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REPORT OF THE FOURTH SESSION OF THE
CODEX SUB-COMMITTEE ON PROCESSED MEAT PRODUCTS
AND CONSUMER PACKAGED MEAT
Copenhagen, 9-13 June 1969

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REPORT OF THE FOURTH SESSION OF THE
CODEX SUB-COMMITTEE ON PROCESSED MEAT
PRODUCTS AND CONSUMER PACKAGED MEAT

OPENING OF THE SESSION

1. The Codex Sub-Committee on Processed Meat Products and Consumer Packaged. Meat held its fourth session from 9-13 June 1969 in Copenhagen under the Chairmanship of Dr. V. Enggaard (Denmark). The Secretariat consisted of representatives of FAO and WHO and the office of Dr. Enggaard. The session was attended by 67 delegates, advisers and observers from 26 countries and 3 international organizations. The list of participants is attached as Appendix I.
2. The session was opened by Mr. E. Mortensen (Head of Division, Ministry of Agriculture) who welcomed the participants on behalf of the Danish Government. He expressed the hope that despite the heavy agenda facing the Committee, agreement would be reached on the standards.

ADOPTION OF THE AGENDA

3. The Sub-Committee unanimously adopted the provisional agenda.

ELECTION OF RAPPORTEUR

4. Mr. L.G. Hanson, United Kingdom, was appointed Rapporteur to assist the Secretariat in the preparation of the draft report.

REPORT BY THE CHAIRMAN

5. The Chairman stressed that the standards being elaborated by the Sub-Committee were world-wide. He also pointed out that the standards under consideration were deficient in some respects, such as the sections on Hygiene, Methods of Analysis and Sampling, and Labelling. The Chairman expressed the hope that the question of meat content would be settled at the present session.

PROPOSED DRAFT CODE OF HYGIENIC PRACTICE FOR PROCESSED MEAT PRODUCTS

6. The Sub-Committee had before it a document drawn up by Denmark, Federal Republic of Germany, New Zealand and WHO (PM/69/1, March 1969), on the basis of the General Principles for Food Hygiene, with certain modifications. The Sub-Committee agreed to discuss the 'title' and 'scope' sections after having considered all other sections of the Code, in order to determine whether the Code should cover all the meat products encompassed by the Sub-Committee's terms of reference, i.e. consumer packaged meat and processed meat products. The Sub-Committee noted that a draft Code of Hygienic Practice had been drawn up for precooked and partially cooked frozen foods for consideration by the Codex Committee on Food Hygiene in 1970. It was pointed out that there might be some overlap between the Code of Hygienic Practice under consideration and that drawn up for the Hygienic Committee with regard to pre-cooked frozen meat products.
7. During the discussion of Sections I - V the following points were raised and amendments made, and the amended text is shown in Appendix II to this report.
8. Amendment to Section I - Scope was made during the discussion of Section IV D.5 (see Appendix II).

9. After a brief discussion the Sub-Committee adopted Section II – Definitions with an amendment to the definition in paragraph 4, as follows, "hermetically-sealed container means an air-tight container"; and to the definition in paragraph 9, as follows, "Processed includes all methods of preservation but does not include prepacked fresh, chilled or frozen meat cuts or joints". The Delegation of the Netherlands reserved its position with regard to the definition of "meat", stating that it was too broad and that they favoured the OECD definition.

10. The Sub-Committee noted that Section III - Raw Material Requirements covered only raw material requirements to be met in establishments following ante-mortem and post-mortem inspect This section was adopted without amendment.

11. The Sub-Committee agreed that paragraph A.2(a) of Section IV - Establishment Facilities and Operating Requirements was too restrictive since it prevented absolutely the use of one part of an establishment for the production of more than one kind of food product, and adopted the following amended text: "Every department in which edible meat or meat products are prepared, processed or stored should be used for that purpose only at that time, and should be physically separated from every area used for the handling of inedible material or for other purposes."

12. A number of Delegations observed that the intention of the provision in paragraph 2(b) was to keep the temperature of the meat at the appropriate low level and proposed that a maximum figure of 7°C therefore should be set for the temperature of the meat. The Delegation of Spain said that the object would be achieved by specifying a maximum room temperature of 12°C. The Sub-Committee decided not to make any changes to the text but to invite governments to comment specifically as to whether or not there should be a provision for the temperature of the meat, as well as, or instead of, the temperature of the room, and which temperature(s) should be specified.

13. With respect to paragraph 2(i) the Sub-Committee agreed to increase the minimum height of the side curbs of stairs to 10 cm.

14. It was agreed that the word "put" be deleted in paragraph 2(k).

15. In connection with paragraph 2(n) the Sub-Committee noted a suggestion of the Delegation of the USA that taps of hand-basins should be such as not to require operation by hand, but decided not to make any provision at this stage. It was noted that the provision for hand washing facilities (not less than one for every 10 employees) was more rigorous than the corresponding one in the General Principles for Food Hygiene. Some Delegations were not convinced that such a difference could be justified for the Code of Hygienic Practice for Meat and Meat Products. The Sub-Committee agreed to ask governments to comment specifically on this matter.

16. The Delegation of New Zealand suggested that the accommodation for Inspectors, in paragraph 2(o), should also provide for dining room facilities.

17. The Sub-Committee did not adopt paragraph B.3. Equipment and Utensils but decided to replace it with the corresponding paragraph in the General Principles for Food Hygiene as follows: "Equipment and utensils used for inedible or contaminating materials should be so identified and should not be used for edible products."

18. With respect to paragraph C.1(c) concerning Hygienic operating requirements the Sub-Committee agreed that all parts of the walls needed thorough cleansing and agreed to delete the words "lower portions of".

19. It was agreed that the equipment listed in sub-paragraph 1(d) would be subjected to different methods to render them suitable for use in the manufacture of meat products. For example, certain utensils and implements might be subjected to processes of sterilization while other equipment, such as tables and other furniture, might have to be subjected to special methods of disinfections and cleansing. The Sub-Committee, therefore, agreed to the amended text given below and also agreed that paragraph B.2 should be amended in a similar manner: "All tables, utensils, implements, equipment including knives, cleavers, knife pouches, saws and containers, should be forthwith thoroughly cleansed and sterilized or disinfected as the case may be, whenever they come into contact with diseased or infected material and at the conclusion of each working day or whenever necessary, particularly during the cutting up of meat when knives and steels require frequent sterilization, in special containers provided for this purpose in each room where the preparation of meat takes place."

20. During the discussion on paragraph C.4 it was pointed out that the corresponding provisions in the General Principles on Food Hygiene had been modified without any great change of substance and that governments should, therefore, be asked to say whether changes of rewording were really necessary. Some Delegates thought it best to say in the Code what should be done without specifying whose responsibility it should be. It was suggested that the first part of 4(b) should be deleted [management should take care to ensure that] but as these words were taken directly from paragraph C.4 of the General Principles on Food Hygiene it was decided to leave them in for the present. The question of the need for requiring a compulsory medical examination was also discussed but the Committee decided to leave paragraph 4(c) as drafted pending comments by governments. It was agreed to delete paragraph 4(e) and to amend paragraph 6(j) as indicated below.

* (paragraph C.4)

21. The following amended Section IV.6.i concerning Hygiene and personnel and food handling practice was agreed to:

"Staff handling raw materials or semi-processed products should not come in contact with any finished products unless and until they discard all such protective clothing worn by them during the handling of raw materials and semi-processed products which have come in direct contact or have been soiled by the raw material or semi-processed products. All uncovered parts of the body, such as hands and arms, should always be washed thoroughly and disinfected after handling raw materials and semi-processed products prior to handling finished products."

22. It was agreed that the words "and the relevant parts of this Code" be included after the words "principles of hygiene" in the first line of sub-paragraph (j) of paragraph 6.

23. It was agreed to amend paragraph D. 1(a) concerning Raw material handling by ending the sentence after the word "inspection" and by replacing the words "and that" with the words "they should not be accepted unless". It was also agreed to replace the word "deleterious" in the last sentence with the word "harmful".

24. On the proposal made by the Danish Delegation, it was decided that the contents of paragraph 5 concerning Preservation of finished product should appear in an Appendix to this Code. Other appendices would also be drawn up which would vary according to the type of preservation (e.g. canning, freezing, drying, smoking, irradiation) used. It was, therefore, agreed that this paragraph should contain only the following

sentence: "requirements for the preservation of specific groups of meat products are given in appendices to this Code" and that in consequence of this the scope section of the Code be amended to: "This Code of Hygienic Practice, including the appendices, applies to processed meat products". The text under paragraph IV.D.5 was fully discussed as a draft for the appendix to deal with canned meat products.

25. With respect to the provisions stated in 5(c) "that any recirculated water must be treated by the addition of chlorine so that it contains not less than two parts per million of free chlorine at the point of usage after a contact time of at least 20 minutes" the Danish Delegation proposed a lower minimum level of free chlorine because a minimum figure of 2 ppm might require the use of an average level high enough to cause corrosion. The Sub-Committee, however, decided to retain the existing text but agreed that in this sentence the word "must" should be replaced by "should" and that governments should be asked to comment specifically on the level of chlorine, which should be specified in order to ensure effective treatment, and on which information was available about the levels which might cause corrosion.

26. A proposal was made by the Danish Delegation in connection with paragraph 5(f) to specify that the incubation of cans should be limited to shelf-stable products. The Sub-Committee decided to defer discussion of this method until consideration of the hygiene sections of individual standards.

27. The question was raised in connection with paragraph 5(g) whether or not the provision of permanently marking containers with the establishment number, the country of origin and the date of production was to be included in a Code of Hygienic Practice. It was pointed out that the provision, as stated in this Code, did not relate to labelling provisions but was aimed at public health control purposes only. It was decided, therefore, to retain the existing text.

28. It was pointed out, in connection with paragraph E(a) dealing with Sanitation control programme, that cleaning staff were often employees of outside contractors who undertook the cleaning of establishments. It was suggested that an appropriate amendment be made to recognise this practice, but, since the wording of this paragraph was that in the General Principles of Food Hygiene, it was agreed to make a note in the report drawing attention to this point without amending the draft code.

29. It was decided to delete paragraph E(c) - Sanitation Control Programme referring to dry-sweeping and to rely on the provisions which were designed to prevent all kinds of contamination.

30. In paragraph F the Sub-Committee agreed to amend the last sentence dealing with the disposal of unsuitable products as follows: "Products unfit for human consumption should be rejected." The Delegation of the USA was of the opinion that this provision should be listed under a separate heading.

31. The Danish Delegation suggested that the sentence in paragraph B of Section V-End Product Specification should read "The products should be free from any micro-organisms pathogenic to man and should not contain any toxic substances produced by micro-organisms in a concentration believed to constitute a public health hazard." In the discussion it was mentioned that some methods of analysis were becoming so sensitive that they could easily detect amounts of toxins not harmful to humans. The Sub-Committee agreed to the above amendment, with the exception of France and Guyana who reserved their position.

32. It was decided to alter the sentence in paragraph C to read: "The products should comply with the requirements for pesticide residues and food additives laid down by the Codex Alimentarius Commission,"

33. The Sub-Committee decided that the proposed Draft Code of Hygienic Practice for Meat and Meat Products should be advanced to Step 3 of the Procedure (see Appendix II).

DETERMINATION OF MEAT CONTENT

34. The Sub-Committee had before it the following documents on this subject: PM/69/3, PM/68/3/A, CL/1968/52, PM/69/4, PM/69/Meat Content, PM/69/3/Nitrogen Content, PM/69/Canada, PM/69/Germany and PM/69/Sweden. The Chairman recalled paragraph 23 of the Report of the Third Session of the Sub-Committee in which governments had been requested to supply information on a number of questions relating to minimum meat content in canned hams. The Delegation of the USA drew the Sub-Committee's attention to certain errors concerning the USA views in document PM/69/4 and provided the Sub-Committee with a statement of their views on the proposed methods of controlling the composition of canned hams.¹ The Delegate of Argentina stated that he would have to reserve his position with respect to this and other questions until experts from Argentina arrived at the session.

¹ This statement will be distributed at a later stage

Canned hams

35. The Chairman drew the Sub-Committee's attention to the desirability of considering the inclusion of a provision for the minimum meat content because of the possibility of pumping brine into hams to a weight 20% above the original. Some Delegations were of the opinion that there should be a provision for a minimum meat content in the end product, while other Delegations maintained that a control of processing was preferable. Other Delegations considered that in the absence of appropriate information on which control could be based, and in particular of factors which could properly be applied to individual hams - which differed widely for natural reasons - it was not practicable nor desirable to include provisions at least at this stage.

36. The Sub-Committee discussed the paper provided by the USA on the control of added substances in domestic canned hams (CL 1968/52, CX 5/27.2) and the proposed method concerning water/protein ratio given in document PM/69/3. It was pointed out that the setting of any limit might encourage the use of non-meat protein in the curing solution and that this would affect, to some extent, the interpretation of the analysis.

37. A number of Delegations were strongly opposed to the introduction of an arbitrary provision into the standard since, in their opinion, sufficient data were not on hand to support specific values. It was pointed out that the figures proposed by the USA, while true of that country, were not necessarily acceptable on a world-wide basis and that, for example, they differed from the figures prepared by the Netherlands. It was pointed out that ham obtained from different sources showed a significant variation in protein to water ratio.

38. The question was also raised as to whether the proposal of the USA could be acceptable for a Codex Standard, since the method of control of meat content was based not on the Standard for a particular can but on a statistical control of batches or lots. It was considered that any provision for minimum meat content should apply to all containers and could not be a subject of tolerances. On the other hand it was noted that ham was not a homogenous product and that a sampling plan, therefore, would have to

make provisions for tolerances to take into account the variation which necessarily exists between individual containers. It was noted that the Codex Committee on Processed Fruits and Vegetables had already elaborated such a sampling plan for processed fruit and vegetable products, but it was pointed out that this plan did not relate to sampling at the retail level or to public health aspects (see paragraph 92).

39. It was decided to proceed to a vote on the proposal that, in principle, a provision for minimum meat content should be elaborated for this product. The Delegation of the U.K. considering the importance of the issue, requested a roll call. The result of the roll call, which took place at 11.45 a.m. on 10th June 1969 was:

Canada	Yes
Denmark	Yes
F.R.Germany	Yes
Finland	Yes
France	Abstained
Hungary	Yes
Ireland	No
Kenya	Yes
Madagascar	Yes
Netherlands	Yes
N.Zealand	No
Norway	Yes
Poland	Yes
Spain	Absent
Sweden	Yes
Togo	Abstained
Turkey	Yes
U.K.	No
USA	Yes
Yugoslavia	Yes
Argentina	Abstained *
Australia	Yes
Austria	Abstained
Belgium	Abstained

* See paragraph 34

The Sub-Committee decided, therefore, by 15 votes for, with 3 against and 5 abstentions, that a provision for minimum meat content should be drawn up. The Delegation of Australia wished to record that it voted in principle and was not in favour of batch control.

40. After further discussion it was agreed that, if a provision was to be included at the next session, it would be necessary for governments who wanted to include it, to supply information on the points outlined below. In this regard it is required to make a comparative evaluation of alternate methods of assessing the "meat content" (water-protein ratio, meat content by Stubbs and Moore, "added substances" as used by the USA, etc.) of canned hams. To accomplish this, the following data need to be furnished:

- (a) The water, protein and fat content of uncured ham meat, with and without skin,
- (b) The water, protein, fat and salt content of canned hams, with and without skin, provided that the percentage of curing solution can also be indicated.

These analyses should be based on the entire contents of the can, i.e. they should include the exuded jelly, juice and fat.

- (c) The methods of analyses used for each of the determinations. The data furnished may be for individual hams or as an average, accompanied by the applicable standard deviation.
- (d) If the average and standard deviations are submitted, the number of hams included should also be indicated.

Information on the above should be sent to the Chairman of the Sub-Committee, with copies to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Rome, by 15 January 1970. The Delegation of the USA agreed to provide background data and procedures used in developing the statistical control system for its "added substances" approach. The Delegation of the Netherlands agreed to make the relevant information available to the Secretariat as soon as possible and not later than the above date; other Delegations also agreed to supply information as soon as possible.

With regard to the meat content of ham containing other added ingredients (question A.(ii), paragraph 23, ALINORM 69/16) such as pineapple, the Committee agreed to postpone discussions until the question of minimum meat content in ham had been settled. A similar decision was reached in connection with questions A.(iii) and B of paragraph 23, ALINORM 69/16 concerning methods of control of the finished product and the need to set a limit for exuded jelly.

Canned luncheon meat

42. The question was raised whether a method of analysis could be established for the determination of ingoing meat content on the finished product. The Delegation of the U.K. was in favour of leaving it open for governments to use any suitable method for this purpose. The Delegation of Canada informed the Sub-committee that a method was being evolved which would make the quantitative determination of vegetable protein possible. The Sub-Committee deferred further discussion on this matter. The Delegation of the Netherlands undertook to supply relevant information to the Secretariat of the Sub-Committee.

PROPOSED DRAFT STANDARD FOR CANNED HAMS

43. The Sub-Committee examined the Proposed Draft Standard for Canned Hams held at Step 4 (Appendix II to ALINORM 69/16) in the light of government comments in documents PM/69/5, PM/69/IOCU, PM/69/Canada, PM/69/Germany and PM/69/Sweden. The amended text of the Standard appears as Appendix III to this Report.

44. In connection with the Scope section, it was agreed that a definition of "hermetically sealed containers" was necessary in order to enable all suitable materials to be used in accordance with the decision recorded in paragraph 18 of the Report of the Third Session of the Sub-Committee. It was recognised that suitable plastic materials could be used. The Delegation of France pointed out that the French word "boite" would limit the scope to rigid containers. The Sub-Committee considered a proposed definition after concluding the examination of the Draft Standard and in the light of its provisions. The amended definition agreed to is as follows:

"Hermetically sealed container means a container which is completely sealed, [rigid] and impermeable and which is made of any appropriate material which is suitable for the product covered by the Standard."

45. Some Delegations proposed to exclude boar meat as suitable material for the preparation of hams from the Description section. The Sub-Committee, however, decided to leave the text unchanged. Several Delegations expressed the opinion that the meaning of the words 'leg' and 'gristle' should be more precisely defined. The Sub-Committee agreed to the amended text in Appendix III. The amendment was considered not to represent a change of substance.

46. After a discussion of the section on Essential composition or quality factors the Sub-Committee decided to retain fancy packs in the Standard, as it was considered preferable that the Standard should cover all types of canned hams.

47. The following modifications to the sub-section on Ingredients were agreed to by the Sub-Committee: To include water and honey and to replace 'sugar' by 'sugars as defined by the Codex Alimentarius Commission'. A majority was in favour of the inclusion of agar as an alternative to gelatine in hams, particularly in those produced for countries with a hot climate. The Sub-Committee decided to include agar in the Food Additives section. The Delegations of Argentina, the Federal Republic of Germany and the USA reserved their position as they considered that only gelatine should be permitted.

48. In connection with the sub-section Essential quality factors, some countries suggested that a method for controlling the requirements of sliceability was desirable and that, if possible, it should be included: The Sub-Committee requested the Federal Republic of Germany and Poland to prepare a working paper giving details of the methods referred to in their comments for the next session. Such paper should be sent to the Secretariat before 15 January 1970.

49. During the discussion of the Food Additives section, the Chairman reported that the Codex Committee on Food Additives had not met since the third session of the Sub-Committee and, therefore, had not yet considered the provisions for food additives in the Standards. The Sub-Committee agreed to include carrageenan and alginates, in addition to agar, as alternatives to gelatine. The Delegation of France expressed the view that the maximum limit of 500 ppm of nitrites was not sufficient for some curing processes. The Sub-Committee noted that whereas all additives listed in this section were expressed as the total amount in the final product, the maximum limit for phosphates was expressed as the amount added to the raw material. The Sub-Committee agreed to draw the attention of the Food Additives Committee to this fact. The Delegation of the Federal Republic of Germany reserved its position regarding the provisions for phosphates and also for sodium citrate which were not allowed in their country. It was agreed to add inosinate and guanylate as acceptable flavour enhancers for this product, with the maximum tentative levels of 500 mg/kg. It was also decided to include cyclamate in the Standard, and the Delegation of the USA undertook to provide the Committee on Food Additives (before its next session) with data about levels of use. In view of the lack of substantial information provided by governments as to which artificial flavourings and smoking agents should be permitted in the Standard, the Sub-Committee decided to defer any final decision and agreed to ask governments once more to submit detailed information on these agents and on their levels of use.

50. The countries responsible for drafting the Code of Hygienic Practice for Processed Meat Products proposed to include certain passages of the Code as mandatory provisions in the Hygiene section of the Standard. Several Delegations pointed out that there might be disadvantages in selecting certain extracts from the advisory Code and giving them mandatory effect in a Standard. First, the selected

passages were applicable to all processed meat products and, therefore, ought to be mandatory for all such products and not simply those covered by a particular Standard. Second, the selection of particular passages of the Code as mandatory carried with it the implication that the remainder were not of prime importance and, therefore, weakened their effect and did not take full account of the widely held view that the control of hygiene was a continuous process. The Sub-Committee recognised the importance of including appropriate mandatory provisions and adopted, on a provisional basis, the recommendation of the drafting group (see Appendix III) without prejudice to further examination after government comments, and asked that the attention of Governments should be specially drawn to this point.

51. The Sub-Committee had before it the decisions made by the Codex Committee on Food Hygiene at its sixth session concerning Heat treatment. The Sub-Committee noted that the above Committee had decided to postpone the endorsement of 68.9 C as the minimum temperature in the centre of canned hams pending the receipt of further information from the Sub-Committee. A reference to the requirement for heat treatment was noted in the Report of the sixth session of the Codex Committee on Food Hygiene that such heat treatment "represented a proper safeguard from the point of view of public health, and at the same time was designed to guard against the transmission of foot and mouth disease". The Sub-Committee noted that this was not exactly in accord with the decision recorded in paragraph 39 of the Report of its third session (ALINORM 69/16). The Sub-Committee had reached the decision "from the point of view of protecting public health" and had chosen 68.9 C at the centre, to be held at least momentarily, because this was a temperature which had proved in practice to be effective for that purpose. Some Delegations stated that in their view too much attention was being paid to animal diseases and that a temperature of 65.5° C would be equally effective, especially if it was maintained for an appropriate period of time, and that such a temperature had, in fact, been used for some time without any difficulty. The Delegation of the U.K. stated that in view of the lack of precise information, it might be better not to quote specific figures so long as suitable provisions were included in the Standard about storage requirements. The Delegation of New Zealand stated that its opposition to perishable canned meat products was related only to the problem of animal health. The Sub-Committee agreed to include the provisions for heating times and temperatures in square brackets in the Standard. Governments were invited to provide the Sub-Committee with precise information with particular reference to temperature and time, and relationship to other factors affecting preservation, such as raw material and curing processes. This information should be sent to the Secretariat of the Sub-Committee before 15 January 1970, with copies to the Chief, Joint FAO/ WHO Food Standards Programme, FAO, Rome.

52. The Sub-Committee did not agree to a proposal made by Argentina requiring the addition of chlorine to all cooling water. It was pointed out that only recirculated water had to be chlorinated and otherwise the water had to be potable, that is, it would have to meet the requirements laid down in the "International Standards for Potable Water, WHO, Geneva, 1963".

53. It was agreed that certain types of container would not necessarily show visible vacuum and an appropriate amendment was made to this provision.

54. The Sub-Committee discussed the need for an incubation test and considered the tentative proposal of the Drafting Group on the Code of Hygienic Practice (PM/69/2 - CX 5/27.3) and tentatively suggested that a better way of controlling stability might be a continuous check of the processing conditions and the processing records. It was

decided to postpone discussion on this question until a later session when, it was hoped, the sampling plans for health protection purposes referred to in paragraph 183 of the Commission's Report of the sixth session would be available.

55. The Sub-Committee reviewed the Recommended General Standard for the Labelling of Prepackaged Foods in order to decide which provisions were applicable to the Standard for Canned Hams. It was agreed that the sections appearing in the amended Standard (see Appendix III) applied.

56. The Sub-Committee agreed that the declaration of certain substances which formed part of the normal curing process for ham need not be made mandatory and agreed that Section 3(2)(a) should be replaced by the text shown in paragraph 6B (iii) of the amended Standard (see Appendix III).

57. The Delegations of Argentina, Canada, Denmark, Federal Republic of Germany, Norway and the USA stated that they were strongly in favour of a mandatory declaration of the country of origin. The Sub-Committee noted that the general policy on this issue had been thoroughly discussed by the Codex Committee on Food Labelling and the sixth session of the Codex Alimentarius Commission, and that Canned Ham did not represent a special case. This section of the General Standard was, therefore, adopted without amendment.

58. The Sub-Committee agreed that Section 5 of the General Labelling Standard did not apply to Canned Ham.

59. It was noted that the General Standard did not at present provide for a class title for gelling agents. The Sub-Committee agreed to provide for "gelling agents" in the same way as for gelatine, as part of the name of the product, as this would be more meaningful for the consumer than the chemical names. The Sub-Committee agreed that the substances which the term covered should be specified in the Standard.

60. Paragraph B(i) - Specific labelling provision - was rewritten in accordance with a proposal made by the Danish Delegation to take account of fancy packs. It was agreed that mandatory requirements should be simultaneously visible with the name, and that the specific provision for ham which had not been skinned should be replaced by a general provision which permitted descriptions of processes, etc. It was agreed that such descriptions be mandatory where appropriate, i.e. where their omission would mislead the consumer.

61. The Sub-Committee discussed a note by the Drafting Group on the Code of Hygienic Practice (PM/69/5/B - CX 5/27.3) concerning paragraph B(ii), Storage instructions, in which it was pointed out that it should be the responsibility of the producer to provide appropriate storage instructions since only the producer would have the necessary knowledge about the effects of heat, processing and hygiene during production and curing processes. The Sub-Committee recognised that although the producer could indicate storage conditions in the relevant documents for commercial purposes, clear statements on the label were necessary for non-shelf-stable products, especially for consumer packs. The Sub-Committee recognised that the contents of the declaration would depend on a variety of factors, and therefore decided to include provisions in general terms, as in Appendix III, paragraph 6.B(iv).

62. The Sub-Committee decided, after a full discussion, not to amend paragraphs B(iii) and B(iv) - Impressions on containers. The Delegate of France maintained that the country of origin should be shown in clear only and that the date of production should be

in an open code, and reserved his position with respect to this question for all the Standards being elaborated.

63. The Sub-Committee agreed that the Proposed Draft Standard for Canned Hams, as amended, should be submitted to the Commission at Step 5 of the Procedure for the Elaboration of world-wide Codex Standards (see Appendix III).

PROPOSED DRAFT STANDARD FOR CANNED LUNCHEON MEAT

64. The Sub-Committee examined the Standard for Luncheon Meat, held at Step 4, appearing in Appendix IV, ALINORM 69/16, in the light of government comments in documents PM/69/8/A, PM/69/8, PM/69/Canada, PM/69/Germany and PM/69/Sweden. The amended version of the Standard is given as Appendix IV to this Report. During the discussion, the following comments were made and amendments agreed to.

65. During the discussion of the Scope section, a number of Delegations expressed the opinion that the standard for Canned Luncheon Meat also applied to Canned Chopped Meat, and that the elaboration of a special standard for Canned Chopped Meat was not necessary. The majority of the Sub-Committee, however, was in favour of elaborating two separate standards for these products in view of current trade practices.

66. The Sub-Committee agreed that the present Description section was too restrictive for a world-wide standard and decided that all reference to species of animals should be deleted. Some Delegations pointed out that some kinds of edible offals were used in the production of luncheon meat. In this connection the Delegation of the U.K. drew the attention of the Sub-Committee to the fact that the usual method of scalding pigs made possible the penetration of scalding water into the lungs, resulting in a highly contaminated product. The Delegation of the Netherlands mentioned a new method of spray-scalding which prevented such contamination of the lungs. The Sub-Committee agreed to include spleens, lungs and pork rind per se as raw materials for use in the production of luncheon meat on the understanding that the lungs from pigs immersed in a scalding tank were not acceptable. The Sub-Committee agreed that a statement should be included in the description section to make this requirement mandatory. The Delegation of the Federal Republic of Germany stated that edible offals and pork rind were not allowed in that country in the production of luncheon meat.

67. With respect to the section on Essential composition and quality factors, the Sub-Committee agreed that carbohydrate binders derived from legumes should be allowed and deleted the provisions which excluded them from the list of ingredients. It was also agreed that "blood serum" should be amended to "dried blood serum" and "sugar" to be replaced by "sugars as defined by the Codex Alimentarius Commission".

68. Some Delegations were in favour of setting a limit for lean meat content or fat content; the Delegation of the U.K. maintained that certain offals should not count towards the meat content. The Sub-Committee decided to defer a decision to its next session and requested the Delegations of Denmark and the Netherlands to provide information on this subject.

69. With respect to the sliceability of Canned Luncheon Meat, the Sub-Committee agreed to proceed in the same manner as for Canned Ham (see paragraph 48).

70. With respect to the section on Food Additives, the Delegation of the Netherlands informed the Sub-Committee that the same maximum levels applied for inosinate and guanylate as in the case of Canned Hams. The Sub-Committee agreed to include these levels on a tentative basis. The Delegation of the Netherlands also proposed the

inclusion of glucono-delta-lactone into the standard. The Sub-Committee requested the Delegation to supply the necessary technological justification for the use of this additive, so that the inclusion could be considered at a later session. With respect to artificial flavourings, essences and extracts, the Sub-Committee decided to request governments to specify these additives and the proposed maximum levels for their use before sending these provisions to the Codex Committee on Food Additives for endorsement. The Sub-Committee agreed that it would be appropriate to leave open for a final decision the addition of colouring agents until the standard was more or less in a final form and that this matter would be considered again at the next session in the light of government comments.

71. The Sub-Committee decided to include, under the Hygiene section, the special hygiene provisions agreed to as mandatory for processed meat products and already inserted into the standard on Canned Hams (see paragraph 50). Some Delegations pointed out that this product required a higher temperature heat treatment than Canned Hams since some of the raw materials used in the production of this product might be highly contaminated (e.g. lungs, comminuted meat, cereals). The Sub-Committee decided to ask Governments to comment on the time-temperature combination which, in their opinion, should be used in the preparation of this product. It was agreed that the provisions mentioned in paragraphs 52 and 53, concerning cooling water and containers, relating to the standard for Canned Ham applied also to Canned Luncheon Meat.

72. The Sub-Committee agreed that the General Standard for the Labelling of Pre-packaged Foods applied fully to this standard. It was pointed out that the consumer should be informed about the presence of certain species of animals used for meat, not usually consumed or not permitted for religious or other reasons. The Sub-Committee, therefore, agreed to include a provision in the standard to make it mandatory to declare such meat if the omission of such declaration would lead to the deception of the consumer. It was agreed that a similar provision be included in the standard with respect to the declaration on binders. Since the standard for Luncheon Meat covered two types of products, namely perishable (packs above 3 lb) and shelf-stable, the Delegations of Argentina and New Zealand reserved their position stating that a provision should be included in the standard for a higher temperature treatment to ensure shelf-stability. The Sub-Committee agreed that the same provision for storage instructions and impression on the container should apply to Canned Luncheon Meat as that agreed to in Canned Hara (see paragraph 9). In this connection the Delegation of France made the same reservation as that made in connection with Canned Hams.

73. The Sub-Committee agreed that the Proposed Draft Standard for Canned Luncheon Meat, as amended, should be submitted to the Commission at Step 5 of the Procedure for the Elaboration of World-Wide Codex Standards (see Appendix IV).

PROPOSED DRAFT STANDARD FOR CANNED CHOPPED MEAT

74. The Committee examined the standard for Canned Chopped Meat held at Step 3, contained in Appendix V, ALINORM 69/16, in the light of government comments contained in documents PM/69/9, PM/69/Canada, PM/69/Germany and PM/69/Sweden. During the discussion of this standard the following comments were made and amendments agreed to.

75. In connection with the section on Description, the Delegation of the Netherlands drew attention to the need to have a definition for "coarsely cut" in the description of the product. The Sub-Committee agreed to ask Governments to comment on this matter and

then to consider it further at the next session. It was pointed out that there was an ambiguity in the definition relating to the word "cooked" which could be taken as referring either to the finished product or to the ingoing meat. The Sub-Committee agreed that the meat was cooked in the can and agreed to delete the word "cooked" from the Description section.

76. The majority of the Sub-Committee considered that the standard for Canned Chopped Meat referred to a product of different quality, having more coarsely chopped meat and a higher meat content than the Canned Luncheon Meat. It was agreed that the three offals - lungs, spleen and pork rind per se - specially included by the Sub-Committee in the Description section of the Luncheon Meat Standard, were not appropriate for inclusion in the standard for Chopped Meat. The Delegations of France, the Federal Republic of Germany, and Australia maintained that the standards for Canned Luncheon Meat and Canned Chopped Meat covered one and the same product.

77. In connection with the Essential composition and quality factors, the Delegation of Denmark proposed to reduce the ingoing raw meat content of Canned Chopped Meat with binders to 80%. The Sub-Committee decided not to make an amendment but agreed that the whole question of lean meat content, fat content, etc. be taken up at the next session. It was agreed to amend the carbohydrate and protein binders in the same way as in the Canned Luncheon Meat standard. With respect to sliceability, the Delegation of Argentina stated that a method at 15°C was available for this purpose. The Sub-Committee agreed to proceed in the same manner as for the Canned Hams and Canned Luncheon Meat standards.

78. During the discussion of the Food Additives section, the Delegation of the Netherlands indicated that a limit of 500 mg/kg for Inosinate and Guanylate was technologically required, as in the previous standards discussed. The Sub-Committee agreed to include these levels on a tentative basis. The Delegation of the Netherlands also proposed the inclusion of glucono-delta-lactone into the standard. The Sub-Committee requested the Delegation to supply the necessary technological justification as indicated in paragraph 70.

79. The Sub-Committee agreed to the same text for the section on Hygiene as that adopted for luncheon meat.

80. The Sub-Committee was of the opinion that all the provisions of the General Standard for Food Labelling of Prepackaged Foods would be applicable to Canned Chopped Meat. In connection with the name of the product it was pointed out that the word "meat" need not be required always to appear on the label. The Sub-Committee agreed to the following amended paragraph:

"The name of the product shall include the designation 'chopped meat' except that the word 'meat' may be replaced by a word describing the kind of meat used, or where more than one kind of meat has been used, by the names in descending order of proportion, e.g. 'chopped pork', 'chopped pork and beef'."

It was agreed that the rest of the Labelling section should be the same as that of the standard for Canned Luncheon Meat. The same reservations as for Canned Luncheon Meat were raised in connection with the various sections of the standard for Canned Chopped Meat.

81. The Sub-Committee adopted the Proposed Draft Standard for Canned Chopped Meat and decided that it should be submitted to the Commission at Step 5 of the Procedure for the Elaboration of world-wide Codex Standards (see Appendix V).

PROPOSED DRAFT STANDARD FOR CORNED BEEF

82. The Sub-Committee had before it the standard for Canned Corned Beef held at Step 4 (Appendix III, ALINORM 69/16) and government comments on the standard (documents PM/69/7, PM/69/Canada, PM/69/Germany and PM/69/Sweden). The Chairman drew the Sub-Committee's attention to the fact that governments had not been asked for comments on specific points concerning this standard. During the discussion, the following comments were made and amendments agreed to.

83. With respect to the section on Description, the Sub-Committee noted that the standard covered two products, one of which was made from carcass meat only, and that both products had been in international trade for a long time. The Delegation of the USA objected to the use of tendons, even if comminuted, maintaining that the product should contain meat only. Some Delegations pointed out that the word "pre-cooked" did not reflect the real treatment of meat and that this word should be replaced by an expression such as "scalded". The Sub-Committee decided to retain the word "pre-cooked". The Delegation of the Netherlands was of the opinion that the description section should also cover a perishable variety of this product. The Delegation of New Zealand, supported by other Delegations, strongly objected to the proposal. The Subcommittee decided not to make the amendment proposed by the Netherlands.

84. The following amendments were adopted with respect to Essential composition and quality factors:

- (a) "sugar" should read "sugars (for curing) as defined by the Codex Alimentarius Commission"
- (b) Provision for "total exuded jelly and fat" and "sliceability at 15°C" to be deleted from the standard as it was agreed that the criteria of sliceability would be controlled by consumer acceptance.

The Delegation of Argentina maintained that Corned Beef should be capable of being sliced at 15°C to a thickness of 2mm. The majority of the Delegations were in favour of a provision to control the meat or water content of Corned Beef, but it was decided to postpone a decision until next year and to await information on the composition of Corned Beef to be supplied by the interested countries.

85. During the discussion of the section on Food Additives the Delegation of the Federal Republic of Germany, supported by the Delegation of France, proposed that ascorbic acid should be permitted as a curing ingredient. The Sub-Committee did not agree to this proposal and decided that the list of food additives should be limited to nitrates and nitrites.

86. The Sub-Committee agreed that the sections of Hygiene and Labelling, agreed to for the standard for Canned Hams, applied also to Canned Corned Beef except for the provision concerning the minimum heat treatment which applied only to perishable products.

87. The Sub-Committee drew the attention of the Commission to the desirability for an internationally recognised Code for the marking of containers to indicate the country of origin. The Delegation of Argentina reserved its position, stating that the country of origin should always be given in clear only.

88. The Sub-Committee agreed that the Proposed Draft Standard for Corned Beef should be submitted to the Commission at Step 5 of the Procedure for the Elaboration of world-wide Codex Standards (see Appendix VI).

PROPOSED DRAFT STANDARD FOR CANNED PORK SHOULDER

89. The Sub-Committee had before it a standard for Canned Park Shoulder (Picnic) contained in document PM/69/10. It was pointed, out that in some countries the word "picnic" signified only part of the shoulder. It was, therefore, decided to delete the word "picnic" in the title and elsewhere in the standard, but to ask governments to comment on the need for labelling provisions about the use of the terra "picnic".

90. As regards other provisions in the standard, the Sub-Committee agreed that they should be amended in the same way as had been the case with the standard for Canned Hams, because of the similarity of the various provisions for these two products. The amended standard is attached as Appendix VII.

91. The Sub-Committee decided that the Proposed Draft Standard for Canned Pork Shoulder should be sent to governments for comment at Step 3 of the Procedure for the Elaboration of world-wide Codex Standards (see Appendix VII).

METHODS OF ANALYSIS AMP SAMPLING

Methods of Analysis

92. The Sub-Committee examined a number of proposals for methods of analysis for the various provisions of the standards contained in working papers PM/69/11, PM/67/Appendix B, CODEX/ANALYS/67-10 and PM/69/Secretariat Note. The Sub-Committee agreed that the following should be covered by a suitable method of analysis:

- (a) Nitrite content
- (b) Nitrate content
- (c) Ascorbic acid and iso-ascorbic acid contents
- (d) Added phosphates
- (e) Inosinate content
- (f) Guanylate content
- (g) Cyclamate content
- (h) Protein content
- (i) Water content
- (j) Fat content

It was agreed to insert into the standards, where applicable, the ISO methods, i.e. the ISO method for protein determination (ISO Recommendation R-937) and the ISO method for the determination of nitrite in meat and meat products. The Sub-Committee noted that the method (Diemair, w., 1963) suggested by the Codex Committee on Methods of Analysis and Sampling for determination of nitrites and nitrates, was a qualitative one and agreed not to discuss this method any further. The Sub-Committee requested the Danish Secretariat to explore the possibility of obtaining suitable methods of analysis from recognised International Organizations expert in the analysis of meat and meat products and, in order to expedite the elaboration of suitable Codex methods of analysis for the various meat standards, prepare a working paper for the next session of the Codex Committee on Methods of Analysis and Sampling.

Methods of Sampling

93. The Sub-Committee considered the Sampling Plans for Prepackaged Foods adopted at Step 5 by the Codex Alimentarius Commission at its last session. It was pointed out that government comments had been requested on the applicability of the above Sampling Plans to products other than processed fruits and vegetables. The Sub-Committee also noted that the Sampling Plans did not apply at retail level and did not

cover criteria relating to public health and other aspects (viz. hygiene, toxic substances, highly objectionable materials, etc.). The Sub-Committee further noted that the Sampling Plans were based on an AQL of 6.5, an aspect which must be considered in relation to the various quality criteria in the meat standards. It was agreed to await comments from governments before embarking upon a detailed discussion of the Sampling Plans.

94. The Sub-Committee was further informed that the International Committee on Microbiological Specifications for Food had elaborated Sampling Plans for a considerable number of food products, among them meat products, and it was agreed that the Sub-Committee should work in close liaison with the above International Committee.

TECHNICAL PROCEDURE OF SAMPLING FOODS

95. The Sub-Committee had before it Appendix VI of the Report of the fourth session of the Codex Committee on Methods of Analysis and Sampling (ALINORM 69/23) on which comments had been requested by that Committee from Commodity Committees. It was decided to examine this matter at a later session.

CONSIDERATION OF FURTHER STANDARDS

96. The Sub-Committee had before it government comments on the desirability of elaborating standards for:

- (a) salami and salami-type sausages
- (b) canned sausages in brine
- (c) canned stewed meat with gravy

The Sub-Committee agreed that, in view of the already heavy work load facing the Committee, the question of elaborating further standards would have to be considered at a later session after some of the present standards had been completed.

OTHER BUSINESS

97. There was no other business to be considered.

FUTURE WORK

98. It was noted that if a number of standards, now advanced to Step 5, were sent by the Commission to governments for comment at Step 6, the next session of the Sub-Committee would have to be scheduled in such a way as to enable governments to consider the standards at Step 6 and make available their comments in good time to the Sub-Committee.

SUMMARY OF STATUS OF WORK

prepared by the Secretariat

In accordance with the recommendations of the Sixth Session of the Codex Alimentarius Commission, the following is the Sub-Committee's current status of work:

- (a) Standards considered at the Fourth Session of the Sub-Committee
 - (i) Canned Hams considered at Step 4 and advanced to Step 5.
 - (ii) Canned Luncheon Meat considered at Step 4 and advanced to Step 5.
 - (iii) Corned Beef considered at Step 4 and advanced to Step 5.
 - (iv) Canned Chopped Meat considered at Step 3 and advanced to Step 5.
 - (v) Canned Pork Shoulder considered at Step 2 and advanced to Step 3.
- (b) Codes of Practice considered at the Fourth Session of the Sub-Committee
 - (i) Code of Hygienic Practice for Processed Meat Products considered at Step 2 and advanced to Step 3.

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PROPOSED DRAFT CODE OF HYGIENIC PRACTICE FOR
PROCESSED MEAT PRODUCTS

(at Step 3)

I SCOPE

This Code of Hygienic Practice, including the appendices, applies to processed meat products.

II DEFINITIONS

1. "Container" means any hermetic enclosure for food including, but not limited to, metal, glass or laminated plastics.
2. "Edible" means suitable as food for humans.
3. "Establishment" includes any premises in which meat products are prepared, processed, handled and stored.
4. "Hermetically sealed container" means air-tight container.
5. "Inedible" means unsuitable as food for humans.
6. "Inspector" means an officer appointed by the competent authority of a country for the purpose of meat and meat products inspection.
7. "Meat" means the edible part of any mammal which is normally used for human consumption.
8. "Meat product" means a product intended for human consumption containing meat.
9. "Processed" includes all methods of preservation but does not include prepacked, fresh, chilled or frozen meat cuts or joints.
10. "Potable water" means water that is pure and wholesome at the point of usage in accordance with the WHO 1963 requirements contained in the "International Standards for Drinking Water".
11. "Unfit for human consumption", in relation to meat and meat products, means an article that would normally be edible but is inedible because of disease, decomposition or any other reason.

III. RAW MATERIAL REQUIREMENTS

1. No meat should be used for the processing and manufacture of meat products unless and until the carcass from which the meat has been derived has been examined ante-mortem and post-mortem by an Inspector in accordance with the criteria valid in the country of origin and accepted by the country of destination. It should be passed and branded by him as fit for human consumption.
2. No meat should be used for the processing and manufacture of meat products which has undergone any process of decomposition or has otherwise deteriorated.

3. All raw materials should be adequately stored and kept off the floor after delivery to the establishment.
4. Where necessary, a bacteriological or biochemical test should be made of the raw material prior to its being moved into the production area of the establishment.

IV. ESTABLISHMENT FACILITIES AND OPERATING REQUIREMENTS

A. ESTABLISHMENT CONSTRUCTION AND LAYOUT

1. The establishment should be located in an area which can be kept reasonably free from objectionable odours, smoke, dust or other contaminants; the size of the establishment should be sufficient to allow for the required working space; the construction should be sound and ensure adequate ventilation, good natural or artificial lighting and easy cleaning; the layout and construction of the premises should ensure that departments in which meat or meat products are processed are used for that purpose and no other and are at all times protected from contamination. In every department in which meat is stored, handled, prepared or processed the floor should be constructed of an impervious and easily cleaned material that is resistant to wear and corrosion and adequately graded and drained; the walls should be constructed of impervious, non-toxic, non-absorbent material having a smooth surface; the ceiling should be so designed and constructed as to prevent the accumulation of dirt and condensation, it should be dustproof and be easily cleaned. The premises should be of such construction as to protect against the entrance and harbouring of insects, birds or vermin. Effective sewage facilities should be provided and should at all times be maintained in good order and repair; catch-basins, traps, save-alls, and sumps should at all times be kept separate and apart from any department in which meat or meat products are prepared, processed, packed or stored.
2. Sanitary facilities and controls
 - (a) Every department in which edible meat or meat products are prepared, processed or stored should be used for that purpose only at that time, and should be physically separated from every area used for the handling of inedible material or for other purposes.
 - (b) The temperature in boning-out and trimming rooms should at no time during working hours exceed 10° C.
 - (c) An ample supply of potable water should be provided with adequate facilities for its storage and distribution and with adequate protection against contamination and pollution.
 - (i) All water used in departments in which meat or meat products are prepared or processed should be potable.
 - (ii) Where non-potable water is used for such purposes as fire control, it must be carried in completely separate lines, identified preferably by colour and with no cross

connection or backsiphonage with the lines carrying potable water.

- (d) Ice should be made from potable water and should be manufactured, handled, stored and used so as to protect it from contamination.
- (e) An adequate supply of hot potable water should be available at all times during working hours.
- (f) All inedible material resulting from the preparation and processing of meat and meat products, refuse and rubbish should be removed promptly and in such a manner as to avoid contaminating meat or meat products, potable water, equipment, floor and walls. Inedible meat should be so treated that it cannot be used for human consumption or supply food or harbour for vermin.
- (g) Adequate ventilation should be provided to prevent excessive heat, steam and condensation and ensure that the air of the premises is not contaminated with odours, dust, vapours or smoke. Ventilation openings should be screened. Windows should be fitted with whole panes and those which open should be screened.
- (h) Adequate lighting should be provided in every room in which meat or meat products are prepared and processed. When artificial lighting is provided, it should be well distributed and of good quality. Light bulbs and fixtures suspended over food in any step of preparation should be of the safety type or otherwise protected to prevent contamination of the food product in the case of breakage.
- (i) All stairs located in any room used for the preparation or processing of meat and meat products should be so constructed that they can be easily cleaned and that no contamination can be caused by material passing through the risers or treads and should have side curbs that are at least 10 cm in height measured at the leading edge of the treads.
- (j) Platforms, ladders, chutes and similar facilities in any room used for the preparation or processing of meat and meat products should be constructed of metal which is not subject to rust or corrosion and which can be easily cleaned.
- (k) Floor drains should be kept in good condition and repair with strainers in places.
- (l) Doors should be tight-fitting when closed. External doors should be preferably double doors with an entrance lock between.
- (m) Adequate provision should be made in every establishment for changing-room accommodation, toilets, and shower and washing facilities for all persons employed. All such accommodation, toilets, and shower and washing facilities should at all times be kept clean and should have adequate lighting and ventilation; and

no changing-room, toilet, or room containing any shower or washing facilities should open directly into or upon any room, compartment, or space used for the preparation or processing of meat and meat products.

- (n) Conveniently adjacent to every toilet and in every room in which meat and meat products are handled, prepared or processed, an adequate number of suitably placed hand-washing facilities should be available; not less than one for every ten employees, furnished with waste pipes leading to a drain and with reticulation pipes supplying both hot and cold water. In addition, an adequate supply of soap or other cleansing agent together with clean dispenser type roller towels or paper towels or other acceptable means of drying the hands should be provided adjacent to each washing facility. Where paper towels are used, a sufficient number of receptacles should be provided.
- (o) Adequate accommodation for Inspectors should be provided by the management of an establishment and should comprise offices, changing rooms, toilets, showers and hand washing facilities with soap dispensers and suitable hygienic means of drying the hands. An access to laboratory facilities should be provided. The Inspectors' accommodation should be provided with adequate lighting, ventilation and heating. The management of an establishment should ensure that the accommodation is at all times maintained in good repair and condition, and is cleaned daily.

B. EQUIPMENT AND UTENSILS

1. All equipment, implements, tables, utensils and containers used in an establishment should be so constructed that they may readily be cleaned and made from a material which is non-toxic, smooth, free from pits, crevices or scale, unaffected by food products, non-absorbent and capable of withstanding repeated exposure to normal cleaning, and sanitizing. Stationery equipment should be installed in such a manner as will permit easy access and thorough cleaning.
2. There should be provided in every establishment adequate facilities for the cleaning and sterilization or disinfection, as the case may be, of all implements, equipment and utensils.
3. Equipment and utensils used for inedible or contaminated materials should be so identified and should not be used for edible products.
4. The use of wood in the production rooms should be restricted as far as possible. Where it is irreplaceable it should be planed and renewed at frequent intervals. Wooden surfaces that are soiled and washed daily should be allowed to dry after cleaning and sanitizing.
5. No containers should be assembled, and no containers, equipment or utensils stored or deposited in any part of an establishment in which meat or meat products are prepared, processed or stored, unless the containers, equipment or utensils are required for immediate use in that part.

C. HYGIENIC OPERATING REQUIREMENTS

1.
 - (a) Every room of an establishment where meat or meat products are handled, prepared, processed, packaged or stored should be kept in good repair and clean, and, as far as practicable, free from steam, vapour and surplus water.
 - (b) Any cooking of meat products should be done in separate areas suitably equipped for this purpose.
 - (c) Immediately after cessation of work for the day, or at such other times as may be required, the floor and walls should be thoroughly cleaned.
 - (d) All tables, utensils, implements, equipment including knives, cleavers, knife pouches, saws and containers should be forthwith thoroughly cleansed and sterilized or disinfected, as the case may be, whenever they come in contact with diseased or infected material and at the conclusion of each working day or whenever necessary, particularly during the cutting up of meat when knives and steels require frequent sterilization, in special containers provided for this purpose in each room where the preparation of meat takes place.
 - (e) If detergents, sanitizing agents and disinfectants are used they must conform to public health requirements and no such substance should be allowed to come in contact with any meat or meat product.
2. Every establishment should ensure that the premises are kept free from rodents, birds, flies, cockroaches and other vermin.
3. No dog or cat or any other domestic animal should be brought into any part of the establishment where meat or meat products are handled, prepared, processed or stored.
4.
 - (a) No person who is suffering from, or who is a carrier of any communicable disease, notably diarrhoea, or is suffering from any condition causing a discharge of pus or serum from any part of the head, neck, arms or hands should engage in any establishment in the preparation, processing, handling or transportation of meat or meat products or should work in any department where meat or meat products are prepared, processed, handled or transported. Any such person should immediately report to the management.
 - (b) Management should take care to ensure that no person, while known to be affected with a disease capable of being transmitted through food, or known to be a carrier of such disease micro-organisms, or while afflicted with infected wounds, sores, or any illness, is permitted to work in any area of an establishment in a capacity in which there is a likelihood of such person contaminating meat or meat products with pathogenic organisms.
 - (c) The manager of any establishment should, if required to do so by an Inspector, produce for perusal by the Inspector any medical certificate produced to the manager by an employee of the establishment.
 - (d) No person who is suffering from any cut or injury should engage in any establishment in the preparation, processing, handling or

transportation of any meat or meat product unless and until the cut or injury has been so treated or dressed that the discharge of blood on to the meat or meat product has been prevented.

5. All rodenticides, insecticides, fumigants or other toxic substances should be stored in separate rooms or cabinets under lock and key and dispensed and handled only by authorised and properly trained personnel to avoid any possibility of contaminating any meat or meat products directly or indirectly as the case may be.
6. Hygiene of personnel and food handling practice
 - (a) Every person engaged in an establishment should, before commencing work and on every occasion after visiting any toilet and before resuming work, wash his hands thoroughly with soap or other cleansing agent, and potable water.
 - (b) Every person engaged in an establishment should maintain a high degree of personal cleanliness while on duty, and should at all times while so engaged wear suitable protective clothing including a head-covering which should be maintained in a clean condition consistent with the nature of the work in which the person is engaged.
 - (c) Every person who visits an establishment should wear clean protective clothing and an appropriate head-covering.
 - (d) No clothing, other than protective clothing, should be deposited in any part of an establishment used for the preparation, processing, handling or transportation of meat or meat products.
 - (e) Protective clothing and knife pouches, etc. may be left in a place provided for the purpose in such a manner that they will not contaminate meat or meat products.
 - (f) Eating, use of tobacco or chewing gum, and spitting should be prohibited where meat or meat products are prepared, processed, handled or transported.
 - (g) Gloves, if used in the handling of meat and meat products, should be maintained in a sound, clean and sanitary condition; the wearing of gloves does not exempt the operator from having thoroughly washed hands as any other employee working without gloves. Gloves should be made of an impermeable material except where the use of such material would be inappropriate or incompatible with the work involved.
 - (h) No person working in any establishment should wear on the hand any bandage unless the bandage is completely protected by a waterproof covering and is of such a nature that it cannot become accidentally detached.
 - (i) Staff handling raw materials or semi-processed products should not come in contact with any finished products unless and until they discard all such protective clothing worn by them during the handling of raw materials and semi-processed products which have come in direct contact or have been soiled by the raw material or semi-

processed products. All uncovered parts of the body, such as hands and arms, should always be washed thoroughly and disinfected after handling raw materials and semi-processed products prior to handling finished products.

- (j) Every employee should be taught the principles of hygiene and the relevant parts of this Code so as to be able to take the necessary precautions to prevent contamination of meat, meat products and ingredients used for the preparation of meat products.

D. OPERATING PRACTICES AND PROTECTION REQUIREMENTS

1. Raw material handling

(a) No meat or meat products should be accepted by an establishment unless the meat or meat products have been derived from animals subjected to ante-mortem and post-mortem inspection. They should not be accepted unless they are properly branded or marked and in all ways suitable for human consumption and that they have not, subsequent to being examined by an Inspector, been exposed to contamination or processed or handled or subjected to the addition of any harmful substance which renders them unfit for human consumption.

(b) Meat and meat products should be stored in an establishment in such a manner as to prevent deterioration and contamination.

- 2. Raw materials and semi-manufactured goods should be kept completely separated from outgoing finished products.
- 3. Preparatory operations leading to the finished product and the packaging operations should be so timed as to permit expeditious handling of consecutive units in production under conditions which would prevent contamination, deterioration, spoilage, or the development of infectious or toxigenic microorganisms.

4. Packaging of finished product

Packaging materials should be clean and should be stored in a clean and sanitary manner to prevent contamination of the final product.

5. Preservation of finished product

Requirements for the preservation of specific groups of meat products are given in appendices to this Code.

- 6. The finished product should be stored off the floor and transported under such conditions as will preclude contamination, infestation and deterioration of the product or of the container.

E. SANITATION CONTROL PROGRAMME

- 1. It is desirable that each establishment in its own interest designate a single individual, whose duties are preferably divorced from production, to be held responsible for the cleanliness of the establishment. His staff should be a permanent part of the organization and should be well trained in the use of special cleaning tools, methods of disassembling equipment for cleaning, and in the significance of contamination and the hazards

involved. Critical areas, equipment and materials should be designated for specific attention to be cleaned and, if necessary, disinfected at least once daily as part of a permanent sanitation schedule.

2. When changing from products which are known to have, or presumed to have, a higher bacterial count to products with a lower count, the machinery and equipment should be cleaned and sanitized.

F. LABORATORY CONTROL PROCEDURES

In addition to the routine control carried out by the meat inspection services, it is desirable that each establishment in its own interest should have access to laboratory control of the sanitary quality of the products processed. The amount and type of such control will vary with the meat products as well as the needs of management. Analytical procedures used should follow recognised or standard methods in order that the results may be readily interpreted. Products unfit for human consumption should be rejected.

V. END PRODUCT SPECIFICATIONS

Appropriate methods should be used for sampling and analysis or determination to meet the following specifications:

- A. The products should be free from foreign matter to the extent possible in good manufacturing practice.
- B. The products should be free from any micro-organisms pathogenic to man and should not contain any toxic substances produced by micro-organisms in a concentration believed to constitute a public health hazard.
- C. The products should comply with the requirements for pesticide residues and food additives laid down by the Codex Alimentarius Commission.

APPENDIX A

Preservation of canned meat products

- a. Meat products packaged in hermetically sealed containers should be processed to withstand spoilage under commercial conditions of storage and transport.
- b. Processing conditions for specific formulations of canned meats should be based on the recommendations of technical specialists competent in canning technology. Such processing should be supervised in the establishment by technically competent personnel and be subject to check by the Inspector. Where applicable, processing records adequate to identify the processing history should be kept and made available for inspection.
- c. No water, other than potable water, should be used for the cooking or cooling of any hermetically sealed containers. Where heat processed containers are cooled in water, any recirculated water should be treated by the addition of chlorine so that it contains not less than two parts per million of free chlorine at the point of usage after a contact time of at least 20 minutes. Instead of chlorine other acceptable, efficient, disinfectants may be used adequately.
- d. After processing, containers should be handled in such a manner as to avoid contamination of the product; in particular, no person should handle a wet can. Rough treatment of processed cans, especially if such cans are wet, should be

- avoided. Belts, runways and other can-conveying equipment should be maintained in a clean condition and good repair.
- e. Processed hermetically sealed containers should be inspected to exclude defective containers.
 - f. Adequate facilities should be provided for the incubation of random samples of individual batches of cans.
 - g. Every container should be permanently marked, either in code or otherwise, to identify the establishment, country and date of production.
- N.B. Requirements for the preservation of meat products which are not packaged in hermetically sealed containers are given in the corresponding specific standards.

PROPOSED DRAFT STANDARD FOR GAMED HAMS

(at Step 5)

1 SCOPE

The provisions of this standard apply to [canned] hams in hermetically sealed containers which have been heat-treated after sealing.

2. DESCRIPTION

The product shall be made of meat from the hind leg of a pig, [divided transversely from the remainder of the side at a point not further anteriorly than the junction of the last lumbar and the first sacral vertebrae]¹ excluding boar meat having an objectionable odour and excluding comminuted or chopped meat. All bones and detached cartilage, tendons and ligaments shall be removed. Skin and fat may or may not be removed. The meat shall be cured and may be smoked, spiced and/or flavoured. The heat treatment shall be sufficient to ensure that the product remains wholesome under normal conditions or storage and sale.

¹ Governments are specially requested to comment upon this tentative definition.

Subsidiary definition

Hermetically sealed container means a container which is completely sealed, [rigid] and impermeable and which is made of any appropriate material which is suitable for the product covered by the standard.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Ingredients

- ham
- water
- salt
- sugars as defined by the Codex Alimentarius Commission
- honey
- gelatine
- spices, seasonings and condiments

3.2 Essential quality factors

The meat shall be clean and substantially free from staining from the container. The meat shall be uniformly and thoroughly cured and capable of being sliced. [Method of determining and sliceability to be developed]

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications, as contained in section ... of the Codex Alimentarius, are subject to endorsement, have been endorsed or temporarily endorsed by the Codex Committee on Food Additives, as indicated below:

Additive

Agar	not limited	subject to endorsement
Alginates, potassium and/or sodium salts	not limited	subject to endorsement
Ascorbic acid, iso-ascorbic acid and their sodium salts	500 mg/kg expressed as ascorbic acid on a total net weight basis singly or in combination	endorsed
Artificial flavourings, essences and extracts [to be specified]	maximum levels to be specified	subject to endorsement
Carrageenan	not limited	subject to endorsement
Citrate sodium	not limited	subject to Endorsement
Cyclamate, sodium and/or calcium	maximum levels to be specified	subject to endorsement
Guanylic acid, sodium salt	[500 mg/kg expressed as guanylic acid on a total net weight basis]	subject to endorsement
Inosinic acid, sodium salt	[500 mg/kg expressed as inosinic acid on a total net weight basis]	subject to endorsement
Monosodium glutamate	not limited	endorsed
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate on a total net weight basis	subject to endorsement
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite on a total net weight basis	Temporarily endorsed
Phosphates, Mono-, di- and Poly-sodium and potassium salts	3000 mg/kg expressed as P ₂ O ₅ may be added to the raw material singly or in combination	Temporarily endorsed

5. HYGIENE

- (a) It is recommended that the Code of Hygienic Practice for Processed Meat Products of the Codex Alimentarius Commission (subject to finalization) should apply, (see Appendix II to this Report) The following specific provisions in respect of the food hygiene of this product are subject to, or have been endorsed by the Codex Committee on Food Hygiene, as indicated below:
- (b) No meat or meat products shall be accepted by an establishment unless the meat or meat products have been derived from animals subjected to ante-mortem and post-mortem inspection. They shall not be accepted

unless they are properly branded or marked and in all ways suitable for human consumption and that they have not, subsequent to being examined by an Inspector, been exposed to contamination or processed or handled or subjected to the addition of any harmful substance which renders them unfit for human consumption.¹

- (c) Meat and meat products shall be stored in an establishment in such a manner as to prevent deterioration and contamination.¹
- (d) The heat treatment shall be such as to result in a temperature of at least [68.9°C momentarily] [65.5°C for ? minutes] at the centre of the product.²
- (e) The product shall be packaged in hermetically Sealed containers which do not permit contamination and which shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.
- (f) When processed containers are cooled in water, the water shall be of potable quality and suitably treated so as not to constitute a public health hazard. If cooling water is re-circulated, it shall be effectively disinfected by chlorine or otherwise before use or each re-use.³
- (g) After processing, containers shall be handled in such a manner as to avoid contamination of the product.²

¹ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products and it is proposed to apply them as mandatory provisions in the Standard (see Section IV.D.1 and D.5.d)

² The Sub-Committee will re-examine this issue at its next session in the light of government comments (see paragraph 51)

³ This provision has been endorsed by the Codex Committee on Food Hygiene.

6. LABELLING

- A. The provisions of sections 1 to 3.1, 3(2)(b) and (c), 3(3)(ii), 3(4) to 4(2) and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods shall apply (Ref. No. CAC/RS 1-1969).
- B. The following specific provisions in respect of the labelling of this product are subject to endorsement by the Codex Committee on food Labelling:
 - (i) The name of the product shall include the designation "ham", "ham in/with natural juices" or "ham in/with natural juices, gelatine added" or "added gelling agent" applying to agar, alginates or carrageenan, as appropriate.
 - (ii) The following shall appear on the label so as to be simultaneously visible with the name of the product - a declaration of characteristic flavouring or seasoning, e.g. "with X", when appropriate:
 - when the ham has been smoked this shall be declared on the label:
 - a declaration that accurately describes any method of preparation or processing may be given and shall be given when its omission would mislead the consumer.

(iii) List of ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion, except that the following curing ingredients need not be stated: water, sugars, nitrate, nitrite, ascorbic acid and its salts.

(iv) Storage instructions

For hams which are not fully shelf-stable, i.e. which may be expected not to keep for at least one year in normal conditions of storage and sale, adequate storage instructions shall be given on the label. These instructions shall state the recommended maximum permissible temperature or conditions of storage and, in the case of containers sold to the consumer, an indication of the recommended maximum period of storage in specified conditions.

(v) Impression of establishment number and country of origin on the container

The establishment number and the country of origin shall be shown on the container in an indelible manner. The country of origin may be shown in code or in clear.

(vi) Impression of date of manufacture on the container

The date of manufacture shall be shown on the container in code.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling:

(a) Protein content

According to the International Standardization Organization (ISO Recommendation R.937)

(b) Nitrite content

According to the ISO Recommendation ~Determination of the nitrite content of meat and meat products, ISO).

PROPOSED DRAFT STANDARD FOR CANNED LUNCHEON MEAT

(at Step 5)

1. SCOPE

The provisions of this standard apply to [canned] luncheon meat in hermetically sealed containers which have been heat treated after sealing.

2. DESCRIPTION

The product shall be made of comminuted, cured meat. Spleens and pork rind per se may be included. Lungs may be included if they have been produced in appropriate conditions, but not if they have been scalded by immersion in hot water. The following shall not be used: ears, scalp, snouts, mucous membrane, sinews, genital system, udders, intestines. The product may or may not contain binders. The heat treatment shall be sufficient to ensure that the product is shelf-stable. Packs over 3 lbs net weight may be mildly heat treated provided that it is sufficient to ensure that the product remains wholesome under conditions of storage and sale as specified in Section 6 B of this standard.

Subsidiary definition

Hermetically sealed container means a container which is completely sealed, [rigid] and impermeable and which is made of any appropriate material which is suitable for the product covered by the standard.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1	<u>Ingredients</u>	<u>with binders</u>	<u>without binders</u>
	- ingoing raw meat content	80%	90%
	- water		
	- <u>Carbohydrate binders</u>		
	- meal, flour or starch prepared from grain, or potato or sweet potato.		
	- bread, biscuit or bakery products.		
	- <u>Protein binders</u>		
	- milk powder, skim milk powder, butter milk powder, egg protein, whey powder, soya flour, soya protein, caseinate, groundnut protein, wheat gluten, dried blood serum.		
	The maximum amount of protein binders which may be present in the product shall not exceed 3%.		
	- salt		
	- sugars, as defined by the Codex Alimentarius Commission		
	- spices, seasonings and condiments		
	- hydrolyzed plant protein		

3.2 Essential quality factors

The meat shall be clean and substantially free from staining from the container. The meat shall be uniformly and thoroughly cured and capable of being sliced. [Method for determining the sliceability to be developed]

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications, as contained in section ... of the Codex Alimentarius, are subject to endorsement, have been endorsed or temporarily endorsed by the Codex Committee on Food Additives, as indicated below:

Additive

Ascorbic acid, iso-ascorbic acid and their sodium salts	500 mg/kg expressed as ascorbic acid On a total net weight basis singly or in combination	Endorsed
Artificial flavourings, essences and extracts [to be specified]	maximum levels to be specified	Subject to endorsement
Citrate sodium	not limited	Subject to endorsement
Guanylic acid, sodium salt	[500 mg/kg expressed as guanylic acid on a total net weight basis]	Subject to endorsement
Inosinic acid, sodium salt	[500 mg/kg expressed as inosinic acid on a total net weight basis]	Subject to endorsement
Monosodium glutamate	not limited	Subject to endorsement
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate on a total net weight basis	Subject to endorsement
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite on a total net weight basis	Temporarily endorsed
Phosphates, Mono-, di- and poly-sodium and potassium salts	3000 mg/kg expressed as P ₂ O ₅ may be added, singly or in combination	Temporarily endorsed pending further toxicological evaluation

5. HYGIENE

- (a) It is recommended that the Code of Hygienic Practice for Processed Meat Products of the Codex Alimentarius Commission (subject to finalization) should apply, (see Appendix II to this Report)
The following specific provisions in respect of the food hygiene of this product are subject to, or have been, endorsed by the Codex Committee on Food Hygiene, as indicated below:
- (b) No meat or meat products shall be accepted by an establishment unless the meat or meat products have been derived from animals subjected to antemortem and post-mortem inspection. They shall not be accepted

unless they are properly branded or marked and in all ways suitable for human consumption and that they have not, subsequent to being examined by an Inspector, been exposed to contamination or processed or handled or subjected to the addition of any harmful substance which renders them unfit for human consumption.¹

- (c) Meat and meat products shall be stored in an establishment in such a manner as to prevent deterioration and contamination.¹
- (d) The heat treatment shall be such as to result in a temperature of at least [68.9°C momentarily] [6.5.5°C for ? minutes/at the centre of the product].²
- (e) The product shall be packaged in hermetically sealed containers which do not permit contamination and which shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.
- (f) When processed containers are cooled in water, the water shall be of potable quality and suitably treated so as not to constitute a public health hazard. If cooling water is re-circulated it shall be effectively disinfected by chlorine or otherwise before use or each re-use.³
- (g) After processing, containers shall be handled in such a manner as to avoid contamination of the product.¹

¹ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products and it is proposed to apply them as mandatory provisions in the Standard (see Section IV.D.1 and D.5.d).

² The Sub-Committee will re-examine this issue at its next session in the light of government comments (see paragraph 71).

³ This provision has been endorsed by the Codex Committee on Food Hygiene.

6. LABELLING

- A. The provisions of sections 1 to 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods shall apply (Ref. No. CAC/RS1-1969).
- B. The following specific provisions in respect of the labelling of this product are subject to endorsement by the Codex Committee on Food Labelling:
 - (i) Name of the product

The name of the product shall include the designation "luncheon meat".

A declaration of the presence of binders and a declaration indicating the species of animals from which the meat is derived may be given and shall be given in connection with the name of the product when its omission would mislead the consumer.
 - (ii) List of ingredients

The list of ingredients shall indicate the species of animals from which the meat is derived.
 - (iii) Storage instructions

For luncheon meat which is not fully shelf-stable, i.e. which may be expected not to keep for at least one year in normal conditions of storage and sale, adequate storage instructions shall be given

on the label. These instructions shall state the recommended maximum permissible temperature or conditions of storage and, in the case of containers sold to the consumer, an indication of the recommended maximum period of storage in specified conditions.

(iv) Impression of establishment number and country of origin on the container

The establishment number and the country of origin shall be shown on the container in an indelible manner. The country of origin may be shown in code or in clear.

(v) Impression of date of manufacture on the container

The date of manufacture shall be shown on the container in code.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

(a) Protein content

According to the International Standardization Organization (ISO Recommendation H.937).

(b) Nitrite content

According to the ISO Recommendation (Determination of the nitrite content of meat and meat products, ISO).

PROPOSED DRAFT STANDARD FOR CANNED CHOPPED MEAT

(at Step 5)

1. SCOPE

The provisions of this standard apply to [canned] chopped meat in hermetically sealed containers which have been heat treated after sealing.

2. DESCRIPTION

The product shall be made of coarsely cut, cured meat. The following shall not be used: ears, scalp, snouts, mucous membrane, sinews, genital system, spleens, lungs udders, intestines, pork rind per se. The product may or may not contain binders. The heat treatment shall be sufficient to ensure that the product is shelf-stable. Packs over 3 lbs. net weight may be mildly heat treated provided that it is sufficient to ensure that the product remains wholesome under conditions of storage and sale as specified in section 6.B (iii) of this standard.

Subsidiary definition

Hermetically sealed container means a container which is completely sealed, [rigid] and impermeable and which is made of any appropriate material which is suitable for the product covered by the standard.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Ingredients with binders without binders

- | | | |
|--|-----|-----|
| - ingoing raw meat content | 85% | 90% |
| - water | | |
| - <u>Carbohydrate binders</u> | | |
| - meal, flour or starch prepared from grain, or potato or sweet potato. | | |
| - bread, biscuit or bakery products. | | |
| - <u>Protein binders</u> | | |
| - milk powder, skim milk powder, butter milk powder, egg, protein, whey powder, soya flour, soya protein, caseinate, groundnut protein, wheat gluten, dried blood serum. | | |

The maximum amount of protein binders which may be present in the product shall not exceed 3%.

- salt
- sugars as defined by the Codex Alimentarius Commission
- spices, seasonings and condiments
- hydrolized plant protein

3.2 Essential quality factors

The meat shall be clean and substantially free from staining from the container. The meat shall be uniformly and thoroughly cured and capable of being sliced, [method for determining the sliceability to be developed]

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications, as contained in section ... of the Codex Alimentarius, are subject to endorsement, or have been endorsed or temporarily endorsed by the Codex Committee on Food Additives as indicated below:

Additive

Ascorbic acid, iso-ascorbic acid and their salts	500 mg/kg expressed as ascorbic acid on a total net weight basis, singly or in combination.	endorsed
Artificial flavourings, essences and extracts [to be Specified]	maximum levels to be specified	subject to endorsement
Citrate sodium	not limited	subject to endorsement
Guanylic acid, sodium salt	[500 mg/kg expressed as guanylic acid on a total net weight basis]	subject to endorsement
Inosinic acid, sodium salt	[500 mg/kg expressed as inosinic acid on a total net weight basis]	subject to endorsement
Monosodium glutamate	not limited	subject to endorsement
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate on a total net weight basis	subject to endorsement
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite on a total net weight basis	Temporarily endorsed
Phosphates, Mono-, di- and poly-sodium and potassium salts	3000 mg/kg expressed as P ₂ O ₅ may be added, singly or in combination	Temporarily endorsed pending further toxicological evaluation

5. HYGIENE

(a) It is recommended that the Code of Hygienic Practice for Processed Meat Products of the Codex Alimentarius Commission (subject to finalisation) should apply.* The following specific provisions in respect of the food hygiene of this product are subject to, or have been, endorsed by the Codex Committee on Food Hygiene, as indicated below:

(b) No meat or meat products shall be accepted by an establishment unless the meat or meat products have been derived from animals subjected to ante-mortem and post-mortem inspection. They shall not be accepted unless they are properly branded or marked and in all ways suitable for human consumption, and that they have not, subsequent to being examined by an Inspector, been exposed to contamination or processed or handled or subjected to the addition of any harmful substance which renders them unfit for human consumption.¹

- (b) Meat and meat products shall be stored in an establishment in such a manner as to prevent deterioration and contamination.¹
- (c) The heat treatment shall be such as to result in a temperature of at least [68.9°C momentarily][65.5°C for ? minutes] at the centre of the product.²
- (d) The product shall be packaged in hermetically sealed containers which do not permit contamination and which shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.
- (e) When processed containers are cooled in water, the water shall be of potable quality and suitably treated so as not to constitute a public health hazard. If cooling water is re-circulated it shall be effectively disinfected by chlorine or otherwise before use or each re-use.³
- (f) After processing, containers shall be handled in such a manner as to avoid contamination of the product.¹

* See Appendix II to this Report.

¹ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products and it is proposed to apply them as mandatory provisions in the Standard (see Section IV.D.1 and D.5.d)

² The Sub-Committee will re-examine this issue at its next session in the light of government comments (see paragraphs 71 and 79)

³ This provision has been endorsed by the Codex Committee on Food Hygiene.

6. LABELLING

- A. The provisions of sections 1 to 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods shall apply (Ref. No. CAC/RS 1-1969)
- B. The following specific provisions in respect of the labelling of this product are subject to endorsement by the Codex Committee on Food Labelling:
 - (i) Name of the product
 The name of the product shall include the designation "chopped meat" except that the word "meat" may be replaced by a word describing the kind of meat used, or where more than one kind of meat has been used, by the names in descending order of proportion, e.g. "chopped pork", "chopped pork and beef". A declaration of the presence of binders and a declaration indicating the species of animals from which the meat is derived may be given and shall be given in connection with the name of the product when its omission would mislead the consumer.
 - (ii) List of ingredients
 The list of ingredients shall indicate the species of animals from which the meat is derived.
 - (iii) Storage instructions
 For chopped meats which are not fully shelf-stable, i.e. which may be expected not to keep for at least one year in normal conditions of storage and sale, adequate storage instructions must be given on the label. These instructions must state the recommended

maximum permissible temperature or conditions of storage and, in the case of containers sold to the consumer, an indication of the recommended maximum period of storage in specified conditions.

(iv) Impression of establishment number and country of origin on the container

The establishment number and the country of origin shall be shown on the container in an indelible manner. The country of origin may be shown in code or in clear.

(v) Impression of date of manufacture on the container

The date of manufacture shall be shown on the container in code.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

(a) Protein content

According to the International Standardization Organization (ISO Recommendation R.937).

(b) Nitrite content

According to the ISO Recommendation (Determination of the nitrite content of meat and meat products, ISO).

PROPOSED DRAFT STANDARD FOR CANNED CORNED BEEF

(at Step 5)

1. SCOPE

The provisions of this standard apply to [canned] corned beef in hermetically-sealed containers which have been heat treated after sealing.

2. DESCRIPTION

Corned beef is chopped, cooked, cured, boneless carcass meat from animals of the bovine species and may include head meat, heart meat, skirt meat and finely comminuted tendons. The products shall be made of pre-cooked coarsely cut beef which may have been previously cured or can be cured in the can. The heat treatment shall be sufficient to ensure that the product is shelf-stable.

Subsidiary definition

Hermetically sealed container means a container which is completely sealed, [rigid] and impermeable and which is made of any appropriate material which is suitable for the product covered by the standard.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Ingredients

- beef
- salt
- sugars (for curing) as defined by the Codex Alimentarius Commission

3.2 Composition

Total fat content in the final product shall not exceed 20%

3.3 Essential quality factors

The meat shall be clean and substantially free from staining from the container. The meat shall be uniformly and thoroughly cured.

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications, as contained in section ... of the Codex Alimentarius, are subject to endorsement, or have been endorsed or temporarily endorsed by the Codex Committee on Food Additives as indicated below:

<u>Additive</u>	<u>Maximum level of use</u>
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate on a total net weight basis subject to endorsement
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite on a total net weight basis Temporarily endorsed

5. HYGIENE

- (a) It is recommended, that the Code of Hygienic Practice for Processed Meat Products of the Codex Alimentarius Commission (subject to finalisation) should apply.(see Appendix II to this Report).
The following specific provisions in respect of the food hygiene of this product are subject to, or have been, endorsed by the Codex Committee on Food Hygiene, as indicated below:
- (b) No meat or meat products shall be accepted by an establishment unless the meat or meat products have been derived from animals subjected to ante-mortem and post-mortem inspection. They shall not be accepted unless they are properly branded or marked and in all ways suitable for human consumption and that they have not, subsequent to being examined by an Inspector, been exposed to contamination or processed or handled or subjected to the addition of any harmful substance which renders them unfit for human consumption.¹
- (c) Meat and meat products shall be stored in an establishment in such a manner as to prevent deterioration and contamination.¹
- (d) The product shall be packaged in hermetically sealed containers which do not permit contamination and which shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.
- (e) When processed containers are cooled in water, the water shall be of potable quality and suitably treated so as not to constitute a public health hazard. If cooling water is re-circulated it shall be effectively disinfected by chlorine or otherwise before use or each re-use.²
- (f) After processing, containers shall be handled in such a manner as to avoid contamination of the product.¹

¹ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products and it is proposed to apply them as mandatory provisions in the standard (see Section IV.D.1 and D.5.d)

² This provision has been endorsed by the Codex Committee on Food Hygiene.

6. LABELLING

- A. The provisions of sections 1 to 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods shall apply (Ref.No.CAC/RS 1-1969).
- B. The following specific provisions in respect of the labelling of this product are subject to endorsement by the Codex Committee on Food Labelling:
 - (i) Name of the product
The name of the product is "corned beef"
 - (ii) Impression of establishment number and country of origin on the container
The establishment number and the country of origin shall be shown on the container in an indelible manner. The country of origin may be shown in clear or in an internationally recognised code.

(iii) Impression of date of manufacture on the container

The date of manufacture shall be shown on the container in code.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

(a) Protein content

According to the International Standardization Organization (ISO Recommendation R.937)

(b) Nitrite content

According to the ISO Recommendation (Determination of the nitrite content of meat and meat products, ISO).

PROPOSED DRAFT STANDARD FOR CANNED PORK SHOULDER

(at Step 3)

1. SCOPE

The provisions of this standard apply to [canned] pork shoulder in hermetically sealed containers which have been heat treated after sealing.

2. DESCRIPTION

The product shall be made of meat from the shoulder of a pig, excluding boar meat having an objectionable odour and excluding comminuted or chopped meat. All bones and detached cartilage, tendons and ligaments shall be removed. Skin and fat may or may not be removed. The meat shall be cured and may be smoked, spiced and/or flavoured. The heat treatment shall be sufficient to ensure that the product remains wholesome under normal conditions of storage and sale.

Subsidiary definition

Hermetically sealed container means a container which is completely sealed, [rigid] and impermeable and which is made of any appropriate material which is suitable for the product covered by the standard.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Ingredients I

- pork shoulder
- water
- salt
- sugars as defined by the Codex Alimentarius Commission
- honey
- gelatine
- spices, seasonings and condiments

3.2 Essential quality factors

The meat shall be clean and substantially free from staining from the container. The meat shall be uniformly and thoroughly cured and capable of being sliced, [Method of determining sliceability to be developed].

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications, as contained in section ... of the Codex Alimentarius, are subject to endorsement, have been endorsed or temporarily endorsed by the Codex Committee on Food Additives as indicated below:

Additive

Agar	not limited	subject to endorsement
Alginates, potassium and/or sodium salts	not limited	subject to endorsement

Ascorbic acid, iso-ascorbic acid and their sodium salts	500 mg/kg expressed as ascorbic acid on a total net weight basis singly or in combination	endorsed
Artificial flavourings, essences and extracts [to be Specified]	maximum levels to be specified	subject to endorsement
Carrageenan	not limited	subject to endorsement
Citrate sodium	not limited	subject to endorsement
Cyclamate, sodium and/or Calcium	maximum levels to be specified	subject to endorsement
Guanylic acid, sodium salt	[500 mg/kg expressed as guanylic acid on a total net weight basis]	subject to endorsement
Inosinic acid, sodium salt	[500 mg/kg expressed as inosinic acid on a total net weight basis]	subject to endorsement
Monosodium glutamate	not limited	Endorsed
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate on a total net weight basis	subject to endorsement
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite on a total net weight basis	temporarily endorsed
Phosphates, Mono-, di- and poly—sodium and potassium salts	3000 mg/kg expressed as P ₂ O ₅ may be added to raw material, singly or in combination	temporarily endorsed

5. HYGIENE

- (a) It is recommended that the Code of Hygienic Practice for Processed Meat Product of the Codex Alimentarius Commission (subject to finalisation) should apply.* The following specific provisions in respect of the food hygiene of this product are subject to, or have been endorsed by the Codex Committee on Food Hygiene, as indicated below:
- (b) No meat or meat products shall be accepted by an establishment unless the meat or meat products have been derived from animals subjected to ante-mortem and post-mortem inspection. They shall not be accepted unless they are properly branded or marked and in all ways suitable for human consumption and that they have not, subsequent to being examined by an Inspector, been exposed to contamination or processed or handled or subjected to the addition of any harmful substance which renders them unfit for human consumption.¹
- (c) Meat and meat products shall be stored in an establishment in such a manner as to prevent deterioration and contamination.¹

- (d) The heat treatment shall be such as to result in a temperature of at least [68.9°C momentarily] [65.5°C for ? minutes/at the centre of the product.²
- (e) The product shall be packaged in hermetically sealed containers which do not permit contamination and which shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.
- (f) When processed containers are cooled in water, the water shall be of potable quality and suitably treated so as not to constitute a public health hazard. If cooling water is re-circulated, it shall be effectively disinfected by chlorine or otherwise before use or each re-use.³
- (g) After processing, containers shall be handled in such a manner as to avoid contamination of the product.²

* See Appendix II to this Report.

¹ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products and it is proposed to apply them as mandatory provisions in the standard (see Section IV.D.1 and D.5.d)

² The Sub-Committee will re-examine this issue at its next session in the light of government comments (see paragraph 5.1)

³ This provision has been endorsed by the Codex Committee on Food Hygiene.

6. LABELLING

- A. The provisions of sections 1 to 3.1, 3(2)(b) and (c), 3(3)(ii), 3(4) to 4(2) and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods shall apply (Ref. No. CAC/RS 1—1969).
- B. The following specific provisions in respect of the labelling of this product are subject to endorsement by the Codex Committee on Food Labelling:
 - (i) The name of the product shall include the designation "pork shoulder" "pork shoulder in/with natural juices" or "pork shoulder in/with natural juices gelatine added" or "added gelling agent" applying to agar, alginates or carrageenan, as appropriate.
 - (ii) The following shall appear on the label so as to be simultaneously visible with the name of the product - a declaration of characteristic flavouring or seasoning, e.g. "with X", when appropriate:
 - when the pork shoulder has been smoked this shall be declared on the label;
 - a declaration that accurately describes any method of preparation or processing may be given and shall be given when its omission would mislead the consumer.
 - (iii) List of ingredients
A complete list of ingredients shall be declared on the label in descending order of proportion, except that the following curing ingredients need not be stated: water, sugars, nitrate, nitrite, ascorbic acid and its salts.

(iv) Storage instructions

For pork shoulder, which is not fully shelf-stable, i.e. which may be expected not to keep for at least one year in normal conditions of storage and sale, adequate storage instructions shall be given on the label. These instructions shall state the recommended maximum permissible temperature or conditions of storage and, in the case of containers sold to the consumer, an indication of the recommended maximum period of storage in specified conditions.

(v) Impression of establishment number and country of origin on the container

The establishment number and the country of origin shall be shown on the container in an indelible manner. The country of origin may be shown in code or in clear.

(vi) Impression of date of manufacture on the container

The date of manufacture shall be shown on the container in code.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

(a) Protein content

According to the International Standardization Organization (ISO Recommendation R.937)

(b) Nitrite content

According to the ISO Recommendation (Determination of the nitrite content of meat and meat products, ISO).