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REPORT OF THE SEVENTH SESSION OF THE CODEX COMMITTEE ON FOOD ADDITIVES

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The Hague, The Netherlands

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REPORT OF THE SEVENTH SESSION OF THE CODEX COMMITTEE ON FOOD ADDITIVES

INTRODUCTION

1. The Codex Committee on Food Additives held its seventh session in The Hague, the Netherlands, from 12th to 16th October 1970. The session was opened by Prof. Dr. M.J.L. Dols, Chairman of the Committee.

2. The session was attended by government delegates from the following 25 countries: Algeria, Australia, Austria, Belgium, Cuba, Denmark, the Federal Republic of Germany, Finland, France, Ireland, Italy, Japan, Morocco, the Netherlands, New Zealand, Norway, Philippines, Poland, Portugal, Sweden, Switzerland, U.K., U.S.A., Venezuela and Yugoslavia as well as an observer from South Africa. The following International Organizations were also represented: Council of Europe (Partial Agreement), European Economic Community (EEC), International Organization for Standardization (ISO), Organization of Manufacturers of Cellulose Products for Foodstuffs in the EEC, International Union of Nutritional Sciences (IUNS), World Association of Veterinary Food-Hygienists (WAVFH), Federation Internationale des Industries et du Commerce en Gros des Vins, Spiritueux, Eaux - de - Vie et Liqueurs, Bureau de Liaison des Syndicats Europeans des Produits Aromatiques (CEE), Union des Industries Chimiques Federation des Chambres Syndioales de l'Industrie Chimique Française, International Organization of the Flavour Industry, International Glutamate Manufacturers Technical Committee, International Federation of Glucose Industries. A list of participants, including officers from FAO and WHO, is set out as Appendix I to this Report.

ADOPTION OF THE AGENDA

3. The Committee adopted the provisional agenda (CX/FA 70/I) without rearrangement of the items. However, it was agreed that the items dealing with the report of the Council of : Europe on natural and artificial flavouring substances should be dealt with well in advance of the 4th day of the session. To make this possible it was agreed to move agenda item 12 forward in the agenda should it prove necessary.

APPOINTMENT OF RAPPORTEURS

4. The Committee agreed that it would not be necessary to appoint rapporteurs and requested the Secretariat to prepare the draft report. Mr. T.J. Coomes from the delegation of the U.K. agreed to assist the Secretariat in this task. Mr. M. Fondu from the delegation of Belgium agreed to assist in the revision of the French version of the draft report.

PART I

MATTERS ARISING PROM SESSIONS OF THE COMMISSION AND CODEX COMMITTEES

5. The Committee had before it two working papers, i.e. CX/FA 70/2 and CX/FA 70/2(I) prepared by the Secretariat and the Netherlands delegation respectively.

General Principles for the Use of Food Additives

6. The Committee noted that the Commission, at its 7th session, adopted the General Principles for the Use of Food Additives, with certain amendments, as a guide for Codex Committees (see Appendix VI, Report of the 7th session of the Commission, ALINORM 70/43). It was pointed out that governments had been invited to comment on

these General Principles and that the comments received would be placed before the Committee at its next session. The Committee took note of a statement made by the representative of WHO that the General Principles should make reference to the safe use of "processes" such as food irradiation. The delegation of the U.K. drew the Committee's attention to the "idea of a General Standard" under consideration by the Codex Alimentarius Commission, which would take into account a number of general provisions for food, including irradiation. It was pointed out that if reference was made to a "process" applied to food, the title of the General Principles would have to be changed to take this into account. The Committee agreed that this matter should be discussed at the next session in the light of comments received.

Specifications for Sodium Chloride

7. The Committee, at its 6th session, had requested authority from the Commission to elaborate specifications for sodium chloride (paras 116-117, ALINORM 70/12). The Committee noted that the Commission had agreed that the Committee should elaborate such specifications but that low priority should be given to this work (para 155, ALINORM 70/43).

8. It was pointed out that the question of the need to elaborate a standard for table salt was under study by the Secretariat and that a report would be made available on this subject to the Commission. The Committee agreed to proceed with the elaboration of specifications for sodium chloride used in the processing of food and accepted an offer by the delegation of the Netherlands to prepare a draft for the next session of the Committee. It was understood that the draft specification would not deal with aspects such as labelling provisions, but would include mainly factors regarding the purity and identity of sodium chloride for food use.

Standards for Soups and Broths

9. The delegation of the Federal Republic of Germany drew the Committee's attention to Para 215 of the Report of the 7th session of the Commission (ALINORM 70/43) dealing with the drafting of standards for soups and broths by the delegation of Switzerland in consultation with the Secretariat, with the right to consult the Codex Committees on Food Hygiene, Food Additives and Food Labelling. It was agreed to consider these draft standards when they became available.

Withdrawal of Endorsed Additive Provisions from Completed Standards

10. The Committee was informed that the Commission, at its 7th session, agreed that, where recent findings concerning the toxicity of a particular food additive indicated a serious hazard to health requiring immediate action, the Secretariat would immediately bring this matter to the attention of the Executive Committee in order to obtain authority to put it before member countries (para 157, ALINORM 70/43). The representative of WHO informed the Committee of the resolution of the 23rd World Health Assembly concerning "health hazards of food additives" (WHA 23.50, 21 May 1970, see Report of the 14th session of the Joint FAO/WHO Expert Committee on Food Additives), which dealt with the dissemination of results of toxicity research and evaluation of food additives when there was an urgent need to do so. The representative of FAO indicated that, although this resolution was still under study in FAO, that organization was in general agreement with the resolution of the World Health Assembly. The Committee decided to bring the resolution of the World Health Assembly to the notice of the Executive Committee so that, after the evaluation by a meeting of experts, the Secretariat could take appropriate action as described in para 157 of the Report of the

7th session of the Commission, with a view to initiating the withdrawal of an endorsed additive from completed standards.

Status of Lists of Food Additives

11. In connection with a note prepared by the delegation of the Netherlands (CX/FA 70/2(1)), the Chairman pointed out that certain specific items in that paper would be discussed under other agenda items. In introducing the paper, the delegation of the Netherlands raised the question as to whether the various lists, at present under consideration by the Codex Committee on Food Additives, should be further elaborated into "closed" lists of permitted additives according to the Procedure for the Elaboration of Standards or whether these lists should be made available only for the information of governments and other interested parties. While it would be useful to establish lists of food additives which would be internationally recognized as acceptable, the delegation of the Netherlands was of the opinion that the Committee was not in a position, at the present time, to establish lists which contained all the possible food additives of interest to governments, since the technology of many additives could not be thoroughly studied by this Committee and since not all these additives have been evaluated by the Joint FAO/WHO Expert Committee on Food Additives.

12. While recognizing that the work on lists of permitted food additives was hot yet complete, the delegation of the U.K. was of the opinion that one of the objectives of the Codex Alimentarius Commission was to harmonize legislation in the field of food additives and was, therefore, in favour of the principle of "closed" lists of permitted food additives elaborated according to the Codex Procedure. A number of delegations shared this view. A number of delegations were in agreement with the proposal of the delegation of the Netherlands that the lists of food additives be only of an advisory nature. The delegation of the Federal Republic of Germany was of the opinion that when publishing these lists of food additives they should be dated to indicate their current status and that the lists were subject to further changes.

13. The Committee briefly discussed the merits of establishing "negative lists of food additives". A number of delegations were not in flavor of establishing such lists since, in their opinion, food additives which did not appear in lists of permitted food additives would automatically be excluded from use in food. It was pointed out, however, that in some cases it was not feasible at the present time to draw up "positive" lists and that, in such a situation the establishment of "negative" lists could be of interim assistance.

14. The Committee agreed that the lists of food additives which had been given an ADI, a temporary ADI or which had been shown to be toxicologically unacceptable as well as additives still pending evaluation, should be made available as information for governments and Codex commodity committees. It was further agreed that reference should be made to the relevant reports and monographs of the Joint FAO/WHO Expert Committee on Food Additives and that the title of the lists should make it clear that the lists were of an advisory nature and were subject to further review.

DISCUSSION OF THE DESIRABILITY OF HOLDING A THIRD JOINT FAO/WHO FOOD ADDITIVES CONFERENCE

15. The Committee had before it a paper prepared by the delegation of the Federal Republic of Germany on the possible items of discussion for a third Joint FAO/WHO Food Additives Conference (CX/FA 70/3). This paper was prepared on the recommendation of the 7th session of the Codex Alimentarius Commission (paras 60-

61, ALINORM 70/43) and set out in detail the various items which should be discussed by the above conference.

16. Some delegations were of the opinion that the holding of a session of government representatives dealing with problems relating to food additives was desirable in order to enable governments to establish a more direct contact with the work of the Joint FAO/WHO Expert Committee on Food Additives. Other delegations thought that all the items contained in the above working document could be dealt with by the Codex Alimentarius Commission through this Committee. It was pointed out that Art. 1 of the Statutes of the Commission charged that body with the coordination of all food standards work including, therefore, work relating to food additives* For this reason, it would be possible for the Codex Committee on Food Additives to discuss the items described in the above document if such items came within the terms of reference of the Committee.

17. The Committee agreed that, provided the terms of reference of the Codex Committee on Food Additives were enlarged by the Codex Alimentarius Commission to include the possibility of "advising the Codex Alimentarius Commission on all matters relating to food additives", it would not be necessary to hold a third Joint FAO/WHO Conference on food additives at this time. The delegation of the Netherlands reserved their position concerning the possible enlargement of the terms of reference of the Codex Committee on food Additives.

ESTIMATION OF THE INTAKE OF FOOD ADDITIVES

18. The Committee had before it a paper entitled "Estimation of Food Additive Intake 1969/70 Computerized Calculation of Potential Food Additive Intake (FAD/FA/70.30(a))" prepared by Food Additives and Health Statistical Methodology Units of WHO. This paper had also been presented to the 1970 Joint FAO/WHO Expert Committee on Food Additives and its comments on this paper were given in paper CX/FA 70/4.

19. The Committee expressed its appreciation of the work carried out by WHO and agreed with the general approach adopted in that study. The Committee agreed with the recommendation of the Joint FAO/WHO Expert Committee on Food Additives which is contained in the 14th Report and reads as follows:

"Recognizing the importance of assessing food additive intake, the Committee recommended that those responsible for the design and analysis of food consumption surveys should consult FAO and WHO so that the collective data can be used to the maximum extent for calculating the intake of food additives on an individual basis."

The Committee further decided that the document PAD/FA/70.30(a) should be made available to Codex commodity committees so that the potential intake of food additives could be taken into consideration when making further provisions for food additives. The delegation of the Federal Republic of Germany reserved their position concerning the immediate applicability of the results contained in the document "Estimation of Food Additive Intake".

20. In view of the high intake of SO_2, especially from wine, shown in the study of WHO as well as one undertaken in Belgium, the Committee requested the Codex Alimentarius Commission to bring this matter to the attention of the International Office of Vines and Wines and invite them to consider steps to reduce the maximum permitted levels of this additive in wine.

21. Professor E.J. Bigwood pointed out that in order to estimate the intake of a food additive it would be important to set maximum levels rather than referring to a limitation by good manufacturing practices, since this raised difficulties in assessing the probable daily intake of additives. The Committee agreed that this matter should be kept in mind.

PART II

ENDORSEMENT OF FOOD ADDITIVES AND CONTAMINANTS IN CODEX COMMODITY STANDARDS

22. The Committee had before it a working paper (CX/FA 70/5) prepared by the FAO Secretariat. The decisions of the Committee are recorded in Appendix II to this Report.

23. Some delegations were of the opinion that it was not desirable to limit food additives, which had been allocated an ADI, by a reference only to the limitation of good manufacturing practice (GMP). The Committee agreed in principle that it would refer back the references to GMP to the appropriate commodity committee requesting that figures relating to maximum permitted levels be quoted. In the case of standards submitted to the Commission at Step 8 of the Procedure for the elaboration of Codex standards, the Committee agreed to temporarily endorse these food additives where the limitation was expressed in terms of GMP with the proviso that this limitation would be reconsidered in terms of maximum levels not later than two years following the adoption of the standard by the Commission at Step 8 of the Procedure. In such cases, the commodity committees concerned would be requested to specify these maximum levels for additives in question.

24. The Committee was of the opinion that the use of certain additives proposed by Codex commodity committees was not in keeping with the General Principles for the Use of Food Additives (Report of the 7th session of the Codex Alimentarius Commission, ALINORM 70/43, Appendix VI). These additives should not be permitted, since it was necessary to protect the consumer from exposure to the unnecessary use of additives. The Committee had also in mind the problem that the ADI might be exceeded especially in oases where no specific intake data were available. Being aware of the fact that, for formal reasons, the additives would be endorsed or temporarily endorsed by this Committee, some delegations stated that a number of additives would not be accepted by their governments.

FOOD ADDITIVES AND CONTAMINANTS IN FRUIT JUICES (see Appendix II, Part A)

Tannins (Item 9, Appendix II, Part A)

25. The question was raised as to whether these clarifying agents could be endorsed without a stated maximum level of use. The Committee agreed that the residue levels found in grape and apple juice following the use of tannins as clarifying agents would be extremely low and endorsed temporarily the use of tannins subject to limitation by GMP.

Asbestos (Item 10, Appendix II, Part A)

26. The Committee noted that the Joint FAO/WHO Expert Committee on Food Additives had not been able to clear this filtration aid toxicologically, pending further information, and agreed not to endorse the use of this substance.

Perlite (Item 14, Appendix II, Part A)

27. In the absence of a toxicological evaluation, the Committee did not endorse this additive and referred it to the Joint FAO/WHO Expert Committee on Food Additives for evaluation.

Lead (Item 17, Appendix II, Part A)

28. The Committee noted that the commodity committee had increased the maximum level for lead from 0.3 mg/kg to 1 mg/kg since such levels were found in practice in lemon juice packed in metal containers. The Committee was of the opinion that the level of 1 mg/kg was unduly high but agreed to endorse temporarily the maximum level of 1 mg/kg, subject to review two years after the adoption of the standard by the Commission at Step 8 of the Procedure. The commodity committee was requested to examine the practice of bulk shipment of lemon juice in metal containers with a view to reducing the levels of lead.

Tin (Item 18, Appendix II, Part A)

29. The delegation of the U.K. informed the Committee that very recent toxicological work appeared to show that the toxicity of tin seemed to be higher that that found by the Joint FAO/WHO Expert Committee on Food Additives on the basis of available data in its recent evaluation. The Committee requested the Joint Expert Committee to re-evaluate tin in the light of these new data and agreed to endorse temporarily the levels proposed by the commodity committee subject to review two years after the adoption of the standard by the Commission at Step 8 of the Procedure. As regards the proposed tentative level of 250 mg/kg in grape and tomato juices, the Committee postponed its decision pending confirmation by the commodity committee.

FOOD ADDITIVES IN PATS AND OILS (see Appendix II, Part A)

alpha-Tocopherol (Item 132, Appendix II, Part H)

30. The Committee confirmed the decision taken by the 7th session of the Codex Alimentarius Commission to approve this additive (see para 74, ALINORM 70/43).

FOOD ADDITIVES IN MEAT PRODUCTS (see Appendix II, Part B)

Artificial Flavourings, Essences and Extracts (Item 27, Appendix II, Part B)

31. The Committee postponed consideration of these additives pending the listing of artificial flavours to be included in the standard.

Cyclamates (Item 29, Appendix II, Part B)

32. The representative of WHO informed the Committee that the Joint FAO/WHO Expert Committee on Food Additives had withdrawn the temporary ADI for cyclamates. It was, therefore, agreed not to endorse these additives.

Guanylic and Inosinic Acids, and their Sodium Salts (Items 30, 31, Appendix II, Part B)

33. In the absence of a toxicological evaluation, the Committee did not endorse these additives.

Monosodium Glutamate (Item 32, Appendix II, Part B)

34. The Committee noted that monosodium glutamate was used in a great number of processed foods and that for this reason it was important to specify a maximum level of use. The commodity committee was requested to propose such maximum levels. The Committee noted that the Joint FAO/WHO Expert Committee on Food Additives had recommended that monosodium glutamate should not be added to foods for infants under the age of one year. It was pointed out that the Codex Committee on Foods for Special Dietary Uses was elaborating standards for baby foods and that this question should be considered by that committee. The delegate from Japan informed the Committee that further toxicological investigations on monosodium glutamate were being

carried out and expressed the wish that the Joint FAO/WHO Expert Committee on Food Additives re-evaluate this substance as soon as the additional data becomes available. The Committee agreed to endorse monosodium glutamate temporarily in the standards concerned in view of the fact that they were at advanced steps of the Procedure (see para 23).

Food Additives in Canned Pork Shoulder (Items 23 to 36, Appendix II, Part B)

35. The Committee noted that the same provisions had been made for food additives in the standard for canned pork shoulder as in the standard for canned hams. It was agreed that the same endorsements would hold for canned pork shoulder as for canned ham. A number of delegations were again opposed to limitation of the quantities of additives by GMP and requested that maximum levels of use be stated. The delegation of Denmark undertook to bring this matter to the attention of the appropriate commodity committee. As regards nitrates and nitrites, concern was expressed regarding the possible formation of nitrosamines in products wherein these additives were permitted. It was pointed out that evidence concerning the presence, identity, and nature of nitrosamines in foods was not yet un-equivocal, so that at the present time, any assessment of possible hazard would be premature. Several delegations were of the opinion that the Commodity Committee should indicate the levels of nitrate and nitrite in the final product.

FOOD ADDITIVES IN QUICK-FROZEN FOODS (see Appendix II, Part C)

Ascorbic Acid (Item: 37, Appendix II, Part C)

36. The Committee noted that the commodity committee had changed the previous maximum level of 400 mg/kg to "not limited" and that the level of 400 mg/kg had been previously endorsed. It was agreed to endorse temporarily the limitation according to GMP in conformity with the decision recorded in para 23 of this Report. The commodity committee was requested to propose a maximum level for this additive.

Citric Acid (Item 38, Appendix II, Part C)

37. The Committee noted that the Commodity Committee had changed the previous maximum level of 400 mg/kg to "not limited" and that the level of 400 mg/kg had been previously endorsed. In view of the fact that the Joint FAO/WHO Expert Committee on Food Additives had cleared this additive without limit except for GMP, the Committee agreed to endorse citric acid limited by GMP.

Sodium Alginate (Item 40, Appendix II, Part C)

38. The Committee agreed to postpone the endorsement of this additive and requested the Commodity Committee to specify the maximum level of use.

FOOD ADDITIVES AND CONTAMINANTS IN COCOA PRODUCTS AND CHOCOLATE (see Appendix II, Part F)

Calcium Carbonate (Item 63, Appendix II, Part F)

39. The Committee agreed to endorse this additive.

Phosphoric Acid (Item 79, Appendix II, Part F)

40. The Committee postponed the consideration of this tentative proposal pending confirmation by the Commodity Committee of the need to use this additive.

Lecithin, Mono- and diglycerides of Edible Fatty Acids (Items 73-75, Appendix II, Part F)

41. The Committee agreed to endorse these emulsifiers including the total maximum level for emulsifiers.

Ammonium Salts of Phosphatidic Acids (Item 72, Appendix II, Part F)

42. The Committee agreed to temporarily endorse these substances in view of the fact that only a temporary ADI had been established.

Natural Flavours and their Synthetic Equivalents (Item 78, Appendix II, Part F)

43. The Chairman of the Codex Committee on Cocoa Products and Chocolate drew the Committee's attention to an apparent inconsistency in this provision as recorded in the 6th session of this Committee (ALINORM 70/12) and was of the opinion that the Commodity Committee had not intended to include flavours other than natural flavours and their synthetic equivalents in the standard. The Committee agreed to postpone the consideration of these flavours pending clarification by the Secretariat of the wording contained in the official report of the Commodity Committee.

Arsenic (Item 82, Appendix II, Part F)

44. The Committee agreed to postpone its decision on the tentative level of 1 mg/kg in a number of types of cocoa products but agreed to endorse the proposed maximum level of 0.5 mg/kg in cocoa butters.

Copper (Item 84, Appendix II, Part F)

45. The Committee agreed to postpone consideration of the tentative proposals (in square brackets), pending confirmation by the Commodity Committee.

Lead (Item 83, Appendix II, Part F)

46. The Committee agreed to postpone its decision on the tentative level of 2 mg/kg in a number of types of cocoa products but agreed to endorse the newly proposed maximum level of 0.5 mg/kg in cocoa butters.

Iron (Item 85, Appendix II, Part F)

47. The Committee noted that the previous level of 0.5 mg/kg in cocoa butters had been increased to 2 mg/kg by the Commodity Committee. Since the maximum level for iron was necessary for technological purposes only, the Committee agreed to endorse this new provision.

FOOD ADDITIVES IN FISH AMD FISHERY PRODUCTS (see Appendix II, Part G)

Orange GGN, Ponceau 6R, Azo-rubine (Items 102-104, Appendix II, Part G)

48. The Committee was informed that these colours, which had not been endorsed at the previous session, of the Committee, had been deleted by the Commission from the Standard for Canned Shrimps and Prawns. The delegation of Denmark indicated that there was still technological interest in the use of these colours. The Committee agreed to request the Joint FAO/WHO Expert Committee on Food Additives to re-evaluate these colours should new data become available.

Monosodium Glutamate (Item 93, Appendix II, Part G)

49. The Committee noted that at its previous session it had considered 850 mg/kg for the above additive in canned shrimps and prawns whereas the correct maximum level in the standard was 800 mg/kg. The Committee did not alter its earlier decision.

Sodium Pyrophosphate (Item 90, Appendix II, Part G)

50. The Committee was informed that the Codex Committee on Fish and Fishery Products meeting from 5 till 10 October 1970 had proposed the above additive in standards for canned tuna and bonito in water or oil. The Committee agreed to discuss this proposal at the present session and decided to endorse it.

FOOD ADDITIVES AND CONTAMINANTS IN PROCESSED FRUITS AND VEGETABLES (see Appendix II, Part I)

Citric, Malic, Fumaric and Lactic Acids (Items 156, 157, 158, 160, Appendix II, Part I)

51. Some delegations were of the opinion that limitation by GMP would be appropriate for these acids in view of the fact that variable amounts were added during processing, depending on the natural acidity of the raw materials concerned so that the pH was adjusted to the required level. Other delegations were of the opinion that it was desirable to establish a limit based either on a pH value or expressed as total acid present in the final product. The Committee postponed the endorsement of these acids in jams, jellies and Citrus marmalade and requested the Commodity Committee to limit, in some way, the acids which may be present in the final product.

L-Tartaric Acid (Item 159, Appendix II, Part I)

52. In view of the high potential intake of this substance, the Committee requested the Commodity Committee to reconsider whether the use of this acid was necessary in jams, jellies and Citrus marmalade.

Sodium and Potassium Carbonates and Bicarbonates and Sodium Hydroxide and Na, K and Ca Salts of Acids in paras 51 and 52 (Items 161-163, Appendix II, Part I)

53. The Committee reached the same conclusions as in para 51 above.

Calcium Chloride (Item 169, Appendix II, Part I)

54. A number of delegations were of the opinion that the proposed maximum level of 1000 mg/kg in jams, jellies and Citrus marmalades appeared too high. It was pointed out that calcium chloride was used as a firming agent in fruits stored and transported in bulk and subsequently used in the manufacture of jams. The maximum level proposed represented a carry-over resulting from this practice. The Committee agreed to postpone the endorsement of this additive and requested the Commodity Committee to clarify this matter.

Calcium Chloride, Calcium Lactate and Calcium Gluconate (Items 166-168, Appendix II, Part I)

55. The Committee agreed to endorse the above additives in canned green peas and canned strawberries.

Stannous Chloride (Item 171, Appendix II, Part I)

56. The Committee agreed to endorse this additive noting that it was required to prevent darkening in asparagus packed in glass or fully enamel-lined or lacquered containers, and that the Joint FAO/WHO Expert Committee on Food Additives had included it in the evaluation for tin.

Tin (Item 261, Appendix II, Part I)

57. The Committee was of the opinion that the proposed maximum levels were too high but, in view of its previous decision recorded in para 23 of this Report, it agreed to

endorse temporarily this maximum level for tin with the proviso that the maximum level would be reconsidered not later than two years following adoption of the standard by the Commission at Step 8 of the Procedure.

Ascorbic Acid (Item 249, Appendix II, Part I)

58. It was agreed to endorse temporarily the limitation according to GMP in canned fruit cocktail, in conformity with the decision recorded in para 23 of this Report. The Commodity Committee was, however, requested to propose a maximum level for this additive.

Sodium Benzoate, Sorbic Acid or K Salt and Esters of Parahydroxybenzoic Acid (Items 251, 253, 255, Appendix II, Part I)

59. The delegation of New Zealand was against the addition of preservatives to jams, jellies and marmalades. It was pointed out that these additives were used to preserve fruit pulp shipped in bulk, which was used in the manufacture of these commodities. The Committee was also informed that these additives were required in jams, jellies and marmalades in order to preserve the product after opening of the jars, especially when the sugar content in the product was low. The Committee postponed the endorsement of the above preservatives and requested the Commodity Committee to reconsider the maximum levels proposed, singly or in combination, and also to set an overall limit for the preservatives in question. The Committee noted that only methyl, ethyl and propyl esters of parahydroxybenzoic acid had been given an ADI by the Joint FAO/WHO Expert Committee on Food Additives.

Sulphur dioxide (Item 254, Appendix II, Part I)

60. The Committee endorsed the maximum level of 100 mg/kg in jams, jellies and Citrus marmalade. As regards the maximum level of 2000 mg/kg in raisins, the Committee was of the opinion that this level was too high and postponed endorsement requesting the Commodity Committee to reconsider this maximum level.

Monosodium Glutamate (Item 207, Appendix II, Part I)

61. The Committee was of the opinion that a maximum level should be set for this additive. In view of its previous decision recorded in para 23 of this Report, the Committee agreed to endorse temporarily monosodium glutamate limited by GMP in canned asparagus, green peas and mushrooms with the proviso that it would be reconsidered not later than two years following adoption of the standard by the Commission at Step 8 of the Procedure.

Natural Flavours and their Identical Synthetic Equivalents (Item 208, Appendix II, Part I)

62. The Committee noted that, in the absence of a definition for "natural flavours", the Commodity Committee had proposed the following text in canned fruit cocktail: "Natural flavours and their identical synthetic equivalents except those which are known to present a toxic hazard". The Committee agreed that the words underlined in the above text were redundant since only those additives which did not represent a hazard to health were permitted in Codex standards. The Committee was informed that the Commission had in fact adopted the above text in a number of other standards. The Committee agreed that no numerical limit was required and agreed to endorse temporarily these flavours limited by GMP.

Natural Fruit Essences, Natural Mint Flavour, Natural Cinnamon Flavour (Items 209-212, Appendix II, Part I)

63. Noting that these flavours were derived from commodities which, under certain circumstances could be used in food, the Committee decided that, similarly to natural flavours discussed in para 62 above, no maximum levels were required and agreed to endorse them.

Cherry Lauryl Oil and Bitter Almond Oil (items 213, 214, Appendix II, Part I)

64. The Committee agreed to endorse these flavours at the limits proposed. It was also agreed that the title "artificial flavours" should be deleted in the standard.

Caramel (as a colouring agent) (Item 215, Appendix II, Part I)

65. The Committee was informed that the Joint FAO/WHO Expert Committee "on Food Additives had not been able to establish specifications for caramel because of the diversity of the manufacturing processes involved. The Committee did not endorse this colouring agent and requested the Joint FAO/WHO Expert Committee on Food Additives to reconsider this substance as soon as possible.

Amaranth, Azo-rubine (Carmoisine), Erythrosine, Fast Green FCF, Ponceau 4R, Sunset Yellow FCF, Tartrazine, Wool Green BS (Green 'S') (Items 239-246. Appendix II, Part I)

66. The delegations of Venezuela, New Zealand and Poland stated that no colouring matter was allowed to be used in jams, jellies and marmalades in their countries. The Committee noted that, with the exception of azo-rubine, all the above colours had been given an ADI or a temporary ADI by the Joint FAO/WHO Expert Committee on Food Additives. As these colours were used either singly or in combination, the Committee agreed to endorse them temporarily with the exception of azo-rubine.

Carotene and Brilliant Blue FCF (items 218, 219, Appendix II, Part I)

67. The Committee was informed that only beta carotene had been given an ADI and that the natural pigment carotene was still pending evaluation. The Committee agreed to endorse the above additional colours in canned green peas substituting beta-carotene for carotene.

Brilliant Black BN (Item 234, Appendix II, Part I)

68. The Committee did not endorse this colour in the absence of a toxicological evaluation. The delegation of Sweden informed the Committee that iron lactate was a satisfactory substitute for Brilliant Black BN in canned mushrooms.

Ponceau 4R, Erythrosine, Wool Green BS (Green 'S') and Tartrazine (Items 235, 236, 237, 238, 232, 233, Appendix II, Part I)

69. The Committee agreed to endorse temporarily the above colours in canned plums and raspberries and Citrus marmalade as proposed by the Commodity Committee.

Mineral Oil (Item 256, Appendix II, Part I)

70. The delegate from Austria was of the opinion that the use of mineral oil should not be permitted in raisins since it contained undesirable impurities and since it could be replaced by triglycerides or acetylated triglycerides. It was pointed out that the Joint FAO/WHO Expert Committee on Food Additives had established specifications for food

grade mineral oil which limited any impurities present. The Committee endorsed the use of food grade mineral oil with the reservation of the delegate from Austria.

Dimethylpolysiloxane, Silicones (items 258, 259, Appendix II, Part I)

71. The Committee postponed the endorsement of the above mentioned anti-foaming agents in jams, jellies and Citrus marmalade and requested the Commodity Committee to specify the silicones to be permitted and to set a maximum level.

Mono- and diglycerides of Fatty Acids of Edible Oils (Item 260, Appendix II, Part I)

72. The Committee endorsed the above additives in jams, jellies and Citrus marmalade as proposed by the Commodity Committee.

Modified Starches (Items 172-186, Appendix II, Part I)

73. The Committee agreed to endorse those modified starches which had been given an ADI and to endorse temporarily those which had been given a temporary ADI. It was understood that the individual modified starches would be listed in the Standard for Canned Mushrooms. The delegation of the U.K. drew the Committee's attention to some more recent toxicological studies on a number of modified starches and the Committee recommended that these should be further evaluated by the Joint FAO/WHO Expert Committee on Food Additives as soon as possible.

Methyl Cellulose (Item 206, Appendix II, Part I)

74. The Committee postponed the endorsement of the tentative provision for methyl cellulose in canned mandarin oranges. It also agreed to postpone the endorsement of methyl cellulose in jams, jellies and marmalade and requested the Commodity Committee to propose a maximum level.

Pectin (Item 201, Appendix II, Part I)

75. The Committee agreed to endorse this additive in jams, jellies and Citrus marmalade as proposed by the Commodity Committee.

Tragacanth and Carob Bean Gums (items 197, 198, Appendix II, Part I)

76. In the absence of an ADI the Committee did not endorse these vegetable gums in canned mushrooms, green peas and asparagus.

Alginates, Agar, Carrageenan and Gums (items 202-205, Appendix II, Part I)

77. The Committee was informed that the following salts of alginic acid and vegetable gums had been given an ADI by the Joint FAO/WHO Expert Committee on Food Additives: Alginate, Na, K, NH_4, Ca, propylens glycol alginate, Carrageenan, Furcellaran, Arabic Gum, Guar Gum. The Committee postponed consideration of these additives in jams and jellies and requested the Commodity Committee to propose maximum levels.

SALT SUBSTITUTES FOR SPECIAL DIETARY USES (see Appendix II, Part J)

78. The Committee had before it proposals from the Codex Committee on Foods for Special Dietary Uses for a number of substances to be used in the formulation of salt substitutes or to be added to special dietary foods with low sodium content. It was noted that the listing of the various acid and base moieties implied the use of a very large number of chemicals not all of which had been evaluated toxicologically as such, nor specifications drawn up for them. It was pointed out that many of the substances

theoretically allowed, considering the possible combination of the various acids and bases, were of little or no commercial interest.

79. As the actual formulation of low sodium diets would depend upon medical advice, the Committee did not consider itself competent to consider the proportion of the various cations or to consider the acceptability of the proposed additives as such from a medical point of view. The Committee, therefore, decided to endorse the substances proposed as salt substitutes by the Codex Committee on Foods for Special Dietary Uses, with the exception of choline salts which had not been toxicologically evaluated. It was understood that specifications would be drawn up for those substances which were in commercial use.

80. It was pointed out that as the exact composition of various salt substitutes was of great significance from the medical point of view, the Committee decided to recommend to the Commodity Committee that such information shall be given prominently on the label of the product.

FOOD ADDITIVES IN MILK PRODUCTS (see Appendix II, Part K)

Annatto and Carotene (Items 267, 268, Appendix II, Part K)

81. It was noted that the Committee of Government Experts had changed the maximum level of 600 mg/kg for the above colours to a limitation by GMP. The Committee was informed that only beta carotene had been given an ADI and that the natural pigment carotene was still awaiting toxicological evaluation. The Committee of Government Experts was requested to propose a maximum level for these colours. The Committee agreed that its previous endorsement of the maximum level of 600 mg/kg would stand. [1]

[1] Note by the Secretariat: In all individual cheese standards in which annatto and beta-carotene have been provided for, the maximum level agreed to is 600 mg/kg singly or in combination (see para 41, Report of the 12th session of the Committee of Government Experts, CX 5/70, August 1969).

Fast Green FCF, Brilliant Blue FCF and Indigotine FCF (items 272-274, Appendix II, Part K)

82. The Committee agreed to postpone the endorsement of these colours and requested the Committee of Government Experts to propose maximum levels.

Suitable Colours Approved by the Codex Committee on Food Additives (Item 275, Appendix II, Part K)

83. The Committee postponed the consideration of these colours in yoghurt pending a clarification by the Committee of Government Experts as to which colours were meant and the establishment of a maximum level.

Essences or Extracts Derived from Fruit or Parts of Fruit (Item 278, Appendix II, Part K)

84. The Committee endorsed the above food additives in yoghurt.

Smoke and Condensed Smoke (Item 277, Appendix II, Part K)

85. The Committee was informed that these additives had not been evaluated by the Joint FAO/WHO Expert Committee on Food Additives. It was, therefore, agreed to postpone their consideration.

Phosphoric Acid (Item 284, Appendix II, Part K)

86. The Committee postponed the endorsement of phosphoric acid in Cottage Cheese and requested the Committee of Government Experts to propose a maximum

level. It was agreed to endorse phosphoric acid in processed cheese products, noting that this acid was used in small amounts as an acidifier and that the limitation of 3% for total phosphate level would apply. The Committee of Government Experts was requested to express the limit for phosphates in terms of P_2O_5.

Citric, L-Tartaric and Malic Acids (Items 280-282, Appendix II, Part K)

87. The Committee postponed the consideration of these acids in yoghurt, pending the establishment of a maximum level. In view of the wide use and low ADI of L-tartaric acid, the Committee of Government Experts was requested to consider the need for this acid. The delegation of Switzerland was of the opinion that the Committee of Government Experts should indicate the reason for the addition of acids to yoghurt.

Sodium dihydrogen phosphate and disodium hydrogen phosphate (Item 283, Appendix II, Part K)

88. It was agreed to postpone the consideration of these additives. The Committee of Government Experts was requested to establish maximum levels. [1]

[1] See Appendix II, p. 33, footnote.

Sodium, Sodium-aluminium, Potassium and Calcium salts of mono, di- and poly-phosphoric acids, Sodium, Potassium and Calcium salts of Citric acid, Citric acid and/or Phosphoric acid with Sodium hydrogen-carbonate and/or Calcium Carbonate (Items 285-287, Appendix II, Part K)

89. The question was raised whether the poly-phosphates were linear and whether the chain length was limited. The Committee requested the Committee of Government Experts to clarify this matter and endorsed the above additives on the understanding that the chain length did not exceed 6 units on an average.

Sodium Orthophosphate, Sodium Hydrogenoarbonate, Sodium Hydroxide, Calcium Hydroxide, Arabic Gum, Alginate, K, Ca, NH_4 (Items 290-293, Appendix II, Part K)

90. The Committee agreed to endorse these food additives as proposed by the Committee of Government Experts.

Gelatine (Item 345, Appendix II, Part K)

91. Subject to reservation by the delegation of Belgium, the Committee agreed that gelatine was a food and not a food additive and, therefore, endorsed the use of this substance. The representative of FAO indicated that information on the bacteriological requirements was needed in order to review the specification for gelatine. The Committee requested the delegations to supply information to FAO.

Alginates, Na, K, Ca, NH_4, Agar, Vegetable Gums, Sodium oarboxymethyl-cellulose, Modified starches (Items 340-344, Appendix II, Part K)

92. The Committee postponed the consideration of these additives in yoghurt and requested the Committee of Government Experts to propose maximum levels.

Nitrate, Na and K, Chlorate, Na and K, Benzoyl Peroxide or a Mixture of Benzoyl Peroxide with Potassium Alum, Calcium Sulphate and Magnesium Carbonate (Items 301, 302, 308, 309, Appendix II, Part K)

93. The Committee noted that the problems which had been referred to the Committee of Government Experts for consideration had not yet been dealt with by that Committee (see paras 53, 54 and 63 of the Report of the 6th session of the Codex

Committee on Food Additives, ALINORM 70/12). The Committee, therefore, agreed to postpone the consideration of the above additives.

Hexamethylenetetramine (Item 303} Appendix II, Part K)

94. The Committee was informed that results of recent investigations on this additive were now available and that the Joint FAO/WHO Expert Committee on Food Additives would evaluate this substance at a future session. The Committee, therefore, postponed the consideration of this additive in Provolone cheese.

Sorbic and Na and K salts OR Propionic acid and Na and Ca salts (Items 305, 306, Appendix II, Part K)

95. The Committee was informed that the above two preservatives were alternatives and that, for this reason, the Committee of Government Experts had established separate limits for them. Noting also that the maximum levels of 2000 and 3000 mg/kg respectively in processed cheese products had been confirmed as being required by good manufacturing practice, the Committee agreed to endorse them*

Cupric Sulphate (Item 300, Appendix II, Part K)

96. Noting that the Joint FAO/WHO Expert Committee on Food Additives had evaluated this substance and had drawn up specifications of identity and purity, the Committee agreed to endorse this additive.

PART III

LISTING AND CLASSIFICATION OF FLAVOURS

97. The Committee, at its last session, had agreed that a definition of "natural flavours" was required to clarify the endorsement of these flavours and agreed to examine the definition proposed by the Council of Europe (para 25, ALINORM 70/12). The Committee had before it a working paper prepared by the Secretariat (CX/FA 70/12) as well as the Report of the Council of Europe (Partial Agreement) entitled "Natural and Artificial Flavouring Substances". The representative of the Council of Europe drew the Committee's attention to the fact that the definitions described in this report had been drawn up for the purposes of the Council of Europe lists of flavouring substances.

98. The delegations of Italy and Prance described the approach adopted by the European Economic Community to the problem of listing flavouring substances. While the Council of Europe list divided flavours into "natural" and "artificial", the European Economic Community had under consideration three lists containing natural extracts, synthetic substances not found in edible aromatic materials and synthetic substances which could be found in edible aromatic materials. These lists were based on the lists established by the Council of Europe. Following a discussion of the Council of Europe's definitions of various flavouring substances, the delegation of Switzerland proposed a definition for synthetic flavouring substances. The Committee agreed that this draft should be incorporated by the Secretariat into a working paper together with any other comments received.

99. It was agreed that the report of the Council of Europe on natural and artificial flavouring substances should be referred to the Joint FAO/WHO Expert Committee on Food Additives in order to obtain that Committee's opinion on the approach adopted by the Council of Europe concerning the toxicological evaluation of the flavouring substances. The Committee agreed that the question of definitions should be reconsidered at the next session of the Committee in the light of the opinion expressed by the Joint FAO/WHO Expert Committee on Food Additives. It was understood that,

pending the adoption of a Codex definition of natural and synthetic flavours, the approach to the endorsement of flavours as described in para 22-23 of ALINORM 70/12 would stand.

PART IV

DRAFT GENERAL STANDARD /CODE OF PRACTICE/ FOR COMMERCIAL ENZYME PREPARATIONS

100. The Committee had before it a draft (CX/FA 70/17 Add. 2) prepared by the Federal Republic of Germany in consultation with the U.S.A., on the basis of the government comments (CX/FA 70/17) on the original draft standard (CCFA/69/17) for commercial enzyme preparations. While considering the draft, a number of delegations expressed the view that it might be advisable to process the draft as a code of practice rather than as a standard. Other delegations were of the opinion to proceed with the development of a general standard. The Committee adopted the draft, with some amendments, as contained in Appendix III. As the original draft had been sent out to governments on two earlier occasions the Committee decided to submit it to the Commission at Step 5 of the Procedure. The Committee agreed that governments should also be asked to comment on whether the draft would be further developed as a mandatory text (standard) or a code of practice.

PART V

FLOUR-TREATMENT AGENTS

101. The Committee had before it a document prepared by the Secretariat containing comments received from governments on the extended list of flour-treatment agents retained at Step 7 of the Procedure at the 6th session of the Committee (CX/FA 70/7). It was stated that ammonium chloride and monocalcium monophosphate did not belong to the category of flour-treatment agents but were used as yeast food and baking powder respectively.

102. Some delegations expressed again their opinion that there was no technological need for the use of a number of flour-treatment agents. It was noted that reservations of this kind were already covered by the statement recorded in para 23 of this report. The delegation of Switzerland pointed out that in the future programme of work of the Codex Alimentarius Commission a Codex Committee on Cereal Products was foreseen.

103. The Committee decided to submit the flour-treatment agents for which the Joint FAO/WHO Expert Committee on Food Additives had established maximum treatment levels, to the Commission for adoption at Step 8 of the Procedure as an advisory list (See Appendix IV).

METHODS OF ANALYSIS FOR FLOUR-TREATMENT AGENTS

104. The Committee had before it a paper prepared by the delegation of the U.S.A. (CX/FA 70/7) containing proposed methods of analysis for all flour-treatment agents of the extended list (see para 101). The Committee expressed its gratitude to the delegation of the U.S.A. and decided to send the complete synopsis to the Codex Committee on Methods of Analysis and Sampling for consideration. It was pointed out that, in view of the fact that the list of flour-treatment agents was only advisory, the intended status of the methods of analysis would have to be considered.

CARRIER AND EXTRACTION SOLVENTS

105. The Committee had before it a document prepared by the Secretariat containing the comments from governments on the lists of carrier solvents and extraction solvents (CX/FA 70/8). The delegation of the Netherlands explained that in their opinion a simple subdivision of solvents into carrier solvents, and extraction solvents caused confusion. The Netherlands delegation preferred lists of carrier solvents for separate groups of additives and a list of extraction solvents indicating for each solvent, the food for which it could be used. The delegation offered to produce such lists for submission to the next session of the Committee. It was noted that the Joint FAO/WHO Expert Committee had already evaluated extraction solvents during its 14th session; the carrier solvents had not yet been considered.

106. The Committee accepted the offer of the delegation of the Netherlands to prepare new lists and decided to ask the Joint FAO/WHO Expert Committee to evaluate the carrier solvents.

FLAVOUR ENHANCERS

107. The Committee had before it a document prepared by the Secretariat containing the comments received from governments on the list of flavour enhancers (CX/FA 70/9). The Committee noted that only a few flavour enhancers had been evaluated by the Joint FAO/WHO Expert Committee and decided to postpone discussion of this paper until the next session and to ask the Joint FAO/WHO Expert Committee on Food Additives to evaluate the remaining substances mentioned in the list (see Appendix VIII). The Committee accepted an offer by the delegation of Japan to prepare a paper on the quantities of flavour enhancers used in food together with a proposal for a new definition for the next session of the Committee.

ANTI-CAKING AGENTS

108. The Committee had before it a document prepared by the Secretariat containing the comments received from governments on the list of anti-caking agents (CX/PA 70/10). The Committee noted that all the substances on the list had been evaluated by the Joint FAO/WHO Expert Committee on Food Additives. The delegation of the Netherlands requested to add to the list calcium carbonate, magnesium carbonate, magnesium oxide and tetra-sodium disphosphate which had also been evaluated by the Joint Expert Committee. The Committee agreed to permit the use of ferrocyanides as anti-caking agents for food-grade salt. The Committee decided to include all the substances on the list of anti-caking agents together with the four mentioned by the delegation of the Netherlands in the general compilation of food additives.

FOOD COLOURS

109. The Committee had before it a document prepared by the FAO Secretariat (CX/PA 70/11). The Committee noted that the Commission, at its last session, had agreed to consider this list as an open one and made it available for the information of Codex commodity committees as well as governments.

110. The Committee agreed that the list of food colours for which an ADI or a temporary ADI had been established (see Appendix VII, ALINORM 70/43) should be made available to governments for information. Other colours, which had been evaluated by the Joint FAO/WHO Expert Committee on Food Additives should be included by reference.

LISTING AND CLASSIFICATION OF FOOD ADDITIVES

111. The Secretariat informed the Committee that FAO had engaged a consultant to draw up lists of food additives as requested by the 6th session of the Committee (see paras 93-96 of the report of the 6th session, ALINORM 70/12). Owing to certain difficulties, the document prepared by FAO could not be distributed as a working document for this session. The Committee requested the Secretariat to explore the possibility of making this document available at its next session. It was agreed that the food additives to be included in the document were those which had been considered by the Joint FAO/WHO Expert Committee on Food Additives as well as the additives which were of interest to Codex. The Secretariat was requested to provide a full reference to the publications of the Joint FAO/WHO Expert Committee on Food Additives.

PART VI

SPECIFICATIONS FOR FOOD ADDITIVES

Discussion of the Procedure to be Adopted for the Elaboration of Specifications for Food Additives

112. The Committee had before it a paper prepared by the Secretariat (CX/FA 70/4) which contained a proposal for the procedure to be followed. The Committee noted that the Commission, at its 7th session, had requested an opinion on this matter. It was also noted that the procedure proposed by the Secretariat was essentially the same as the procedure for the Elaboration of Codex standards with the difference that the monographs of the Joint FAO/WHO Expert Committee on Food Additives containing the specification would not be submitted to the Committee at Step 2 of the Procedure but would be submitted directly to governments and interested international organizations for comment by the Secretariat. The Committee agreed that the comments received should be made available to the Joint FAO/WHO Expert Committee on Food Additives for consideration as a matter of course.

113. As regards Step 9 of the Procedure, the Committee agreed that reference to this should be deleted in order not to prejudice any future decision reached by the Commission concerning the eventual status of the specifications. The Committee agreed that the procedure given in Appendix V should be submitted to the Commission for consideration.

Consideration of Government Comments on the Specifications Established by the Joint FAO/WHO Expert Committee on Food Additives

114. The Committee was informed that only a few comments had been received on the specifications submitted to governments and that for this reason the Secretariat did not prepare a working document. It was agreed that the specifications would be examined in the light of comments at a later session.

PART VII

DEFINITIONS

115. The Committee, at its 5th session, adopted definitions for "food additives", "contaminants" and "process" (see Appendix II, ALINORM 69/12). The Commission, at its 6th session, decided to defer consideration of these definitions and requested governments to comment on them (see para 83, ALINORM 69/67). The Commission, at its 7th session, had before it some comments but decided to refer the matter to this Committee. The delegation of the Federal Republic of Germany pointed out that the

Commission had agreed that the purpose of these definitions was not to delineate the terms of reference of the Codex Committee on Food Additives but to define the terms used in the General Principles of the Codex Alimentarius. Furthermore, in accepting these definitions, the Commission emphasized that they were not intended for governments to use in their national food legislation. After full discussion, the Committee agreed to adopt the definitions proposed by the U.K. as shown in Appendix VI and to request governments to comment on them. It was agreed that the definitions would be re-examined in the light of comments in the next session.

CARRY-OVER PRINCIPLE (See Appendix VII)

116. The Committee had before it a paper prepared by the delegation of the Netherlands (CX/FA 70/18) dealing with the problem of the presence of ingredients containing additives. The Committee agreed with the definition for "Carry-Over" and with the principles described in the above working paper. It was agreed to request governments to comment on the principles contained in Appendix VII.

117. The delegation of the Federal Republic of Germany drew the attention of the Committee to the possible difficulties in connection with the labelling of foods to which the carry-over principle applied. The Committee decided to bring this problem to the attention of the Codex Committee on Food Labelling.

DISCUSSION OF THE REPORT OF THE JOINT FAO/IAEA/WHO EXPERT COMMITTEE

118. The Committee had before it the report of the 1969 meeting of the above Expert Committee entitled "Wholesomeness of Irradiated Food with Special Reference to Wheat, Potatoes and Onions" (WHO techn. Rep. Ser. No. 451). The representative from WHO gave a summary of the above report indicating the recommendations of the Expert Committee in connection with some irradiated foods. The Committee reconfirmed its decision taken at the 6th session (see paras 111-112, ALINORM 70/12). (N.B. Paragraph 118 has been inserted by the Secretariat after adoption of the Report).

PART VIII

OTHER BUSINESS

Agenda Item for the Next Session of the Committee

119. On the proposal of the delegation of the Federal Republic of Germany, the Committee was of the opinion that, subject to the Commission agreeing to the enlarged terms of reference of this Committee (see para 17), it would be desirable to discuss the FAO publications concerning food additives. The Secretariat agreed to prepare a working paper on this subject.

Matters to be Referred to the Codex Commodity Committees and the Joint FAO/WHO Expert Committee on Food Additives

120. The delegation of the U.K. informed the Committee that additional toxicological information had become available on stearoyl laotylate. The Committee agreed to refer this additive to the Joint FAO/WHO Expert Committee on Food Additives for re-evaluation. The U.K. delegation further informed the Committee that data were available on xanthan gum which might enable the Joint FAO/WHO Expert Committee on Food Additives to establish an ADI. This gum could replace some other vegetable gums like guar gum, carob bean gum or karaya gum. The Committee agreed that this matter be referred to the Joint FAO/WHO Expert Committee on Food Additives and the relevant Commodity Committee.

121. On the request of the delegation of Sweden, the Committee agreed to add SO_2 to the list of additives referred to the Joint FAO/WHO Expert Committee on Food Additives for consideration. It was pointed out that new work was in progress in BIBRA on the toxicity of this additive.

122. The Committee agreed to divide the priority list into two parts: the first containing additives requiring early action and the second list containing items which could be considered at a later stage. The Joint FAO/WHO Expert Committee was requested to evaluate the substances listed in Appendix VIII of this report.

Use of Spanish Language

123. The delegate from Venezuela stressed the importance of the use of Spanish as a working language of this Committee. This, in the opinion of the delegate from Venezuela, would result in a greater participation by Spanish speaking countries in the work of this Committee.

Time and Place of the Next Session

124. The Secretariat informed the Committee that the Codex Alimentarius Commission had decided to schedule its sessions to take place at 18 months intervals and that the scheduling sessions of Codex committees in the same manner was under consideration. Subject to confirmation by the Commission, the next session of the Committee would therefore take place around February 1972.

Valediction

125. The delegate of Switzerland, Mr. J. Ruffy, speaking on behalf of the Committee, expressed the Committee's gratitude to the retiring Chairman, Prof. Dr. M.J.L. Dols, for all his efforts in conducting the discussions, often difficult and at times very involved in a characteristically calm and pleasant manner. It was with regret that the delegates learned that this was the last session of the Committee over which Professor Dols would be presiding. Though the Committee still had much work before it, Professor Dols could be proud of the results achieved so far, which were due to a great extent to his own efforts during the course of the seven sessions which had taken place under his able chairmanship. The good wishes of all the delegates, who will retain the kindest recollections of their first Chairman, will accompany Professor Dols in his future activities during the years to come.

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APPENDIX II

ENDORSEMENT OP FOOD ADDITIVES IN CODEX COMMODITY STANDARDS

Explanatory Notes

a) "Not endorsed" - used in the case of those additives which are awaiting evaluation by the Joint FAO/WHO Expert Committee on Food Additives, or where no ADI could be established for lack of adequate data, or where there is evidence that the substance is not Suitable as a food additive.

b) "Temporarily endorsed" - used where there is only a temporary toxicological evaluation or where additional information might come forward from the Commodity Committee.

c) "Postponed" - used in the case of those additives for which further clarification is required by either the Joint FAO/WHO Expert Committee on Food Additives or the Codex Committee on Food Additives or both, before an endorsement.

d) GMP - means good manufacturing practice.

PART A. FRUIT JUICES

Additive or contaminant	Maximum level	Food	Status	References
1. Ascorbic acid	limited by GMP	Apricot nectar Peach nectar Pear nectar Apple juice Grape juice	endorsed	
2. Citric acid	limited by GMP	Apricot nectar Peach nectar Pear nectar	endorsed	
3. Malic acid	limited by GMP	Apricot nectar Peach nectar Pear nectar	endorsed	
4. Sulphur dioxide	50 mg/kg total SO_2 [1]	Grape juice	endorsed	
	10 rag/kg total SO_2	Apple juice	endorsed	
Clarifying agents and filtration aids:				para 7 ALINORM 70/12
5. Clarifying enzymes	limited by GMP	Apple juice Grape juice	temporarily endorsed	
6. Edible gelatine	limited by GMP	Apple juice Grape juice	endorsed	
7. Bentonite				
8. Silicon dioxide (colloidal solution of silica)				
9. Tannins	limited by GMP	Grape juice Apple juice	temporarily endorsed	para 25
10. Asbestos	limited by GMP	Grape juice Apple juice	not endorsed	para 26
11. Diatomaceous earth (diatomite Kieselguhr)	limited by GMP	Apple juice Grape juice	endorsed	
12. Cellulose	limited by GMP	Apple juice Grape juice	endorsed	
13. Vegetable carbon	limited by GMP	Apple juice Grape juice	endorsed	
14. Perlite	limited by GMP	Apple juice	not endorsed	para 27

[1] After an interval of three years from the date of publication of this Standard for acceptance by governments, this figure will be reduced to 10 mg/kg.

[2] Without preservatives.

15. Arsenic (As)	0.2 mg/kg	Apricot nectar Peach nectar		
16. Copper (Cu)	5.mg/kg	Pear nectar Apple juice Orange juice Grape juice Tomato juice Lemon juice Grapefruit juice	endorsed	
17. Lead (Pb)	0.3 mg/kg	Apricot nectar Peach nectar Pear nectar Apple juice Orange juice Grape Juice Tomato juice Grapefruit juice	temporarily endorsed	
	1 mg/kg	Lemon juice		para 28
18. Tin (Sn)	250 mg/kg	Apricot nectar Peach nectar Pear nectar Orange juice Lemon juice Grapefruit juice	temporarily endorsed [1]	para 29
	150 mg/kg	Apple juice	temporarily endorsed	para 29
	*[*250 mg/kg*]*	Grape juice Tomato juice	postponed	para 29
19. Zinc (Zn)	5 mg/kg	Apple juice Orange juice Lemon juice Grapefruit juice Grape juice Tomato juice Apricot nectar Peach nectar Pear nectar	endorsed	

[1] Subject to review two years after the adoption of the standards at Step 8 of the Procedure.

20. Iron (Fe)	15 mg/kg	Apricot nectar Peach nectar Pear nectar	
	10 mg/kg	Apple juice	
	15 mg/kg	Orange juice Grape juice Tomato juice Lemon juice Grapefruit juice	endorsed
21. Total metal content precipitable by potassium hexacyanoferrate (II)	20 mg/kg	Apricot nectar Peach nectar Pear nectar Orange juice Lemon juice Grapefruit juice	endorsed
	17 mg/kg expressed as Fe	Grape juice Tomato juice	
	12 mg/kg expressed as Fe	Apple juice	
22. Mineral impurities insoluble in 10% HCl	20 mg/kg 25 mg/kg	Apple juice Grape juice Tomato juice	endorsed

PART B. MEAT PRODUCTS

Additive	Maximum level	Food	Status	References
23. Agar	limited by GMP	Canned hams Canned pork shoulder	endorsed	para 35
24. Alginates, K and/or Na salts	limited by GMP	Canned hams Canned pork shoulder	endorsed	para 35
25. Ascorbic acid and sodium salt 26. Iso-ascorbic acid and sodium salt	500 rag/kg expressed as ascorbic acid singly or in combination	Canned chopped meat Canned hams Canned pork shoulder Canned luncheon meat	endorsed	para 35
27. Artificial flavourings, essences and extracts (to be specified)	to be specified	Canned hams Canned luncheon meat Canned chopped meat Canned pork shoulder	postponed	paras 31, 35
28. Carrageenan	limited by GMP	Canned hams Canned pork shoulder	endorsed	para 35
29. Cyclamate, Ca and/or Na salts	to be specified	Canned hams Canned pork shoulder	not endorsed	paras 32, 35
30. Guanylic acid, sodium salt	*[*5"00 mg/kg expressed as guanylic acid/	Canned hams Canned pork shoulder Canned luncheon meat Canned chopped meat	not endorsed	paras 33, 35

31. Inosinic acid, sodium salt	*[*500 mg/kg expressed as inesinic acid*]*	Canned hams Canned pork shoulder Canned luncheon meat Canned chopped meat	not endorsed	paras 33, 35
32. Monosodium glutamate	limited by GMP	Canned hams Canned pork shoulder Canned luncheon meat Canned chopped meat	temporarily endorsed [1]	paras 34, 35

[1] Subject to review two years after the adoption of the standards at Step 8 of the Procedure

33. Nitrate, K and/ or Na salts	500 mg/kg expressed as sodium nitrate	Canned hams Canned pork shoulder Canned corned beef Canned luncheon meat Canned chopped meat	temporarily endorsed	para 35
34. Nitrite, K and/ or Na salts	200 mg/kg total nitrite expressed as sodium nitrite	Canned hams Canned pork shoulder Canned corned beef Canned luncheon meat Canned chopped meat	temporarily endorsed	para 35
35. Sodium citrate	limited by GMP	Canned luncheon meat Canned hams Canned pork shoulder Canned chopped meat	endorsed	para 35
36. Sodium and potassium <u>phosphates</u> (mono, di-and poly-)	3000 mg/kg expressed as P_2O_5 may be added to the raw material singly or in combination	Canned hams Canned pork shoulder Canned luncheon meat Canned chopped meat	temporarily endorsed [1]	para 35

[1] See ALINORM 69/12 Appendix IV and para 64-65, ALINORM 70/12.

PART C. <u>QUICK-FROZEN FOODS</u>

<u>Additive</u>	<u>Maximum level</u>	<u>Food</u>	<u>Status</u>	<u>References</u>
37. Ascorbic acid	limited by GMP	Quick-frozen strawberries Quick-frozen peaches	temporarily endorsed	para 36
38. Citric acid	limited by GMP	Quick-frozen strawberries Quick-frozen peaches	endorsed	para 37

N.B.:				
Ascorbic acid Citric acid	400 mg/kg singly or in combination	Quick-frozen strawberries (sliced and halved)	endorsed in 1969	p. 36, ALINORM 70/12
39. Natural flavourings as defined in the Codex Alimentarius and their identical synthetic equivalents	limited by GMP	Quick-frozen peas	temporarily endorsed	para 13, ALINORM 70/12
40. Sodium alginate	limited by GMP	Quick-frozen peaches	postponed	para 38

PART D. FUNGUS PRODUCTS [1]

[1] Ref. No. CAC/RS 38-1970

Additive	Maximum level	Food	Status	References
41. Acetic acid 42. Lactic acid 43. Citric acid 44. Ascorbic acid	limited by GMP	General Standard for Fungi and Fungus Products	endorsed	
45. Citric acid 46. Lactic acid	5 g/kg individually or in combination	Sterilized fungi	endorsed	
47. Acetic acid	20 g/kg	Pickled fungi	endorsed	

PART E. SUGARS [2]

[2] Ref. No. CAC/RS 4 to 11 - 1969

Additive or contaminant	Maximum level	Food	Status	References
48. Sulphur dioxide	20 mg/kg	Dextrose Anhydrous Dextrose Monohydrate White Sugar (specification A) Powdered Sugar	endorsed	
	40 mg/kg	Soft Sugars (Specifications A and B) Glucose Syrup Dried Glucose Syrup	endorsed	

	70 mg/kg	White Sugar (Specification B)	endorsed	
	150 mg/kg	Dried Glucose Syrup for the manufacture of sugar confectionery only	endorsed	
	400 mg/kg	Glucose Syrup, for the manufacture of sugar confectionery only	endorsed	
<u>Anti-caking agents:</u>				
49. Calcium silicate				
50. Dehydrated silica el (silicon dioxide amorphous)				
51. Magnesium stearate				
52. Magnesium trisilicate				
53. Tricalcium mono-phosphate	15 g/kg singly or in combination	Powdered Sugar	endorsed	para 15, ALINORM 70/12
54. Sodium aluminosilicate				
55. Sodium calcium aluminosilicate				
56. Magnesium carbonat				
57. Arsenic (As)	1 mg/kg	Dextrose Anhydrous Dextrose Monohydrate Glucose Syrup Dried Glucose Syrup Lactose Soft Sugars (specifications A and B) White Sugar Powdered Sugar	endorsed	
58. Copper (Cu)	2 mg/kg	Dextrose Anhydrous Dextrose Monohydrate Lactose White Sugar Powdered Sugar	endorsed	
	5 mg/kg	Glucose Syrup Dried Glucose Syrup	endorsed	
	10 mg/kg	Soft Sugars (specifications A and B)	endorsed	

59. Lead (Pb) 2	2 mg/kg	Dextrose Anhydrous Dextrose Monohydrate Glucose Syrup Dried Glucose Syrup Lactose Soft Sugars (specifications A and B) White Sugar Powdered Sugar	temporarily endorsed

PART F. COCOA PRODUCTS AND CHOCOLATE [2]

Additive or contaminant	Maximum level	Food	Status	References
Alkalizing agents:				
60. Ammonium carbonate		Cocoa beans and all raw and semi processed materials derived there from Sweetened fat reduced cocoa powder [3]		para 16 ALINORM 70/12 and para 39 of this report
61. Ammonium hydrogen-carbonate[1]				
62. Ammonium hydroxide				
63. Calcium carbonate		Cocoa powder		
64. Magnesium carbonate	5 g/kg singly or in combination expressed as anhydrous K_2CO_3 on a fat free basis	Fat-reduced cocoa powder		
65. Magnesium hydroxide		Sweetened cocoa powder	endorsed	
66. Potassium carbonate				
67. Potassium hydrogen carbonate				
68. Potassium hydroxide				
69 Sodium carbonate				
70. Sodium hydrogen carbonate				
71. Sodium hydroxide				

[1] The Specification (FAS/I/I3, SP 10/50) covers the mixture of ammonium hydrogen carbonate and ammonium crbamate in varying proportions.

[2] Appendix II, ALINORM 71/10.

[3] Standard No. I, ALINORM 71/10.

Additive or contaminant	Maximum level	Food	Status	References
Emulsifiers:				
72. Ammonium salts of phosphatidic acids	7 g/kg	Individual standards for chocolate [1] Cocoa powder Sweetened cocoa powder Fat-reduced cocoa powder Sweetened fat-reduced cocoa powder cocoa mass cocoa press cake	temporarily endorsed	
73. Lecithin	5 g/kg of the acetone insoluble component of lecithin	Individual standards for chocolate [1]	endorsed	
	10 g/kg of the acetone insoluble component of lecithin	Cocoa powder Sweetened cocoa powder Pat-reduced cocoa powder Sweetened fat-reduced cocoa powder Cocoa mass Cocoa press cake	endorsed	para 41
74. Mono- and diglycerides of edible fatty acids	15 g/kg	Individual standards for chocolate [1] Cocoa mass Cocoa press cake Cocoa powder Sweetened cocoa powder Pat-reduced cocoa powder Sweetened fat-reduced cocoa powder	endorsed	para 41
75. Total amount of emulsifiers not more than 15 g/kg		Foods under 72 - 74	endorsed	para 41

[1] Standard Nos. IV and V, ALINORM 71/10.

Additive or contaminant	Maximum level	Food	Status	References
Flavouring agents:				
76. Vanillin	in small amounts for flavour adjustment	Individual standards for chocolate [3]	endorsed	
77. Ethyl vanillin		Cocoa mass		
78. Natural flavours, as defined in the Codex Alimentarius and their synthetic equivalents *[*and synthetic flavours appearing in the Codex list,*]* other than those which would imitate natural chocolate or milk flavours	limited by GMP	Cocoa press cake Cocoa powder Fat-reduced cocoa powder Sweetened cocoa powder Sweetened fatreduced cocoa powder	postponed pending clarification[1]	para 43
Neutralizing agents:				
79. *[*phosphoric acid (expressed as P_2O_5)*]*	5 g/kg singly or in combination	Cocoa beans and all raw and semi-processed materials derived there from [2] Cocoa powder Fat-reduced cocoa powder Sweetened cocoa powder Sweetened fat-reduced cocoa powder	postponed	para 40
80. Citric acid			endorsed	
81. L-tartaric acid			endorsed	

1 Temporarily endorsed in 1969, see Appendix VII, ALINORM 70/12.

2 Standard No. I, ALINORM 71/10.

3 Standard Nos. IV and V, ALINORM 71/10.

Additive or contaminant	Maximum level	Food	Status	References
Contaminants:				
82. Arsenic (As)	*[*1 mg/kg*]*	Chocolates [2] Cocoa powder Sweetened cocoa powder Fat-reduced cocoa powder Sweetened fat-reduced cocoa powder Cocoa beans and all raw and semi-processed materials derived therefrom [1]	postponed	Para 44
	0.5 me/kg	Cocoa butters	endorsed	para 44
83. Lead (Pb)	*[*2 mg/kg*]*	Chocolates [2] Cocoa powder Sweetened cocoa powder Fat-reduced cocoa powder Sweetened fat-reduced cocoa powder Cocoa beans and all raw and semi-processed materials derived there from [I]	postponed	para 46
	0.5 mg/kg	cocoa butters	endorsed	para 46
84. Copper (Cu)	*[*60 mg/kg*]*	Cocoa powder Sweetened cocoa powder Fat-reduced cocoa powder Sweetened fat-reduced cocoa powder Cocoa press cake	postponed	para 45
	*[*20 mg/kg*]*	Cocoa beans Cocoa nib Cocoa mass Chocolates [2]	postponed	para 45
	0.4 mg/kg	Cocoa butters	endorsed	Appendix VIII ALINORM 69/12
85. Iron (Fe)	2 mg/kg	Cocoa butters	endorsed	para 47

1 Standard No. I, ALINORM 71/10.

2 Standard Nos. IV and V, ALINORM 71/10.

PART G. FISH AND FISHERY PRODUCTS

Additive	Maximum level	Food	Status	References
86 Monophosphate monosodium or monopotassium (Na or K ortho-phosphate)	5 g/kg of the final product expressed as P_2O_5, singly or in combination	Frozen fillets of cod and haddock. Frozen fillets of ocean perch Frozen fillets of plaice	endorsed	
87. Diphosphate, tetrasodium or tetrapotasaium (Na or K pyro-phosphate)				
88. Triphosphate, pentasodium or pentapotaasium or calcium (Na, K or Ca tripoly-phosphates)				
89. Polyphosphate, sodium (Na hexa-metaphosphate)				
90. Diphosphate, tetrasodium (Na pyrophosphate)	5 g/kg of the final product expressed as P_2O_5	Canned tuna and Bonito in water or oil	endorsed	para 50
91. Orthophosphoric acid	850 mg/kg of the final product	Canned shrimps and prawns	temporarily endorsed	
92. Ascorbate, potassium or sodium salts	1000 mg/kg of the final product, expressed as ascorbic acid	Frozen fillets of cod and haddock Frozen fillets of ocean perch Frozen fillets of plaice	endorsed	
93. Monosodium glutamate	800 mg/kg of the final product	Canned shrimps and prawns	postponed	para 49
94. Calcium disodium EDTA	250 mg/kg of the final product	Canned shrimps and prawns	endorsed	
95. Citric acid	limited by GMP	Canned shrimps and prawns	endorsed	

96. Beta-carotene				
97. Tartrazine (CI 19140)				
98. Amaranth (CI 16185)			endorsed	
99. Sunset Yellow FCF (CI 15985)	30 mg/kg of the final product individually or in combination	Canned shrimps and prawns	temporarily endorsed	
100. Erythrosine (CI 45430)				
101. Ponceau 4R (CI 16255)				
102. Orange GGN (15980)			not endorsed	para 48
103. Ponceau 6R (CI 16290)				
104. Azo-rubine (CI 14720)				

PART H. FATS AND OILS

Key to commodities;

Fats and Oils (General Standard)	-	General Standard for Fats and Oils not covered by individual Codex Standards (CAC/RS 19-1969)
Fats	-	Lard, rendered pork fat, premier jus, edible tallow (CAC/RS 28 to 31-1969)
Oils		Soyabean oil, arachis oil, cottonseed oil, sunflowerseed oil, rapeseed oil, maize oil, sesameseed oil, safflowerseed oil, mustardseed oil, but not including olive oil (CAC/RS 20 to 27 -1969, CAC/RS 34-1970).

Additive	Maximum level	Food	Status	References
105. Annatto	limited by GMP [1]	Fats and Oils (General Standard) Oils Margarine	temporarily endorsed	
106. Beta-carotene	limited by GMP [1]	Fats and Oils (General Standard) Oils Margarine	endorsed	
107. Curcumin	limited by GMP [1]	Fats and Oils (General Standard) Oils Margarine	temporarily endorsed	
108. Canthaxanthine	limited by GMP [1]	Fats and Oils (General Standard) Oils Margarine	endorsed	
109. Beta-apo-8'-carotenal	limited by GMP [1]	Fats and Oils (General Standard) Oils Margarine	endorsed	

110.	Beta-apo-8'-carotenoic acid, methyl and ethyl esters	limited by GMP[1]	Fats and Oils (General Standard) Oils Margarine	endorsed	
111.	Natural flavours as defined in the Codex Alimentarius, and their identical synthetic equivalents and synthetic flavours appearing in the Codex list	limited by GMP	Margarine	temporarily endorsed	paras 22-25 ALINORM 70/12
112.	Natural flavours as defined in the Codex Alimentar-ius and their identical synthetic equivalents and synthetic flavours appearing in the permitted Codex list	limited by GMP as agreed by the Codex Alimentarius Commission [1]	Fats and Oils (General Standard) Oils	temporarily endorsed	paras 22-25 ALINORM 70/12
113.	Mono- and diglycerides of fatty acids	limited by GMP	Fats and Oils (General Standard) Margarine	endorsed	
114.	Mono- and diglycerides of fatty acids eaterified with acetylcitric orthophosphoric acids and their Na and Ca salts	20 g/kg*	Fats and Oils (General Standard)	not endorsed	

[1] The Codex Alimentarius Commission, at its sixth session, agreed to a text to be inserted in the Standards for Fats and Oils to limit the amount of colouring agent which may be added, see para 146, ALINORM 69/67 and the respective Recommended Standards. This does not apply to margarine.

115. Mono- and diglycerides of fatty acids esterified with acetic, acetyltartaric, citric, lactic, tartaric acids and their Na and Ca salts	20 g/kg* 10 g/kg	Fats and Oils (General Standard) Margarine	endorsed	
116. Lecithins (and components of commercial lecithin)	20 g/kg* limited by GMP	Fats and Oils (General Standard) Margarine	endorsed	

* Individually or in combination.
[1] See footnote [1] on page 15, Appendix II.

Additive	Maximum level	Food	Status	References
117. Polyglycerol esters of fatty acids	20 g/kg 5 g/kg	Fats and Oils (General Standard) Margarine	endorsed	
118. Esters of fatty acids with polyaloohols other than glycerol: sorbitan monopalmitate sorbitan monostearate sorbitan tristearate	20 g/kg* 10 g/kg	Fats and Oils (General Standard) Margarine		
119. 1,2-propylene glycol esters of fatty acids	20 g/kg*	Fats and Oils (General Standard) Margarine	endorsed	
120. Sucrose esters of fatty acids (including sucroglycerides)	20 g/kg* 10 g/kg	Fats and Oils (General Standard) Margarine	Temporarily endorsed	para 26 ALINORM 70/12
121. Stearoyl lactylie acid, Ca salt	20 g/kg*	Fats and Oils (General Standard)	temporarily endorsed	para 119
122. Polyglycerol esters of interesterified ricinoleic acid	20 g/kg	Fats and Oils (General Standard)	temporarily endorsed	

123. Polyoxyethylene sorbitan monostearate	10 g/kg*	Fats and Oils (General Standard)	endorsed	
124. Polyoxyethylene sorbitan monooleate	10 g/kg*	Fats and Oils (General Standard)	endorsed	

* Individually or in combination.

Additive	Maximum level	Food	Status	References
125. Gallates, propyl, octyl, dodecyl, isoamyl	100 mg/kg individually or in combination	Fats and Oils (General Standard) Oils, Fats	endorsed not endorsed	
126. HIT, BHA	200 mg/kg individually or in combination	Fats and Oils (General Standard) Fats Oils	endorsed	
127. Any combination of gallates with BHA or BHT or both, maximum 200 mg/kg but gallates not to exceed 100 mg/kg				
128. Gallates, propyl, octyl, dodecyl	100 mg/kg individually or in combination	Margarine	endorsed	
129. BHT, BHA				
130. Ascorbyl palmitate	200 mg/kg individually or in combination	Fats and Oils (General Standard) Oils Fats Margarine	endorsed	
131. Ascorbyl stearate				
132. Alpha-Tocopherol for the purpose of restoring natural tocopherel lost in processing	200 mg/kg total alpha tocopherol in the final product	Refined olive oil, refined olive-residue oil and blends of virgin and refined olive oils and mixtures of virgin and refined olive-residue oils	endorsed	para 30

133.	Sorbic acid and Na, K and Ca salts	1000 mg/kg individually or in combination expressed as the acids	Margarine	endorsed	
134.	Benzoic acid and Na and K salts				
135.	Natural and synthetic tocopherols	limited by GMP	Fata And Oils (General Standard) Oils Fats Margarine	endorsed	
136.	Ethyl protocatechuate	200 mg/kg	Fats and Oils (General Standard) Oils Fats	not endorsed	
137.	Dilauryl thlodipropionats	200 mg/kg	Fats and Oils (General Standard) Oils Fats	endorsed	
138.	NDGA	100 mg/kg	Fats	not endorsed	
139.	Resin guaiac	1000 mg/kg	Fats	not endorsed	
140.	Citric acid and its sodium salt	limited by GMP	Fata and Oils (General Standard) Oils Fats	endorsed	
141.	Citric acid and its sodium or potassium salts	limited by GMP	Margarine	endorsed	
142.	Lactic acid and its sodium or potassium salts	limited by GMP	Margarine	endorsed	
143.	L-tartaric acid and its sodium or sodium-potassium salts	limited by GMP	Margarine	endorsed	
144.	Sodium hydrogen carbonate, carbonate or hydroxide	limited by GMP	Margarine	endorsed	
145.	Isopropyl citrate mixture	100 mg/kg	Fats and Oils (General Standard) Oils Margarine Fats	endorsed	Para 30 ALINORM 70/12

* Individually or in combination.

Additive	Maximum level	Food	Status	References
146. Phosphoric acid	100 mg/kg	Fats and Oils (General Standard) Oils Pats	temporarily endorsed	para 63 ALINORM 70/12
147. Monoglyceride citrate	100 mg/kg	Oils Pats	endorsed	
148. Dimethyl poly-siloxane singly or in combination with silicon dioxide	10 mg/kg	Fats and Oils (General Standard) Oils	temporarily endorsed	para 31 ALINORM 70/12
149. Oxystearin	1250 mg/kg	Fats and Oils (General Standard) Oils	temporarily endorsed	
150. Iron (Fe)	1.5 mg/kg (refined fats and oils)	Fats and Oils (General Standard) Oils Fats Margarine	endorsed	
	5 mg/kg (virgin oils)	Fats and Oils (General Standard) Arachis Oil Sunflowerseed Oil Rapeseed Oil Maize Oil Sesameseed Oil Mustardseed Oil	endorsed	
151. Copper (Cu)	0.1 mg/kg (refined fats and oils)	Fats and Oils (General Standard) Oils Margarine	endorsed	
	0.4 mg/kg (virgin oils)	Fats and Oils (General Standard) Arachis Oil Sunflowerseed Oil Rapeseed Oil Maize Oil Sesameseed Oil Mustardseed Oil Fats	endorsed	

* Individually or in combination.

Additive or Contaminant	Maximum level	Food	Status	References
152. Lead (Pb)	0.1 mg/kg	Fats and Oils (General Standard) Oils Fats Margarine	endorsed	
153. Araenic (As)	0.1 mg/kg	Fats and Oils (General Standard) Oils Fats Margarine	endorsed	
154. Solvent residues	nil	Refined olive residue oil	postponed	paras 32-34 ALINORM 70/12

PART I. PROCESSED FRUITS AND VEGETABLES

Additive or contaminant	Maximum level	Food	Status	References
155. Acetic acid	limited by GMP	Canned tomatoes Canned asparagus	endorsed	
156. Citric acid	limited by GMP	Canned tomatoes Canned applesauce Canned grapefruit Canned sweetcorn Canned asparagus Canned mushrooms Canned strawberries Canned raspberries Canned pineapple Canned pears Canned mandarin oranges	endorsed	
	to maintain the pH at a level net above 4.3	Processed tomato concentrate		
	limited by GMP	Jams, jellies Citrus marmalade	postponed	para 51
157. Lactic acid	limited by GMP to maintain the pH at a level not above 4.3	Canned tomatoes Canned strawberries Canned raspberries Canned pears	endorsed	
		Processed tomato concentrate		
	limited by GMP	Jams, jellies Citrus marmalade	postponed	para 51

158.	Malic acid	limited by GMP	Canned tomatoes Canned applesauce Canned asparagus Canned strawberries Canned raspberries Canned pears	endorsed	
		to maintain the pH at a level not above 4.3	Processed tomato concentrate		
		limited by GMP	Jams, jellies Citrus marmalade	postponed	para 51
159.	L-tartaric acid	limited by GMP	Canned tomatoes Canned strawberries Canned raspberries Canned pears Canned asparagus	endorsed	
		to maintain the pH at a level not above 4.3	Processed tomato concentrate		
		limited by GMP	Jams, jellies Citrus marmalade	postponed	para 52
160.	Fumaric acid	limited by GMP	Jams, jellies Citrus marmalade	postponed	para 51
161.	Na, K and Ca salts of acids under 156-160				
162.	Na and K carbonates and bicarbonates	limited by GMP	Jams, jellies Citrus marmalade	postponed	para 53
163.	Na hydroxide				
164.	Sodium hydrogen carbonate	to raise the pH to a level not above 4.3	Processed tomato concentrates	endorsed	
165.	Calcium chloride or other calcium salts	350 rag/kg Ca derived from added Ca salts	Canned tomatoes	endorsed	para 36 ALINORM 70/12
166.	Calcium chloride				
167.	Calcium lactate	350 mg/kg Ca in the final product	Canned green peas Canned strawberries	endorsed	
168.	Calcium gluconate				
169.	Calcium chloride	1000 mg/kg	Jams, jellies Citrus marmalade	postponed	para 54
170.	Calcium chloride and/or lactate	350 mg/kg Ca derived from added Ca salts	Canned grapefruit	endorsed	

171. Stannous chloride	25 mg/kg calculated as Sn	Canned asparagus in glass or fully enamel-lined (lacquered) containers	endorsed	para 56
172. Amylose		Canned green and wax beans Canned sweetcorn [2] Canned asparagus [1]		
173. Amylopectin	[4]	Canned green peas [2]	endorsed	
174. Dextrins, white and yellow				see para 98 ALINORM 70/12
175. Enzyme-treated starch		Canned mushrooms [3]		para 73
<u>Modified starches:</u>				
176. Acid-treated starches	see ever	see p. 25	endorsed	
177. Alkali-treated starches				
178. Bleached starches				
179. Distarch, phosphate (sodium triraetaphos-phate treated)				
180. Distarch phosphate, phosphated				
181. Monostarch phosphate				

[1] To be used only when packed in sauces.

[2] To be used only when butter is an ingredient.

[3] To be used only when butter or other edible animal or vegetable fats or oils are used as ingredients.

[4] Requirements listed under the Essential Composition and Quality Factors section in the standards concerned.

Additive or contaminant	Maximum level	Food	Status	References
182. Starch acetate				
183. Starch, hydroxy-propyl				
184. Distarch, adipate, acetylated			temporarily endorsed	para 37
185. Distarch glycerol, hydroxypropyl				
186. Oxidized starches				
187. Starch sodium succinate 188. Distarch phosphate (phosphorus oxychloride treated)	10 g/kg singly or in combination with vegetable gums and alginates	Canned mushrooms[3] Canned green and wax beans Canned sweetcorn[2] Canned asparagus[1] Canned green peas[2]		
189. Distarch phosphate, acetylated			not endorsed	
190. Distarch phosphate, hydroxypropyl				
191. Distarch glycerol, acetylated				
192. Distarch glycerol				

[1] To be used only when packed in sauces.

[2] To be used only when butter is an ingredient*

[3] To be used only when butter or other edible animal or vegetable fats or oils are used as ingredients.

Additive or contaminant	Maximum level	Food	Status	References
Vegetable gums (193-198):				
193. Arabic gum 194. Carrageenan 195. Furcellaran 196. Guar gum		see p. 25	Temporarily endorsed	
197. Tragacanth [4] 198. Carob bean gum [4]	10 g/kg singly or in combination with modified starches		not endorsed	para 76
199. Alginates (Ca, K, Na, NH_4)			Temporarily endorsed	
200. Propylene glycol alginate				
201. Pectin	limited by GMP	Jams, jellies Citrus marmalade	endorsed	para 75
202. Alginate 203. Agar 204. Carrageenan 205. Gums	limited by GMP	Jams, jellies	postponed	para 77
206. Methyl cellulose	*[*10 mg/kg*]* limited by GMP	Canned mandarin oranges Jams, jellies	postponed	para 74

[4] Not in Canned green and wax beans and canned sweetconrn.

Additive or contaminant	Maximum level	Food	Status	References
207. Monosodium glutamate	limited by GMP	Canned green and wax beans Canned sweetcorn	endorsed	para 41 ALINORM 70/12
		Canned asparagus Canned green peas Canned mushrooms	temporarily endorsed	para 61
208. Natural flavours and their identical synthetic equivalents	limited by GMP	Canned peaches Canned applesauce Canned grapefruit Canned plums Canned pears Canned pineapple Canned fruit cocktail	temporarily endorsed	para 62
209. Natural fruit essences	limited by GMP	Canned pineapple Canned pears Canned peaches Canned fruit cocktail Jams, jellies Citrus marmalade	endorsed	para 63

210.	Mint flavour (mint oil)	limited by GMP	Canned pineapple	endorsed	
211.	Natural mint flavour	limited by GMP	Jams, jellies	endorsed	para 63
212.	Natural cinnamon flavour				
213.	Cherry lauryl oil	10 mg/kg	Canned fruit cocktail (cherries only)	endorsed	para 64
214.	Bitter almond oil	40 mg/kg			
215.	Caramel (as a colouring agent)	limited by GMP	Canned mushrooms Citrus marmalade	not endorsed	para 65
216.	Wool Green BS		Canned green peas	temporarily endorsed	
217.	Tartrazine	100 mg/kg singly or in combination			
218.	Brilliant Blue FCF			indorsed	
219.	Beta-carotene				
220.	Erythrosine	200 rag/kg singly or in combination	Canned applesauce	temporarily indorsed	
221.	Amaranth				
222.	Past Green FCF				
223.	Sunset Yellow FCF			endorsed	
224.	Tartrazine				
225.	Brilliant Blue FCF				
226.	Indigotine			temporarily endorsed	
227.	Amaranth	200 mg/kg singly or in combination	Canned pears	endorsed	
228.	Erythrosine			temporarily endorsed	
229.	Past Green FCF			endorsed	
230.	Wool Green BS			temporarily endorsed	
231.	Erythrosine	limited by GMP (to colour cherries only)	Canned fruit cocktail	temporarily endorsed	
232.	Wool Green BS (Green 'S')	100 mg/kg singly or in combination	Canned green and wax beans Citrus marmalade (lime marmalade only)		
233.	Tartrazine			temporarily endorsed	para 69
234.	Brilliant Black BN	100 mg/kg	Canned mushrooms	not endorsed	para 68
235.	Ponceau 4R	300 mg/kg	Canned 'Red' or	temporarily	para 69

236.	Erythrosine	singly or in combination	'Purple' plums	endorsed	
237.	Ponceau 4R	300 mg/kg	Canned raspberries	temporarily	
238.	Erythrosine	singly or in combination	Canned strawberries	endorsed	
239.	Amaranth				
240.	Erythrosine				
241.	Fast Green FCF				
242.	Ponceau 4R				
243.	Sunset Yellow FCF	200 mg/kg singly or in combination	Jams, jellies	temporarily endorsed	para 66
244.	Tartrazine				
245.	Wool Green BS (Green 'S')				
246.	Azo-rubine (Carmoisine)			not endorsed	para 66
247.	Ascorbic acid, Iso-ascorbic acid (erythorbic acid	150 mg/kg singly or in combination	Canned applesauce	endorsed	
248.	Ascorbic acid	limited by GMP	Canned mushrooms	endorsed	para 58
			Canned asparagus Canned fruit cocktail	temporarily endorsed	
249.	EDTA (calcium disodium salt)	200 mg/kg	Canned mushrooms	endorsed	
250.	Benzoic acid or Na salt	1000 mg/kg	Processed tomato concentrates (glass packed puree not over 15% solids)	endorsed	
251.	Sodium benzoate	1000 mg/kg	Jams, jellies, Citrus marmalade	postponed	para 59
252.	Sorbic acid	1000 mg/kg	Processed tomato concentrates (glass packed puree not over 15% solids)	endorsed	
253.	Sorbic acid or K salt	1000 rag/kg	Jams, jellies Citrus marmalade	postponed	para 59
254.	Sulphur dioxide	2000 mg/kg	Raisins	postponed	para 60
		100 mg/kg	Jams, jellies Citrus marmalade	endorsed	para 60
255.	Esters of parahydroxy-benzoic acid	1000 mg/kg	Jams, jellies Citrus marmalade	postponed	para 59
256.	Mineral oil (food grade)	5 g/kg	Raisins	endorsed	para 70
257.	Dimethylpoly-siloxane	10 mg/kg	Canned pineapple	temporarily endorsed	

258. Dimethylpoly-siloxane	To be determined	Jams, jellies Citrus marmalade	postponed	para 71
259. Silicones				
260. Mono- and diglycerides of edible oils	Net more than is necessary to inhibit foaming	Jams, jellies Citrus marmalade	endorsed	para 72
261. Tin (Sn)	250 mg/kg calculated as Sn	Canned asparagus (in metal containers where tin is exposed) Canned pineapple [2] Canned pears Canned mandarin oranges Processed tomato concentrates [3]	temporarily endorsed [1]	para 57

[1] Subject to review two years after the adoption of the Standards at Step 8 of the Procedure.
[2] See Report of the 7th Session of the Codex Alimentarius Commission, para 7:(f) ALINORM 70/43.
[3] In the final concentrated product.

PART J. SALT SUBSTITUTES

Additive	Maximum level	Food	Status	References
262. Potassium sulphate, potassium, calcium or ammonium salts of adipic, glutamic, carbonic, succinic, lactic, hydrochloric, tartaric, citric, acetic or phosphoric acids	Not limited in the mixture		endorsed	para 79
263. Magnesium salts of adipic, glutamic, carbonic, citric, succinic, acetic, phosphoric, lactic, hydrochloric or tartaric acids, mixed with other Mg-free salt substitutes	Mg++ to be not more than 20% of the total cations (K+, Ca++, Mg++ and NH_4+) present in the mixture		endorsed	para 79
264. Free adipic, glutamic and citric acids	Not limited in the mixture		endorsed	para 79
265. Anti-caking	Not more than		endorsed	

	agents: colloidal silica	*[*….% m/m*]* of the final product		
266.	Choline salts of acetic, carbonic, lactic, hydrochloric, tartaric or citric acids, mixed with other choline-free salt substitutes as listed in 262, 263 and 264	The choline content lot to exceed 3% of the total mixture	not endorsed	para 79

PART K. MILK AND MILK PRODUCTS

Key to commodities;

Processed Cheese Products	- See Draft General Standards A-8(a), A-8(b) and A-8(c) Appendix IV, Report No. CX 5/70, 13th session, June 1970.
Cheese	- Individual standards for cheese.
Condensed Milk	- Standards for Sweetened Condensed Milk, Skimmed Sweetened Condensed Milk.
Milk Powder	- Standards for Whole Milk Powder, Partly Skimmed Milk Powder, Skimmed Milk Powder, High-Fat Milk Powder, Cream Powder.
Evaporated Milk	- Standards for Evaporated Milk, Evaporated Skimmed Milk.
Butter	- Standards for Butter and Whey Butter, Report No. CX 5/70, 13th Session, June 1970.

Additive	Maximum level	Food	Status	References
267. Annatto	limited by GMP	Butter Processed cheese products	temporarily endorsed	para 51 ALINORM 70/12
	600 mg/kg (*)	Cheese		para 81
268. Beta-carotene	limited by GMP	Butter Processed cheese produces	endorsed	ALINORM 70/12
	600 mg/kg (*)	Cheese		para 81
269. Curcumin	limited by GMP	Butter Processed cheese products	temporarily endorsed	
270. Chlorophyll	limited by GMP	Cheese Processed cheese products	endorsed	

270. Chlorophyll	limited by GMP	Cheese Processed cheese products	endorsed		
271. Chlorophyll copper complex	limited by GMP	Cheese Processed cheese products	endorsed		
272. Past Green FCF	limited by GMP	Cheese	endorsed		

(*) Singly or in combination.

273. Brilliant Blue FCF 274. Indigotine FCF	to neutralize any natural yellow colour of the curd	Provolone cheese Blue cheese	postponed	para 82
275. Suitable colours approved by the Codex Committee on Food Additives	Not stated	Yoghurt	postponed	para 83
276. Riboflavin (lactoflavin)	limited by GMP	Cheese Processed cheese products	endorsed	
277. Smoke and condensed smoke		Cheese	not endorsed	para 85
278. Essences or extracts derived from fruit or parts of fruit	limited by GMP	Yoghurt	endorsed	
279. Lactic acid	limited by GMP 40 g/kg	Cottage cheese Processed cheese products	endorsed	
280. Citric acid	limited by GMP 40 g/kg	Cottage cheese Processed cheese products	endorsed	
	not stated	Yoghurt	postponed	para 87
281. L-tartaric acid 282. Malic acid	not stated	Yoghurt	postponed	para 87
283. Sodium dihydrogen phosphate and disodium hydrogen phosphate	to be established[1]	Herrgårdsost Hushållsost Norvegia Ädelost	postponed	para 88
284. Phosphoric acid	not stated (see items, 281 282, 283)	Cottage cheese Processed cheese products	postponed endorsed	para 86

285. Sodium, sodium-aluminium, potassium and calcium salts of mono-, di- and poly-phosphoric acids 286. Sodium, potassiun and calcium salts of citric acid 287. Citric acid and/ or phosphoric acid with sodium hydrogen carbonat and/or calcium carbonate	40 g/kg individually or in combination calculated as anhydrous salts, phosphates not to exceed 3% m/m	Processed cheese products	endorsed	para 89
288. Sodium and calcium salts of: hydrochloric, citric, carbonic o-phosphoric, poly-phosphoric acids (linear with a degree of of polymerisation of up to 6 units)	2 g/kg of the final product calculated as anhydrous substances, singly or in combination	Condensed milk Evaporated milk	endorsed	

[1] The Committee of Government Experts, at its 12th Session, had agreed that the maximum level submitted by the government of Norway to the Secretariat be incorporated into these standards. This has now been done and the maximum level proposed is 200 mg/kg (see CL 1969/49).

Additive	Maximum level	Food	Status	References
289. Sodium and calcium salts of hydrochloric citric, carbonic, 0-phosphoric, poly-phosphoric acids (linear with a degree of polymerisation	5 g/kg of the final product calculated as anhydrous substances, singly or in combination	Milk powder High-fat milk powder Cream powders	endorsed	
290. Sodium orthophosphate	2 g/kg singly or in combination,			

291. Sodium hydrogen carbonate and carbonate	expressed as anhydrous substances	Butter	endorsed	para 90
292. Sodium hydroxide				
293. Calcium hydroxide				
294. Calcium carbonate		Processed cheese products	endorsed	
295. Sodium hydrogen carbonate	[1]			
296. Acetic acid				
297. Sodium hydrogen-carbonate	30 g/kg of the acid curd	Harzer Käse	endorsed	
298. Calcium carbonate				
299. Calcium chloride	200 mg/kg of the milk used	Cheese	endorsed	
	[1]	Processed cheese products		

[1] Within the maximum level stated under items 285 - 287.

Additive	Maximum level	Food	Status	References
300. Cupric sulphate	13 mg/kg expressed as copper	Emmentaler cheese	endorsed	
301. Chlorate, sodium and potassium	100 mg/kg in the cheese	Emmentaler cheese	postponed	para 93
302. Nitrate, sodium and potassium	200 mg/kg of the milk used	Cheese	postponed	para 93
303. Hexamethylene-tetramine	600 mg/kg of the liquid used to work the curd	Provolone cheese	postponed	para 94
304. Sorbic acid and Na and K salts	1000 mg/kg calculated as sorbic acid	Cheese	endorsed	
305. Sorbic acid and Na and K salts	2000 mg/kg of the finished product	Processed cheese products	endorsed	
OR				
306. Propionic acid and Na and Ca salts	3000 mg/kg of the finished product	Processed cheese products	endorsed	para 95

307. Nisin	100 mg/kg of the finished product	Processed cheese products	endorsed	
308. Benzoyl peroxide	limited by GMP	Provolone cheese	postponed	para 93
309. Benzoyl peroxide or a mixture of benzoyl peroxide with potassium alum, calcium sulphate and magnesium carbonate	20 mg/kg benzoyl peroxide, other ingredients singly or in combination not more than six times the quantity of benzoyl peroxide used	Blue cheese	postponed	para 93
Additive	Maximum level	Food	Status	References
310. Gallates, propyl, octyl and dodecyl 311. BHT, BHA	200 mg/kg individually or in combination, gallates not to exceed 100 mg/kg	Butter fat not for direct consumption nor for use in making reconstituted milk or milk products	endorsed	
312. Oleoresin of paprika	limited by GMP	Processed cheese products	temporarily endorsed	
313. Caseinates (Na, NH_4, Ca,	30 g/kg of the reaming mixture singly or in any combination	Cottage cheese	temporarily endorsed	
Stabilizers:				
314. Carrageenan			endorsed	
315. Furcelleran			endorsed	
316. Carob bean gum			not endorsed	
317. Karaya gum			not endorsed	para 53
318. Tragacanth gum			not endorsed	
319. Guar gum	5 g/kg of the creaming mixture singly or in combination	Cottage cheese	temporarily endorsed	
320. Sodium carboxy-raethyl cellulose			endorsed	
321. Lecithin			endorsed	
322. Alginic acid or K or Na salts			endorsed	
323. Propylene glycol alginate			temporarily endorsed	
324. Calcium sulphate			endorsed	

Carries for stabilizers:				
325. Glycerin	5 g/kg of the creaming mixture singly or in combination	Cottage cheese	endorsed	
326. 1,2-propylene glycol			endorsed	
327. Locust bean gum				
328. Carob bean gum				
329. Karaya gum			not endorsed	
330. Oat gum				
331. Tragacanth gum				
332. Guar gum			temporarily endorsed	
333. Arabic gum	8 g/kg of the finished product individually or in combination	Processed cheese preparations (Draft Standard A-8(c)	endorsed	
334. Agar				
335. Alginate, Na, K, Ca, NH				
336. Carrageenan				
337. Sodium carboxy-methyl cellulose				
338. Pectin				
339. Propylene glycol alginate			temporarily endorsed	
340. Alginates, Na, K, NH_4, Ca				
341. Agar				
342. Vegetable gums				
343. Sodium carboxymethyl cellulose	Not stated	Yoghurt	postponed	para 92
344. Modified starches				
345. Gelatine	limited by GMP	Processed cheese preparations (Draft Standard A-8(c) Yoghurt	endorsed	para 91

APPENDIX III

PROPOSED DRAFT GENERAL STANDARD /CODE OF PRACTICE FOR COMMERCIAL ENZYME PREPARATIONS FOR FOOD PROCESSING

(Advanced to Step 5)

1. SCOPE

This standard *[*Code of Practice*]* applies to commercial enzyme preparations generally used in food processing under conditions where the preparations or their components may be consumed with the finished food product (Category I), or where they are not intended to become part of the finished food product (Category II).

2. DESCRIPTION

2.1 Enzyme preparations are obtained from animal, vegetable or microbial sources and may range from whole animal, vegetable or microbial cells to cell-free enzyme extracts in liquid, sami-liquid or dry form.

2.2 Microbial enzyme preparations are derived from the application of microorganisms under suitable controlled culture-conditions and methods; they contain active enzymes for use in food processing.

2.3 Category I enzyme preparations may be consumed with the finished food product; Category II enzyme preparations are used in food processing where components of the enzyme preparations are intentionally removed from the finished food except for technologically unavoidable residues.

3. ESSENTIAL COMPOSITION AMD QUALITY FACTORS

3.1 Where enzymes are derived from micro-organisms, they shall not be derived micro-organisms known to be pathogenic to man.

3.2 Culture media used for the growth of micro-organisms or plant material used in the production of these enzyme preparations shall consist of ingredients which, under the conditions of use, do not leave residues harmful to human health in the finished food product.

3.3 Animal tissues used in the production of enzyme preparations shall be derived from animals which have passed ante- and post-mortem inspection by a competent authority recognized in national legislation.

3.4 Enzyme preparations shall be added to foods in quantities not exceeding the amount recognized to achieve the intended effect.

4. ADDITIVES AND INGREDIENTS

4.1 Substances added to enzyme preparations shall be only those which are accepted for use in foods. Examples of such substances are carriers, diluents, preservatives, stabilizers and dispersing, clarifying and precipitating aids.

4.2 Category II enzyme preparations may also contain as added substances those which are not normally accepted for use in foods but which are removed from the processed food as far as possible by good manufacturing practice. Examples of such substances are listed in 4.1.

5. CONTAMINANTS

5.1 Enzyme preparations of Category I shall not contain substances in amounts hazardous to health, nor shall enzyme preparations of Category II impart any such amounts of such substances to the finished food product under the conditions of use.

5.2 Category I enzyme preparations shall not contain more than:

5.2.1. Heavy metals (calculated as Pb)	50 mg/kg
5.2.2. Lead (Pb)	10 mg/kg
5.2.3. Arsenic (As)	3 mg/kg
5.2.4. *[*Mycotoxins	.. .. ..*]*

6. HYGIENE

The following provisions in respect of the food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene.

6.1 The products covered by the provisions of this standard *[*code of practice*]* shall be prepared in accordance with the appropriate sections of the General Principles of Food Hygiene of the Codex Alimentarius (Ref. No. CAC/RCP 1-1969).

6.2 Enzyme preparations shall be free from pathogens and/or toxins.

6.3 Enzyme preparations shall not contribute more micro-organisms to the finished food product than the accepted level for that product.

7. LABELLING

The following provisions in respect of labelling of this product are subject to endorsement by the Codex Committee on Food Labelling.

7.1 In addition to Sections 1, 2, 3.1(a), 3.1(o), 3.1(d), 3.2(a), 3.2(b), 3.2(c), 4 and 6 of the Recommended International Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply:

7.2 The name of the enzyme preparation shall be declared.

7.3 Net Contents

The net content shall be declared by weight in case of solids, by volume in case of liquids and, by weight or volume in case of semi-solids, as the case may be for this purpose, either the metric system or avoirdupois system (for weight) or both systems of measurement as required by the country in which the product is being sold, shall be used.

7.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the product shall be declared.

7.5 Potency (Activity)

The potency of the enzyme preparation in suitable units or, the quantity of food which may be effectively treated with a given quantity of the preparation concerned shall be given on the label.

7.6 Instructions

Brief instructions for use including the purpose to be achieved by using the enzyme preparation in foods and the amount thereof necessary to achieve the desired effect shall be given on the label.

8. METHODS OF ANALYSIS

(to be completed)

APPENDIX IV

RECOMMENDED LIST OF FLOUR-TREATMENT AGENTS

(Submitted to the Codex Alimentarius Commission at Step 8)

The following flour-treatment agents have been evaluated by the Joint FAO/WHO Expert Committee on Food Additives and found safe at levels not exceeding the maximum treatment levels recommended. The list given below is advisory and further flour-treatment agents (found safe on the basis of toxicological evaluation) may be added in the future. Specifications of identity and purity have been drawn up for these flour-treatment agents by the Joint FAO/WHO Expert Committee on Food Additives and these are being further elaborated by the Codex Alimentarius Commission into internationally recognized specifications. Suitable methods of analysis may also be recommended in the future.

Flour-treatment agent	Maximum treatment level in mg/kg	Reference
Ascorbic acid	200	(1)
Azodicarbonamide	45	(2)
Benzoyl peroxide	40	(3)
	75 for special purposes (*)	
Chlorine dioxide	30	(3)
	75 for special purposes (*)	
Potassium bromate	20	(3)
	75 for special purposes (*)	

(*) e.g., for certain biscuit flours.

(1) This maximum treatment level was proposed by the Codex Committee on Food Additives at its 1967 session (ALINORM 68/12, Appendix IV).

(2) FAO Nutrition Meetings Report Series, 1966, No. 40; Wld Hlth Org. techn. Rep. Ser., 1966, 339; also FAO Nutrition Meetings Report Series, 40 ABC; WHO/Food Add./67.29).

(3) FAO Nutrition Meetings Report Series, No. 35; Wld Hlth Org. techn. Rep. Ser., 1964, 281.

APPENDIX V

PROCEDURE FOR THE ELABORATION OF CODEX SPECIFICATIONS FOR FOOD ADDITIVES

(Submitted for consideration by the Codex Alimentarius Commission)

Steps 1 and 2

The Secretariat distributes the specifications, when available from the Joint FAO/WHO Expert Committee on Food Additives, and requests comments from governments and interested International Organizations.

Steps 3 and 4

The Codex Committee on Food Additives examines the specifications in the light of comments. The comments are also made available to the Joint FAO/WHO Expert Committee on Food Additives. The Expert Committee's opinion is also placed before the Codex Committee on Food Additives.

Step 5

Specifications which, in the opinion of the Codex Committee on Food Additives, are satisfactory, are submitted to the Commission with a recommendation that Steps 6, 7 and 8 be omitted. If any specification proves to be controversial and/or requires further comments, then Steps 3 and 4 are repeated and further comments and information are requested on the specific points at issue concerning that standard.

APPENDIX VI

DEFINITIONS FOR FOOD ADDITIVES AND CONTAMINANTS

" For the purposes of the Codex Alimentarius, food additive means any substance, including microbial material, not normally consumed as a food by itself and not normally used as a major ingredient of food, whether or not it has nutritive value, the addition of which to feed in the production, manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food results, or may be reasonably expected to result, directly or indirectly, in it or its by-products becoming a component of or otherwise affecting the characteristics of such food. The term does not include contaminants or pesticide residues", [1]

" For the purposes of the Codex Alimentarius, contaminant means any substance not normally consumed as a food by itself, not normally used as a major ingredient of food, not being a food additive or pesticide residue and not deliberately added to such food, which is present in such food as a result of the production, manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food".

[1] "For the purpose of the definitions of food additive and contaminant, a "process" applied to food means any agricultural, technological, manufacturing or distribution practice which affects in any way the characteristics of, or may leave residues in the food and includes certain irradiation. The term "processing" shall be construed accordingly".

APPENDIX VII

THE CARRY-OVER PRINCIPLE [1]

[1] This text has been editorially revised by the Secretariat in consultation with the delegation of the Netherlands, as agreed to by the Committee.

1. For the purpose of the Codex Alimentarius, the carry-over principle regulates the presence of additives in food indirectly as a result of the use of raw materials or ingredients in which these additives were used. Thus, the presence of contaminants is not covered under this principle.

2. The presence of an additive in food through the carry-over principle is admissible only if:

(a) it is stated in the Codex standard for the food concerned that the carry-over principle applies;

(b) the maximum level of use for the additive, so far as such is laid down in the Codex standard for the food concerned, is not exceeded;

(c) the additive results from the use, as an ingredient, of a foodstuff for which a Codex standard has been established;

(d) the quantity of the additive "carried-over" is not greater than that which is required by good technological and/or manufacturing practice and its level does not proportionately exceed the level permitted in the ingredient; provided also that the specific action of such additive does not manifest itself significantly in the end-product.

3. The Codex Alimentarius Commission may establish overall limits for the "carried-over" food additive, which are considered to fulfil the condition under 2(d).

APPENDIX VIII

WORK PRIORITIES FOR THE JOINT FAO/WHO EXPERT COMMITTEE ON FOOD ADDITIVES

List A

Tin (para 29)

Caramel (para 65)

Modified starches (paras 73, 92)

Choline salts (para 79)

Steroyl lactylate (para 119)

Hexamethylenetetramine (para 94)

Enzymes (para 100)

Esters of glycerol and thermally oxidized soy bean fatty acids

Microcrystalline cellulose

List B

Perlite (para 27)

Xanthane gum (para 119)

Flavouring substances (a preliminary review, para 99)

Orange GGN Ponceau 6R Azo-rubine	(para 48)

Smoke and condensed smoke (para 85)

Flour-treatment agents (para 101)

Carrier solvents (para 106)

Flavour enhancers (para 107)

Sulphur dioxide (para 121)