

Report of the Joint Committee on Preservative Regulations

AT the request of the Public Analysts and Official Agricultural Analysts Committee, the Council of the Society suggested to the Committee of the Food Group of the Society of Chemical Industry that a Joint Committee should be set up to report to the Ministry of Food and the Ministry of Health on the desirability of amending the Preservative Regulations. The Committee of the Food Group agreed to the suggestion and the Joint Committee of the two bodies was set up early in 1949, consisting of—

*Representing the Society of Public Analysts
and Other Analytical Chemists :*

Dr. G. W. Monier-Williams (Chairman)
Dr. H. E. Cox
Mr. J. F. Clark
Mr. H. E. Monk
Mr. G. Taylor

*Representing the Society of Chemical
Industry—Food Group :*

Dr. L. E. Campbell
Dr. J. M. B. Coppock
Dr. E. B. Hughes
Dr. C. H. Lea (non-voting)
Mr. R. Harold Morgan (Convenor
and Secretary)

The report prepared by this Joint Committee was received by the Council of the Society in November, 1949, and was given their approval.

It was sent jointly by the Society and the Society of Chemical Industry to the Ministry of Food and the Ministry of Health in March, 1950.

In January, 1951, the Ministry of Food appointed a Sub-Committee of the Food Standards Committee with the following terms of reference—

To review the Public Health (Preservatives, etc., in Food) Regulations and to make any recommendations the Sub-Committee may consider desirable for the amendment of the Regulations.

It is anticipated that the review will be concerned primarily with the technical and scientific as distinct from the administrative aspects of the Regulations, and the Sub-Committee has been invited, without prejudice to any other matters, to consider—

(a) The definition of "preservative" and the application of the Regulations specifically to anti-oxidants, anti-staling agents, anti-mould agents and similar substances.

(b) The permitted preservatives and similar substances, and the quantitative control of their use.

(c) The application of the Regulations to stabilising agents, emulsifying agents and allied chemicals.

(d) The provisions governing the control of added colouring matters and, in particular, whether a list of permitted colourings or dyestuffs should be substituted for the existing list of prohibited substances in Schedule I (Part 2) of the Regulations.

(e) The provisions relating to labelling of food containing preservatives, etc.

Professor E. C. Dodds, Director of the Courtauld Institute of Biochemistry at Middlesex Hospital, has agreed to act as Chairman; the following are particulars of the Government Departments and bodies that it is considered should be represented on the Sub-Committee

and of the individual representatives to whom invitations to serve on the Sub-Committee are being issued—

Ministry of Food	Mr. C. A. Adams
Ministry of Health	Dr. N. R. Beattie and Mr. P. N. R. Butcher
Department of Health for Scotland ..	Dr. J. M. Johnston
Department of the Government Chemist	Dr. J. R. Nicholls
Society of Public Analysts and Other Analytical Chemists	Dr. H. E. Cox
Food Manufacturing Industries	Mr. A. Glover, Co-operative Wholesale Society
Society of Chemical Industry (Food Group)	Dr. E. B. Hughes, Research Department, Messrs. J. Lyons & Co., Ltd.
Medical Research Council	Professor S. J. Cowell

Report of Joint Committee

The Preservatives Regulations of 1925–27 have been in existence with only slight modifications, for nearly 25 years. They have undoubtedly been of immense value in suppressing several undesirable methods of food preservation.

It is clear, however, that in 25 years, there have been many developments in food manufacture and processing that could not have been foreseen at the time, and that make it essential that the definition of the term “preservative” in the regulations be amended, and the application of the regulations more precisely defined. The Committee has noted below a number of specific instances in which the regulations as they stand have been found to be ambiguous or not in accordance with modern knowledge.

Admittedly it will be extremely difficult to frame a satisfactory definition of “preservative” that would be generally and permanently applicable. It will be necessary that a more detailed schedule than exists at present be drawn up, and that this schedule should be kept constantly under review.

The Committee has considered in detail the Public Health (Preservatives in Foods) Regulations, S.R. & O., 1925, No. 775, as amended, and makes the following suggestions—

PART I—

- 2 (1)—That the definition of “food” be replaced by that given in the Foods and Drugs Act, 1938, and Defence Regulations, *viz.*, “Food” means any article used as food or drink for human consumption, and includes any substance which is intended for use in the composition or preparation of food, any flavouring, sweetening matter or condiment and any colouring matter intended for use in food, and an article shall not be deemed not to be food by reason only that it is also capable of being used as medicine.

(N.B.)—The legal implications of the proposed definition should be considered, with particular reference to the final clause.

- 2 (1)—That in the definition of “preservative” the word “chemical” shall replace “substance” and the word “deterioration” shall be substituted for “decomposition.”

- 2 (1)—That all exceptions to the definition of preservative should be put into the Schedule to the Regulations, and that provision should be made for amendment of the Schedule for which purpose suitable machinery should be established to permit of frequent consideration of suggested amendments.

That the definition of “thickening substance” appears out of place in the Preservatives Regulations. (This recommendation applies to all references to thickening substances wherever mentioned in the Regulations.)

That mention should be made of the various compounds of benzoic acid and of sulphur dioxide, which can be permitted for use in preservatives.

PART II—

- 4 (1)—That a list of the only colours permitted to be used in foods should be given, such a list to be subject to frequent revision. As a basis, the colours now in common use should be considered, and the whole matter should be investigated carefully in conjunction with the manufacturers of food colours.

- 4 (1) (ii)—That this paragraph needs clarification and re-drafting. The Committee is of the opinion that there is no objection to a Scheduled Food containing two preservatives provided that if any article of food specified in Part I of the said Schedule contains a second preservative necessarily introduced by the use of another Scheduled Food, the amount of preservative allowed by Schedule for the first named food should be reduced by the amount of the second preservative introduced by the use of the other Scheduled Food: 600 parts benzoic acid being regarded as equivalent to 350 parts sulphur dioxide for the purposes of calculation.
- 4 (1) (iii) (a) and (b)—That these paragraphs should be more specific and refer to foods not intended for retail sale.
- 4 (2)—That this sub-section be reconsidered in view of existing labelling regulations.

THE FIRST SCHEDULE—

1. That this food classification requires extension.
2. That this classification should also include fruit products and vegetable products, and that "for manufacturing purposes only" should replace "for conversion into jam or crystallised, glacé or cured fruit."
4. That this classification needs clarification and explanation of its specific purpose.
5. That "cordial" should be replaced by "concentrated soft drink" and that the comma after "juices" be deleted.
6. That the sulphur dioxide limit for jams, etc. be raised to 100 parts per million.
14. That "sweetened mineral waters" be replaced by "ready-to-drink soft drinks."
16. That "coffee and chicory extracts" should also be included.
17. That this classification needs extension.

60 C.A.A.—That the relaxation regarding the use of boric acid in 60 C.A.A. be reconsidered.

The Committee, in recommending a wider definition of the term "preservative" as mentioned heretofore, desires to bring under control the addition of substances to foods for other purposes, such as anti-oxidants, prevention of staling, anti-mould agents, stabilisers, etc., and recommends that a policy should be formulated with regard to such usages, giving a list of substances permitted for these purposes.

The following lists mention substances which appear to be added to food in various countries for the purposes mentioned.

ANTI-OXIDANTS

Tocopherols
Lecithin
Guaiacum resin
Nordihydroguaiaretic acid (NDGA)
Citric and phosphoric acids
Propyl gallate
Butylated hydroxy anisole

ANTI-MOULD AGENTS

Calcium propionate
Sodium di-acetate

PREVENTION OF STALING

Glyceryl stearates
Polyoxy ethylene stearates
Sorbitol stearates

EMULSIFYING AGENTS

Glyceryl mono-stearate and di-stearate
Glyceryl mono-oleate and di-oleate
Glyceryl mono-laurate
Cetyl palmitate
Pentaerythrityl stearates
Sulphonated lauroyl
Polymerised linseed oil

STABILISING AGENTS

Sodium and calcium pectates
Sodium alginate
Methyl cellulose
Ethyl cellulose
Sodium carboxymethyl cellulose

May, 1951]

EXAMINATION OF DETERGENT PREPARATIONS

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FATTY MATERIALS BUT NOT EMULSIFYING
AGENTSLanette wax
Lanolin

MISCELLANEOUS

Diphenyl (orange preservative)
Methyl naphthyl acetate (potatoes in
clamp)
Thiourea
Certain quinoline derivatives
Bromacetic ester (milk preservation)

Signed for and on behalf of the Joint Committee:

G. W. MONIER-WILLIAMS (*Chairman*)R. HAROLD MORGAN (*Convenor and Secretary*)