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ALINORM 74/12

JOINT FAO/WHO FOOD STANDARDS PROGRAMME  
CODEX ALIMENTARIUS COMMISSION

Tenth Session, Rome, 1-12 July, 1974

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

Wageningen, 10-14 December 1973

INTRODUCTION

1. The Codex Committee on Food Additives held its ninth session in Wageningen, The Netherlands, from 10th to 14th December 1973. The session was opened by Dr. G.F. Wilmink, Chairman of the Committee, who welcomed the participants on behalf of The Netherlands' Government. He expressed satisfaction that the 17th Report of the Joint Expert Committee on Food Additives had been made available on time for consideration by the Committee, and expressed the hope that it will be possible for FAO and WHO to assist the work of the Committee by a timely distribution of Reports of Expert Committees, if necessary in a draft form. Dr. Wilmink also expressed his satisfaction that the Ninth Session of the Commission had adopted the definitions of "Food Additive" and "Contaminant" as well as the General Principles for the Use of Food Additives. He was glad to state that the List of Food Additives had been published by FAO and WHO and was of the opinion that the establishment of Lists of food additives constituted an important task of the Committee.

2. The session was attended by government delegates from the following 30 countries; the Arab Republic of Egypt, Australia, Austria, Belgium, Brazil, Canada", Czechoslovakia, Denmark, Finland, France, the Federal Republic of Germany, Hungary, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Poland, Romania, Spain, Sweden, Switzerland, Tunisia, United Kingdom, United States of America, Venezuela, Yugoslavia. Republic of Zaire, as well as an observer from South Africa. The following International Organizations were also represented: Bureau de Liaison des Syndicats Européens des Produits Aromatiques, Centre de Liaison des Industries de Traitement des Algues Marines de la CEE (CLITAM), Commission of the European Economic Community (EEC), Council of Europe (CE), European Food Emulsifier Manufacturers' Association EFEMA), Fédération Européenne des Fabricants d'Adjuvants pour la Nutrition Animale (FEFANA), Institut Européen des Industries de la Gomme de Caroube (INEC), International-Federation of Pectin Producers, International Glutamate Technical Committee (IGTC), International Organization of the Flavour Industry (IOFI), International Secretariat for the Industries of Dietetic Food Products (ISDI), International Organization for Standardization (ISO), Office International de la Vigne et du vin (OIV),

Organization of Manufacturers of Cellulose Products for Foodstuffs in the EEC (OFCA), Union des Associations de Boissons Gazeuses des Pays Membres de la CEE (UNESDA), and the Ad Hoc Technical Caramel Committee. 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 without any re-arrangement of the order of items.

4. The Chairman expressed the opinion that it might be necessary to set up small working groups to meet during the session, particularly in connection with agenda items dealing with the carry-over principle, the list of additives in soft drinks and the general labelling standard for food additives. Some delegations were of the opinion that it would be difficult to discuss List B of Food Additives because Lists A and C had not been distributed prior to the session and these two lists were essential for the discussion of List B. Other delegations also stated that they had not received a number of important working documents in time and that, therefore, they might have to reserve their position at the appropriate point during the discussions.

5. At the request of the Chairman of the Committee, Mr. A. Turner and Mr. I.K. Charlton of the United Kingdom delegation and Mr. C. Kestens and Mr. F. Fondu of the Belgian delegation agreed to assist the Secretariat in the preparation of the draft report.

#### MATTERS OF INTEREST TO THE COMMITTEE

6. The Committee had before it document CX/FA 73/4 containing abstracts from reports of the Commission and various Codex Committees.

##### Codex committee on Methods of Analysis and Sampling

7. The Committee noted that the Codex Committees on Fats and Oils, and Cocoa Products and chocolate were considering the question of extraction solvents and residues of these in food. It also noted that the Codex Committee on Methods of Analysis and Sampling was considering the establishment of general methods to determine solvent residues in food. The Committee was informed that at an appropriate time any limits proposed for solvents, whether extraction or carrier solvents, together with other appropriate information, would be placed before it for consideration.

##### Codex Committee on Food Hygiene

8. The Committee took note that the above Committee had agreed to delete the reference to toxicity in one of the hygiene provisions and to insert the words "should not represent a hazard to health", as suggested by the 8th session of the Food Additives Committee (see para 18, ALINORM 72/12). The Committee on Food Hygiene, however, had not followed the proposal of the Food Additives Committee that the hygiene provision should specify that the micro-organisms which should be absent from food are those which are pathogenic. A number of delegations commented further on this provision. The Committee considered, however, that this was a matter for discussion by the Codex Committee on Food Hygiene.

##### Codex Committee on Fish and Fishery Products

9. The Committee was informed that the Codex Committee on Fish and Fishery Products, at its 7th session (October 1972), had decided, on the request of the Committee, to reconsider the maximum levels of phosphates permitted in each standard under elaboration and that governments had been requested to send their comments to

the Commodity Committee on this matter. As regards the request of the Commodity Committee that this 'Committee should give reasons for the concern about the "heavy phosphate load" arising from food, reference is made to para 79 of this report.

#### Joint ECE/Codex Alimentarius Group of Experts on the Standardization of Quick Frozen Foods

10. The Committee noted that the Joint Group of Experts, at its 8th session (April 1973), had considered direct contact freezants and had agreed that liquid nitrogen, liquid carbon dioxide and dichlorodifluoromethane were those which were most widely used, Governments had been requested to supply toxicological and other information to this committee. The opinion was expressed that dichlorodifluoromethane should only be used where there was a marked technological advantage to do so. It was brought to the attention of the Committee that dichlorodifluoromethane and its derivatives were also used in the preparation of bread.

11. The Committee was informed that the delegation of Japan had prepared a document on "Freon 12" containing results of preliminary toxicological tests. It was agreed that these results as well as a "Review of Liquid Freezants in Food", a report by the U.K. Food Additives and Contaminants Committee, which had been presented to the 8th session of the Group of Experts on Quick Frozen Foods (CX/QFF 73/7), should be made available to the Joint Expert Committee on Food Additives. The Joint ECE/Codex Group of Experts was requested to give further consideration to technological aspects, as well as to the question of residues.

12. The Committee decided that, pending further information, the three direct contact freezants should be included in Codex List B of additives and that governments should be requested to supply all necessary information (e.g. whether other direct contact freezants were used, levels of residue in food, results of toxicological tests, specifications of identity and purity, possible interaction with food, etc.).

#### Executive Committee of the Commission

13. The Committee was informed that, at the 19th session (July 1973) of the Executive Committee, the representative of WHO had stated that his Organization was planning to intensify its activities in various fields which would have a bearing on the work of this Committee (see paras 21-24).

14. As regards the question of the frequency and phasing of Codex sessions, the Committee was informed of two amendments to the Proposed Timetable of Codex Sessions as appended to the report of the Executive Committee. The 10th session of this Committee was envisaged for July 1975 (see also para 112).

#### Codex Alimentarius Commission

15. The Committee noted that:

(a) The Commission had adopted the definitions of "food additive" and "contaminant" and the General Principles for the Use of Food Additives. Both the definitions and the General Principles had been printed in the Third Edition of the Commission's Procedural Manual and the "List of Additives Evaluated for their Safety-in-Use in Food" (CX/FAL 1-1973).

(b) As regards the elaboration of specifications for salt (see para 73, ALINORM 72/12), the Commission had requested the Codex Committee on Food Additives not to proceed with work on the specification, pending further consideration of the justification

for the elaboration of a standard or standards for salt (see paras 232-234, ALINORM 72/35).

(c) The Commission had requested Codex Committees to pay full attention to the need to make provisions for, and to limit, certain contaminants in food (see para 297, ALINORM 72/35).

(d) The Commission had noted that good manufacturing practices varied with climatic conditions and that this aspect should be borne in mind when recommending food additives for use in food. The Codex Committee on Food Additives had been requested to give this matter its consideration (see para 298, ALINORM 72/35).

#### Statement by the O.I.V.

16. The observer from the Office International de la Vigne et du Vin (O.I.V.) informed the Committee that, as a result of a campaign carried out over a period of twenty years by his organization, a reduction in the use of sulphur dioxide had finally been agreed to in September 1972 by the General Assembly of O.I.V. Limits of 200 mg SO<sub>2</sub>/ litre for red wine and of 250 mg SO<sub>2</sub>/ litre for dry white wine, had been set, replacing earlier values of 350 to 450 mg SO<sub>2</sub>/litre, depending on the country. These limits would be adopted by the member countries of the EEC and also, by other countries. It was expected that the SO<sub>2</sub> values would in fact be considerably lower and that, eventually, with further improvements in technology and equipment, still lower limits might be achieved. The Committee observed that the reduction agreed by the O.I.V. was a positive development resulting from international collaboration in this particular area.

#### THE 16TH AND 17TH REPORTS OF THE JOINT FAO/WHO EXPERT COMMITTEE ON FOOD ADDITIVES

17. The WHO representative pointed out that the 16th Report had already been orally introduced to this Committee at its previous session. He drew attention to two typographical errors, namely that on page 21, line 26, 0.03 mg/m<sup>3</sup> should read 0.03 μg/m<sup>3</sup> and on page 23, line 29, 1 mg/kg should read 1 μg/kg. It was noted by the Committee that supporting data were included in the FAO and WHO Report Series No. 51 and No. 4, respectively, entitled "Evaluation of Mercury, Lead, Cadmium and the Food Additives Amaranth, Diethylpyrocarbonate and octyl Gallate". It was also noted that additional, data would be needed before limits could be proposed for these contaminants in foods.

18. The WHO representative outlined the main points of the 17th Report mentioning especially the guidelines on procedures for the toxicological testing of food additives, the principles for evaluating the toxicological and related data using principally data derived from laboratory tests on animals, but also supplemented with data from man wherever available, as a basis for arriving at "acceptable daily intake" (ADI) values. In certain cases, the ADI was temporary, whereas in others it was "not limited" but was nevertheless subject to the limitation imposed by good manufacturing practice. The allocation of conditional ADIs was discontinued because there had been confusion regarding the precise interpretation of this term. In addition, the Expert Committee re-evaluated a large number of food additives, taking into account new data and new principles of toxicological evaluation. Finally, the Expert Committee had expressed the view that the procedures adopted by the Council of Europe on flavouring substances represented a useful and practical first approach.

19. The representative of the Council of Europe (Partial Agreement) informed the Committee that he anticipated that the Second Edition of the Council of Europe's

publication on flavours would be published around February 1974. Noting that the Expert Committee had agreed with the general approach of the Council of Europe (Partial Agreement), but with recognition to display flexibility, concerning the toxicological evaluation of flavours, and having been informed by the representative of WHO that the Expert Committee would not, in the foreseeable future, undertake a substance by substance evaluation of flavouring substances, the Committee agreed that the report of the Council of Europe should be distributed to member governments for comment. It was also agreed that, on the basis of these comments, the Council of Europe's List of Flavouring Substances should be considered at the next session. The Secretariat was requested to make arrangements with the Secretariat of the Council of Europe to obtain sufficient copies of the report for distribution to member countries of the Codex. During the discussion of the question of lists of flavouring substances, some delegations were of the opinion that only "artificial flavours" (i.e. those which were prepared by synthesis and did not occur in edible plants or animals) should be regarded as "food additives" and included in positive lists. Other delegations were of the opinion that there should not be such a distinction between flavours and that all flavours should be subjected to control by means of positive lists. The Committee agreed that the issues raised should be considered at the next session and also recognized that the list drawn up by the Council of Europe might need enlarging to take into account all flavouring substances used in the various countries.

20. The representative of IOFI informed the Committee that his organization had published a report entitled "Basic Features of Modern Flavour Regulations". This report was distributed to the participants at the Codex Committee on Food Additives.

#### REPORT OF THE THIRD JOINT FAO/WHO CONFERENCE ON FOOD ADDITIVES AND CONTAMINANTS

21. The WHO representative, in presenting the report, outlined the main decisions and recommendations of the Conference at which the scope and progress of the Joint FAO/WHO Expert committee on Food Additives, as well as some related activities of FAO and WHO, had been reviewed. The Conference had recommended, in connection with the calculation of potential intakes of food additives and contaminants, that member states designate an appropriate office for the collection and submission of relevant food consumption data to FAO/WHO. It also recommended that member states examine the technological efficacy, and the need for the use of food additives. With respect to contaminants, the Conference, having been informed that FAO and WHO had formulated an international coordinated monitoring programme on food contaminants and also that a proposal for funding had been submitted to the United Nations Environmental Programme, had recommended that member states cooperate fully with the agencies in the implementation of the programme. The Conference had additionally recommended that WHO should extend its existing "food additive information service" to cover food contaminants (since the present information survey applied only to action taken by member states to prohibit or limit the use of food additives).

22. The delegations of Norway and New Zealand drew the Committee's attention to paragraph 2.4.7 of the Report of the 17th Meeting of the Expert committee in which it is stated that, with the exception of phosphates, amounts of substances occurring naturally in food are not included in the ADI. The Committee noted that the Third Joint FAO/WHO Conference on Food Additives and Contaminants had discussed this point and had referred the question to the Expert Committee on Food Additives. The Committee was of the opinion that, from a toxicological point of view, it was impossible to distinguish between the natural background in and the amount of the substance added to food. The

delegation of New Zealand expressed the view that the Expert Committee's observation on the calcium/phosphate balance introduced a nutritional as well as a toxicological factor. For example, the use of certain amino acids as additives for a technological purpose could lead to nutritional imbalance.

23. The Chairman expressed the view that it was desirable to clarify whether limits were levels of use or levels in the final product and, if so, whether these took account of amounts, if any, naturally present in the food. In the opinion of the delegation of Norway, nitrates represented an example where the laying down of a level in the final product, even taking account of the amounts naturally present, did not entirely overcome the problem of controlling the amounts of substances in the finished product, since nitrates were converted into other substances in the food.

24. The Committee agreed with the recommendation of the Third Joint FAO/WHO Conference that the question of whether ADIs ought to take into account substances naturally occurring in the food, should be considered by the Expert Committee on Food Additives. The representative of WHO assured the Committee that this matter would be brought before the Expert Committee. It was also agreed that Commodity Committees should have regard to the analytical problems involved, when proposing maximum limits for additives which also occur naturally in the food. The Committee agreed that, in principle, a maximum total level in the final product was to be preferred. The Committee also agreed that, those concerned with the calculation of potential or other estimates of food additive intake should take into account the amounts of substances naturally present in food.

#### ESTIMATION OF THE INTAKE OF FOOD ADDITIVES

25. The WHO representative reported on the present status of the computerized calculations of potential intake of food additives which WHO has been undertaking since 1966. The importance of this study was emphasized since it formed an essential aspect of quantitative predictive toxicology. However, while WHO was fully aware of the importance of this study for the use of the Codex Committee on Food Additives, it was also aware of the complexities and limitations involved in this exercise. Some delegates expressed the opinion that, despite such limitations, some results, using approximate figures, were preferable to none at all.

26. The WHO representative underlined the necessity of updating food consumption figures that constituted the basis of such studies. To facilitate the collection of such information, it was desirable for countries possessing food consumption data to cooperate more closely with WHO by designating an appropriate office or department which would assist in the exchange of data. WHO was prepared to accept the request made by the Committee to expand the study of the computerized calculations as more data on food consumption were made available by countries. The results would be presented to the next session of the Committee.

27. The Committee discussed the procedure previously agreed for calculating food additive intake (a) on the basis of data on average per caput consumption of groups of foods, making allowance for all possible uses of an additive and the maximum levels proposed by the Codex, and (b) on the basis of more specific data obtained from individual countries. The Committee recognized the shortcomings of these approaches but, even so, was of the opinion that it was necessary to have an estimate of the potential intake of food additives so that it could carry on its work effectively. The representative of WHO undertook to prepare for the next session further estimates of potential intake for the additives under consideration by the Committee. The Committee

agreed with the recommendation of the Third Joint FAO/WHO Conference that governments should send data on food consumption and designate an office to liaise with WHO so as to facilitate the exchange of such information.

#### ENDORSEMENT OF FOOD ADDITIVES

28. The Committee had before it a paper (CX/FA 73/12 and Addendum I distributed at the session) containing those food additive provisions which were pending endorsement by the Committee.

29. The delegations of the Federal Republic of Germany and of Switzerland wished to put on record their opinion that a number of substances were listed for endorsement which were not necessary and suggested that the Commodity Committees should be requested to examine these lists again in the light of the recommendations made by the Third FAO/WHO Conference on Food Additives and Contaminants concerning efficacy and technological need. They recognized, however, that for procedural reasons, these recommendations would not take effect at this meeting since they were addressed more to the Commodity committees. Additionally, both delegations wished to reserve their positions concerning the endorsement of individual additives listed in document CX/FA 73/12 because they had only received the papers at the meeting.

30. The endorsement decisions of the Committee are summarized in Appendix II to this report. The comments made by delegations at the session and questions raised by the Committee are given in the following paragraphs.

#### Limitation by Good Manufacturing Practice

31. The Committee agreed that, as a matter of principle, food additives should be subject to maximum limits in the final product, especially where an acceptable daily intake for man in terms of mg/kg body-weight had been established. Where, for particular reasons, a quantitative maximum level in food for a food additive was not considered to be necessary or feasible, the expression "Limited by Good Manufacturing Practice" rather than "Not Limited" should be used.

#### Draft General Standard for Jams (Fruit Preserves) and jellies

##### Acidifying Agents and pH Regulating Agents

32. The Committee was of the opinion that there was an inconsistency between the limit set for L-tartaric and fumaric acids and the fact that the salts of these acids listed under "pH Regulating Agents" were "Not Limited". It was agreed to request the Commodity Committee to amend the provision for Acidifying and pH Regulating Agents as given in Appendix II.

##### Pectin

33. The Committee noted that the Expert Committee had given an ADI only to "amidated" pectin and had considered that "non-amidated" pectin did not require limitation by an ADI. The representative of the International Federation of Pectin Producers explained that in products with a minimum solids requirement of above 55% non-amidated pectin would be used, whereas the amidated pectin was more likely to be used in "low calorie" products. The Committee decided that the provision should be amended in order to make it clear that the endorsement referred to "non-amidated" pectin. The question of "amidated" pectin was referred back to the Commodity Committee for consideration, as appropriate.

### Colouring Matters

34. A number of delegations were either completely against the use of colours in the preparation of jams (fruit preserves) and jellies, or considered that the limit of 200 mg/kg was excessively high. Furthermore, the question was raised whether the use of certain colours was, in fact, appropriate (e.g. vegetable charcoal). It was also pointed out that, not only did the ADI vary from colour to colour, but also did the tinctorial power of the colours. It, therefore, appeared that the limit of 200 mg/kg needed to be revised.

35. The Committee requested the Commodity Committee to reconsider the list of colours in this standard with particular emphasis on the need to set limits in the product for individual colours or groups of colours with the aim that the limits would reflect more closely the total amount of added colour required in accordance with good manufacturing practices (taking into consideration tinctorial power and other aspects).

36. It was recognized that the General Standard covered a variety of products and that any limits set would also have to take this fact into account. In order to assist the Commodity Committee in its work, the Secretariat was requested to obtain government comments on the proposed list of colours and to make these comments available to the Commodity Committee (see also para 42).

### Preservatives

37. The Committee did not discuss sodium benzoate, the sorbates and the esters of parahydroxybenzoic acid since the Commodity Committee had not reached firm conclusions concerning them. As regards sulphur dioxide, it was noted that the Commodity Committee had specified that this substance was present as a "Carry-over" from the use of raw materials, used in the preparation of the products, rather than as added preservative. Some delegations were of the opinion that the limit of 100 mg/kg was too high, and the question arose as to whether or not, at this level, sulphur dioxide would have preservative action. As the carry-over principle had not yet been considered, the Committee agreed not to pursue the question of whether or not the residue of 100 mg/kg sulphur dioxide conformed with the carry-over principle envisaged.

### Firming Agents

38. The Committee noted that, under acid conditions, sulphur dioxide would be released into the products from the use of calcium bisulphite. This provision and the provision governing sulphur dioxide as a carry-over residue were, therefore, in conflict. Noting also that calcium bisulphite as such had not yet been evaluated by the Expert Committee, the Committee agreed to postpone endorsement pending information from the Commodity Committee and the Joint Expert Committee.

### Antioxidants

39. Several delegations had reservations concerning the use of isoascorbic (erythorbic) acid. The Committee was informed that there was evidence that erythorbic acid in the diet interfered with vitamin C (ascorbic acid) utilization. Noting that separate limits of 500 mg/kg had been proposed for ascorbic and erythorbic acids, although in the case of citrus marmalade an overall limit of 500 mg/kg had been proposed for these two substances, the Committee postponed endorsement and referred the matter back to the Commodity Committee.



#### Interpretation of the Provision for Ascorbic Acid

40. The Chairman of the Committee pointed out that difficulties arose in interpreting the meaning of the maximum level proposed for ascorbic acid; if the provision in the standard was related to the amount actually added, it would be difficult to deduce this added quantity from an analysis of the final product. On the other hand, if the provision was related to the final product, it would, in those cases where the additive was degraded in the food, enable the use of a higher amount at the manufacturing stage. The Commodity Committee was requested to consider this matter since the same problem applied to other additives. The Committee accepted the offer of the delegation of the Netherlands to prepare a paper on the subject for the next session of the Committee.

#### Draft General Standard for Citrus Marmalade

##### Acidifying , pH Regulating and Thickening Agents

41. The Committee agreed that the same remarks and reservations applied for these substances as under the Draft General Standard for Jams (Fruit Preserves) and Jellies (see paras 32 and 33).

##### Colouring Matters

42. A number of delegations were opposed to the use of colours (see paras 34 and 35) since they considered that the use of larger amounts of colours than were needed to stabilize natural fruit colour could mislead the consumer as to fruit content. It was suggested that, as the standard provided for a minimum fruit content, this would adequately safeguard the interest of the consumer. The committee further noted that, under the provisions of the Standard, a total amount of 300 mg/kg colours was permitted in Lime Marmalade, a level which appeared excessive to some delegates. The Committee decided, therefore, to postpone endorsement of Sunset Yellow FCF and to refer the whole section on colours to the Commodity Committee for clarification and reconsideration. The Committee, notwithstanding the previous temporary endorsement of caramel colour made by the ammonia process, decided to request the Commodity Committee to propose a maximum level for caramel colour made by this process.

##### Preservatives

43. The Commodity Committee was requested to clarify whether the sulphur dioxide was a carry-over from the raw materials used, as was the case with jams and Jellies (see para 37).

##### Antioxidants

44. The same reservations were made in connection with the use of erythorbic acid as in the case of Jams and Jellies (see para 39). The Committee, however, endorsed the use of these antioxidants, noting that an overall limit of 500 mg/kg had been proposed for these additives.

#### Recommended International Standard for Canned Peaches

45. The Committee endorsed the level of 550 mg/kg L-ascorbic acid, noting that the Commodity Committee had responded to the request of the Committee to review the previous proposal for a limitation according to good manufacturing practice.

### Draft Standard for Raisins

46. Noting that the Commodity Committee had re-confirmed that a maximum level of 1,500 mg/kg of sulphur dioxide was needed in this product, and also noting the reevaluation of sulphur dioxide by the Joint Expert Committee, the Committee endorsed this provision.

### Tin (Contaminant) in the Standards for Canned Carrots, Canned Tropical Fruit Salad and Canned Mature Processed Peas

47. The endorsement of this provision was postponed pending further toxicological information and details of the actual amount of tin found in the various products. The delegation of Czechoslovakia considered the limit of 250 mg/kg to be too high.

### Proposed Draft Standard for Canned Carrots

#### Monosodium Glutamate

48. A number of delegations were of the opinion that the use of monosodium glutamate, even when its addition was restricted to packs containing butter or other edible animal or vegetable fats or oils as ingredients, should not be unlimited as provided for in the standard. It was agreed to ask the Commodity Committee to reconsider this matter and to set a maximum level in those products which fell into the category of "saucepacks".

#### Mint Flavour

49. The Committee considered that mint flavour (mint oil) and natural mint flavour should be listed together as in the Standard for Canned Green Peas, i.e. "Mint flavour (mint oil)".

#### Modified Starches

50. The Committee noted that modified starches would, in practice, only be used in saucepacks and considered that this should be made clear.

51. The Committee endorsed the use of modified starches at the level proposed by the Commodity Committee. The Belgian delegation was of the opinion that 10 g/kg expressed on the final product was too high, because the substances were only present in the sauce part of the product. Oxidized starches were only temporarily endorsed, the endorsement of hydroxypropyl distarch phosphate was postponed pending evaluation by the Expert Committee. It was further agreed that distarch phosphate (sodium trimetaphosphate treated) and distarch phosphate (phosphorus oxychloride treated) should be listed together as "distarch phosphate" since they were covered by one specification.

#### Vegetable Gums

52. The Committee noted that gum arabic, carrageenan, furcellaran and guar gum had been evaluated and included in List A(I). The use of these gums at a maximum level of 10 g/kg was endorsed. The endorsement of gum tragacanth and carob bean (locust bean) gum was postponed pending evaluation by the Expert Committee.

#### Alginates

53. The delegation of Denmark stated that, in its view, the maximum level of use of alginates should be lower than 10 g/kg and that, in particular, the upper limit for propylene glycol alginate should be reduced. The Committee noted the reservation of

Denmark, but endorsed the use of alginates at the level proposed by the Commodity Committee.

#### Pectin

54. The Committee endorsed the provision but requested the Commodity Committee to clarify whether normal pectin and amidated pectin were both to be covered. If so, the plural word "pectins" would seem appropriate. It was noted that amidated pectins had been allocated a temporary ADI (see para 33).

#### Proposed Draft Standard for Canned Tropical Fruit Salad

55. The Committee agreed to request the Commodity Committee to use a common approach when compiling the additive sections of related commodity standards. The Committee expressed preference for the maximum level of substance to relate to the end product, because this would facilitate enforcement.

#### Colouring Matters

56. At its last session the Committee had given a temporary endorsement to the use of erythrosine for which there was a temporary ADI. As the additive was only used to colour cherries and did not migrate significantly into the rest of the product, it was agreed to specify that the maximum usage should be governed by good manufacturing practice.

#### Natural Flavours

57. The Committee decided to postpone reconsideration of natural flavours but considered that natural flavours also embraced natural fruit essences and that it was not clear why a distinction had been drawn between the two.

#### Antioxidants

58. The Committee postponed taking any decisions on antioxidants. Several delegations held the view that the use of erythorbic acid should not be allowed. It was agreed to request the Commodity Committee to clarify whether "maximum level" related to the use or the limiting quantity in the end product.

#### Proposed Draft Standard for Canned Mature Processed Peas

#### Colouring Matters

59. Many delegates held the view that the limit of 200 mg/kg for the colours listed was rather high and the Committee agreed to request the Commodity Committee to review the need for colours and the level of use again, bearing in mind that there were inevitable differences in the tinctorial power of the different colours.

#### Proposed Draft Standard for Pickled Cucumbers

60. Consideration of the food additive section of this Standard was postponed as the Commodity Committee had not yet discussed the Standard at Step 4 in the light of government comments.

#### Draft Standard for Canned Fruit Cocktail

61. The proposed limit for the maximum level for L-ascorbic acid was endorsed (see also para 55 above with regard to the question of level of use and maximum level in the end product).

## Proposed Draft Standard for Processed Foods for Infants and Children Based on Cereals

62. It was observed that there was a discrepancy between the title of this standard, indicating that the food was intended for infants and children, and the scope of the standard which excluded infants up to weaning age, and that furthermore, in the labelling section no specific requirement was made for a declaration of the exclusion of children under weaning age. The Committee, after a brief discussion, decided to defer further consideration of the list of additives and to request the Commodity Committee to reconsider the food additive section, taking into account views expressed at the FAO/WHO Meeting on Additives in Baby Foods (Rome, 14-16 June 1971; WHO Technical Report Series, No. 488) and the observations made by the Committee. The Committee noted that the Expert Committee Report stated that "on developmental grounds an arbitrary distinction may be made between children aged less than 12 weeks and older children".

63. It was noted that the approach of the Joint FAO/WHO Meeting, regarding the use of certain additives in baby foods, was necessarily temporary until certain requirements for toxicological testing had been met. In particular, the following items emerged from the Committee's discussion:

(a) The thickening agents listed in the present standard had not been discussed at the Joint FAO/WHO Meeting.

(b) Although the emulsifiers lecithin, monoglycerides and diglycerides appeared to be suitable, it was pointed out, however, that the text should be re-worded so as to exclude erucic acid as a component fatty acid of the mono-, and diglycerides series.

(c) No reservations were raised with regard to inorganic stabilizers and pH adjusting agents.

(d) The use of naturally occurring antioxidants was found acceptable. This would exclude L-ascorbyl-6-palmitate, even though it was hydrolyzed in the gut.

(e) The FAO/WHO Meeting had considered the use of flavouring agents and had not endorsed the use of any synthetic substances. The term "harmless" in conjunction with flavouring agents was not acceptable to the Committee.

64. The representative of the international Federation of Pectin Producers proposed that in the present standard, as well as in the draft standard for infant formula, elaborated by the Committee on Foods for Special Dietary Uses, the use of pectin should be limited to non-amidated pectin.

65. The Committee agreed that, in the introductory sentence to the various standards for infants and baby foods, the reference to national legislation should be deleted. The statement that no more than two additives should be used from each group was to be expanded to embody a provision limiting the total amount used within a group to the quantity permitted for the individual substances.

## Proposed Draft Standard for Infant Formulae and Canned Baby Foods

66. Although the FAO/WHO Meeting had concluded that no additives should be allowed in some of the products covered by the two standards, it had been recognized that certain exceptions to this general rule might be necessary.

67. In parallel with the decision taken with regard to the food additive section of the Draft Standard for Processed Foods for Infants and Children Based on Cereals, the

Committee agreed to refer back, for reconsideration by the Committee on Foods for Special Dietary Uses, the section on food additives but to take account of the intended scope of the standards and the recommendations of the FAO/WHO Meeting.

68. The Czechoslovakian delegation drew attention to published evidence showing the need for careful balancing of the cations in the diet of babies. Thus, although sodium salts could be tolerated by adults, it was not so for babies and the use of sodium salts in infant foods should be restricted. The Committee agreed that the attention of the Committee for Foods for Special Dietary Uses should be drawn to this aspect.

#### Draft Standard for Cocoa Beans, cocoa Nib, Cocoa Mass, Cocoa Press Cake and Cocoa Dust for Use in the Manufacture of Cocoa and Chocolate Products

##### Copper

69. The Committee decided to endorse the higher limit of 30 mg/kg which had been firmly proposed for cocoa beans, cocoa nib and cocoa mass.

#### Draft Standard for Cocoa Butters

##### Processing Aids

70. The Committee decided to postpone endorsement of the various groups of processing aids and requested the Commodity Committee to specify the actual substances covered by this provision and also to propose residue limits for the permitted extraction solvents. The Committee noted that the Commission had in fact adopted provisions governing clarifying agents and filtration aids in the fruit juices standard by reference to a Codex list of such aids not yet established. It was pointed out, however, that those particular lists of processing aids would be specific to fruit juices, whereas, in this case, reference to the Codex Advisory list was not sufficiently specific to cocoa butters. In the opinion of the delegation of Switzerland, the identity and quality criteria laid down for the various cocoa butters ensured that residues of processing aids would be kept to negligible amounts and that this removed the need to set limits for solvent residues.

#### Draft Standard for Cocoa Powder with Additives for Industrial Purposes

##### Alginates

71. The Committee endorsed, from a point of view of safety-in-use, the maximum level of 3.5 g/kg of the Na, K, Ca and NH<sub>4</sub> salts and the propylene glycol ester of alginic acid, either singly or in combination with other stabilizers. The Committee, however, did so without prejudice to the suitability of these substances in the preparation of cocoa powder for industrial purposes and requested the Commodity Committee to specify in this standard the actual substances for which permission was sought.

##### Natural Flavours

72. The Committee agreed to delete vanillin as it was already covered by the provision for natural flavours.

#### Draft Standard for Flavoured Yoghurt

73. The Committee endorsed or temporarily endorsed, according to toxicological rating, the various stabilizers referred to in Appendix II to this Report, on the understanding that the maximum level of 5000 mg/kg related to use either "singly or in combination". To make it clear that both amidated and non-amidated pectins were permitted in the standard, the Committee replaced the reference to "pectin" by "pectins".

The endorsement of the modified starches was postponed, the Commodity Committee being asked to indicate which modified starches were actually used. The delegations of Austria, Czechoslovakia and Italy considered that there was no need to use stabilizers as, in their opinion, this represented falsification. The delegation of Switzerland, however, pointed out that stabilizers were necessary to prevent liquefaction in yoghurts containing fruit ingredients. The Committee regarded gelatine as food and considered that it would be more appropriately listed under optional ingredients. Opinion was divided as to whether preservatives were needed. It was pointed out that the Commodity Committee was still considering this matter and that some preservatives were carried over from the fruit ingredients used.

#### International Individual Standards for Cheese

74. The Committee again postponed endorsement of sodium and potassium nitrates, maximum limit of 200 mg/kg of the milk used, pending a proposal by the Commodity Committee for a maximum level in the final product. It noted, however, that the Commodity Committee considered the question and that a number of delegations attending the Commodity Committee session had made proposals to base the maximum level of nitrate in the final product. The Committee was informed that the question of nitrates and nitrites was being reviewed in the U.K.

#### Processed Cheese Standards No. A-8(a) to A-8(c)

75. The Committee noted that the provision for nisin had been restated in terms of pure nisin (1 g pure nisin =  $40 \times 10^6$  IU) and reconfirmed its previous endorsement. The delegations of Ireland and Switzerland did not agree to the use of antibiotics in food, whether or not the antibiotics used were therapeutically effective.

#### Standard for Evaporated Milks

76. The delegations of Austria and Spain were opposed to the use of additives in these products.

#### Draft Standard for Table Olives

77. The Committee noted that gluconic acid and calcium gluconate were included in List A(I) but that the ferrous salt had not been considered specifically by the Expert Committee. Taking into account the status of the Standard (Step 8), it was agreed to endorse temporarily the use of ferrous gluconate and to request the Expert Committee to consider the toxicology of this substance and to draw up specifications. There was some discussion on whether the technological information for sodium hydroxide, i.e. "when used in the preparation of alkaline lye" ought to be included in the additives section. It was finally agreed to endorse the provision without amendments.

#### Draft Standard for Quick Frozen Peaches

78. It was noted that an ADI had been established for sodium alginate. The Commodity Committee was requested to provide a numerical limit for the substance in the end product. The Committee decided to follow the same procedure as agreed for other commodities (see para 33) and to change "pectin" to "pectins" in order to accommodate the use of amidated pectins. The representative of the International Federation of Pectin Producers proposed a limit of 5000 mg/kg for consideration by the Commodity Committee. In discussing ascorbic acid and citric acid, it was noted that, whereas the former had an ADI, the use of the latter was not limited since it no longer had an ADI. The Commodity committee was asked to provide a numerical limit for ascorbic acid.

### Proposed Draft Standard for Quick Frozen Fillets of Hake

79. The use of phosphates was discussed against the background of the latest decision of the Expert Committee which served to increase considerably the ADI for phosphates and phosphoric acid. The hazard to public health previously assumed to be associated with the use of phosphates thus assumed different proportions. The Committee noted that this applied to all foods and that it was not limited to fish and fishery products. The level of use of various phosphates as proposed by the Commodity Committee was considered and subsequently agreed to in the light of this further development and also took into account the additional information received from the Commodity Committee.

### Draft Standard for Quick Frozen Shrimps or Prawns

80. The Committee agreed to the use of citric acid being limited by good manufacturing practice. In line with an earlier discussion during the session, the Committee agreed to request the Commodity committee to propose a limit for the use of ascorbic acid.

81. It was pointed out that the loss of colour resulted from mechanized peeling. The Committee decided to request the Commodity Committee to reconsider the need for the use of colourants and possibly to restrict such use to the heat-treated product only.

82. In keeping with the decision on Quick Frozen Hake, the Committee also allowed the use of certain di- and tri-phosphates, at the proposed level, in this product. The delegation of Spain was of the opinion that the use of phosphates was not in keeping with good manufacturing practice. When discussing the use of various sulphites in the raw materials the Committee noted that, at the 17th session of the Expert Committee, the ADI had been established at the former unconditional level. A number of objections were raised to these additives pending further information from the Commodity Committee with regard to a numerical maximum level in the final product and on the possible use of alternative substances. The Committee agreed to refer this matter to the Commodity Committee. Since an ADI had been established for monosodium glutamate, the Committee decided to ask the Commodity Committee to indicate a numerical maximum level in the final product, rather than limiting the use to good manufacturing practice.

### Draft Standard for Canned Crab Meat

83. The Committee agreed to the use of disodium diphosphate at the level proposed (see also para 79 of this report), provided that phosphorus derived from phosphoric acid used for pH adjustment should be covered by the same limit. Citric acid used as a pH regulating agent was to be listed as such at a level of use governed by good manufacturing practice. With regard to aluminium sulphate, the Committee agreed to await toxicological evaluation by the Expert Committee but further considered that a technological reason for its use was required.

### Draft Standard for Cooked Cured Ham and Cooked Cured Pork Shoulder

84. The Chairman pointed out that hydrolyzed protein could be considered to be both a food as well as a modified protein by analogy with modified starches which fell into the different categories of acid hydrolyzed and enzyme hydrolyzed starches. The Committee agreed to request further information on the source of the hydrolyzed protein, although it was realized that in the final product it would be extremely difficult to establish the source analytically. It was further agreed to request further information with regard to

specifications. The delegation of the Federal Republic of Germany was opposed to the use of hydrolized protein in the preparation of hams.

#### Draft Standard for Cooked Cured Luncheon Meat

85. The Committee agreed to the use of monosodium glutamate at the level proposed. The Committee was informed that results of investigations had indicated that glucono-delta-lactone might inhibit the formation of nitrosamines during the curing process. The opposite opinion was expressed by Dr. Schuller of the Secretariat that glucono-delta-lactone, which lowered pH, would enhance the rate of formation of nitrosamines, and that this was borne out by tests. The Committee considered that any definite scientific conclusions concerning glucono-delta-lactone in relation to the formation of nitrosamines would be of interest to the Expert Committee. The Committee was also informed that an International Symposium on Nitrite in Meat Products had been held at Zeist, the Netherlands (September 1973) which had confirmed that nitrite played a key role in colour formation and flavour development and the prevention of the development of clostridium botulinum and that there was no adequate substitute known at the present time; the presence of N-nitrosamines in meat was established but there were indications that ascorbates decreased the risk of N-nitrosamine formation. The Symposium had concluded that there was a need to improve sampling and analytical methods, to carry out investigation concerning the ingestion of nitrosamines and to prepare an inventory of all meat products according to their nitrite content. It was the view of the Committee that there was no need for the use of erythrosine. The delegations of Denmark, the Netherlands, U.K. and the U.S.A. were of the opinion that the use should be accommodated.

#### Standard for Canned Mushrooms

86. The Chairman informed the Committee that, at the 9th session of the Commission, a problem had arisen with regard to the acceptance at Step 8 of the Standard for Canned Mushrooms (ALINORM 72/35, para 115). The Commodity Committee, which had met between the sessions of this Committee and the Commission, had made a small amendment to the food additives section by allowing the use of pectin within the overall maximum level of 10 g/kg which applied to modified starches, vegetable gums, alginates and propylene glycol alginate. The Commission authorized the inclusion of the additive on the basis of a reassurance from the Chairman of this Committee that it would not present difficulties in being endorsed.

#### ADVISORY LIST OF ADDITIVES IN SOFT DRINKS

87. The Committee had before it a paper prepared by the delegation of Canada (CX/FA 73/8) together with comments by Canada (cx/FA 73/8-Addendum I), comments by Denmark (CX/FA 73/8-Addendum II) and comments by Sweden (CX/FA 73/8-Addendum III). After a preliminary discussion, it was agreed that an ad hoc Working Group, under the Chairmanship of Canada (Mr. R.O. Read;), should consider and report on the various papers so as to facilitate consideration of this subject by the Committee. Delegates from Austria, Belgium, Canada, Denmark, the Netherlands, Poland and Sweden agreed to participate in the ad hoc Working Group.

88. The Committee agreed not to try to define "soft drinks" formally but only to describe them for the purposes of the Codex list (see para 90). The Committee agreed that the advisory list would aid the compilation of data with the objective of establishing food additive intake from "soft drinks". It would also serve as a first step possibly leading to a Codex recommendation concerning the use of additives in "soft drinks". In such a



case, the Committee recognized that it would become essential to define "soft drinks" and also to consider the technological justification for the use of additives in these products.

#### Report of the Ad Hoc Working Group on Food Additives in Soft Drinks

89. (a) It was the view of the Committee, expressed at its last session, that the working paper on additives in soft drinks prepared by Canada would be of assistance to WHO in its computerized programme on the estimation of the potential intake of food additives (ALINORM 72/12). Canada was also requested to draw up an advisory list of additives in soft drinks and to propose tentative maximum levels for the food additives in soft drinks. Canada has now acquired information concerning the food additives permitted in soft drinks in 31 countries together, in some cases, with their maximum permitted levels of use.

(b) Canada has already issued on an advisory basis two lists of additives present in soft drinks and, as a result of recently acquired information and any additional updating from governments, proposes to issue a third list. It is believed that this third list will indicate the majority, if not all, the additives used in soft drinks.

(c) Having compiled a list of additives in soft drinks the next request of the Committee to propose tentative maximum levels for additives in soft drinks has proved extremely difficult due to lack of consumption data. Three countries have supplied Canada with per caput consumption figures which at best provide only a crude measure of food additives intake and generally do not indicate elements of a population which might be at risk. The ad hoc Working Group was in agreement that the acquisition of consumption data would be difficult but was also in agreement that a further advisory list be sent to the various governments accompanied by a request for consumption data. It may be possible to obtain data through statistics, trade "associations or nutritional surveys. (Canada has been able to acquire information through these sources). The ad hoc Working Group agreed that such information acquired by a further survey be made available to the WHO Food Additives and Health Statistical Methodology Unit for comment as to its utility in their computer programme.

(d) The ad hoc Working Group felt that a problem may lie in the definition of "soft drinks" and that a new definition should be provided based on the exclusion of those substances which are not considered to be "soft drinks". It was understood that CESDA (CX/FA 73/8-Addendum III) was preparing a definition, but the ad hoc Working Group felt that such a definition might reflect a purely European point of view and that any definition should reflect the practices of all countries. The ad hoc Working Group was in agreement that everyone knew what was meant by "soft drinks" but classification in various countries segmented the field and made the task of statistical evaluation difficult. The ad hoc Working Group proposed to define soft drinks for Codex purposes as "Beverages other than fruit juice, milk, alcoholic beverages, mineral water, tea, coffee and maté", the intention being to cover all these beverages containing food additives.

(e) The ad hoc Working Group then discussed the physiological approach to the measurement of food additive intake as suggested by Denmark (CX/FA 73 /8-Addendum II) and felt that it should be discussed by the Codex Committee on Food Additives and, if the Committee agreed, the Danish proposal should be referred to the Food Additive and Health Statistical Methodology Unit of WHO for evaluation as a supplementary approach in relation to the problem of establishing food additive limits.

(f) The point was also made in the ad hoc Working Group that the lists drawn up by Canada (CX/FA 73/8-Addendum I) classifying food additives under A, B and C headings, depending on the state of their ADIs, did not reflect the fact that some of these additives had been toxicologically investigated by various countries and approved for use nationally. Such additives had not yet been reviewed by the Expert Committee. It was suggested that the list be revised to reflect this situation by deleting the categories.

90. Following an introduction of the report by the chairman of the ad hoc Working Group, the Committee:

(a) accepted the offer of the delegation of Canada to continue to act as rapporteur and to prepare an up-dated list of food additives used in soft drinks in the light of the views, based on the report, expressed by the Committee, the working papers considered at the session and any subsequent information received from governments;

(b) agreed that governments be asked to provide Canada with further information on the consumption of the various types of soft drinks;

(c) described "soft drinks" for the purpose of the Codex List as being "beverages other than fruit juices, fruit nectars, milk, milk based beverages, alcoholic beverages, mineral waters, tea and tea substitutes, coffee, chickory, mate and cocoa and chocolate drinks; and

(d) agreed that the Food Additive and Health Statistical Methodology Unit of WHO be requested to study the physiological approach to the measurement of food additive intake" presented by the delegation of Denmark at the session.

#### CONSIDERATION OF LIST B OF FOOD ADDITIVES

91. The Committee had before it document CX/FA 73/8 listing food additives awaiting evaluation by the Expert Committee and referring also to a number of food additives on which guidance by the Committee itself was needed as to the extent of current interest in their use by the food industry. The Committee noted that it had been originally planned to distribute Codex Lists A and c simultaneously with List B so as to enable governments and interested international organizations to comment effectively on List B (i.e. to include or delete additives on List B). Since only the English version of List A and C had been distributed just before the session, and so had not been received by many governments, no comments had yet been received. For this reason the Committee agreed to give only a preliminary consideration to List B and requested the Secretariat to seek comments on List B revised in the light of the decisions of the committee.

#### REVISED VERSION OF THE CARRY-OVER PRINCIPLE

92. The Committee had before it a paper prepared by the Netherlands Secretariat (CX/FA 73/6) containing comments of ten governments on a paper previously presented at the 8th session on the carry-over Principle (CX/FA 72/15). The current paper also contained a new proposal by the Secretariat for the carry-over principle, based on the approach that:

(a) in case of an additive functional in the food the total amount does not exceed the level permitted in the Codex Standard for the food; and

(b) in case of an additive non-functional in the food

(i) the amount of the additive carried-over into the food does not exceed proportionally the level permitted in a Codex Standard for the ingredient, and

- (ii) the additive is present on the FAO/WHO List A(1) or A(2) and is used in an amount in conformity with good manufacturing practice in the ingredient, for which no Codex Standard exists.

93. The Committee discussed whether or not the carry-over principle should require that a food additive, carried over from an ingredient used in the preparation of that food, should be below a level which was still functional. Some delegations supported the proposal of the Netherlands Secretariat that the carry-over principle should apply to additives arising from the use of ingredients in which they were present, irrespective of whether the amounts transferred did or did not exert a particular effect, provided the levels of such additives were limited in the standard. The majority of the delegations were in favour of the modified US proposal given as Appendix III to this report.

94. It was pointed out that it was not feasible to require that there be no effect at all and, in this connection, the presence of permitted colours in ingredients was mentioned as an example. It was considered necessary to assure that, on the other hand, additives not permitted in the food could not be introduced into the food via ingredients. The Committee adopted the text proposed by the USA with (a) the amendment proposed by the delegation of Switzerland to delete the requirement that the additive carried over exerted no effect at all, (b) the amendment proposed by Australia and modified by the delegations of the Netherlands and the Federal Republic of Germany, that the appropriate Codex Committee should, where necessary, establish overall limits for additives when used as ingredients of one food and carried over into another, and (c) other editorial amendments (see Appendix III to this report).

95. The Commission was requested to consider the carry-over principle and to give guidance to this Committee as to how to proceed further with its application, it was agreed that the carry-over principle would, in any case, serve as a guide for Codex Commodity Committees. The Committee noted that paragraphs 1 and 2 were the operative parts of the carry-over principle relating to the presence of additives from the use of ingredients containing them and that paragraph 3 was directed to Codex Commodity Committees or other bodies preparing commodity standards.

#### REVISED VERSION OF THE DRAFT GENERAL STANDARD ON THE LABELLING OF FOOD ADDITIVES WHEN SOLD AS SUCH

96. The Committee, at its 8th session, had requested the delegation of the United Kingdom to revise the draft proposals which had been prepared as a basis for a general standard on the Labelling of Food Additives sold as such, taking into account the views expressed during the session (ALINORM 73/12, paras 77 and 78). In addition to this revised text (CX/FA 73/9), the Committee had before it a redraft of the document prepared by the delegation of the USA, and further written comments on specific parts by the delegations of Denmark and Switzerland.

97. Subsequent to reaffirming that a general standard for the labelling of Food Additives was a worthwhile proposition, the Committee thoroughly discussed the two versions (UK and USA) which had been drafted and the scope of such a standard, the cardinal point being whether or not the general standard should primarily apply to food additives sold by retail or only to products sold to food manufacturers, processors, caterers and for institutional uses. The Committee finally agreed that the scope would cover both types of sale, but that the provisions relating to retail sales in the present (UK) text should be simplified, consistent with the aim of protecting the health of consumers. In this context some delegations expressed the view that, provided only permitted food additives were in fact sold, the consumer would be adequately

safeguarded. The UK and other delegations suggested that account needed to be taken of the situation created by the withdrawal of these additives on the basis of an evaluation of new toxicological data. The Committee requested the delegation of the United Kingdom to continue to act as rapporteur in this field and to prepare an amended version of the document on the basis of the various papers before the Committee and taking into account the observations made during these discussions. The UK delegation agreed to undertake the work. The amended version of the text will be distributed in good time for a further round of government comments prior to the next session of the Committee.

#### REVISED VERSION OF THE LIST OF CLASS NAMES FOR FOOD ADDITIVES

98. The Committee had before it a document (CX/FA 73/10) which reviewed the subject to date and provided a summary of government comments received and extracts of Reports of the Codex Alimentarius Commission and the Codex Committee on Food Labelling. A series of questions were posed in the document concerning a proposal for a revised list of class names in the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969; para 3.2(c)).

99. The Committee discussed a proposal to include, in the list of class titles for ingredients, the class title "starches" - to include modified starches - which had been made at the 8th session of the Codex Committee on Food Labelling (ALINORM 74/22, paras 82-84). The suggestion led to a discussion on the way in which modified starches should be dealt with. One suggestion was that modified starches should be listed as a separate generic category, the other references to this class being deleted. The Committee agreed with the view of the Codex Committee on Food Labelling that enzyme modified and physically modified starches were included in the class designation "starch", but considered that there was no need to amend the General Labelling Standard as proposed by the delegation of the Netherlands.

100. A prolonged discussion followed as to whether it was the intention of para 3.2 (c) of the General Standard for the Labelling of Prepackaged Foods to limit the class names which may be used for the purposes of label declarations or to encourage international standardization of generic nomenclature or both. The Committee considered that it was not the intention actually to standardize class names and that class names equivalent to those listed would be accepted as being within the spirit of the provision in para 3.2(c).

101. As far as informing the consumer was concerned, it was agreed that certain class names might be more readily understood than the chemical name of the substance, but no generally applicable rule could be established. Moreover, considerable differences existed between the labelling practices in different countries. The different national interpretations of the class names made it difficult to propose additions. It was suggested that, in view of the difference in approach of various delegations as highlighted by the discussion on the question of the extension of class names, the Committee on Food Labelling might be asked to advise on whether even the currently listed generic expressions were of value internationally.

102. Several delegations suggested tentatively that the option to declare additives by class names might be left to the provisions of national legislation, provided that it was recognized in the labelling standard that the use of class names, where appropriate, was acceptable. The possibility was also discussed of Codex Commodity Committees considering the use of class names for food additives when they were drawing up commodity standards.

## SPECIFICATIONS OF SELECTED FOOD ADDITIVES

103. The Committee was informed that the 17th session of the Expert Committee had undertaken the review of food additive specifications and that a certain number of these specifications had already been revised by FAO following the 17th session of the Expert Committee. The revised specifications would be printed and distributed to governments and International Organizations for comment. On the basis of information received, the Expert Committee, at its 18th session, would reconsider the specifications and those adopted by the Experts would be submitted to the 10th session of the Committee.

104. A number of delegations were of the opinion that work on specifications was important but expressed doubt whether detailed comments on all the specifications could be transmitted to FAO in time for the Expert Committee scheduled for June 1974.

105. The Committee agreed that governments and interested international Organizations be requested to send, as soon as possible, their comments on the specifications revised by FAO following the 17th session of the Expert Committee on Food Additives.

## PRIORITY LIST FOR FOOD ADDITIVES

106. The Committee had before it a Room Document, prepared by the Netherlands Secretariat, containing a draft priority list of Food Additives. The delegation of the United Kingdom was of the opinion that it was not possible to come to a final conclusion on priorities since they had not had the time to study the document in detail.

107. The Committee agreed that the priority list drawn up at this session was for the guidance of the Joint Expert Committee. It was not final and was open to further inclusions submitted in writing to the Secretariat. The committee agreed to indicate which of the food colours appearing in list B were of high priority and considered that the shorter list proposed by the delegation of the Netherlands subject to the addition of Yellow 2-G as proposed by Denmark and any other amendments subsequently proposed by other delegations formed a useful basis for tackling this exercise. The delegation of Denmark indicated that full toxicological information was available on this colour. As regards priority within the list of colours, the committee agreed that governments interested in the evaluation of particular colours which were on the agenda of the Joint Expert Committee, should submit toxicological and other information to the Expert Committee. It was also agreed that food colours appearing in Codex standards should be regarded as colours of high priority for re-evaluation. The delegation of Sweden was of the opinion that anthocyanins should be given high priority. The delegation of Denmark indicated that toxicological data were available on Orange RN.

108. The delegation of the Federal Republic of Germany, supported by the delegation of Belgium, proposed to put sorbyl-palmitate on a further list for examination by the Expert Committee and indicated that they could submit data on this compound to the Secretariats of FAO and WHO. It was explained that the substance was used to prevent the development of moulds in baked products such as bread. The delegation of the USA requested the inclusion of the glycerol esters of woodresin on the priority list. These esters were used as clouding agents in soft drinks. The Committee agreed to include these substances.

109. The question was raised as to whether the ADI for locust bean gum could be extended to Tara gum (Peruvian Carob), a gum similar in chemical composition to locust bean gum but from a different plant source. The Netherlands delegation informed the

Committee that they had carried out an investigation on both gums and that the results would be made available to the Expert committee. The delegation of Italy proposed that Tara gum be included in the list of priorities for establishment of an ADI. The Committee agreed.

110. The representative of WHO observed that ADIs were in fact allocated by the 17th Meeting of the Expert committee to additives that are related chemically and toxicologically but that such groupings of additives for purposes of evaluation cannot be assumed. He stressed the need in all cases for submission of results of toxicological investigation and other relevant data, to enable the Expert committee to carry out its work and that it would be appreciated if the submission of data to WHO would be done only for those additives listed on the FAO/WHO agenda which will be widely advertised and finalized. Comments in writing on the priorities proposed were requested by July 1974.

#### FUTURE WORK AND OTHER BUSINESS

111. The Committee decided not to undertake work on any further subjects because of the existing workload. There was no other business raised by the delegations at the session.

#### TIME AND PLACE OF NEXT SESSION

112. The Chairman informed the Committee that the next session of the Committee would take place during the first half of 1975 and that, in all probability, it would be held in The Hague.

LIST OF PARTICIPANTS\*  
LISTE DES PARTICIPANTS  
LISTA DE PARTICIPANTES

- \* The heads of delegations are listed first; Alternates, Advisers and Consultants are listed in alphabetical order.  
Les chefs de délégations figurent en tête et les suppléants, conseillers et consultants sont énumérés par ordre alphabétique.  
Figuran en primer lugar los Jefes de las delegaciones; los Suplentes, Asesores y Consultores aparecen por orden alfabético.

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ENDORSEMENT OF FOOD ADDITIVES IN CODEX COMMODITY STANDARDS

In order to get a complete picture of all the endorsements of food additive provisions by the Codex Committee on Food Additives, it is necessary to consult the reports of the 7th, 8th and 9th sessions of the Committee (ALINORM 71/12, ALINORM 72/12, ALINORM 74/12). The additives listed in this Appendix under the various headings are not necessarily all the additives provided for in the individual Codex commodity standards, but are those which were considered or reconsidered at the 9th session of the Codex Committee on Food Additives.

Abbreviations used: GMP : Good Manufacturing Practice  
CCFA : Codex Committee on Food Additives  
JECFA : Joint FAO/WHO Expert Committee on Food Additives

PROCESSED FRUITS AND VEGETABLES

Draft General Standard for Jams (Fruit Preserves) and Jellies  
(Appendix II, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>		
1. <u>Acidifying and PH regulating agents</u>			
1.1 Citric acid	In sufficient amount to maintain the pH at a level of 2.8 - 3.5	Endorsed	para 32
1.2 Malic acid			
1.3 Lactic acid			
1.4 L-Tartaric acid			
1.5 Fumaric acid			
1.6 Sodium, potassium and calcium salts of any of the acids listed in 1.1 to 1.5	L-Tartaric acid and fumaric acid and their salts expressed as the acid, 3000 mg/kg		
1.7 Sodium and potassium carbonates			
1.8 Sodium and potassium bicarbonates			
2. <u>Thickening agents</u>			
Pectin (Not including amidated pectins)	Limited by GMP	Endorsed	para 34
3. <u>Colours</u>			
3.1 Erythrosine 45430	200 mg/kg, singly or in combination	Endorsement postponed <sup>1</sup>	paras 35, 36
3.2 Amaranth 16185			
3.3 Fast Green FCF 42053			
3.4 Ponceau 4R 16255			
3.5 Azo-rubine (Carmoisine) 14720			
3.6 Tartrazine 19140			
3.7 Wool Green BS (Green 'S') 44090			
3.8 Sunset Yellow FCF 15985			



- 3.9 Brilliant Blue FCF 42090
- 3.10 Black PN 28440
- 3.11 indigotin (indigo Carmine)  
73015
- 3.12 Orange G 16230
- 3.13 Orange RN 15970
- 3.14 Red 2G 18050
- 3.15 Caramel colours
- 3.16 Curcumin 75300
- 3.17 Lactoflavin (Riboflavin)
- 3.18 Cochineal 75470
- 3.19 Orcein
- 3.20 Carbo medicinalis vegetalis
- 3.21 Chlorophylls 75810
- 3.22 Carotenoids
  - (a) alpha-, beta- and gamma-  
Carotenes (75130, 40800)
  - (b) Bixin, norbixin (Annatto)  
75120
  - (c) Capsanthin or Capsorbin
  - (d) Lycopene 75125
  - (e) beta-apo-8'-carotenal  
40820
  - (f) ethyl ester of beta-apo-8'-  
carotenoic acid 40825
- 3.23 Xanthophylls
  - (a) Flavoxanthine
  - (b) Lutein
  - (c) Kryptoxanthine
  - (d) Riboxanthine
  - (e) Violoxanthine
  - (f) Rhodoxanthine
  - (g) Canthaxanthine
- 3.24 Beet red or betanin
- 3.25 Anthocyanins

<sup>1</sup> Previous temporary endorsement (ALINORM 71/12) of 3.1 to 3.4 and 3.6 to 3.8 withdrawn.

#### 4. Preservatives

- 4.1 [sodium benzoate] [1000 mg/kg, singly or in combination] Endorsement para 37
- 4.2 [Sorbic acid or potassium salt] in combination] postponed
- 4.3 [Esters of parahydroxy benzoic acid]
- 4.4 Sulphur dioxide (as a carry-over from raw material) 100 mg/kg <sup>1</sup>

#### 5. Firming agents

- 5.1 Calcium bisulphite 200 mg/kg, expressed as Ca, singly or in combination] Endorsement para 38 postponed
- 5.2 Calcium carbonate Endorsed
- 5.3 Calcium chloride

5.4	Calcium lactate		
5.5	Calcium gluconate		
6.	<u>Antioxidants</u>		
6.1	L-ascorbic acid	500 mg/kg	Endorsement paras
6.2	Erythorbic acid (iso-ascorbic acid)	500 mg/kg	postponed 39,40

<sup>1</sup> 100 mg/kg endorsed by the 7th session of the Committee (ALINORM 71/12); the present postponement of endorsement refers particularly to 100 mg/kg as a carry-over residue.

Draft General Standard for Citrus Marmalade  
(Appendix III, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>		
1.	<u>Acidifying and pH regulating agents</u>		
1.1	Citric acid	In sufficient amount to	Endorsed para 41
1.2	Malic acid	maintain the pH at a	
1.3	Lactic acid	level of 2.8 - 3.5	
1.4	L-Tartaric acid		
1.5	Fumaric acid		
1.6	Sodium, potassium and calcium salts of any of the acids listed in 1.1 to 1.5	L-Tartaric acid and fumaric acid and their salts, expressed as the acids, 3000 mg/kg	
1.7	Sodium and potassium carbonates		
1.8	Sodium and potassium bicarbonates		
2.	<u>Thickening agent</u>		
	Pectins <sup>1</sup>	Limited by GMP	Endorsed para 41
3.	<u>colours</u>		
3.1	Caramel colours (made by the ammonia process)	Limited by GMP <sup>2</sup>	Temporarily endorsed by the 8th session of the CCFA
	(not made by the ammonia process)		Endorsed
3.2	Sunset Yellow FCF	200 mg/kg	Endorsement postponed para 42
3.3	Tartrazine	100 mg/kg, singly or in combination, in Lime marmalade	Temporarily endorsed by the 7th session of the CCFA para 42
3.4	Wool Green BS (Green 'S')		
4.	<u>Preservatives</u>		
4.1	Sorbic acid and potassium sorbate	250 mg/kg, singly or in combination	Endorsed
4.2	Sulphur dioxide	100 mg/kg	Endorsed by paras 37, the 7th session 43

<sup>1</sup> "Pectins" refers to amidated and non-amidated pectins (see para 33).

<sup>2</sup> The Commodity Committee is requested to propose a maximum level for caramel colour made by the ammonia process (see para 42).

of the CCFA

- |     |                                    |                                     |          |         |
|-----|------------------------------------|-------------------------------------|----------|---------|
| 5.  | <u>Antioxidants</u>                |                                     |          |         |
| 5.1 | L-Ascorbic acid                    | 500 mg/kg, singly or in combination | Endorsed | para 44 |
| 5.2 | Erythorbic acid (isoascorbic acid) |                                     |          |         |

Amendment to Recommended International Standard for Canned Peaches (CAC/RS 14-1969)  
(Appendix IV, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>		
L-Ascorbic add	550 mg/kg in the final product	Endorsed	para 45

Draft Standard for Raisins  
(Appendix VI, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>		
Sulphur dioxide	1,500 mg/kg in bleached raisins only	Endorsed	para 46

Proposed Draft Standard for Canned carrots  
(Appendix VIII, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>		
1. Monosodium glutamate (used only when butter or other animal or vegetable fats or oils are ingredients, as in a "sauce pack")	Limited by GMP	Endorsement postponed	para 48
2. Mint flavour (mint oil)		Endorsed	para 49
3. <u>Firming agents</u>			
3.1 Calcium chloride	total 350 mg/kg, calculated as Ca in the final product	Endorsed	
3.2 Calcium lactate			
3.2 Calcium gluconate			
4. Tin (Sn)	250 mg/kg	Endorsement postponed	para 47
5. <u>Thickening agents</u>			
5.1 <u>Modified starches</u>	10 g/kg, singly or in combination, to be used only when butter or other edible animal or vegetable fats or oils are used as ingredients as in a "sauce pack"	Endorsed	para 51
Acid-treated starches			
Alkali-treated starches			
Bleached starches			
Distarch, phosphate <sup>1</sup>			
Distarch phosphate, phosphated			
Monostarch phosphate			
Starch acetate			
Starch, hydroxypropyl			
Distarch adipate, acetylated			
Distarch glycerol, hydroxypropyl			
Distarch phosphate, acetylated			
Distarch glycerol, acetylated			
Distarch glycerol	Temporarily endorsed		
Oxidized starches			

Distarch phosphate, hydroxypropyl	Endorsement postponed	
<b>5.2 Vegetable gums</b>		
Arabic gum	Endorsed	para 52
Carrageenan		
Furcellaran		
Guar gum		
Gum tragacanth	Endorsement postponed pending toxicological evaluation by the JECFA)	
Carob bean (Locust bean) gum		
<b>5.3 Alginates</b>		
Ammonium alginate		para 53
Calcium alginate		
Potassium alginate	Endorsed	
Sodium alginate		
Propylene glycol alginate		
<b>5.4 Pectins<sup>2</sup></b>		para 54
<sup>1</sup> The sodium metaphosphate treated and phosphorus oxychloride treated starches have been combined under "distarch phosphate.		
<sup>2</sup> The endorsement applies to amidated and non-amidated pectins; however, the Commodity Committee is requested to specify which pectin is used or whether both types are used (see para 54).		

**Proposed Draft Standard for Canned Tropical Fruit Salad**  
(Appendix IX, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>		
<b>1. Colours</b>			
Erythrosine (to colour cherries only when artificially coloured cherries are used)	Limited by GMP	Temporarily endorsed by the 8th session of the CCFA	Para 56
<b>2. Natural flavours</b>			
2.1 Natural fruit essence	Limited by GMP	Temporarily endorsed by the 8th session of the CCFA	para 57
2.2 Natural flavours as defined in the Codex Alimentarius and their synthetic equivalents			
<b>3. Antioxidants</b>			
3.1 Ascorbic acid	700 mg/kg, singly or in combination	Endorsement postponed	para 58
3.2 Erythorbic acid			
<b>4. Acidifying agent</b>			
Citric acid	Limited by GMP	Endorsed	
<b>5. Firming agents</b>			
5.1 Calcium chloride	total 350 mg/kg, calculated as Ca	Endorsed	
5.2 Calcium lactate			
5.3 Calcium gluconate			
<b>6. Contaminant</b>			
Tin	250 mg/kg, calculated as Sn	Endorsement postponed	para 47

Proposed Draft standard for Canned Mature Processed Peas  
(Appendix X, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>	
<b>1. <u>Firmina agents</u></b>		
1.1 Calcium chloride	total 350 mg/kg, calculated as Ca	Endorsed
1.2 calcium lactate		
1.3 Calcium gluconate		
<b>2. <u>Colours</u></b>		
2.1 Green 'S' (1956) (C.I. 44 090)	200 Mg/kg, singly or in combination	Endorsement para 59 postponed
2.2 Tartrazine (1956) (C.I. 19 140)		
2.3 Brilliant Blue FCF (1956) (C.I. 42090)		
<b>3. <u>Contaminant</u></b>		
Tin	250 mg/kg, calculated as Sn	Endorsement para 47 postponed

Proposed Draft Standard for Pickled Cucumbers  
(Appendix XI, ALINORM 74/20)

<u>Additive</u>	<u>Maximum Level</u>	
<b>1. <u>Solubilizing and dispersing agents</u></b>		
Polyoxyethylene (20) sorbitan monoöleate (polysorbate 80)	500 mg/kg	Endorsement para 60 postponed
<b>2. <u>Firming agent</u></b>		
Aluminium potassium sulphate (potassium Limited by GMP alum)		Endorsement para 60 postponed
<b>3. <u>Preservatives</u></b>		
3.1 Benzoic acid and sodium benzoate	1000 mg/kg	
3.2 Sorbic acid and sodium and potassium sorbates		

Draft Standard for Canned Fruit Cocktail  
(Appendix IV, ALINORM 72/20A)

<u>Additive</u>	<u>Maximum Level</u>	
<b><u>Antioxidant</u></b>		
L-Ascorbic acid	500 mg/kg	Endorsed paras 55, 61

Recommended Standard for Canned Mushrooms

<u>Additive</u>	<u>Maximum Level</u>	
Pectins <sup>1</sup>	10 g/kg	Endorsed para 86

<sup>1</sup> Includes amidated and non-amidated pectins.

**FOODS FOR SPECIAL DIETARY USES**

Proposed Draft Standard for Processed Foods for Infants and children Based on Cereals  
(Appendix IV, ALINORM 74/26)

From the food additives listed below no more than two additives may be used from each group in a product. The total amount added should not exceed the limit for one additive (see para 65).

<u>Additive</u>	<u>Maximum Level in the ready-to-eat product</u>	
1. <u>Thickening agents</u>		
1.1 Guar gum	10 g/kg	Endorsement paras 62, postponed 63, 64
1.2 Locust bean gum (Carob gum)	10 g/kg	
1.3 Pectin	15 g/kg	
1.4 Alginic acid and its sodium, potassium and calcium salts	10 g/kg	
1.5 Agar-agar	10 g/kg	
2. <u>Emulsifiers</u>		
2.1 Lecithin	13 g/kg	
2.2 Mono- and diglycerides of long-chain fatty acids which occur naturally in food	30 g/kg	
3. <u>Inorganic stabilizers</u>		
Calcium chloride	Limited by GMP	
4. <u>pH Adjusting agents</u>		
4.1 Sodium bicarbonate	Limited by GMP	Endorsement paras 62 postponed 63
4.2 Potassium bicarbonate		
4.3 Calcium carbonate		
4.4 Sodium hydroxide		
4.5 Citric acid		
4.6 L-Lactic acid		
5. <u>Antioxidants</u>		
5.1 Tocopherols		
5.2 L-Ascorbyl-6-palmitate		
5.3 L-Ascorbic acid and its sodium and potassium salts		
6. <u>Flavours</u>		
6.1 Harmless natural flavouring materials and their identical synthetic equivalents		
6.2 Ethyl vanillin		
7. <u>Enzymes</u>		
Amylase		
8. <u>Carry-over</u> : The carry-over principle applies as defined by the Codex Committee on Food Additives, unless otherwise defined		
9. <u>Pesticide residues</u> : The product shall be prepared with special care under good manufacturing practices, so that residues of those		para 33, ALINORM 72/24A

pesticides which may be required in the production, storage or processing of the raw materials or the finished food do not remain, or, if technically unavoidable are reduced to the maximum extent possible

10. Other contaminants: The product shall be free from residues of hormones, antibiotics and practically free from other contaminants

Draft Standard for Infant Formula  
(Appendix V(A), ALINORM 74/26)

From the food additives listed below no more than two additives may be used from each group in a product. The total amount added should not exceed the limit for one additive (see para 65).

<u>Additive</u>	<u>Maximum level in the ready-to-eat product</u>	
1. <u>Thickening agents</u>		
1.1 Guar gum	1000 mg/kg	Endorsement paras 66-68
1.2 Locust bean gum (Carob bean gum)	1000 mg/kg	postponed 68
1.3 <u>Modified starches</u>		
(a) Distarch phosphate	5000 mg/kg, singly or in combination	Endorsement paras 66-68
(b) Acetylated distarch phosphate		
(c) Phosphated distarch phosphate		
(d) Hydroxypropyl starch		
1.4 Carrageenan	1000 mg/kg	
1.5 Pectin	5000 mg/kg	para 64
1.6 Alginic acid and its sodium, potassium and calcium salts	3000 mg/kg	
1.7 Agar-agar	1000 mg/kg	
2. <u>Emulsifiers</u>		
2.1 Lecithin	6000 mg/kg	paras 66-68
2.2 Mono- and diglycerides of long-chain fatty acids which occur naturally in food fats	5000 mg/kg	
3. <u>Inorganic stabilizers</u>		
Sodium hexametaphosphate (sodium polyphosphate)	1000 mg/kg	
4. <u>pH Adjusting agents</u>		
4.1 Sodium hydrogen sulphate	Limited by GMP	
4.2 Potassium hydrogen sulphate		
4.3 Sodium hydrogen carbonate		
4.4 Sodium carbonate		
4.5 Potassium hydrogen carbonate		
4.6 Potassium carbonate		

- 4.7 L(+)-Lactic acid
- 4.8 Citric acid and its sodium and potassium salts
- 4.9 Acetic acid
- 4.10 L(+)-Lactic acid producing cultures

5. Antioxidants

- 5.1 Tocopherols
- 5.2 L-Ascorbyl-6-palmitate

6. Pesticide residues: The product shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage or processing of the raw materials or the finished food do not remain, or, if technically unavoidable, are reduced to the maximum extent possible

para 33,  
ALINORM  
72/24A

7. Other contaminants: The product shall be free from residues of hormones, antibiotics and practically free from other contaminants

Proposed Draft standard for Canned Baby Foods  
(Appendix V(B), ALINORM 74/26)

From the food additives listed below no more than two additives may be used from each group in a product. The total amount added should not exceed the limit for one additive (see para 65).

<u>Additive</u>	<u>Maximum level in the ready-to-eat product</u>	
1. <u>Thickening agents</u>		
1.1 Guar gum	15 g/kg	Endorsement paras 66- postponed 68
1.2 Locust bean gum (Carob bean gum)	15 g/kg	
1.3 <u>Modified starches</u>		
(a) Distarch phosphate	60 g/kg, singly or in combination	
(b) Acetylated distarch phosphate		
(c) Phosphated distarch phosphate		
(d) Acetylated distarch adipate		
(e) Hydroxypropyl starch		
1.4 Carrageenan	10 g/kg	
1.5 Pectin	50 g/kg	
1.6 Alginic acid and its sodium, potassium and calcium salts	15 g/kg	
1.7 Agar-agar	10 g/kg	
2. <u>Emulsifiers</u>		



- |  |                |  |
|--|----------------|--|
| 2.1 Lecithin   | 10 g/kg        |  |
| 2.2 Mono- and diglycerides of long-chain fatty acids which occur naturally in food fats  | 30 g/kg        |  |
| 3. <u>Inorganic stabilizers</u>  |                |  |
| Calcium chloride   | Limited by GMP |  |
| 4. <u>pH Adjusting agents</u>  |                |  |
| 4.1 Sodium hydrogen carbonate  |                |  |
| 4.2 Sodium carbonate   |                |  |
| 4.3 Potassium hydrogen carbonate   |                |  |
| 4.4 Calcium carbonate  |                |  |
| 4.5 Sodium hydroxide   |                |  |
| 4.6 Citric acid and its sodium salt  |                |  |
| 4.7 Acetic acid  |                |  |
| 4.8 Malic acid   |                |  |
| 4.9 L(+)-Lactic acid   |                |  |
| 5. <u>Antioxidants</u>   |                |  |
| 5.1 Tocopherols  |                |  |
| 5.2 L-Ascorbyl-6-palmitate   |                |  |
| 5.3 L-Ascorbic acid and its sodium and potassium salts   |                |  |
| 6. <u>Flavours</u>   |                |  |
| 6.1 Harmless natural flavouring materials and their identical synthetic equivalents  |                | para 62                                      |
| 6.2 Ethyl vanillin   |                |  |
| 7. <u>Carry-over</u> : The carry-over principle applies as defined by the Codex Committee on Food Additives, unless otherwise stated   |                |  |
| 8. <u>Pesticide residues</u> : The product shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage or processing of the raw materials or the finished food do not remain, or, if technically unavoidable, are reduced to the maximum extent possible |                | Endorsement para 23 postponed ALINORM 72/24A |
| 9. <u>Other contaminants</u> : The product shall be free from residues of hormones, antibiotics and practically free from other contaminants   |                |  |

COCOA PRODUCTS AND CHOCOLATE (ALINORM 74/10)

Draft Standard for Cocoa Beans, Cocoa Nib, Cocoa Mass, Cocoa Press Cake and Cocoa Dust for Use in the Manufacture of Cocoa and Chocolate Products

(Appendix II, ALINORM 74/10)

<u>Contaminant</u>	<u>Maximum Level</u>		
Copper (Cu)	30 mg/kg in cocoa beans, cocoa nib and cocoa mass	Endorsed	para 69

Draft Standard for Cocoa Butters

(Appendix III, ALINORM 74/10)

<u>Additive</u>	<u>Maximum Level</u>		
1. <u>Processing aids</u>			
1.1 <u>Clarifying, "degumming" and filtration aids</u>	Limited by GMP leaving minimum residues	Endorsement postponed	para 70
1.2 <u>Neutralizing agents</u>	Lye and other suitable neutralizing agents appearing in the Codex List		
1.3 <u>Bleaching agents</u>	Bentonite, activated charcoal and other suitable bleaching agents appearing in the Codex List		
2. <u>Extraction solvents</u>	Suitable extraction solvents appearing in the Codex List		

Proposed Draft Standard for Cocoa Powder with Additives for Industrial Purposes

(Appendix IV, ALINORM 74/10)

<u>Additive</u>	<u>Maximum Level</u>		
1. <u>Alkalizing and neutralizing agents</u>	carried over in proportion to the maximum quantity as provided for in <u>Standard for Cocoa Powder (Cocoa) and Sweetened Cocoa Powder (Sweetened Cocoa)</u>	Endorsed	
2. <u>Emulsifiers</u>			
2.1 Lecithin	50 g/kg of the acetone insoluble component of lecithin	Endorsed	
2.2 Mono- and diglycerides of edible fatty acids	50 g/kg		
3. <u>Stabilizers</u>			
3.1 Carrageenan	3.5 g/kg, singly or in		para 71

3.2 Alginates, sodium, potassium, calcium ammonium salts and propylene glycol alginates	combination		
3.3 Carboxymethylcellulose or its sodium salt			
4. <u>Flavouring agents</u>			
4.1 Natural flavours as defined in the Codex Alimentarius, and their synthetic equivalents, other than those which would imitate natural chocolate or milk flavours	Limited by GMP	Temporarily endorsed	
4.2 Ethyl vanillin <sup>1/</sup>		Endorsed	para 72
5. <u>Contaminants</u>			
5.1 Arsenic (As)	1 mg/kg	Temporarily endorsed	
5.2 Copper (Cu)	50 mg/Ag		
5.3 Lead (Pb)	1 mg/kg		

<sup>1</sup> Vanillin is covered by the provision for natural flavours and their synthetic equivalents (4.1).

## MILK PRODUCTS

### International Individual Standard for Cream Cheese (Rahmfrischkäse)

(Appendix V, Report of the 16th Session of the Joint FAO/WHO Committee on Milk and Milk Products)

<u>Additive</u>	<u>Maximum Level</u>	
1. Karaya gum	5 g/kg of the weight of the finished cheese	Endorsement postponed pending toxicological evaluation by the JECFA
2. Tragacanth gum		
3. Locust (Carob) bean gum		
4. Xanthan gum		
5. Dicotyl sodium sulphosuccinate		

### Draft Standard for Flavoured Yoghurt

(Appendix III-B, Report of the 16th Session of the Joint FAO/WHO Committee on Milk and Milk Products)

<u>Additive</u>	<u>Maximum Level</u>	
1. Food colours (to be specified)	(to be established)	Endorsement postponed
2. <u>Stabilizers</u>		
2.1 Furcellaran	5000 mg/kg, singly or in combination	Endorsed
2.2 Arabic gum		
2.3 Guar gum		
2.4 Agar-agar		
2.5 Carrageenan		
2.6 Sodium carboxymethyl cellulose (cellulose gum)		
2.7 Propylene glycol alginate		
2.8 Sodium, potassium, calcium and ammonium alginates		

Para 72

2.9 Xanthan gum		Endorsement postponed
2.10 Locust (Carob) bean gum		pending
2.11 Karaya gum		toxicological
2.12 Tragacanth gum		evaluation by the JECFA
2.13 Pectins <sup>1</sup>	10 g/kg	Endorsed
2.14 Gelatine	10 g/kg	
2.15 Modified starches	30 g/kg	Endorsement postponed

### 3. Preservatives

3.1 Sorbic acid and its sodium, potassium and calcium salts	maximum levels to be established
3.2 Sulphur dioxide	
3.3 Benzoic acid	

<sup>1</sup> Includes amidated and non-amidated pectins.

#### International Individual Standards for Cheese

(Danablu, Danbo, Edam, Gouda, Havarti, Samsøe, Tilsiter, Limburger, Saint-Paulin, Svecia, Herrgårdstost, Hushållstost, Norvegia, Maribo, Fynbo, Esrom, Amsterdam, Leidse, Friese, Blue-veined cheese)

<u>Additive</u>	<u>Maximum Level</u>	
Nitrate, sodium and potassium	200 mg/kg of the milk used	Endorsement Para 73 postponed

#### International Standard for Cottage Cheese

(Standard No. C-16 (1968, submitted for acceptance))

<u>Additive</u>	<u>Maximum Level</u>	
Phosphoric acid	Limited by GMP	Endorsement Para 86, postponed ALINORM 71/12

#### Processed Cheese Standards

(Standard Nos. A-8(a) to A-8(c))

<u>Additive</u>	<u>Maximum Level</u>	
Nisin	12.5 mg/kg, calculated as pure nisin	Endorsed Para 74

#### Standard for Evaporated Milk and Evaporated Skimmed Milk

(Standard No. A-3(1971), sent to governments for acceptance)

<u>Additive</u>	<u>Maximum Level</u>	
Carrageenan	150 mg/kg	Endorsed Para 75

#### TABLE OLIVES

##### Draft Standard for Table Olives

(Appendix V, ALINORM 74/21)

<u>Additive</u>	<u>Maximum Level</u>	
1. Benzoic acid and its sodium or potassium salts	1000 mg/kg, expressed as benzoic acid	Endorsed

- |      |  |                                    |                      |         |
|------|--|------------------------------------|----------------------|---------|
| 2.   | Ferrous gluconate (solely to stabilize the colour of treated olives darkened by oxidation) | 150 mg/kg as total Fe in the fruit | Temporarily endorsed | para 76 |
| <br> |  |                                    |                      |         |
| 3.   | <u>Processing aids</u><br>Sodium hydroxide, when used in the preparation of alkaline lye   | Limited by GMP                     | Endorsed             | para 77 |

### QUICK FROZEN FOODS

#### Draft Standard for Quick Frozen Peaches (CX/QFF 74/2)

<u>Additive</u>	<u>Maximum Level</u>		
[1. Sodium alginate] <sup>1</sup>	[Limited by GMP]	Endorsement	para 78
2. Pectins <sup>2/</sup>	Limited by GMP	postponed	
3. Ascorbic acid <sup>3/</sup>			

<sup>1</sup> Previous temporary endorsement withdrawn (ALINORM 72/12).

<sup>2</sup> Includes amidated and non-amidated pectin.

<sup>3</sup> For a full endorsement it is necessary to establish a maximum level in the food; limitation by GMP has been temporarily endorsed by the 8th session (ALINORM 72/12).

### FISH AND FISHERY PRODUCTS

#### Proposed Draft Standard for Quick Frozen Fillets of Hake (Appendix V, ALINORM 74/18)

<u>Additive</u>	<u>Maximum Level</u>		
1. Monophosphate, monosodium or monopotassium (Na or K orthophosphate)	5000 mg/kg of the final product, expressed as P <sub>2</sub> O <sub>5</sub> , singly or in combination	Endorsed	para 79
2. Diphosphate, tetrasodium or tetrapotassium (Na or K pyrophosphate)			
3. Triphosphate, pentasodium or penta potassium or calcium (Na, K or Ca tripolyphosphate)			
4. Polyphosphate, sodium (Na hexameta phosphate)			
5. Ascorbate, sodium or potassium salts	1000 mg/kg of the final product, expressed as ascorbic acid)		

#### Proposed Draft Standard for Quick Frozen Shrimps or Prawns (Appendix III, ALINORM 74/18A)

<u>Additive</u>	<u>Maximum Level</u>		
1. Citric acid	Limited by GMP	Endorsed	para 80
2. Ascorbic acid		Endorsement postponed	
3. Canthaxanthine C.I. 75 135	30 mg/kg of the final	Endorsed	para 81
4. Erythrosine C.I. 45 430	cooked product, singly	Temporarily	
5. Ponceau 4R C.I. 16 255	or in combination	endorsed	
6. Diphosphate, tetrasodium or tetrapotassium (Na or K pyrophosphate)	5000 mg/kg of the final product, expressed as	Endorsed	para 82

- |  |  |                     |
|--|--|---------------------|
| 7. Triphosphate, pentasodium or penta  | P <sub>2</sub> O <sub>5</sub> , singly or in combination |                     |
| 8. Sodium bisulphite                   | (For use in raw product                                  | Endorsement para 82 |
| 9. Sodium sulphite                     | only) 30 mg/kg of the                                    | postponed           |
| 10. Sodium hyposulphite                | final product,   |                     |
| 11. Sodium or potassium metabisulphite | expressed as SO <sub>2</sub> , singly or in combination  |                     |
| 12. Monosodium glutamate               | Limited by GMP   |                     |

**Proposed Draft Standard for Canned Crab Meat**  
(Appendix VI, ALINORM 74/18A)

<u>Additive</u>	<u>Maximum Level</u>	
1. Disodium diphosphate (sodium acid pyrophosphate) and phosphoric acid	5000 mg/kg, expressed as P <sub>2</sub> O <sub>5</sub>	Endorsed para 83
2. Citric acid	Limited by GMP	
3. Aluminium sulphate	180 mg/kg	Endorsement postponed pending toxicological evaluation by the JECFA)

**PROCESSED MEAT PRODUCTS**

**Draft Standard for Cooked Cured Hams and Cooked Cured Pork Shoulder**

<u>Additive</u>	<u>Maximum Level</u>	
1. Guanylic acid, Na salt	500 mg/kg, expressed as guanylic acid	Endorsement postponed pending toxicological evaluation by the JECFA para 84
2. Inosinic acid, Na salt	500 mg/kg, expressed as inosinic acid	
3. Hydrolyzed protein (used as flavour enhancer)	Limited by GMP	Endorsement postponed

**Draft Standard for Cooked Cured Luncheon Meat**

<u>Additive</u>	<u>Maximum Level</u>	
1. Guanylic acid, Na salt	500 mg/kg, expressed as guanylic acid	Endorsement postponed para 85
2. Inosinic acid, Na salt	500 mg/kg, expressed as inosinic acid	pending toxicological evaluation by the JECFA
3. Monosodium glutamate	5000 mg/kg, expressed as glutamic acid	Endorsed

- |                                  |  |                          |
|----------------------------------|--|--------------------------|
| 4. Glucono-delta-lactone         | 3000 mg/kg                             |                          |
| 5. Erythrosine (C.I. No. 45 430) | 15 mg/kg, to replace<br>loss of colour | Endorsement<br>postponed |

THE CARRY-OVER PRINCIPLE

1. For the purpose of the Codex Alimentarius, the "Carry-over" Principle applies to the presence of additives in food as a result of the use of raw materials or other ingredients in which these additives were used. The presence of contaminants is not covered by this Principle.
2. The presence of an additive in food through the application of the carry-over principle is admissible in general and the principle should be understood as applying to all Codex Standards, unless otherwise specifically stated in such standards, if:
  - (a) the additive is permitted in the raw material or other ingredient by an applicable Codex standard or under any acceptable standard or other legal specification;
  - (b) the amount of the additive in the raw material or other ingredient does not exceed the maximum amount so permitted;
  - (c) the quantity of the additive carried over is not greater than that which results from good technological and/or manufacturing practice and its level in the finished food does not proportionately exceed the level permitted in the raw material or other ingredient; and
  - (d) the additive carried over is present at non-functional and insignificant levels in the finished food.
3. The appropriate Commodity Committee, in conjunction with the Codex Committee on Food Additives should, where necessary, establish overall limits for additives when used as an ingredient and carried over into a food.



WORKING PRIORITIES FOR THE JOINT FAO/WHO EXPERT COMMITTEE ON FOOD  
ADDITIVES TENTATIVE LIST

- |   |  |
|---|--|
| <p>I. <u>COLOURS</u></p> <p>a. Allura Red AC<br/>Anthocyanins<br/>Azorubine<br/>Beet Red and Betanin<br/>Black 7984<br/>Brilliant Black BN<br/>Brown FK<br/>Capsanthine<br/>Capsorubine<br/>Carotenes<br/>Chocolate Brown FB<br/>Chocolate Brown HT<br/>Chrysoine<br/>Cochineal &amp; Carminic Acid<br/>Curcumin<br/>Fast Yellow AB<br/>Iron hydroxides<br/>Iron oxides<br/>Licorice<br/>Lycopene<br/>Orange GGN<br/>Orange RN<br/>Orchil and Orcin<br/>Persian Berries<br/>Ponceau 6R<br/>Red 2G<br/>Scarlet GN (specially pure)<br/>Xanthophylls<br/>Yellow 2G</p> <p>b. Alkanet<br/>Alkanin<br/>Aluminium<br/>Benzyl violet 4B<br/>Carthamus<br/>Chrysoine SGX (specially pure)<br/>Fast Red E<br/>Gold<br/>Lithol Rubine BK<br/>Orange I<br/>Quercetin<br/>Quercitron<br/>Saffron, Crocin, Crocetin</p> | <p>Silver<br/>Ultramarines</p> <p>II. <u>LIQUID FREEZANTS</u></p> <p>Nitrogen (Specifications)<br/>Carbon dioxide<br/>(Specifications)<br/>Dichlorodifluoromethane</p> <p>III. <u>METALS</u></p> <p>Tin</p> <p>IV. <u>THICKENING AGENTS</u></p> <p>Tragacanth gum<br/>Karaya gum<br/>Locust bean gum (Carob bean gum)<br/>Tara gum (Peruvian Carob bean gum)<br/>Xanthan gum<br/>Hydroxypropyl distarch phosphate<br/>Starch sodium succinate<br/>Dioctyl sodium sulphosuccinate</p> <p>V. <u>FLAVOUR ENHANCERS</u></p> <p>Guanylic acid, sodium and calcium salts<br/>Inosinic acid, sodium and calcium salts<br/>Calcium-5'-ribonucleotide<br/>Sodium-5'-ribonucleotide<br/>L-arginine L-glutamate<br/>L-lysine L-glutamate</p> <p>VI. <u>CARRIER SOLVENTS</u></p> <p>Butane-1,3-diol<br/>Diethylene glycol monoethyl ether<br/>Diethyltartrate<br/>Dipropylene glycol<br/>Isopropyl alcohol<br/>Propan-1-ol</p> <p>VII.</p> |
|---|--|

## EXTRACTION SOLVENTS

Trichloromethane

Cyclohexane

## VIII. MISCELLANEOUS

Calcium bisulphate

Aluminium potassium sulphate

Potassium hydrogen sulphate

Sodium hydrogen sulphate

Aluminium sulphate

Sodium thiosulphate (Sodium

Hyposulphite)

L-Ascorbic acid, potassium salt

Ferrous gluconate

Potassium chloride

Pimaricine

Asbestos

Smoke and condensed smoke

Sorbyl palmitate (Mixed  
anhydride of sorbic and  
palmitic acids)

Glycerol esters of wood resin