

## Sale of Food and Drugs Acts.

EXTRACTS FROM THE ANNUAL REPORT OF THE MINISTRY OF HEALTH FOR  
1922-1923 AND

ABSTRACT OF REPORTS OF PUBLIC ANALYSTS\* FOR THE YEAR 1922.

APPOINTMENT OF ANALYSTS.—During the year the Department approved of 48 appointments of Public Analysts in England.

PERCENTAGE OF ADULTERATION.—The total number of samples purchased for analysis in 1922 was 113,860, of which 7106 were reported as not being genuine or up to standard. In 1921 the number of samples taken was 113,664, of which 7582 were reported against. The proportion of samples reported against shows a decrease from 6·7 per cent. in 1921 to 6·2 per cent. in 1922.

MILK.—Of 60,274 samples of milk purchased and submitted for analysis, 4624 were reported as adulterated or not up to standard. These represent a proportion of 7·7 per cent. as against 8·6 per cent. in 1921 (5290 out of 61,439).

In London the proportion of adulterated milk samples was 4·5 per cent. (593 out of 13,179), as compared with 5·1 per cent. in 1921 and 6·7 in 1920.

In the 40 largest provincial towns in England and Wales the proportion of adulterated samples was 8·0 per cent., and in the remainder of the country, excluding London, the proportion was 8·2 per cent.

Of the total number of milk samples examined in the whole country, 135 of whole milk and 48 of separated milk contained colouring matter.

Prosecutions were instituted successfully in the majority of cases in which adulteration was found, with the exception of cases in which the sample was purchased informally.

As many as 166 samples contained excessive amounts of sediment, and 18 of these samples were also otherwise adulterated. Another 33 samples were condemned by reason of containing boric acid, and 7 as containing formaldehyde. The number of milk samples adulterated by reason of containing preservatives indicates a substantial reduction as compared with the figures for 1921.

CREAM.—Reports for 1922 indicate that 902 samples of cream and 976 of preserved cream were examined under the Sale of Food and Drugs Acts, or the Public Health (Milk and Cream) Regulations, 1912 and 1917.

There is no standard of composition for cream, but it is fairly generally accepted in this country that cream should contain about 40 or 50 per cent. of butter fat, the remainder being mostly water with about 5 per cent. of the non-fatty solids of milk. The Public Analyst for Kent reports that in seven samples

\* H.M. Stationery Office. 1923. Price 1s. 6d. net.

of cream analysed by him in one quarter the percentage of fat varied from 22·2 to 57·2, and he adds that tinned creams invariably contain a low percentage of fat, and usually contain an unwarrantable amount of other solids.

Of the 902 samples sold as cream (without declaration of preservative) 279 were found to be preserved, the preservative in nearly all the cases being boric acid. Of the 976 samples sold as preserved cream, 37 were reported against for some contravention of the Regulations, the contravention in most cases being the omission or incompleteness of the required declaratory label.

**BUTTER AND MARGARINE.**—The number of samples of butter examined during the year was 11,234, and of these 189 were reported against, the percentage being 1·7 as compared with 2·4 in 1921.

Of the samples reported against, 92 contained foreign fat (margarine), and 63 contained an excess of water. A number of samples were also found to contain an excessive amount of preservative.

In two samples the percentages of water were found to be as high as 29·9 and 25·3, as compared with the statutory limit of 16. On the other hand, the percentage of water found in a sample of Dorset factory butter was as low as 11·8.

As a means of checking the quality of food sold in restaurants and tea-shops, 55 of the above samples were purchased as bread-and-butter, and in 16 cases the "butter" was found to consist of margarine. In one case the proprietor and manageress of a restaurant were together fined £40.

Of 3700 samples of margarine submitted for analysis, 27 were reported against, including 4 cases in which the sample was found to contain more than the permissible limit of 10 per cent. of butter.

**LARD AND DRIPPING.**—During the past year 3214 samples of lard were reported upon by Public Analysts, and 6 were regarded as adulterated. Of 400 samples of dripping analysed, 19 were condemned. In both cases the principal defects were the presence of water and of free fatty acids.

**COCOA.**—Many types of tinned, packet, and loose cocoas have been examined at the instance of a number of Authorities, and of a total of 1851 samples taken during the year, 26 were condemned as containing more than one-hundredth of a grain of arsenic per pound, this being the limit suggested by the Royal Commission on Arsenical Poisoning. Five other samples of cocoa were found to be adulterated with foreign starches or sugar or cocoa shell.

**VINEGAR.**—The number of samples of vinegar submitted during the year was 1968, of which 110, or 5·6 per cent., were reported against as not being genuine. Included in these totals are two samples of genuine wine vinegar and 475 samples of malt vinegar, of which 38 were adversely reported upon. One sample was condemned because it contained one-ninetieth of a grain of arsenic per gallon. There is no evidence indicating that glucose had been used in the preparation of this sample, but contamination by impure glucose might account for the presence of arsenic.

The sale of vinegar containing "vinegar eels" was reported in one case. The common vinegar eel is a nematode, *Anguillula aceti*, and there is no record of any case of illness having been attributed to it.

**MISCELLANEOUS ARTICLES OF FOOD.**—The practice of using talc for the facing of rice appears to be on the increase, 52 samples out of 1129 having been reported against. A vendor of one sample containing extraneous mineral matter was fined £5 and £5 5s. costs.

Cornflour was found in one sample of arrowroot to the extent of 50 per cent., and the vendor was fined £5.

Eight samples of aerated waters were condemned, being contaminated with copper, lead, or zinc.

Exception was taken in a few cases to the small percentage of meat in sausages. A fine of £2 inclusive of costs was recovered in respect of one sample containing only 42 per cent. of meat.

Dyes, salicylic acid, and apple pulp are still used in the adulteration of jams.

In one case it was suspected that an attack of vomiting affecting several children was due to the consumption of lemonade made from a popular brand of lemonade powder, and a sample of the powder was therefore submitted to analysis. The analyst reported that this powder, like other lemonade powders, sold under proprietary names, consisted of tartaric acid with the addition of colouring matter and flavouring, and he expressed the view that the illness might have been caused by the tartaric acid.

Salicylic acid has been reported in samples of coffee extracts, but it is understood that the trade has undertaken to discontinue its use.

DRUGS.—The percentage of adulteration of drugs has increased from 6·7 per cent. during 1921 to 7·3 per cent. during 1922, 426 samples out of 5863 being reported against.

Of 429 prescriptions analysed 96, or 22·4 per cent., were found to be inaccurate, as compared with 29 out of 178, or 16·3 per cent., during 1921.

A number of these prescriptions were made up in accordance with the procedure for supplying drugs to insured persons under the National Health Insurance Acts.

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