, 1974, S.I. 1974 No. 832, provide for the renewal of licences under Part II of the Medicines Act 1968.

The Medicines (Phenacetin Prohibition) Order, 1974, S.I. 1974 No. 1082, prohibits from 1 September 1974 human medicaments which contain 0.1 per cent. or more of phenacetin, except when the sale is by a pharmacist in accordance with a doctor's prescription. Once again, Public Analysts and sampling officers are exempt from the prohibition. The prohibition is said to have resulted from an Independent Television Programme broadcast on 31 May. REVOKED

The Medicines (Termination of Transitional Exemptions) (No. 1) Order 1974, S.I. 1974 No. 1149. Transitional exemption from the licensing requirements of Section 16 of the Medicines Act, 1968 with regard to ingredients, supplied for example to pharmacists, ceased on 1 September.

The Medicines (Exemption from Licences) (Ingredients) Order, 1974, S.I. 1974 No. 1150.

The Medicines (Standard Provisions for Licences and Certificates) Amendment Regulations, 1974, S.I. 1974 No. 1523, provide, among other things, for the scrutiny of advertisements by a licensing authority.

MAFF Explanatory Note 776/74—*The Medicines (Labelling of Medicated Animal Feeding Stuffs) Regulations, 1973* augment the leaflet MAL 28 which was published to give guidance to manufacturers of medicated animal feeding stuffs.

DANGEROUS DRUGS

New Legislation included the following:

The Misuse of Drugs (Licence Fees) Regulations 1974, S.I. 1974 No. 942. Various charges for renewal of licences to possess certain drugs covered by the Misuse of Drugs Act, 1971 are laid down. Laboratories which hold Cannabis are subject to a licence fee of £22.

The Misuse of Drugs (Safe Custody) (Amendment) Regulations, 1974, S.I. 1974 No. 1449, delayed until 1 April 1975 the requirement that controlled drugs shall be locked away in the prescribed manner.

POISONS LEGISLATION

The Poisons List Order, 1974, S.I. 1974 No. 80, added three substances to the Poisons List.

The Poisons (Amendment) Rules, 1974, S.I. 1974 No. 81, amended the rules with respect to salts of thallium, the supply of oral contraceptives and paraquat.

Poison bottle sides require fluting. Changes corresponding with the changes in the Poisons List are also made.

S.I. 1974 Nos. 1556 and 1557—These are further amendment regulations to the Poisons List and Poisons Rules.

Weights and Measures

Weights and Measures legislation no longer enters the Public Analysts' laboratories as a matter of course. The orders and regulations which did appear were the following:

The Weights and Measures Act 1963 (Dentifrices) Order, 1974, S.I. 1974 No. 874, removed the exemption of Part V Schedule 7 which had formerly allowed the quantity of dentifrice in a pack to remain undeclared. The exemption remains for tubes containing less than 12 ml.

Early in 1975 a government report (Children's Dental Health in England and Wales 1973) suggested that brushing teeth had no effect on dental health . . . a sorry comment on millions of pounds spent on Health Education.

The Weights and Measures (Sale of Wine) Order, 1974, S.I. 1974 No. 875. From 2 September 1974 wine sold for immediate consumption must be sold in quantities measured in the units shown in Part IV of Schedule 1 to the 1963 Act.

The Weights and Measures (Sugar) Order 1974, S.I. 1974 No. 1166, provides that Parts VIII and IX of Schedule 4 of the Weights and Measures Act, 1963 shall cease to apply to sugar. Prepacked sugar in quantities between 100 grammes and 5 kilogrammes may now be sold only in 12 oz, 1 lb, 1½ lb quantities or 1 lb multiples, or—by metric weight—in eighth, quarter, half and three quarter kilogramme quantities, in half kilogramme multiples to 3 kg and then in 4 kg and 5 kg packages. The packages must have the weight marked upon them, unless the quantity is below 50 grammes.

The Weights and Measures (Amendment) Regulations 1974, S.I. 1974 No. 1316, modify acceptability criteria for capacity measures.

The Trade Marks (Amendment) Rules, 1974, S.I. 1974 No. 1314, changes the fees for registration of trade marks.

The Prices Act, 1974 and its first regulations became the responsibility of Weights and Measures authorities during the year.

Fertilisers and Feeding Stuffs

The legislation which became effective in 1974 required all forms of animal feed except pet foods to bear a Statutory Statement, the name of the feed, and the name and address of the manufacturer. The label must list the content of oil, protein, fibre, Vitamins A, D and E (if added), copper in excess of 50 ppm., magnesium in excess of 0.5 per cent., molybdenum, selenium, permitted anti-oxidants, and permitted colourants . . . and nobody wants to pay an economic fee for the analysis of all these components. The label must also bear the names, amounts, product licence numbers and methods for use for each medicinal product in the feed, together with guaranteed dates for the effectiveness of vitamins and medicaments.

COMMUNICATIONS FROM THE MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

A letter from A. J. Gibbins, 10 January, Ref. DW23B, warned that the annual returns which will replace the former quarterly returns would have to contain more information. An annex to the letter outlined the 'Ministers' Consent' procedures—analysts were told not to approach the Ministry on questions of interpretation except through some association. Advice about suitable methods of analysis (until EEC methods are officially adopted) could be obtained from the Government Chemist. There was notification of a proposed review of present tolerances. There was a request for information about analytical results obtained on 'informal samples' (with a warning about discretion in revealing them), and there were specimens of the forms to be used in making the annual returns.

A letter from A. J. Gibbins, 7 June, Ref. DW23 CCB 5100A, requested that a quarterly return in the name of those Local Government Authorities which existed before Local Government Reorganisation should be sent to the Ministry for the first quarter ON THE NEW FORMS. The 1974 annual return was required only for the last nine months, and in the names of the new authorities.

A letter from A. J. Gibbins, 19 July, Ref: DW25, referred to copper in concentrates which were intended for dilution but did not fall within the definition of 'Feed Supplement'. No limits of variation had been proposed for copper in excess of 200 p.p.m. The letter requested that until the forthcoming revisions a tolerance of 30 per cent. of the amount stated be accepted.

MAFF Technical Bulletin No. 27 'The Analysis of Agricultural Materials'—The date of this publication was, in fact, 1973 but it only became generally available in 1974. It specifies strengths of extractant solutions in soil analysis and gives a standard acid detergent method for fibre. It also provides methods of analysis for aflatoxins, soluble carbohydrates, fatty acids in silage, nitrates in herbage, urea, boron, zinc etc.

The Therapeutic Substances (Supply of Antibiotics & Chemotherapeutic Substances for Agricultural Purposes) Amendment Regulations, 1974, S.I. 1974 No. 242, increase the permitted amount of sulphaquinoxaline in rabbit food from 94 p.p.m. to 310 p.p.m.

The Fodder Plant Seeds Regulations, 1974, S.I. 1974 No. 897, give effect to EEC Directive 401/66 setting standards for fodder plant seeds.

UNDESIRABLE SUBSTANCES

The contents of an EEC Directive on maximum permitted levels for undesirable substances in Animal Feeding Stuff were given in the Association of Public Analysts' Bulletin Volume 21 No. 3 (March '74) (*restricted circulation*) but the number of the directive was not given.

Lead

In addition to the food monitoring which has already been mentioned, the year 1974 produced some other evidence of the present preoccupation with lead. An indication of the preferred analytical methods to be used was contained in

the document *Food Contamination Monitoring in the U.K.* by Kermode and Malik of the Food Standards and Control Service Food Policy and Nutrition Division FAO Rome, ref FAD/FCM/74.1 and FAO: ESN: MON 74:1 dated Rome, 7-11 October 1974. On page seven it suggested that Public Analysts' results for mercury, cadmium, arsenic, nitrite and nitrate might be collated by computer. There was also an MAFF Food Science Division document of September 1974 numbered SG 78 which stated how samples for survey purposes should be taken—for example, only edible portions of fish should be examined, all grit should be removed and mashing in a liquidiser should be brief.

Early in the year attention was drawn to *Warren Springs Laboratory Report 1973, No. LR 189 AP* entitled 'A Preliminary Assessment of the Roadside Dust in Greater London'. Lead levels ranged from 0.1 to 0.3 per cent. and do not justify special concern up to about 0.5 per cent. The association of lead with traffic was inferred from the lead content at only about 0.06 per cent. in dust deposited in central Hyde Park. Chromate levels were of the order of only 0.003 to 0.009 per cent. indicating that the lead was not due to abrasion of lead chromate from yellow street marking lines.

A Department of the Environment Circular (115/74) in September drew attention to D. of E. Pollution Paper No. 2, an Inter-departmental Working Group report on 'Lead in the Environment and its Significance to Man'. This concludes that there is no evidence of a crisis situation, but that food is the major source of lead absorption for most people, and more stringent limits for lead in food are on the way. Water does not normally present a major problem, but where individuals need to replace plumbing in their houses, a grant toward the cost of fitting copper piping is available. Possible ingestion by the chewing of lead painted objects, release of lead from ceramic glazes and some forms of eye shadow cosmetics are considered, and Local Authority Health Departments are listed as bodies taking an interest in the lead intake of children of lead factory workers, and of people living near lead works, in lead levels in food and drink, and in the health hazard to people living in areas having a high lead content in soil.

The National Society for Clean Air issued a report from its 41st Annual Conference on the use of moss as a means of collecting traces of heavy metals in order to assess the metals content of air.

Toys, etc.

The Toys (Safety) Regulations, 1974, S.I. 1974 No. 1367, revoked the regulations of 1967. The modifications to the earlier regulations include relaxation on the use of cellulose nitrate so that it is now permitted in cellulose paints used on toys. Limits are to be reduced to 2500 p.p.m. for total lead, 100 p.p.m. for soluble arsenic, and 100 p.p.m. for soluble cadmium. The soluble antimony and soluble chromium limits remain at 250 p.p.m., while the limit for soluble barium has been increased to 500 p.p.m. and a new limit of 100 p.p.m. for mercury has been introduced. There is a limit imposed on the operating voltage of electrical toys but safety limits for the transformers which reduce

mains voltages to the maximum working voltage of 24 will be included in Electrical Appliances (Safety) Regulations which are in preparation. Pile fabrics used in toys should conform with requirements of British Standard 4569:1970 but only approved laboratories may undertake the tests. Sharp edges and points are controlled and the detachability of eyes, etc., has to conform with the Code of Safety Requirements for Childrens' Toys B.S. 3443:1968. The plastic bags in which toys may be packed must either be of a minimum thickness of 38 microns, or, temporarily, carry a warning of their possible dangers. The Regulations are enforceable by local Weights and Measures Authorities.

The Pencils and Graphic Instruments (Safety) Regulations, 1974, S.I. 1974 No. 226, restrict the amounts of soluble arsenic, cadmium, hexavalent chromium and mercury in the paint coating of pencils, brushes, etc., to 100 p.p.m., the amounts of soluble antimony and lead to 250 p.p.m., and of soluble barium to 500 p.p.m. Crayons and the cores of pencils, etc., have similar limits imposed. The analytical method of metal extraction, as with the new Regulations for toys, uses a smaller volume of hydrochloric acid than in the former Toys (Safety) Regulations, 1967.

Health

The Health and Safety at Work, etc. Act, 1974 received Royal Assent on 31 July. It is not quite clear whether the "etc" means that the drafters were not sure whether they had included more than Health and Safety, (happiness perhaps?), or whether in the present state of things they wondered whether the ways in which people make a living could be called 'work'. Significantly, when the Commencement (No. 1) Order, S.I. 1974 No. 1439 began to bring its provisions into operation, the Act still had not appeared because of a strike of printers. The next thing to happen was that it went out of print. This enabling Act is expected to take over existing legislation at present contained in The Factories Act, The Alkali Act, Mines and Quarries legislation, etc., and to extend those provisions to hospital workers, laboratory workers and even to the general public. A Health and Safety Commission came into being on 1 October 1974 and its members included some Local Government representatives who may confidently be expected to overlook the application of the Act to laboratories operating on behalf of Local Government, although in some places, building maintenance improved beyond recognition in the year before the Act received Royal Assent. A Health and Safety Executive will be created from existing Factories Act inspectors, etc., on 1 January 1975 and will use the Environment Hygiene Laboratories at Cricklewood and the Safety in Mines Research Establishment in Sheffield.

The timetable for the implementation of the various parts of the Act has been published as Advisory Bulletin 8 of the Local Authorities Conditions of Service Advisory Board, and from 1 January 1975 the newly created Employment Medical Advisory Service will be transferred to the Health and Safety Executive.

The trickiest part of the legislation at present seems to be a requirement for employers to prepare a written statement, by 1 April 1975, about general policy with regard to health and safety, and proposed arrangements for carrying out the policy.

Less pressing literature in the health field was:

Trace Elements in Relation to Cardiovascular Diseases (WHO—Geneva—1974).

Department of Health and Social Security Reports on Health and Social Subjects, No. 7, Diet and Coronary Heart Disease.

No. 9, Present-day Practice in Infant Feeding. This report included recommendations for the modification of the composition of National Dried Milk, for constant conditions for formulation of feeds, and the discouragement of additions of cereal—this would affect some formulations for babies under 4 months old. The discouragement of additions of sugar to baby food is also advocated.

Medical Research Council Report Series No. 302 'Tables of Representative Values of Foods commonly used in Tropical Countries'.

Safety

The following documents should be noted:

The Abstract of Special Regulations (Highly Flammable Liquids and Liquefied Petroleum Gases) Order 1974, S.I. 1974 No. 1587.

The Radioactive Substances 1948 (Modification) Regulations, 1974, S.I. 1974 No. 1821.

The Hydrogen Cyanide (Fumigation) Act 1937 (Repeals and Modifications) Regulations, 1974, S.I. 1974 No. 1840.

The Factories Act (Repeals and Modifications) Regulations, 1974, S.I. 1974 No. 1941.

Offices, Shops and Railway Premises Act (Transfer to Health and Safety at Work etc. Act), 1974, S.I. 1974 No. 1943.

Home Office Code of Practice for the Packaging of Dangerous Substances for Carriage by Road. No. 1 Organic Peroxides.

Department of the Environment Report by the Sub-committee of the Joint Advisory Committee on Safety and Health in the Construction Industries, 'Precautions in the Use of Asbestos in the Construction Industry'.

Department of the Environment Circular 123/74 'Emergencies Arising from Chemicals and Other Substances Washed Ashore'.

Environment

The Department of the Environmental Central Unit on Environmental Pollution, Pollution Paper No. 3, '*Report on the Non-Agricultural Uses of Pesticides in Great Britain*', proposes an extension of the work of the MAFF Pesticides Safety Precautions Scheme to include supervision of the use of pesticides by local authorities by the Health and Safety Commission (see also D. of E. Circular 158/74).

In this connection, it might be worth mentioning that a letter from the MAFF dated 3 December 1974 and referenced TOX 7974 7613 suggested that an interim limit which might be taken for Thiram on lettuces would be 8 p.p.m. for those grown outdoors and 30 p.p.m. for those grown under glass.

CONTROL OF POLLUTION ACT, 1974

The Control of Pollution Act, 1974 was made on 31 July and it repeals The Rivers (Prevention of Pollution) Act, 1951, most of The Rivers (Prevention of Pollution) Act, 1961, the Clean Rivers (Estuaries and Tidal Waters) Act, 1960, The Noise Abatement Act, 1960 and The Deposit of Poisonous Waste Act, 1972. It also amends parts of several other Acts such as The Public Health Act, 1963 and The Public Health (Drainage of Trade Premises) Act, 1937.

The Act provides for plans for the disposal of waste, prohibiting unlicensed disposal of controlled waste and providing for the reclamation of waste or the production of heat and electricity from waste. It makes provision for dealing with litter and tips, and for the cleaning of highways. Control of pollution of rivers and coastal waters is dealt with in Part II of the Act, taking over the legislation connected with 'Consents to Discharge' effluents. The Act seeks to control the discharge of trade effluent to public sewers and it gives local authorities powers to forestall pollution, to deal with wastes discharged from vessels, and to halt agricultural practices which may be polluting waterways. The power in the Water Act, 1973 to make charges for facilities provided by the Water Authorities has been transferred to this Act and it seeks even to control discharges made by the Water Authorities. Part III of the Act deals with noise, with special sections dealing with noise on construction sites, noise in streets, with noise abatement zones and with the noise made by machinery. Part IV deals with atmospheric pollution giving powers to make regulations about motor fuel (rather like that which began to reduce lead from 1 November) and to make regulations about the sulphur content of fuels. There is no reference to analysis in the Act. As with much else of this 1974 legislation, most of the Control of Pollution Act dovetails with Community Environmental Policy which was detailed in a UN declaration at Stockholm, and by Ministers of the Environment who met at Bonn. It is to be co-ordinated by an EEC Environment and Consumer Protection Service which was created in 1973, but it will be taking little account of existing protection services which have been operating on small budgets for 100 years.

Miscellaneous

The County Councils Association became the Association of County Councils on 1 April 1974 when the Association of Metropolitan Authorities and the Association of District Councils were also formed.

A white paper (Cmnd 5726) called 'National Consumers' Agency' described in September how a Government-financed agency would be set up to promote consumers' interests by making representations to central and local government,

to the Director General of Fair Trading, to industry, etc. It would be expected to be available to give a consumer view on policies and proposals, to represent the consumer on bodies which (for example) may include organisations of the European Community, and to review arrangements for consumer representation which could make nationalised industries more responsive to consumer needs. Mr Michael Young, who founded the Consumers Association (which publishes "Which?") will be the first chairman, from 1 April 1975.

A Local Government Act, 1974 received Royal Assent on 8 February. Part III of that Act sets up systems for investigating maladministration of Local Government in England and Wales.

The Costs in Criminal Cases (Allowances) (Amendment) Regulations, 1974, S.I. 1974 No. 1580, and *The Coroners (Fees and Allowances) (Amendment) (No. 2) Rules, 1974, S.I. 1974 No. 1581*, revise fees for witnesses who attend courts.

A Department of the Environment letter of 20 July (ref. BRA/1068/2) with an enclosure dated 17 July by R. F. Stevens of the Building Research Establishment, reviewed the problem of high alumina cement concrete in buildings, and suggested some tests which might usefully be carried out upon samples of concrete suspected of being of this kind.