



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET
L'AGRICULTURE
ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y
LA ALIMENTACION
00100 Rome, Via delle Terme di Caracalla. Cables: FOODAGRI, Rome. Tel.
5797



WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTÉ
1211 Genève, 27 Avenue Appia. Câbles: UNISANTÉ, Genève. Tél. 34 60 61

ALINORM 74/16

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX ALIMENTARIUS COMMISSION
Tenth Session. Rome. July 1974

REPORT OF THE
CODEX COMMITTEE ON PROCESSED MEAT PRODUCTS
Seventh Session
3-7 December 1973
Copenhagen, Denmark

INTRODUCTION

1. The Codex Committee on Processed Meat Products held its Seventh Session in the Conference Room of the WHO Regional Office in Copenhagen, Denmark, from 3-7 December 1973 by courtesy of the Government of Denmark. The participants were welcomed on behalf of the Danish Ministry of Agriculture by Dr. V. Enggaard, Chairman of the Committee and by Dr. A. Eberwein on behalf of the Director of the WHO Regional Office.

2. Representatives from the following 31 countries were present:

Argentina	Finland	Norway
Australia	France	Poland
Austria	Fed. Rep. of Germany	Spain
Belgium	Hungary	Sweden
Brazil	Ireland	Switzerland
Bulgaria	Italy	Thailand
Canada	Japan	Turkey
Czechoslovakia	Kenya	United Kingdom
Denmark	Malawi	United States of
Egypt, Arab Rep, of	Netherlands	America
	New Zealand	Yugoslavia

Observers from the following International Organizations participated at the Session:

European Economic Community (EEC)
Centre de Liaison des Industries Transformatrices de Viande de la Communauté
Européenne (CLITRAVI)
International Organization of Consumer Unions (IOCU)
International Commission on Microbiological Specifications for Foods (ICMSF)
International Organization for Standardization (ISO)

Institut Européen des Industries de Gomme de Caroube

A list of participants, including officers from the Food and Agriculture Organization and the World Health Organization, is given as Appendix I to this Report.

ADOPTION OF PROVISIONAL AGENDA

3. The Committee adopted the Provisional Agenda

ELECTION OF RAPPORTEURS

4. On the proposal of the Chairman, the Committee appointed Mr. R. Sawyer (U.K.) and Mr. J. Riviere (France) as Rapporteurs of the Session.

MATTERS ARISING FROM THE REPORT OF THE 9th SESSION OF THE CODEX ALIMENTARIUS COMMISSION (November 1972)

5. The Chairman briefly informed the Committee of various matters arising from the Report of the 9th Session of the Commission *and* various Codex Committees. It was decided that these matters should be considered in detail when discussing the relevant items of the agenda.

6. At the invitation of the Chairman, the representative of the FAO Legal Office explained the purpose of the opinion prepared by the FAO Legal Office (Document CX/PMP 73/3) in response to the Committee's request contained in the Report of its 6th Session, concerning the formulation of the Scope and Labelling sections of several draft standards under consideration by the Committee. He pointed out that the legal opinion was based on the interpretation of the General Principles of the Codex Alimentarius as adopted by the Commission and of certain other provisions contained in the Procedural Manual. While the legal opinion was intended to assist the Committee in devising solutions that would be consistent with the aforementioned legal provisions, it was within the responsibilities of the Committee to ensure that any solutions envisaged would also be acceptable from a technological and commercial point of view. He also recalled that certain provisions concerning Acceptance of Recommended Standards would be reviewed at the next Session of the Codex Committee on General Principles and that this review might conceivably have a bearing on the questions now under consideration by the Codex Committee on Processed Meat Products.

CONSIDERATION OF DRAFT STANDARD FOR CANNED CORNED BEEF AT STEP 7

7. The Committee took note of the decision of the Commission, taken at its 9th Session (November 1972), to return the draft standard to the Committee for reconsideration at Step 7 of the Procedure (ALINORM 72/35, Para 178) in view of the discussions concerning the name of the product in connection with the scope of the standard and also concerning the amendments proposed to the provisions of the standard.
8. The Committee further noted the decision of the Commission (ALINORM 72/35, para 179) that it should review again the entire subject matter of the standard, thereby giving consideration to the reply given by the FAO Legal Office to the question on the scope of the standard which had been raised by the Committee at its 6th Session (April 1972). In its deliberations the Committee further took into account the views of countries which manufactured products which were not of the traditional South American type.
9. The following documents were taken into consideration:
 - (i) Draft Standard for Canned Corned Beef (ALINORM 72/16, Appendix IV);

- (ii) Opinion of FAO Legal Office (CX/PMP 73/3);
 - (iii) Government comments received at Step 8 for discussion by the Commission (ALINORM 72/30, Addendum I (para 27-44) and Addenda II and III);
 - (iv) Government comments received at Step 7 (CX/PMP 73/4 with Addendum I);
 - (v) Additional information on canned corned beef elaborated by the Danish Secretariat (CX/PMP 73/4A);
 - (vi) Analytical data provided (during the session) by the delegation of Switzerland.
10. The Committee was invited to examine a display of a number of products of the type detailed in Appendix 2 to CX/PMP 73/4A, and to consider whether or not the whole range of products not covered by the standard could be encompassed in a single standard.

Scope

11. The Committee confirmed the position taken at its 6th Session that the present standard should cover the traditional South American type of canned corned beef only, but that products of different compositional characteristics should not be prevented from using the term "corned beef" as part of their designation, provided that it was qualified by suitable descriptive terms which should be informative to the consumer.

12. At the suggestion of the Chairman and following consideration of the display material, the Committee then considered whether a second standard dealing with the corned beef products not covered by the present standard should be elaborated. It was thought that the scope of such a standard would be so broad as to make the standard of little value. It was therefore decided that for the time being no work on such a standard should be undertaken.

13. In order to make it quite clear that the limitation of the standard to the traditional type of corned beef did not preclude the use of the term "corned beef" in conjunction with a descriptive designation for other products traded under such a name, the Committee decided that, provisions to this effect should be included in the standard. It came to the conclusion that in the scope section a positive as well as a negative delineation should be provided for, the former dealing with the product proper, the latter concerning the non-traditional corned beef products.

14. The scope section was thus amended to read: "The provisions of this standard shall apply to canned meat products designated as "Corned Beef" and packed in hermetically sealed containers which have been heat treated after sealing to such an extent that the product is shelf-stable. The standard shall not apply to any canned meat product with compositional characteristics different from those specified in the standard even though the name of such a meat product might include the term "corned beef"."

15. It was further decided that in the labelling section the subsection dealing with the name of the food (6.1) would be amended and brought into line with the scope section (see para 28).

16. The delegation of Argentina reserved its position with regard to the amended version of the sections concerning scope and name as it considered that under the revised text, products not covered by the standard would be in a more favourable position than the traditional type South American corned beef.

17. The question was raised whether the term "shelf-stable" should be defined. In this connection reference was made to subsection 6.6 "Storage instructions" of the Draft

Standard for Cooked Cured Hams in which the term "not fully shelf-stable" in relation to ham described a product which might be expected not to keep for at least one year in normal conditions of storage and sale. The Committee decided, however, not to define "shelf-stable", as it considered this point adequately covered by the hygiene section of the standard.

Description

18. The Committee discussed at great length the desirability of laying down limits for the protein and the fat content of the product. If such compositional requirements were established it was thought that it would be unnecessary to retain in the description section the clause stating that the final product should represent not more than 70% by weight of the raw meat prior to cooking.

19. The Committee decided to include in the subsection on composition an upper limit for the fat content of the final product and a lower limit for the protein content. A number of delegations were of the opinion that the fat content should not exceed 15%. The Committee agreed that the fat content should not exceed 20% m/m. The delegations of Belgium, France, the Federal Republic of Germany, the Netherlands and the U.S.A. stated that in their opinion the limit of 20% fat in the final product was too high. The limit for the protein content was dealt with under the general consideration of "Expression for Meat Content" (see paras 84-87 of this Report).

20. Several delegations held the view that the protein content should be expressed as protein on the total product and others favoured the expression protein on a fat free basis, which had been accepted as an analytical parameter for cooked cured hams and shoulders. It was noted that in contrast to ham, it would be comparatively easy to add fat to corned beef. This implied that if the product were to be "standardized" with regard to a fat content near the upper limit, the expression of the protein on a fat free basis could lead to an undesirable imbalance in the protein content of the product. It was further pointed out that during the manufacture of the product, fat often was separated prior to cooking and that at a later stage in the processing it was added again.

21. The Committee decided to deal with the matter in detail during its deliberations on the expression for meat content (see paras 84-87 of this Report).

Essential Composition and Quality Factors

22. The present wording of the provision could be construed to mean that in the manufacture of corned beef all the listed ingredients should be used. As this was not considered necessary, the Committee agreed to amend the subsection on ingredients by splitting it into two: essential ingredients and optional ingredients. Uncured beef, salt and sodium or potassium nitrite were regarded to be essential ingredients and sugars were considered to be optional ingredients.

Nitrates which had been listed as ingredients were not considered to be essential ingredients and were deleted in this section as it was thought sufficient that they were listed as food additives.

Food Additives

23. The Committee noted that the maximum level of use of ascorbic acid and its sodium salt had been endorsed by the Codex Committee on Food Additives. The Committee was informed that recent work had shown on the one hand that in many products the use of nitrates might not be essential and that lower levels than the maximum for nitrites provided for in the standard might be adequate for the curing

process as well as from a point of view of public health (e.g. control of Clostridium botulinum). On the other hand, levels of ascorbate such as provided for in the standard or even higher levels might have the effect of preventing the formation of nitrosamines and that, therefore, the use of ascorbate should not only be regarded as serving to accelerate the curing process, but also to minimize the potential toxicological hazard. While recognizing the desirability of reducing, as far as possible, the maximum levels of nitrates and nitrites in the standard, the Committee agreed that this was not opportune at the present time and decided to insert a footnote to the food additives section indicating that the maximum levels of use were subject to review in the future pending further information from the international research being carried out. (See paras 123 -124 of this Report)

Hygiene

24. At its 9th Session, the Codex Committee on Food Hygiene had endorsed subsections 5.4, 5.5 and 5.6, whereby the text of subsections 5.4 and 5.6 had been brought into line with that contained in the Draft Standard for Cooked Cured Ham.

25. It was pointed Out that the product under consideration was packed solely in rigid containers and that therefore the amended text did not apply and was incompatible with the (subsidiary) definition for "hermetically sealed containers" in the description section. The Committee agreed to retain the text as it stood and to submit it again for endorsement to the Codex Committee on Food Hygiene.

26. The question of time and temperature of incubation to check on the final heat treatment' of the product was deferred for consideration later in the session in connection with the methods of analysis to be inserted in the standards (see paras 108-111 of this Report).

Labelling

27. The Committee reconsidered the labelling section in the light of government comments, the decisions made at the 7th Session of the Codex Committee on Food Labelling and the opinion of the FAO Legal Office. The Committee agreed on a number of amendments to this section.

The Name of the Food

28. The Committee adopted a new wording for this subsection consequential to the amendment of the scope section as shown in Appendix II to the Report (see also paras 14-15 of this Report). The purpose of the amendment was to reserve the name "Corned Beef" used as sole designation for products covered by the standard, i.e. the traditional South American products, and at the same time to ensure that other products not covered by the standard (e.g. to which ingredients such as broth, gelatine, cereals etc. were added) could continue to be traded under the designation "Corned Beef", provided that a suitable qualifying term was added which would not be misleading to the consumer.

List of Ingredients

29. The Committee amended the text to bring it into line with the General Standard for the Labelling of Prepackaged Foods in accordance with the decision taken by the Codex Committee on Food Labelling at its seventh Session.

Country of Origin

30. The Committee agreed to specify that the country of origin should be declared in clear on the label. The Codex Committee on Food Labelling (8th Session) had requested that commodity committees should consider whether section 3.5(b) of the General Standard for the Labelling of Prepackaged Foods, concerning country of origin for products processed in a second country in such a way that their nature was changed, was in fact applicable to commodity standards. The Committee agreed that in relation to processed meat products, the country in which the processing takes place should be considered to be the country of origin and therefore decided to change subsection 6.5.2 as follows: "The country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling."

Additional Provisions

31. The Committee agreed to amend the title of this subsection to read "Lot Identification" and considered the text proposed by the Codex Committee on Food Labelling at its 1972 session (ALINORM 72/22, para 5), i.e. "The container shall be permanently and indelibly marked in code or in clear so as to identify the manufacturer and the country, place and date of manufacture."

The delegation of Argentina stressed the need to declare the country of origin in clear in order to inform the consumer.

32. In this connection the Committee noted that the Labelling Committee at its last Session (June 1973) had endorsed a similar provision for a canned fish product that read: "Each , container shall be embossed or otherwise permanently marked in code or in clear to identify the producing factory, the date of production and the contents of the container." The Committee considered that the latter text was more appropriate to canned meat products, except that it was not entirely clear as to what was meant by identification of the contents of the container, e.g. nature of. product or quantity. The Committee adopted the text which the Labelling Committee had endorsed for canned fish products, replacing the words "contents of" by the words "product packed in".

33. It was understood that details of lot identification would have to be permanently marked on the container and that such information given on a lithographed label would be considered as being permanently affixed to the container.

Methods of Analysis and Sampling

34. The Committee noted that the Codex Committee on Methods of Analysis and Sampling (ALINORM 72/23, para 75) had temporarily endorsed the ISO Recommendation R 1443 pending selection of one extraction solvent to be used and requested evidence of the results of collaborative test*. It was noted that collaborative tests were being carried out by a Working Group from the Codex Committee on Methods of Analysis and Sampling which might help to resolve the choice of solvent. The question was raised whether such additional collaborative tests were necessary, since the ISO method was established on the basis of collaborative tests. The Codex Committee on Methods of Analysis and Sampling was asked to finalize the method of determination of total fat content (ISO Recommendation R 1443).

* Procedural Manual - 3rd Edition - General Principles for the Establishment of Codex Methods of Analysis, 2(b)

35. As regards the determination of total protein content in the final product, the Committee adopted the ISO recommended method "Determination of Nitrogen Content

of Meat and Meat Products" (ISO Recommendation R 937) which had also been adopted for the Draft Standards for Cooked Cured Hams and Pork Shoulders.

Status of the Standard

36. The Committee agreed to advance the standard to Step 8 following a discussion in which some delegations expressed the opinion that the standard should be reviewed once more by the commodity committee prior to consideration by the Commission.

37. The delegations of Argentina, Australia, Kenya, Sweden, Switzerland and the United Kingdom reserved their positions in this respect. One of the main objections raised in connection with advancing the standard was the introduction of a minimum limit of 25% for protein content (see para 85). It was pointed out, however, that the limit for the protein content had previously been contained in the standard (in a paraphrased form) in the clause that the product in the container should represent not more than 70% by weight of the raw meat prior to cooking.

38. The delegation of Denmark supported by the delegation of the United Kingdom expressed some misgivings with respect to the compatibility of the revised scope section of the standard with the Rules of Acceptance which may become applicable after the proposed review of these Rules by the Codex Committee on General Principles (see paras 121-122).

39. It was pointed out, however, that the policy question contained in the revised scope should be subject to discussion by the Commission as the principle had been introduced in several standards under elaboration by the Committee. Further opportunity would be available for comment by governments at Step 8. .

40. The revised draft standard is contained in Appendix II to this Report.

RECONSIDERATION OF DRAFT STANDARD FOR COOKED CURED HAMS (STEP 7)

41. The Committee reconsidered the above draft standard as contained in Appendix II to ALINORM 72/16 in the light of the opinion of the FAO Legal Office on questions arising from the report of the 6th Session of the Committee (CX/PMP 73/3), and government comments received (CX/PMP 73/5 + Addendum I).

Scope

42. The opinion of the FAO Legal Office dealt in particular with (i) the naming of products claiming to meet the requirements of the standard; and (ii) a Danish proposal to amend the scope and the description sections.

43. In the discussions the Committee considered in particular the extensive written comments of Denmark which stated that the standard should cover all packaged cooked cured ham products. Some delegations expressed doubt as to the possibility of elaborating a single standard with such a broad scope. Doubt was further expressed on whether it would be possible, at a later stage, to reach agreement on the meat content of the product.

44. The Committee agreed to proceed with the consideration of the document on the basis of a single standard, leaving the possibility open to decide at a later stage whether to reconsider this approach and to elaborate two or more standards for cooked hams, each covering a different form of presentation of the product.

45. The agreement reached with regard to the lay-out of the scope section in the Draft Standard for Canned Corned Beef, by having a positive and a negative delineation, was also considered to be appropriate for the present standard for cooked cured hams.

46. The provision dealing with the name of the food (6.1) was amended accordingly (see paras 60-64 of this Report).

47. The Committee agreed to revise the last paragraph of this provision by deleting the specific reference to cooking and by including the requirement that the product should not present any public health hazard. The revised text reads: "The heat treatment to which the product has been subjected and the type of cure and packaging shall be sufficient to ensure that the product presents no hazard to public health and remains wholesome under conditions of storage, transport and sale as indicated in subsections 5.2.3 and 5.2.4." (See para 57 of this Report).

Subsidiary Definitions

48. The Committee agreed that no subsidiary definitions were necessary.

Optional Ingredients

49. The Committee agreed that honey need not be listed separately but could be listed together with the various sugars. Hydrolyzed protein used as a flavour enhancer was regarded to be a food additive and was therefore moved to the additives section.

50. As it was not the intention that speciality packs should be covered by the standard, it was further agreed that foods imparting organoleptic characteristics should not be listed under optional ingredients as this would leave open the possibility of adding a disproportionate amount of such an ingredient.

Meat Content

51. For the discussion concerning the requirement for minimum meat content, see paras 74-82 of this Report.

Food Additives

52. The Committee noted the various remarks made by the Codex Committee on Food Additives (ALINORM 72/12, paras 33-35 and 59). As agreed earlier, hydrolyzed protein for use as a flavour enhancer was inserted in the list of food additives and it was agreed that the maximum level of use should be limited by good manufacturing practice.

53. With regard to nitrates and nitrites and the possible formation of nitrosamines, the Committee was informed that similar considerations to those in para 23 applied in this case.

54. The delegation of the Federal Republic of Germany was opposed to the use of thickening agents, phosphates, citrates and smoke agents in the preparation of hams.

55. The delegation of Japan was of the opinion that there was a technological need for the use of guanylate, inosinate and glutamate both in hams and corned beef.

56. The Committee requested governments to send toxicological information on guanylate and inosinate to WHO (Dr. F.C. Lu, Chief, Food Additives, WHO, Geneva) so that the Joint FAO Expert Committee could evaluate these substances from a toxicological point of view.

Hygiene

57. As the scope of the standard had been broadened to allow for the product to be packed in any suitable packaging material, the provision dealing with the hygienic requirements of containers (5.4) was amended. A distinction was made between

products which are heat treated after packaging and products subjected to heat treatment prior to packaging (new 5.2.3 and 5.2.4).

58. A consequential editorial amendment was made in the provision pertaining to hygienic methods of handling and storage (old 5.6 - new 5.2.6).

Name of the Food

59. With regard to the pertinent labelling requirements for the name of the food, the Committee agreed to a limited number of variants (Section 6.1.2) along the lines of the written proposals by Denmark.

60. The Committee recalled that certain questions regarding designations had already been raised in connection with the scope section.

61. Following the method adopted with respect to the Canned Corned Beef Standard, the Committee agreed that in addition to prescribing the name "Cooked Ham" for labelling cooked cured ham in conformity with the standard, it would be desirable to include a provision concerning products designated as "cooked ham" but not meeting all requirements of the standard.

62. The view was also expressed that the situation was different from that prevailing with respect to corned beef and that it would therefore be preferable to dispense with a negative delineation in the labelling section.

63. The Committee decided to include in the labelling section (6.1.3) a mandatory provision to the effect that products not fully conforming with the standard, while including the term "cooked ham" in the name of the product, should be accompanied by a suitable qualifying statement.

64. The Committee felt that although the revised labelling section seemed a logical approach to distinguish between products covered and products not covered by the standard, a number of matters of interpretation still remained open. The Committee was of the opinion that these needed further consideration and decided to refer them to the working group mentioned in para 82.

List of Ingredients

65. In line with an observation made by the Codex Committee on Food Labelling with regard to deviating from the wording of the Recommended International General Standard for the Labelling of Prepackaged Foods, the Committee returned to the original wording of this provision.

66. It was further agreed that added phosphates could be declared by the class title "Phosphates".

Country of Origin

67. At its 6th Session the Committee had agreed that the declaration of the country of origin should be in clear (ALINORM 72/16, para 57), and it was agreed to specify this requirement.

68. In consequence with the amendment agreed to for corned beef with regard to the country or origin in the case of products undergoing a change in nature by processing in a second country, the first sentence of the relative provision was deleted.

Lot Identification

69. The Committee agreed to include a provision for lot identification, accepting the text as elaborated for canned corned beef. The words "the date of production" were, however, replaced by "the date of packaging" as this was considered more suitable in relation to the products covered by the standard.

Methods of Analysis and Sampling

70. The discussion of the Committee with regard to the incubation test to which the product should be subjected, is contained in paras 108-111 of this report.

Status of the Standard

71. In view of the large number of amendments made by the Committee in the course of its deliberations, it was agreed to return the draft standard to Step 6 of the Procedure for a further round of comments. The revised draft standard is contained in Appendix III to this Report.

RECONSIDERATION OF DRAFT STANDARD FOR COOKED CURED PORK SHOULDER (STEP 7)

72. The Committee agreed to request the Secretariat to make similar amendments in the Draft Standard for Cooked Cured Pork Shoulder as agreed to for cooked cured ham.

73. The revised draft standard is contained in Appendix IV to this Report.

EXPRESSION FOR MEAT CONTENT

74. The Committee had before it a document (CX/PMP 73/7 and Addendum I) containing proposals from various governments for minimum meat content in cooked cured hams and pork shoulder and methods of sampling of consignments for the determination of meat content. These observations had been received in response to a decision by the Committee at its 6th Session to select the % protein on a fat free basis as a suitable expression for the content of meat for canned hams and pork shoulder.

75. The main issues considered by the Committee were the following:

- (a) Should the standard contain a provision for minimum meat content expressed as % protein on a fat-free basis using the arithmetical mean of the sample taken from the lot or should the standard specify only a minimum level for % protein content below which no unit in the sample should fall?
- (b) Should a sampling plan be developed on the basis of which lots should be accepted or rejected taking into account appropriate deviations from the mean (or some other type of sampling plan)?
- (c) What should the minimum % protein be and is there a need to distinguish between products containing additional brine and products processed back to "green weight"?

Meat Content of Cooked Cured Hams

76. In connection with (a) above the Committee had three proposals before it on the level of protein on a fat free basis:

- (i) Denmark 17.3% with a sampling plan
- (ii) Netherlands 16.5% with a sampling plan

(iii) United Kingdom 19% minimum content.

Some delegations supported the Danish proposal using a minimum arithmetical mean protein content expressed as % on a fat-free basis in the final product, while other delegations preferred to include in the standard an absolute minimum value of % protein content.

77. As regards (b) above, a number of delegations were in favour of the Danish approach for a sampling plan which involved the use of a standard deviation of 0.5% on the basis of which a lot would be either accepted or rejected. Some delegations were of the opinion that the deviation of 0.5% might not be appropriate and would need to be reconsidered in the light of information obtained from interlaboratory tests.

78. Other delegations were opposed to discussing any sampling plans as they considered that the Committee was not in a position (as it had insufficient information before it) to consider the question of sampling procedures at the present session.

79. Concerning the question mentioned under (c) above, most delegations which spoke - including the delegation of the Netherlands which withdrew its proposal for 16.5% protein on a fat free basis as given in their written comments - were in favour of maintaining for hams the minimum mean protein content of 17.3% on a fat free basis as proposed in the standard in view of the variable composition of the original meat used. Some opinion was expressed in favour of a single absolute minimum figure, though the value of 19.0% as an absolute minimum was considered by the delegation of the U.S.A. as not feasible commercially.

80. Other delegations were of the opinion that to cover the marketing of hams with higher yields two separate figures for minimum protein content should be laid down, one to cover hams with brine and another for hams processed back to "green weight". Furthermore, it was essential to label the product appropriately, in particular to declare any added water, as provided for in the standard and in order to inform the consumer (see also para 44).

81. The Committee agreed to retain the statements on a minimum arithmetical mean for % protein on a fat-free basis of 17.3% and the absolute minimum of 15.3% within square brackets, but decided not to take a position concerning the Danish proposal for a sampling plan (contained in document CX/PMP 73/7). It further agreed that the question of sampling plans should be considered in the light of information and comments received from governments. The delegations of Australia, the Federal Republic of Germany, New Zealand, the United Kingdom and the U.S.A. reserved their position concerning the figure of 17.3%.

82. The delegation of the Netherlands proposed that a small informal working group be asked to look further into the figures for the various products covered by the scope as drafted during the session and to look at the consequential linking with the requirements of the labelling section. The delegations of Denmark, the Netherlands, Switzerland, the United Kingdom and the U.S.A. agreed to participate in such a working group.

Meat Content of Cooked Cured Pork Shoulder

83. The Committee agreed to proceed in the same manner as with cooked cured hams, i.e. it retained both the absolute minimum for % protein on a fat free basis of 16.6% and the minimum arithmetical mean protein content of 14.6% within square brackets.

Meat Content of Corned Beef.

84. The Committee noted that this product was not subject to the same variation of composition as cooked cured hams and pork shoulder and agreed that the provision for minimum protein content should be expressed as an absolute figure and not as the arithmetical mean of the sample.

85. The Committee also noted that, although governments had been requested to send information concerning minimum protein content in corned beef, only limited comments had been received (see CX/PMP 73/4) and these had been supplemented at the meeting by the delegate of Switzerland. The Committee agreed with the proposal of the delegation of the U.S.A. for a minimum requirement of 25% protein and decided, as a consequence, to delete from the description section the requirement that the product following processing should represent not more than 70% by weight of the raw meat prior to cooking.

86. The delegations of Argentina, Australia, New Zealand and the United Kingdom reserved their position concerning the limit of 25% as, in their opinion, the Committee did not have sufficient data to substantiate that figure. The delegation of the United Kingdom further reserved its position concerning the deletion of the 70% requirement in the description section (see para 39).

87. In the opinion of the U.S.A. the establishment of a minimum protein value of 25% for canned corned beef made a maximum value for fat content unnecessary. These values are closely related and in this case the minimum value for protein becomes the dominant factor. A 25% minimum protein value makes it extremely difficult for fat values to rise much above 15% in this type of product.

CONSIDERATION OF DRAFT STANDARD FOR LUNCHEON MEAT (COMMUNUTED MEAT PRODUCTS)

88. The Committee had at its 6th Session considered a proposal by the Netherlands for three categories of canned chopped and comminuted meat products (ALINORM 72/16, paras 65-71).

89. Subsequent to the discussion of the proposal, the Committee had agreed to request the delegation of the Netherlands to prepare, in collaboration with the delegations of Denmark, the United Kingdom and the U.S.A., a new working paper which would contain revised proposals for standards for canned chopped meat and comminuted meat products which might replace the draft standards for luncheon meat and for chopped meat (ALINORM 71/16, Appendix IV and Appendix V respectively).

90. The Working Group which had met twice since its conception had come to the conclusion, however, that it would be better to return to the original concept of having two standards covering luncheon meat and chopped meat respectively, rather than having a "Group" standard for chopped and comminuted meat products.

91. The deliberations of the Working Group were contained in a report (CX/PMP 73/8) to which a revised text for the draft standard for cooked cured luncheon meat was appended; due to lack of time no revision of the chopped meat standard had been possible.

Title and Scope

92. The delegate of the Netherlands introduced the document to the Committee pointing out that the proposed scope section differed substantially from the original

scope section in that no reference was made to a specific type of container in which the product was packed. The new scope section allowed for any suitable packaging material.

93. In line with this proposal the title of the document had been amended to cover cooked cured luncheon meat.

94. Furthermore the scope section had been worded so that the standard would cover only products designated as "Luncheon Meat" and not comminuted meat products with other designations even though these might well comply with the requirements of the standard. In this connection it was pointed out that only the English term "Luncheon Meat" was applicable and that it should therefore not be translated.

Description

95. The Working Group had made a considerable number of changes in this section. The Committee while discussing these further made a number of amendments. The main changes were as follows: a statement to the effect that poultry meat could also be used in the preparation of the product; a deletion of the subsidiary definition for "hermetically sealed container"; and the inclusion of definitions for "edible offal", "packaged" and "poultry meat". The definition for meat was brought into line with that contained in the Draft Code of Hygienic Practice for Fresh Meat.

Essential Composition and Quality Factors

96. The Working Group had differentiated between essential ingredients and optional ingredients. The Committee agreed with the proposal and made a minor amendment in the subsection for optional ingredients.

Composition

97. The proposal of the Working Group for this subsection was amended by the Committee to the extent that it was specified, for the product with binder, that poultry meat could substitute 15% of the total ingoing meat. For the product without binder or edible offal a similar substitution was provided for with the restriction, however, that the poultry meat should be exclusive of offal.

98. The delegation of the U.S.A. proposed to lower substantially the minimum meat content for the product with binder to provide for the use of textured vegetable protein. The Committee held the view that for the time being no such provision should be made.

Essential Quality Factors

99. It was agreed that the essential quality factors as contained in the original draft standard should also be included in the present text. In view of the fact that the raw material could consist of both meat and poultry meat, the Committee agreed that in the raw material section the generic term "ingredients" should be used. With regard to the final product an editorial amendment was made stating that the product should be capable of being sliced.

Food Additives

100. As on previous occasions, the Committee discussed the need for the addition of erythrosine, as a colour and glucono-delta-lactone as an acidifier. It was agreed to retain both additives. The Committee agreed, however, to request the Codex Committee on Food Additives to give its opinion on the use of glucono-delta-lactone in connection with the prevention of the formation of nitrosamines. The delegations of France and the Federal Republic of Germany reserved their position with regard to the use of this

additive. The delegations of Argentina, Australia, the Federal Republic of Germany, New Zealand, Norway, Switzerland and the U.S.A. saw no need for the use of erythrosine.

Hygiene

101. Taking into account that the product could consist of meat as well as poultry meat, the Committee agreed to recommend that in addition to the Code of Hygienic Practice for Processed Meat Products, the Code of Hygienic Practice for Poultry Processing should apply.

102. As the product covered by the standard could be packed in any suitable packaging material, the hygiene provision dealing with the packaging of the product was revised. The same text as agreed to for cooked cured ham was adopted.

Name of the Food

103. The Committee discussed at some length the desirability of making the declaration of the presence of binders and edible offal a mandatory requirement. Similarly it discussed the need for specifying the species of animals from which the meat used in the manufacture of the product derived. It was agreed that the declaration of these details would only be necessary if their omission would mislead the consumer.

104. The remainder of the labelling section was amended to bring it into line with the changes made in the Draft Standard for Cooked Cured Ham.

Methods of Analysis and Sampling

105. The Committee decided that in view of the fact that limits had been laid down for the fat content of the product, it should include a method of analysis for fat. The same method (ISO-R 1443) as agreed upon for cooked cured ham was inserted.

Status of the Standard

106. The Committee agreed that in view of the extensive amendments made by the Working Group as well as by the Committee itself, the draft standard should be returned to Step 6 of the Procedure for a further round of government comments. The amended text is contained in Appendix V to this Report.

DRAFT STANDARD FOR CANNED CHOPPED MEAT

107. In view of the fact that the informal Working Group set up in accordance with para 71 of ALINORM 72/16 had not found time to revise the Draft Standard for Canned Chopped Meat Products (ALINORM 71/16 - Appendix V), the Committee agreed that the standard should be held in abeyance at Step 7 pending a revised draft standard being prepared by the informal Working Group.

SAMPLING PLANS FOR MICROBIOLOGICAL EXAMINATION OF PROCESSED MEAT PRODUCTS

108. The Committee had before it document CX/PMP 73/10 containing two chapters (15 and 16) from a book to be published by the International Commission on Microbiological Specifications for Foods (ICMSF) "Microorganisms in Food II",: Sampling for Microbiological Analysis and Principles and Specific Application.

109. The representative of ICMSF, Dr. B. Simonsen, in introducing the paper, stressed particularly the fundamental importance of proper hygienic in-plant control of the food in preparation, processing and further handling. He indicated that chapters 15 and 16 of the above book dealt with sampling plans for processed meats and sampling plans for shelf-stable canned foods. In his opinion the method of sampling and

inspection would be applicable to import control and could be adapted for routine purposes. The ICMSF representative further informed the Committee that his organization was working on microbiological end product specifications (bacterial counts) for non shelf-stable meat products using certain indicator microorganisms.

110. The Committee expressed its appreciation to the ICMSF for its contribution to furthering the work of the Codex Alimentarius Commission in the field of food hygiene and microbiology. It agreed, however, with the suggestion of a number of delegations that the document CX/PMP 73/10 could not be discussed in detail at the present session and accepted the offer of the representative of ICMSF to draw up, in collaboration with the Secretariat, a new text of sampling and inspection procedures for the next Session of the Committee. The representative of ICMSF further offered to elaborate suitable methodology for the microbiological analysis of processed meat products for inclusion in the various standards.

111. Some delegations were of the opinion that a document dealing with microbiological inspection of consignments of meat products would inevitably have a broader field of application than the standards at present considered by the Committee. In this connection the Secretariat was of the opinion that the document could be printed and published separately. It could then be adopted in Codex commodity standards wholly or in part, as appropriate, where it was necessary to give to the texts inserted into Codex standards by reference a mandatory character. It was understood by the Committee that any text agreed to in connection with microbiological methodology would, at an appropriate step be referred to the Codex Committee on Food Hygiene for endorsement in conformity with the Guidelines for Codex Committees.

CONSIDERATION OF REVISED CODE OF HYGIENIC PRACTICE FOR PROCESSED MEAT PRODUCTS AT STEP 4

112. The Committee had before it the above named code originally contained in Appendix V, ALINORM 72/16, as revised by the Danish Secretariat (CX/PMP 73/12) in the light of amendments made to the Draft Code of Hygienic Practice for Fresh Meat at the Second Session of the Codex Committee on Meat Hygiene (June 1973).

Definitions

4. "Container" - The Committee agreed to delete the requirement that containers should be impermeable to gas, as not all containers in use for packaging meat products would have to be of such a nature. It was noted that the word "container" was used in the text of the code in various connotations. The Committee agreed to reconsider this term at its next Session.

8. "Edible" - The Committee agreed to a redraft: "... means fit for human consumption".

12. "Hermetically sealed" - The Committee agreed to amend this definition to "..... means completely sealed and impermeable to gas."

13. "Ingredient" - The Committee, in order to make it clear that food additives were included in the term ingredient, agreed to insert after the word "substance" the words "including food additives", it being understood that food additives used in the preparation of meat products were covered by Codex specifications for identity and purity.

18 (new) "Poultry meat" - The Committee decided to include a definition of poultry meat as agreed to in the Luncheon Meat Standard.

18. "Processed" - The Committee considered that the definition did not make it clear as to what methods of preservation and what other treatment would lead to a product being regarded as "processed". The following text was proposed:

"Processed in relation to meat products means all approved methods of preservation but does not include chilling and freezing."

The Committee requested governments to comment on this definition or propose another suitable definition for the term "processed".

Ingredient Requirement

22. The Committee considered a proposal to expand the paragraph to include reference to poultry meat. The Committee agreed to include a proposal of New Zealand in the code in square brackets for consideration at its next session in the light of government comments.

Establishment Facilities and Operating Requirements

27(j) The Committee agreed to clarify the intention of this provision by replacing the word "used" by "available" in the first sentence. (New 27(h))

29(g) The Committee agreed to amend the last sentence to read:

"Inedible meat should be of such character or so treated that it cannot be used for human consumption, or supply food for or harbour vermin."

29(p) One delegation proposed that this paragraph be deleted as its provisions appeared covered in 30(a). As the words in 29(p) "should at all times be kept clean" were not included in 30(a), it was decided to refer this matter to the Meat Hygiene Committee.

35(a) The Committee considered a proposal requiring daily cleaning of walls which, in the opinion of some delegations, was not essential. The Committee did not make any changes to this paragraph.

35(c) It was agreed to amend this paragraph as proposed by the delegation of Ireland: "If a room normally used for the handling, preparation, processing, packaging or storage of meat and meat products is used for any other purpose, then sanitisation and disinfection are necessary immediately after such use."

35(d) The Committee considered a proposal to delete the requirement that rooms be completely emptied every 4 hours and to require, in case of continuous operation, cleaning every, 8 hours. The Committee decided only to delete the requirement for the rooms to be emptied.

35(e) The words "or smoking" were inserted after the word "cooking".

41(a) The question was posed whether the use of game meat in producing meat products had been given sufficient consideration with respect to this code. The code required that all meat used for meat products should be derived from animals subjected to ante and post mortem inspection. This would not be suitable for game meat. Consequently game meat would be excluded from the production of meat products. Since this was not the intention, the Committee considered it necessary to consider how game meat could be covered in the code in a proper way and agreed to request governments to give their views on this matter.

43. The Committee agreed to insert a proposal by New Zealand in square brackets as an alternative for the consideration of governments.

54(a) It was -pointed out that the term "foreign matter" could give difficulty of interpretation, especially in view of the permitted use of non-meat ingredients in the preparation of processed meat products. It was agreed that further consideration of this observation was necessary.

54(b) The Committee adopted the amendment proposed, by the U.S.A. to make clear that pathogenic microorganisms should not be present in detectable numbers.

Annex A

(c) The Committee adopted the text of the proposal of the U.S.A. which included the requirement that the chlorine concentration should be 1-2 ppm of residual chlorine at the discharge end of the cooler.

(d) The Committee considered amending the second sentence to provide for a break down of mechanical can handling equipment or systems. The Committee agreed to amend the second sentence as follows: "If it is essential to handle wet cans, personnel should do so exercising hygienic precautions."

(f) The Committee considered that the requirement to hold batches for the entire incubation period was unduly restrictive and agreed to the amendment proposed by the U.S.A. The Committee considered that at some future stage a sampling plan would require consideration but that at this stage random sampling would be sufficient.

(g) The Committee did not consider it necessary to require the declaration of country of origin in clear in the present code.

Annex B

The Committee agreed that it was necessary to elaborate another annex dealing with meat products heat treated prior to packaging (open pack products). The delegation of the United Kingdom offered to prepare such an annex for the next Session of the Committee.

Status of the Code

114. The Committee decided to advance the Proposed Draft Code of Hygienic Practice for Processed Meat Products as amended to Step 5 of the Procedure (see Appendix VI of this Report).

JUSTIFICATION FOR THE ELABORATION OF STANDARDS FOR CANNED CORNED MUTTON AND CANNED MEAT AND VEGETABLES

115. The Committee had before it a paper prepared by Australia (CX/PMP 73/13). In introducing the paper the delegation of Australia pointed out that on the basis of Australian data on production and exports in the above two types of product, and considering other aspects such as consumer protection, there appeared sufficient justification for elaborating international standards for the products in question.

116. In the event that the Committee felt that there was a need to obtain further information, the delegation of Australia proposed that a questionnaire based on the one included in the working paper should be distributed to governments.

117. It was pointed out that there was a need to ask governments to specify exactly and in analytical terms any information concerning compositional criteria. Doubt was expressed whether in view of the large variety of the products covered by a standard for

canned meat and vegetables, it would be feasible to draw up a standard other than one consisting of general provisions.

118. The Committee thanked the delegation of Australia for the work done and agreed that a questionnaire should be circulated to governments requesting information on both products.

119. The delegation of Australia would, if it deemed it appropriate on the basis of information received, draw up draft standards for the products in question for consideration by the Committee. The Committee would, at that time, be in a position to decide whether or not it was appropriate to proceed with the elaboration of international standards for canned corned mutton and canned meat and vegetables.

FUTURE WORK

120. The Committee agreed that there was no need at this time to consider other future work than the suggested standards for canned corned mutton and canned meat and vegetables.

OTHER BUSINESS

121. The Committee felt that the problems encountered in connection with the formulation of the scope, description and labelling sections of the Draft Standards for Canned Corned Beef and Cooked Cured Ham were of a general nature and might therefore recur and might also arise in other Codex commodity committees.

122. As these problems were connected, to a certain extent, with the provisions concerning Acceptance of Recommended Standards, the Committee suggested that they might suitably be considered by the Executive Committee and possibly by the Codex Committee on General Principles; it felt that they should in any event be examined by the Commission in the broad framework of the elaboration of Codex standards.

123. In connection with the discussion on nitrates and nitrites and the possible role of ascorbic acid in preventing the formation of nitrosamines (see para 23) the Committee was informed that an International Symposium on Nitrite in Meat Products had been held in Zeist, the Netherlands. The Symposium had made certain resolutions concerning the role of nitrites in the preparation of meat products, etc.

124. The Committee was informed that the proceedings of the Symposium would be published in the near future. The Committee requested the Codex Committee on Food Additives to take note of this information in its deliberations.

DATE AND PLACE OF NEXT SESSION

125. The Committee noted that its next Session was scheduled to be held in 1975 in Copenhagen and that the Commission, at its 10th Session, would consider the timetable of Codex Sessions for the period 1974-75.

SUMMARY STATUS OF WORK
(Prepared by Codex Alimentarius Commission Secretariat)

1. CODES AND STANDARDS UNDER CONSIDERATION BY THE COMMITTEE

Code/Standard	Status (Step)	to be dealt with by	Document ALINORM-App.
Code of Hygienic Practice for Processed Meat Products	5 - advanced	C'ssion 10th	74/16 - VI
Draft Standard for Canned Corned Beef	8 - advanced	C'ssion 10th	74/16 - II
Draft Standard for Cooked Cured Hams	6 - returned	C'ttee 8th	74/16 - III
Draft Standard for Cooked Cured Pork Shoulder	6 - returned	C'ttee 8th	74/16 - IV
Proposed Draft Standard for Cooked Cured Luncheon Meat	6 - returned	C'ttee 8th	74/16 - V
Proposed Draft Standard for Canned Chopped Meat	7 - retained	Working Group + C'ttee 8th	CX/PMP 75/3*

* See para 107 of the Report; document to be issued in due time.

2. MATTERS OF SPECIFIC INTEREST TO OTHER CODEX COMMITTEES

	Paragraphs
- Executive Committee	121-122, 7-21, (84-87), 27-33
- (General Principles	121-122, 7-21, (84-87), 27-33)
- Food Additives*	23, 52-56, 100, 123-124
- Food Hygiene	24-26, 57-58, 101-102, 108-111
- Food Labelling	27-33, 59-69, 103-104
- Methods of Analysis and Sampling	34-35, 105
- Meat Hygiene	Page 14 - para 29(p)

* At its 9th Session (December 1973) the Codex Committee on Food Additives dealt with the matters referred to it. Where appropriate, consequential changes have been made in the various standards.

3. WORK UNDERTAKEN BY VARIOUS COUNTRIES AND ORGANIZATIONS

- 3.1 Meat Content of Cooked Cured Hams
Informal Working Group - Denmark, Netherlands, Switzerland, United Kingdom and U.S.A. (See para 82)
- 3.2 Redraft of Proposed Draft Standard for Chopped Meat
Informal Working Group - Denmark, Netherlands, United Kingdom and U.S.A. (See para 107)
- 3.3 Sampling Plans for Microbiological Examination of Processed Meat Products and Methodology for Microbiological Analysis ICMSF (See para 110)
- 3.4 Questionnaire requesting information on Trade, Compositional Criteria, etc. of Canned Corned Mutton and Canned Meat and Vegetables Australia (See paras 115-119)

4. REQUEST FOR SPECIAL COMMENTS

- 4.1 Toxicological information on guanylate and inosinate to be sent to the Chief, Food Additives, WHO, 1211 Geneva (Switzerland). (See para 56 of this Report)
- 4.2 Governments are requested to comment specifically on matters referred to in paras 81; page 14 - para 18, and para 22; page 15 - para 41(a) and para 43.

ALINORM 74/16-
APPENDIX I

LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

ARGENTINA
ARGENTINE

Mr. Alfredo Louro
Economic and Commercial Counsellor
Argentinian Embassy
Grevgatan 5
11453-Stockholm/Sweden

Dr. Enrique Canessa
Director Laboratory P. Industry
48-950
La Plata/Argentina

AUSTRALIA
AUSTRALIE

Mr. R.A. Potts
Assistant Chief Veterinary Officer
Department of Primary Industry
Canberra

Mr. L.J. Erwin
Food Technologist
Department of Primary Industry
Canberra

Mr. P. Barnes
Deputy Chairman
Australian Meat Exporter's
Federal Council
Represent the Australian Meat Board
30 Grosvenor Street
Sidney

AUSTRIA
AUTRICHE

Dr. Prof. Oskar Praendl
A 1130 Vienna
Gloriettegasse 12

BELGIUM
BELGIQUE
BELGICA

Dr. P. Devaux
Inspecteur Médecin Vétérinaire
20, Place de la Foire
B 6620 Neufchateau

BRAZIL
BRESIL
BRASIL

Claudio Roberto Almeida
Veterinarian
Esplanadu dos Ministerics
Bloco 8 Sala 527
Brasilia

BULGARIA
BULGARIE

Mr. Blagoi Lazarov
Bulgarian Trade Representation
Finsensvej 11A
Dk-2000-Copenhageu F/Denmark

CZECHOSLOVAKIA
TCHECOSLOVAQUIE
CHECOSLOVAQUIA

Dr. Oto Orban
Veterinary Surgeon
State Veterinary Administration
Pekarska 1-3
Brno

Mr. D. Klima
Meat Research Institute
Scientific worker
Palacheho 1-3
Brno

DENMARK
DANEMARK
DINAMARCA

Børge Sørensen
Food Technologist
Danish Meat Cannery Export
Association
Axelborg, Axeltorv 3.
DK-1609 Copenhagen V

K. Andreasen
Veterinarian
Agricultural Council
Axelborg, Axeltorv 3
DK-1609 Copenhagen V

Ole Jørgensen
Food Technologist
Danish Meat Cannery Association
Axelborg, Axeltorv 3
DK-1609 Copenhagen V

K. Hermansen
Veterinarian
Directorate of Veterinary Service
Nyropsgade 37
DK-16C2 Copenhagen V

K.B. Fallesen
Veterinarian
Directorate of Veterinary Service
Nyropsgade 37
DK-1609 Copenhagen V

P. Jørgensen
Export Manager
Danish Meat Cannery Association
Axelborg, Axeltorv 3
DK-1609 Copenhagen V

K.G. Pedersen
Chief Technologist
Danish Meat Products Laboratory
Howitzvej 13
DK-2000 Copenhagen F

J.B. Wilhelmsen
Chief Microbiologist
Danish Meat Research Institute
Maglegårdsvej 2
DK-4000 Roskilde

Mog. Kondrup
Food Technologist
ISALESTA
Vesterbrogade 1
DK-1620 Copenhagen, V

Birgit Gottlieb
Secretary
Ministry of Agriculture
Slotsholmsgade 10
DK-1216 Copenhagen K

EGYPT, Arab. Rep. of
EGYPTE, Répt. arabe de
EGIPTO, Rep. arabe de

Dr. Nazar Adham Ali Adham
Director Food Control Department
Ministry of Health
10 Yafia ben Ziostreet
Giza
Cairo

FINLAND
FINLANDE
FINLANDIA

Esko Nurmi
Professor
College of Veterinary Medicine
Hämeentie 57
00550 Helsinki 55

FRANCE
FRANCIA

J. Riviere
Vétérinaire
Inspecteur Chef
Ministère de l'agriculture
5 rue Ernest Renan
Issy les Moulineaux. 92

GERMANY, Fed. Rep. of
ALLEMAGNE, Rép. féd. de l'
ALEMANIA, Rep. fed. de

Dr. Klaus Gerigk
Director and Professor
Bundesgesundheitsamt
D-1000 Berlin 33
Postfach

Dr. G. Roller
Ministerial Counsellor
Federal Ministry for Food
Agriculture and Forestry
D-53 Bonn-Duisdorf

Dr. Günter Heinz
Meat Technologist
Bundesanstalt für Fleischforschung
D 865 Kulmbach, Blaich 4

HUNGARY
HONGRIE
HUNGRIA

Dr. Otto Noske
Chemical engineer
Central Laboratory for Meat and Meat
Products
Szechenyi rkp 6
Budapest V

IRELAND
IRLANDE
IRLANDA

John Devereux
Veterinarian
Veterinary Research Laboratory
Abbotstown
Castleknock
County Dublin

ITALY
ITALIE
ITALIA

A. Stacchini
Chimico, Istituto Superiore Sanità
Viale Regina Elena 249
Rome

JAPAN
JAPON

Yasuhiro Taga
Agricultural Technical Official
Ministry of Agriculture & Forestry
Meat & Egg Division
Animal Industry Bureau
No. 2-1, 1 chome, Kasumigaseki
Chiyoda-ku
Tokyo

Mr. H. Sasaki
Third Secretary
Embassy of Japan
Kultorvet 2
DK-1175 Copenhagen K
Denmark

Yoshichika Fuchi
Managing Director
The Canned Meat Manufacturers,
Association of Japan
2nd Fl. Robson Building
Nihombashi 4-4
Chuo-ku
Tokyo

KENYA
KENIA

Dr. B.S. Kimanzi
Senior Veterinary Officer
Veterinary Laboratories
P.O. Kabete

MALAWI

I. McLauchlan
Deputy Director of Veterinary Serv
Ministry of Veterinary
P.O. Box 613
Lilongwe

NETHERLANDS
PAYS-BAS
PAISES BAJOS

M.J.M. Osse
Ministry of Agriculture
and Fisheries
Depat. International Trade &
Agricultural Industries
le v.d. Boschstraat 4
The Hague

Dr. Klaas Büchli
Public Health Officer
Hoodinspectie Volksgezondheid
Dr. Reyersstraat 10
Leidschendam

Prof. Dr. B. Krol
Central Institute for Nutrition
& Food Research TNO
UtrechtSeweg 48
Zeist

Dr. J.P.W. van Baal
Manager of the Central Laboratory
Hartog's Fabrieken N.V.
Gasstraat 10
Oss

Dr. C.C.J.M. van der Meys
Officer of the Veterinary Services
Ministry of Agriculture and Fisheries
le v.d. Boschstraat 4
The Hague

NEW ZEALAND
NOUVELLE-ZELANDE
NUEVA ZELANDIA

Miss Frances M.C. Lee
First Secretary (Commercial)
New Zealand High Commission
Haymarket
London S.W. 1
Britain

Mr. Brian Stedman
Chief Chemist
New Zealand Refrigerating Co. Ltd.
P.O. Box 1472
Christchurch, New Zealand

NORWAY
NORVEGE
NORUEGA

Mr. A. Ørbeck Sørheim
Superintending Veterinary Inspect.
Ministry of Agriculture
Veterinary Division
Oslo Dep.

Mr. M. Haugum
Laboratory Chief
Stabburet A/S
N-1601 Frederikstad

POLAND
POLOGNE
POLONIA

Mr. Norbert Jaugsch
Food Technologist
Ministry of Foreign Trade
Quality Inspection Office
9 Stepinska Str.
Warsaw

Mr. W. Kolowiecki
Veterinarian
Ministry of Foreign Trade
Quality Inspection Office
9 Stepinska Str
Warsaw

Dr. L. Michalowski
Ministry of Agriculture
Veterinary Department
30 Wspolna Str.
Warsaw

SPAIN
ESPAGNE
ESPANA

Fernando Perez Florez
Escuela Nacional de Sanidad
Ciudad Universitaria
Madrid 3

José Gómez Laá
Secretario de la Comision
Especializada de Normalizacion
de Productos Ganaderos
Fondo de Ordenacion y Regulacion
de Producciones y Precios
Agrarios (FORPPA)
General Sanjurjo 4
Madrid 3

Dr. Manuel Rodríguez-Rebollo
Jefe de la Sección de
"Industrias Cárnicas y
Auxiliares de la Ganadería"
M° de Agricultura
Paseo Infanta Isabel, 1
Madrid-7

SWEDEN
SUEDE
SUECIA

Dr. Georg Brännland
Chief Government Inspector
Food Production Division
The National Food Administration
S-104 01 Stockholm 60

Dr. Bengt Eriksson
KF's Provchark
Finnbodavägen 13
S-13100 Nacka

Prof. Torsten Storgårds
Swedish Meat Research Institute
Box 52
S-244 00 Kävlinge

Mr. Olof Ågren
Deputy Head of Food Standards
Division
The National Food Administration
S-10401 Stockholm 60

Mr. Börje Lindgren
Manager
The Meat Trade Association
Slakthusplan 5
S-12162 Johanneshov

SWITZERLAND
SUISSE
SUIZA

Mr. H.U. Pfister
Head of Codex Section
Swiss Federal Health Service
Haslestr. 16
CH-3008 Berne

Dr. Eugen Hauser
Eidg. Veterinäramt
Leiter Lebensmittelchemie
Viktoriastrasse 85
CH-3000 Berne 25

Mr. Gerd Huschke
Chemist
Mischelistr. 39
CH-4153 Reinach

THAILAND
THAILANDE
TAILANDIA

Prof. Amara Bhumiratana
Director
Institute of Food Research &
Product Development
Technical Adviser
Thai Food Processer's Association
P.O. Box 4-170
Bangkok-4

TURKEY
TURQUIE
TURQUIA

Ahmet Unali
Veterinarian
Et Ve Balik Kurumu et Kombinasi
Ankara

Adnan Aydin
Veterinarian
Et ve Balik Kurumu
Genel Müdürlüğü
Ankara

UNITED KINGDOM
ROYAUME-UNI
REINO UNIDO

Mr. A.A. Philpott
Food Standard Division
Ministry of Agriculture
Fisheries and Food
Great Westminster House
Horseferry Road
London S.W.1 2 PE

Mr. I.M.V. Adams
Food Science Division
Ministry of Agriculture
Fisheries and Food
Horseferry Road
London S.W.1 2PE

Mr. Allen
Food Standard Division
Ministry of Agriculture
Fisheries and Food
Horseferry Road
London S.W.1 2PE

Mr. R. Sawyer
Superintendent Food and
Nutrition Division
Laboratory of the Government
Chemist
Cornwall House
Stamford Street
London S.E.1 9NQ

Mr. W.R.P. Hildebrand
Government Veterinarian
Ministry of Agriculture
Dundonald House
Upper Newtonnards Road
Belfast BT4 3SB
Northern-Ireland

Mr. N.D. Baird
State Veterinary Surgeon
Ministry of Agriculture
Fisheries and Food
Government Offices
Leatherhead Road
Chessington
Surrey

Mr. J. Lokce
Company Secretary
Walls Meat Groupe Ltd.
Atlas Road
Willesden
London N.W.10

Dr. R.S. Hannan
Food Scientist
The Walls Meat Company Ltd.
Atlas Road
Willesden
London N.W. 10

Dr. A.M. Taylor
Food Technologist
C. Shippams Ltd.
East Walls
Chichester
Sussex

Mr. P.O. Dennis
Food Technologist
Brooke Bond Oxo Ltd.
Witneys Technical Centre
Trojan Way
Purley Way
Croydon CR 9 9EH

U.S.A.
E.U.A.
EE.UU

Dr. H.C. Mussman
Deputy Administrator
Scientific & Technical Services
Animal and Plant Health Inspection
Service
United States Department of Agriculture
Washington D.C. 20250

Dr. Donald Houston
Director, Technical Service
United States Department of Agriculture
Meat & Poultry Inspection Programme
Washington D.C. 20250

Dr. R.B. Sleeth
Assistant Director, Food Research
Division
Armour and Company
801 West 22nd Street
Oak Brook, Illinois 60521

Mr. R.J. Asp
Group Vice President
Geo A. Harmel Co.
P.O. Box 800
Austin, Minnesota 55912

YUGOSLAVIA
YUGOSLAVIE

Dr. Radoljub Tadic
Research Worker
Yugoslav Institute of MeatTechnology
11000 Beograd
Kacanskog-13

Dr. Milenko Potparić
Government Counsellor
Savezni Tržišni Inspektorat
11000 Beograd
Brankova 25

INTERNATIONAL ORGANIZATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES
INTERNACIONALES

EUROPEAN ECONOMIC COMMUNITY
(EEC)

Mr. Gilbert Castille
Commission des Communautés
Européennes
200 rue de la Loi
B-1040 Bruxelles
Belgium

Mr. Michael Graf
Administrateur auprès du Secrétaire.
Général du Conseil des Communautés
Européennes
170 rue de la Loi
B-1040 Bruxelles.
Belgium

CENTRE DE LIAISON DES
INDUSTRIES TRANSFORMATRICES
DE VIANDES DE LA COMMUNAUTE
EUROPEENNE (CLITRAVI)

Mr. Karel Ruelens
Vice-Président Exécutif
Av. de Cortenbergh 172
B-1040 Bruxelles
Belgium

INTERNATIONAL ORGANIZATION OF
CONSUMERS UNIONS (IOCU)

Jette Juul Jense
Danish Consumer Council
Forbrugerrådet
Købmagergade 7
DK-II50 Copenhagen K
Denmark

INTERNATIONAL COMMISSION ON
MICROBIOLOGICAL
SPECIFICATIONS FOR FOODS
(I.C.M.S.F.)

Bent Simonsen
Chief Microbiologist
Danish Meat Products Laboratory
Howitzvej 13
DK-2000 Copenhagen F
Denmark

INSTITUT EUROPEEN DES
INDUSTRIES DE GOMME DE
CAROUBE

Mr. Peter Roennau
Ingenieur, Food Technologist
Fa. INTERFRIMULSION G.m.b.H.
D-2400 Lübeck
Postfach 1384

INTERNATIONAL ORGANIZATION
FOR
STANDARDIZATION (ISO)

Mrs. F. van den Akker
Secretariat ISO/TC 34/SC 6 - Meat and
Meat Products
Nederlands Normalisatie-Instituut
5 Polankweg
Rijswijk (ZH) 2106

DANISH SECRETARIAT
SECRETARIAT DANOIS
SECRETARIADO DANES

Dr. V. Enggaard *
Assistant Director
Danish Meat Products Laboratory
Howitzvej 13
DK-2000 Copenhagen F

Mrs. A. Brincker
Food Technologist
Danish Meat Products Laboratory
Howitzvej 13
DK-2000 Copenhagen F

* Chairman
Président
Presidente

FAO

W.L. de Haas
Food Standards Officer
Joint FAO/WHO
Food Standards Programme FAO
00100 Rome, Italy

Dr. G. Lodomery
Food Standards Officer
Joint FAO/WHO
Food Standards Programme FAO
00100 Rome Italy

J.P. Dobbert
Senior Legal Officer
FAO
00100 Rome Italy

WHO

OMS

Dr. L. Reinius
Food Hygienist
Veterinary Public Health
Division of Communicable Diseases
WHO
1211 Geneva 27
Switzerland

Mrs. B. Blomberg
Administrative Officer
Promotion of Environmental Health
WHO/EURO
Scherfigsvej 8
DK-2100 Copenhagen ø
Denmark

Dr. A.H. Wahba
Regional Officer
Health Laboratory Service
WHO/EURO
Scherfigsvej 8
DK-2100 Copenhagen ø
Denmark

APPENDIX II

DRAFT STANDARD FOR CANNED CORNED BEEF (Advanced to Step 8 of the Procedure)

1. SCOPE

The provisions of this standard shall apply to canned meat products designated as "Corned Beef" and packed in hermetically sealed containers which have been heat treated after sealing to such an extent that the product is shelf-stable.

The standard shall not apply to any canned meat product with compositional characteristics different from those specified in the standard even though the name of such a meat product might include the term "corned beef".

2. DESCRIPTION

Corned beef is chopped, cured, boneless carcass meat from animals of bovine species and may include head meat, heart meat, and skirt meat.

The product shall be prepared from coarsely cut beef which has been precooked or a mixture of such precooked beef to which a maximum of 5% raw beef has been added and, in either case, the meat shall be cured before or after filling into the container.

The heat treatment shall be applied after the container is sealed and 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 Essential Ingredients

- uncured beef
- salt (sodium chloride), sodium or potassium nitrite

3.2 Optional Ingredients

- sucrose, invert sugar, dextrose (glucose), lactose, maltose, or glucose syrup (including corn syrup)

3.3 Composition

Total protein content in the final product shall not be less than 25% m/m. Total fat content in the final product shall not exceed 40% m/m.

3.4 Essential Quality Factors

3.4.1 Raw material

The meat from which the product is prepared shall be free from objectionable odours and flavours.

3.4.2 Final product

The product shall be clean and substantially free from staining from the container. The meat shall be uniformly and thoroughly cured and the product capable of being sliced.

4. FOOD ADDITIVES

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

<u>Additive</u>	<u>Maximum level calculated on the total net content of the final product</u>	<u>Status</u>
Nitrate, potassium and/or sodium salts	500 mg/kg, expressed as sodium nitrate ¹	Temporarily endorsed
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite ¹	Temporarily endorsed
Ascorbic acid and its sodium salt	500 mg/kg expressed as ascorbic acid ¹	Endorsed

¹ Subject to review in the light of further information based on current research.

5. HYGIENE

- 5.1 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 VI to this Report).
- 5.2 The following specific provisions in respect of food hygiene of this product are subject to, or have been endorsed by the Codex Committee, on Food Hygiene as indicated below:
- 5.2.1 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. ² (IV.D.41(a)) (Endorsed)
- 5.2.2 Meat and meat products shall be handled, stored and transported in an establishment in a manner that will protect the meat and meat products from contamination and deterioration. ² (IV.D.41(b)) (Endorsed)
- ² These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products (Appendix VI to this Report).
- 5.2.3 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 shall show visible vacuum. (To be endorsed)
- 5.2.4 When processed containers are cooled in water, the water shall be of potable quality or suitably treated so as not to constitute a public health hazard. If cooling

water is re-circulated, it shall be filtered and effectively disinfected by chlorine or otherwise, before use or each re-use. (Endorsed)

- 5.2.5 After processing, containers shall be handled in such a manner as to avoid contamination of the product. (To be endorsed)

6. LABELLING

In addition to sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS I-1969), the following specific provisions apply, and are subject to endorsement or have been endorsed by the Codex Committee on Food Labelling.

6.1 The Name of the Food (subject to endorsement)

The name of the product is "Corned Beef". This name, if used as sole designation, shall be reserved exclusively to products falling within the scope of the standard, it being understood that the term "corned beef" may be used for other products only if accompanied by a suitable qualifying statement.

6.2 List of Ingredients (endorsed)

A complete list of ingredients shall be declared on the label in descending order of proportion and a specific name shall be used for all of the ingredients.

6.3 Net Contents (endorsed)

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and Address (endorsed)

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

6.5 Country of Origin (subject to endorsement)

- 6.5.1 The country of origin of the product shall be declared in clear.

- 6.5.2 The country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

6.6 Lot Identification (subject to endorsement)

Each container shall be embossed or otherwise permanently marked in code or in clear to identify the producing factory, the date of production and the product packed in the container. .

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are subject to endorsement or have been provisionally endorsed by the Codex Committee on Methods of Analysis and Sampling.

7.1 Fat (provisionally endorsed)

Recommended method: Determination of Total Fat Content of Meat and Meat Products, ISO Recommendation R 1443.

7.2 Protein (subject to endorsement)

Recommended method: Determination of Nitrogen Content of Meat and Meat Products, ISO Recommendation R 937.

DRAFT STANDARD FOR COOKED CURED HAM

(Returned to Step 6 of the Procedure for further Government Comments)

1. SCOPE

The provisions of this standard shall apply to products designated as "Cooked Ham" packaged in any suitable packaging material as defined in section 5 below.

The standard shall not apply to any ham products with compositional characteristics different from those specified in the standard, even though the name of such products might include the terms "ham" or "cooked ham".

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 end of the hip bone - 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 to which the product has been subjected and the type of cure and packaging shall be sufficient to ensure that the product presents no hazard to public health and remains wholesome under conditions of storage, transport and sale as indicated in subsections 5.2.3 and 5.2.4.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Essential Ingredients

- uncured ham
- brine consisting of water and salt (sodium chloride) and sodium or potassium nitrite

3.2 Optional Ingredients

- sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose syrup (including corn syrup), honey
- edible gelatine
- spices, seasonings and condiments

3.3 Essential Quality Factors

3.3.1 Raw material

The ingredients from which the product is prepared shall be free from objectionable odours and flavours.

3.3.2 Final product

The product shall be clean and substantially free from staining and contamination from the container. The meat shall be uniformly and thoroughly cured and the product shall be capable of being sliced.

3.4 Meat Content

[Minimum arithmetic mean for % protein on fat-free basis	17.3%
Absolute minimum for % protein on fat-free basis	15.3%]

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:

<u>Additive</u>	<u>Maximum level calculated on the total net content of the final product</u>	<u>Status</u>
Agar	Limited by good manufacturing practice (GMP)	Endorsed
Alginates, potassium and/or sodium salts	Limited by GMP	Endorsed
Carrageenan	Limited by GMP	Endorsed
Ascorbic acid, iso-ascorbic acid and their sodium salts	500 mg/kg (expressed as ascorbic acid) singly or in combination ¹	Endorsed
Natural flavourings as defined in the Codex Alimentarius and their identical synthetic equivalents	Limited by GMP	Temporarily endorsed pending establishment of Codex lists
Natural smoke solutions and their extracts as defined in the Codex Alimentarius and their identical synthetic equivalents	Limited by GMP	Temporarily endorsed, pending evaluation by the JECFA
Citrate, sodium salt	Limited by GMP	Endorsed
Guanylic acid, sodium salt	500 mg/kg expressed as guanylic acid	Postponed pending toxicological evaluation by the JECFA
Inosinic acid, sodium salt	500 mg/kg expressed as inosinic acid	Endorsed
Monosodium glutamate	2000 mg/kg expressed as glutamic acid	Endorsed
Hydrolyzed protein used as flavour enhancer	Limited by GMP	Endorsement postponed ²
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate ¹	Temporarily endorsed
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite ¹	Temporarily endorsed
Added phosphates (mono-di- and poly-sodium and potassium salts)	3000 mg/kg (expressed as P ₂ O ₅) singly or in combination	Endorsed

¹ Subject to review in the light of further information on current research.

² Report of 9th Session of Codex Committee on Food Additives, ALINORM 74/12, para 84.

5. HYGIENE

5.1 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 VI to this Report).

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

5.2.1 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. ³ (IV.D.41(a)) .

³ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products (Appendix VI to this Report).

5.2.2 Meat and meat products shall be handled, stored or transported in an establishment in a manner that will protect the meat and meat products from contamination and deterioration, ¹ (IV.D.41(b))

¹ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products (Appendix VI to this Report).

5.2.3 Products that are heat treated after packaging shall be packaged in hermetically sealed containers manufactured of materials which do not present any health hazard and which do not permit contamination under the conditions of handling, storage, transport, and sale indicated on the label. The containers shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.

5.2.4 Products that are heat treated before packaging shall be packaged in such a way that contamination is kept to a minimum so that the product will withstand spoilage and present no public health hazard under the conditions of handling, storage, transport and sale indicated on the label. The containers shall be manufactured of materials which do not present any health hazard and which do not permit contamination under normal conditions of handling. They shall be clean and, where applicable, show visible vacuum.

5.2.5 When processed containers are cooled in water, the water shall be of potable quality or suitably treated so as not to constitute a public health hazard. If cooling water is re-circulated, it shall be filtered and effectively disinfected by chlorine or otherwise, before use or each re-use.

5.2.6 The final product shall be handled and stored in such a manner as to avoid contamination of the product.

6. LABELLING

In addition to sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/R3 I-1969), the

following specific provisions apply (subject to endorsement by the Codex Committee on Food Labelling):

6.1 The Name of the Food

6.1.1 The name of the product is "Cooked Ham".

6.1.2 The name of the product shall include, as appropriate, the designation:

- "with skin"
- "in/with natural juice"
- "X added" applying to gelatine, agar, alginates or carrageenan
- "smoked"
- "smoking agent added"

6.1.3 The name "cooked ham" if used as such or in combination with the descriptive designations in 6.1.2 shall be reserved exclusively to products falling within the scope of the standard, it being understood that the term "cooked ham" as such or in combination with the descriptive designations in 6.1.2 may be used for other products only if accompanied by further suitably qualifying statements in the name of the product.

6.1.4 A declaration that accurately describes any method of preparation or processing shall be given so as to appear simultaneously visible with the name of the product if its omission would mislead the consumer.

6.2 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion, in accordance with subsection 3.2(c) of the Recommended International General Standard for the Labelling of Prepackaged Foods, except that specific names shall be used for ascorbic acid, iso-ascorbic acid and their sodium salts, nitrate (potassium and sodium), and nitrite (potassium and sodium), and added phosphates may be declared by the class title "phosphates".

6.3 Net Contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and Address

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

6.5 Country of Origin

6.5.1 The country of origin of the product shall be declared in clear.

6.5.2 The country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

6.6 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.

6.7 Lot Identification

Each container shall be embossed or otherwise permanently marked in code or in clear to identify the producing factory, the date of packaging and the product packed in the container.

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.

7.1 Protein

Recommended method: Determination of Nitrogen Content of Meat and Meat Products, ISO Recommendation R 937.

7.2 Fat

Recommended method: Determination of Total Fat Content of Meat and Meat Products, ISO Recommendation R 1443.

APPENDIX IV

DRAFT STANDARD FOR COOKED CURED PORK SHOULDER

(Returned go Step 6 of the Procedure for further Government Comments)

1. SCOPE

The provisions of this standard shall apply to products designated as "Cooked Pork Shoulder" packaged in any suitable packaging. material as defined in section 5 below.

The standard shall not apply to any pork shoulder products with compositional characteristics different from those specified in the standard, even though the name of such products might include the terms "pork shoulder" or "cooked pork shoulder".

2. DESCRIPTION

The product shall be made of meat from the shoulder of a pig 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 to which the product has been subjected and the type of cure and packaging shall be sufficient to ensure that the product presents no public health hazard and remains wholesome under conditions of storage, transport and sale as indicated in sections 5.2.3 and 5.2.4.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Essential Ingredients

- uncured pork shoulder
- brine consisting of water and salt (sodium chloride) and sodium or potassium nitrite.

3.2 Optional Ingredients

- sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose syrup (including corn syrup), honey
- edible gelatine
- spices, seasonings and condiments

3.3 Essential Quality Factors

3.3.1 Raw material

The ingredients from which the product is prepared shall be free from objectionable odours and flavours.

3.3.2 Final product

The product shall be clean and substantially free from staining and contamination from the container. The meat shall be uniformly and thoroughly cured and the product shall be capable of being sliced.

3.4 Meat Content

[Minimum arithmetic mean for % protein on fat-free basis 16.6%
Absolute minimum for % protein on fat-free basis 14.6%]

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:

<u>Additive</u>	<u>Maximum level calculated on the total net content of the final product</u>	<u>Status</u>
Agar	Limited by good manufacturing practice (GMP)	Endorsed
Alginates, potassium and/or sodium salts	Limited by GMP	Endorsed
Carrageenan	Limited by GMP	Endorsed
Ascorbic acid, iso-ascorbic acid and their sodium salts	500 mg/kg (expressed as ascorbic acid) singly or in combination ¹	Endorsed
Natural flavourings as defined in the Codex Alimentarius and their identical synthetic equivalents	Limited by GMP	Temporarily endorsed, pending establishment of Codex lists
Natural smoke solutions and their extracts as defined in the Codex Alimentarius and their identical synthetic equivalents	Limited by GMP	Temporarily endorsed, pending evaluation by the JECFA
Citrate, sodium salt	Limited by GMP	Endorsed

Guanylic acid, sodium salt	500 mg/kg expressed as guanylic acid	Postponed pending toxicological evaluation by the JECFA
----------------------------	--------------------------------------	---

¹ Subject to review in the light of further information on current research.

Inosinic acid, sodium salt	500 mg/kg expressed as inosinic acid	
Monosodium glutamate	2000 mg/kg expressed as glutamic acid	Endorsed
Hydrolyzed protein used as flavour enhancer	Limited by GMP	Endorsement postponed ¹
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate ²	Temporarily endorsed
Nitrite, potassium, and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite ²	Temporarily endorsed
Added phosphates (mono-, di- and poly-sodium and potassium salts)	3000 mg/kg (expressed as P ₂ O ₅) singly or in combination	Endorsed

¹ Report of 9th Session of Codex Committee on Food Additives, ALINORM 74/12, para 84.

² Subject to review in the light of further information on current research.

5. HYGIENE

- 5.1 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 VI to this Report).
- 5.2 The following specific provisions in respect of food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene:
- 5.2.1 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. ^{3/} (IV.D.41 (a))
- 5.2.2 Meat and meat products shall be handled, stored or transported in an establishment in a manner that will protect the meat and meat products from contamination and deterioration. ^{3/}(IV.D.41 (b))
- 5.2.3 Products that are heat treated after packaging shall be packaged in hermetically sealed containers manufactured of materials which do not present any health hazard and which do not permit contamination under the conditions of handling, storage, transport and sale indicated on the label. The containers shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.

- 5.2.4 Products that are heat treated before packaging shall be packaged in such a way that contamination is kept to a minimum so that the product will withstand spoilage and present no public health hazard under the conditions of handling, storage, transport and sale indicated on the label. The containers shall be manufactured of materials which do not present any health hazard and which do not permit contamination under normal conditions of handling. They shall be clean and, where applicable, show visible vacuum.
- 5.2.5 When processed containers are cooled in water, the water shall be of potable quality or suitably treated so, as not to constitute a public health hazard. If cooling water is re-circulated, it shall be filtered and effectively disinfected by chlorine or otherwise, before use or each re-use.
- 5.2.6. The final product shall be handled and stored in such a manner as to avoid contamination of the product.

³ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products (Appendix VI to this Report).

6. LABELLING

In addition to sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS 1-1969), the following specific provisions apply (subject to endorsement by the Codex Committee on Food Labelling):

6.1 The Name of the Food

6.1.1 The name of the product is "Cooked Pork Shoulder"

6.1.2 The name of the product shall include, as appropriate, the designation:

- "with skin"
- "in/with natural juice"
- "X added" applying to gelatine, agar, alginates or carrageenan
- "smoked"
- "smoking agent added"

6.1.3 The name "cooked pork shoulder" if used as such or in combination with the descriptive designations in 6.1.2 shall be reserved exclusively to products falling within the scope of the standard, it being understood that the term "cooked pork shoulder" as such or in combination with the descriptive designations in 6.1.2 may be used for other products only if accompanied by further suitably qualifying statements in the name of the product.

6.1.4 A declaration that accurately describes any method of preparation or processing shall be given so as to appear simultaneously visible with the name of the product if its omission would mislead the consumer.

6.2 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion, in accordance with subsection 3.2(c) of the Recommended International General Standard for the Labelling of Prepackaged Foods, except that specific names shall be used for ascorbic acid, iso-ascorbic acid and their sodium salts, nitrate (potassium and sodium), and nitrite (potassium and sodium) and added phosphates may be declared by the class title "phosphates".

6.3 Net Contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and Address

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

6.5 Country of Origin

6.5.1 The country of origin of the product shall be declared in clear.

6.5.2 The country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

6.6 Storage Instructions

For pork shoulders 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.

6.7 Lot Identification

Each container shall be embossed or otherwise permanently marked in code or in clear to identify the producing factory, the date of packaging and the product packed in the container.

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.

7.1 Protein

Recommended method: Determination of Nitrogen Content of Meat and Meat Products, ISO Recommendation R 937.

7.2 Fat

Recommended method: Determination of Total Fat Content of Meat and Meat Products, ISO Recommendation R 1443.

APPENDIX V

DRAFT STANDARD FOR COOKED CURED LUNCHEON MEAT (Returned to Step 6 for further Government Comments)

1. SCOPE

The provisions of this standard apply to products designated as "Luncheon Meat"¹ which have been packed in any suitable packaging material.

¹ Only the English language shall be used whatever the language of the text.

2. DESCRIPTION

The product shall be prepared from meat as defined below and which has been comminuted and cured and which may have been smoked.

Apart from the meat as defined below, edible offal as defined below and poultry meat as defined below may also be used in the preparation of the product.

The product may or may not contain binders.

The heat treatment to which the product has been subjected and the type of cure and packaging shall be sufficient to ensure that the product presents no public health hazard and remains wholesome under the conditions of storage, transport and sale as indicated in sections 5.2.3 and 5.2.4.

Subsidiary Definitions

Edible offal means such offals as have been passed as fit for human consumption including lungs (but not if the animal from which the lungs have been taken has been scalded by immersion in hot water) but not including ears, scalp, snouts (including lips and muzzle), mucous membrane, sinews, genital system, udders, intestines and urinary bladder.

Meat means the edible part of any mammal slaughtered in an abattoir.

Packaged means packed in a container manufactured of materials which do not permit contamination under normal conditions of handling.

Poultry meat means the edible part of slaughtered domesticated birds including chickens, turkeys, ducks, geese, guinea-fowls or pigeons.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Essential Ingredients

- meat
- water
- curing ingredients consisting of salt and sodium or potassium nitrite

3.2 Optional Ingredients

- edible offal, fat per se, cured and uncured pork rind per se, poultry meat
- carbohydrate and protein binders
 - meal, flour or starch prepared from grain, or potato or sweet potato
 - bread, biscuit or bakery products
 - milk powder, skim milk powder, butter milk powder, egg protein, whey powder, soya flour, soya - protein, textured vegetable protein, caseinate, groundnut protein, wheat gluten, dried blood serum

- sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose syrup (including corn syrup)
- spices, seasonings and condiments
- hydrolyzed protein

3.3 Composition

	<u>product with binder</u> ¹	<u>product without binder or edible offal (but may include heart, tongue or head meat)</u> ²
- Minimum ingoing meat content	80%	90%
- Maximum fat content	35%	30%

¹ Poultry, meat may be substituted up to a level of 15% of the total ingoing meat content.

² Poultry meat, exclusive of offal, may be substituted up to a level of 15% of the total ingoing meat content.

3.4 Essential Quality Factors

3.4.1 Raw material

The ingredients from which the product is prepared shall be free from objectionable odours and flavours.

3.4.2 Final product

The product shall be clean and substantially free from staining and contamination from the container. The meat and poultry meat shall be uniformly and thoroughly cured and the product shall be capable of being sliced.

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:

<u>Additive</u>	<u>Maximum level calculated on the total net content of the final product</u>	<u>Status</u>
Ascorbic acid, iso-ascorbic acid and their sodium salts	500 mg/kg (expressed as ascorbic acid) singly or in combination	Endorsed
Natural flavourings as defined in the Codex Alimentarius and their identical synthetic equivalents	Limited by GMP	Temporarily endorsed, pending establishment of Codex lists
Sodium citrate	Limited by GMP	Endorsed
Guanylic acid, sodium salt	500 mg/kg expressed as guanylic acid	Endorsement postponed

Inosic acid, sodium salt	500 mg/kg expressed as inosinic acid	pending toxicological evaluation by the JECFA
Monosodium glutamate	5000 mg/kg expressed as glutamic acid	Endorsed
Nitrate, potassium and/or sodium salts	500 mg/kg expressed as sodium nitrate	¹ Temporarily endorsed
Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite ²	Temporarily endorsed
Added phosphates, (mono-, di- and poly-), sodium and potassium salts	3000 mg/kg (expressed as P ₂ O ₅) singly or in combination	Endorsed
Glucono-delta-lactone	3000 mg/kg	Endorsed
Erythrosine C.I. No. 45430 to replace loss of colour	15 mg/kg	Endorsement postponed ^{2/}

¹ Subject to review in the light of further information based on current research.

² See Report of 9th Session of Codex Committee on Food Additives, ALINORM 74/12, para 85.

5. HYGIENE

- 5.1 It is recommended that the Code of Hygienic Practice for Processed Meat Products and, where applicable, the Code of Hygienic Practice for Poultry Processing of the Codex Alimentarius Commission (subject to finalization) should apply.
- 5.2 The following specific provisions in respect of food hygiene of this product are subject to endorsement by the Codex Committee on Food Hygiene:
- 5.2.1 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.^{3/} (IV.D.41(a))
- 5.2.2 Meat and meat products shall be handled, stored or transported in an establishment in a manner that will protect the meat and meat products from contamination and deterioration. ³ (IV.D.41 (b))
- 5.2.3 Products that are heat treated after packaging shall be packaged in hermetically sealed containers manufactured of materials which do not present any health hazard and which do not permit contamination under the conditions of handling, storage, transport and sale indicated on the label. The containers shall be clean and show the characteristics of sound containers and, where applicable to the type of container, shall show visible vacuum.
- 5.2.4 Products that are heat treated before packaging shall be packaged in such a way that contamination is kept to a minimum so that the product will withstand spoilage and present no public health hazard under the conditions of handling,

storage, transport and sale indicated on the label. The containers shall be manufactured of materials which do not present any health hazard and which do not permit contamination under normal conditions of handling. They shall be clean and, where applicable, show visible vacuum.

- 5.2.5 When processed containers are cooled in water, the water shall be of potable quality or suitably treated so as not to constitute a public health hazard. If cooling water is re-circulated, it shall be filtered and effectively disinfected by chlorine or otherwise, before use or each re-use.
- 5.2.6 The final product shall be handled and stored in such a manner as to avoid contamination of the product.

³ These provisions have been taken from the Draft Code of Hygienic Practice for Processed Meat Products (Appendix VI to this Report).

6. LABELLING

In addition to Sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (Ref. No. CAC/RS I-1969), the following specific provisions apply:

6.1 The Name of the Food

The name of the product is "Luncheon Meat".

A declaration of the presence of binders and of edible offal and a declaration indicating the species of animals from which the meat is derived shall be given in connection with the name of the product where their omission would mislead the consumer.

6.2 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion in accordance with subsection 3.2(c) of the Recommended International General Standard for the Labelling of Prepackaged Foods, except that specific names shall be used for ascorbic acid, isoascorbic acid and their sodium salts, nitrate (potassium and sodium), and nitrite (potassium and sodium), and added phosphates may be declared by the class title "phosphates".

The list of ingredients shall indicate the species of animals from which the meat is derived.

6.3 Net Contents

The net contents shall be declared by weight in either the metric ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the product is sold.

6.4 Name and Address

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

6.5 Country of Origin

6.5.1 The country of origin of the product shall be declared in clear.

6.5.2 The country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

6.6 Storage Instructions

For products 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 products sold to the consumer, an indication of the recommended maximum period of storage in specified conditions.

6.7 Lot Identification

Each container shall be embossed or otherwise permanently marked in code or in clear to identify the producing factory, the date of packaging and the product packed in the container.

7. METHODS OF ANALYSIS AND SAMPLING

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

7.1 Fat

Recommended method: Determination of Total Fat Content of Meat and Meat Products, ISO Recommendation R 1443.

DRAFT CODE OF HYGIENIC PRACTICE FOR PROCESSED MEAT PRODUCTS
(Advanced to Step 5 of the Procedure)

- Note: - Sideline portions indicate provisions specific to this Code.
- FM = Same text as in Draft Code of Hygienic Practice for Fresh Meat (ALINORM 74/15, Appendix II) with such modifications that are necessary to bring it into line with the Scope of the present Code.
 - (FM) = Partial reference to text of Draft Code of Hygienic Practice for Fresh Meat (ALINORM 74/15, Appendix II).

SECTION I - SCOPE

This Code of Hygienic Practice, including the Annex, applies to processed meat products. It contains the minimum requirements of hygiene in the production, handling, packing, storing and transportation of processed meat products to assure a healthful and wholesome supply of meat products.

SECTION II - DEFINITIONS

For the purpose of this Code:

1. "Abattoir" means premises approved and registered by the controlling authority used for the slaughter of animals for human consumption. FM 1
2. "Brand" means any mark or stamp approved by the controlling authority and also includes any tag or label bearing such mark or stamp. FM 2
3. "Cleaning" means the removal of objectionable matter. FM 4
4. "Container" means any protective covering for meat products which is constructed of materials which prevent the contamination of the contents during processing, handling and storage.
5. "Contamination" means the direct or indirect transmission of objectionable matters to the meat. FM 5
6. "Controlling authority" in relation to an establishment means the official authority charged by the government with the control of hygiene including inspection of meat and meat products. (FM 6)
7. "Disinfection" means the application of hygienically satisfactory chemical or physical agents and processes to cleaned surfaces with the intention to eliminate micro-organisms. FM 7
8. "Edible" means fit for human consumption.
9. "Edible offal" means such offals as have been passed as fit for human consumption. (FM 9)
10. "Establishment" means any premises approved and registered by the controlling authority in which meat products are prepared, processed, handled, packed or stored. FM 10
11. "Fresh meat" means meat which has not yet been treated in any way to ensure its preservation, except that if it has been subjected to refrigeration, it should continue to be considered as "fresh" for the purpose of this Code. FM 12
12. "Hermetically sealed" means completely sealed and impermeable to gas.
13. "Ingredient" means any substance including food additives used in the

manufacture or. preparation of a meat product.

14. "Inspector" means a properly trained officer appointed by the controlling authority of a country for the purpose of inspection of meat and meat products and supervision of meat hygiene. The supervision of the inspection of meat hygiene including the inspection of meat and meat products should be the responsibility of a veterinarian. (FM 13)
15. "Manager" in relation to an establishment includes any person for the time being responsible for the management of the establishment. FM 14
16. "Meat" means the edible part of any mammal slaughtered in an abattoir. FM 15
17. "Meat product" means a product intended for human consumption containing meat.
- "Poultry meat" means the edible part of slaughtered domesticated birds including chickens, turkeys, ducks, geese, guinea-fowls or pigeons.
18. "Processed" includes all methods of preservation but does not include prepackaged fresh, chilled or frozen meat cuts or joints.
19. "Potable water" means water that is pure and wholesome at the point of usage in accordance with the WHO requirements contained in the "International Standards for Drinking Water". FM 16
20. "Protective clothing" means special garments intended to prevent the contamination of meat and used as outer wear by persons in an establishment and includes head coverings and footwear. FM 17
21. "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.

SECTION III - INGREDIENT REQUIREMENTS

22. All meat used for the processing and manufacture of meat products should comply with the requirements of the Code of Hygienic Practice for Fresh Meat and the Code of Ante-Mortem and Post-Mortem Inspection of Slaughter Animals.
- [22. All meat used in the manufacture of meat products should have been produced in an abattoir which complies with the provisions of the Code of Hygienic Practice for Fresh Meat and should have been subjected to the inspection processes prescribed therein and in the Code of Ante-Mortem and Post-Mortem Inspection of Slaughter Animals. It should have been passed by an Inspector as fit for human consumption. Poultry meat should have been produced in an establishment complying with the Code of Hygienic Practice for Poultry Processing and shall be fit for human consumption.]
23. No meat or other ingredient which has undergone deterioration or any process of decomposition or which has been contaminated with foreign matter to an extent which has made it unfit for human consumption should be used for the processing and manufacture of meat products.
24. All ingredients should be adequately stored and kept off the floor after delivery to the establishment.
25. Where necessary, laboratory tests should be made of the ingredients prior to their being moved into the production area of the establishment.

SECTION.IV - ESTABLISHMENT FACILITIES AND OPERATING REQUIREMENTS

A. Establishment Registration, Construction and Lay-out

26. Establishments should be approved and registered by the controlling authority. FM 22
27. (a) Establishments should be located in areas not subject to regular and frequent flooding and free from objectionable odours, smoke, dust or other contaminants. FM 23(a)
- (b) Establishments should provide adequate working space for the satisfactory performance of all operations. FM 23(b)
- (c) The construction should be sound and ensure adequate ventilation, good natural or artificial lighting and easy cleaning. FM 23(c)
- (d) The buildings and facilities of the establishment should be kept in good repair at all times. FM 23(d)
- (e) The establishment should be laid out and equipped so as to facilitate proper supervision of meat hygiene including performance of inspection and control. FM 23(e)
- (f) The establishment should be of such construction as to protect against the entrance and harbouring of insects, birds, rodents or other vermin. FM 23(f)
- (g) In every establishment there should be a physical separation between departments in which edible and inedible material is handled. FM 23(g)
- (h) The lay-out and the construction of the establishment should be such as to ensure that the departments in which meat or meat products are processed are available for that purpose only, or for that purpose only at one and the same time. If the departments are used for processing of non-meat products, the arrangements should be such that it can be ensured that there is no resultant contamination of the meat products.
- (i) In all rooms in an establishment other than rooms provided for the accommodation of workers and inspectors: FM 23(h)
(i) (ii) (iii)
- (i) Floors should be of water-proof, non-toxic, non-absorbent materials, easy to clean and disinfect. They should be non-slip and without crevices and, except in the case of rooms where meat is frozen or stored, should slope sufficiently for liquids to be drained off to trapped outlets protected by a grill.
- (ii) Walls should be of water-proof, non-toxic, non-absorbent materials, which are easy to clean and disinfect, smooth and at a height appropriate to the operation conducted; they should be light coloured and washable. The angles between the walls and the angles at the wall to floor junctions should be coved.
- (iii) Ceilings should be so designed and constructed as to prevent the accumulation of dirt and condensation and should be easy to clean.
- (j) Effective facilities should be provided for the disposal of plant effluent which 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, handled, packed or stored. FM 23(g)

28. Refrigeration facilities. The construction and lay-out of any chilling room or freezer should satisfy the requirements of this Code. FM 26
29. Sanitary Facilities and Controls
- (a) Every department in which edible meat products are prepared, processed or stored should be used at that time only for that purpose or for the preparation of other edible products, subject to the same conditions of hygiene. It should be physically separated from every area used for the handling of inedible material or for other purposes.
 - (b) Establishments should be layed-out and equipped so as to ensure that meat and meat products do not come into contact with floors, walls or other fixed structures , except those which are specifically designed for contact with meat. FM 27(c)
 - (c) The temperature in any room used for boning-out and trimming should at no time during working hours exceed 10°C, except as provided for in sub-section IV.C.35(d).
 - (d) An ample supply of potable water under adequate pressure should be provided with adequate facilities for its. storage and distribution and with adequate protection against contamination and pollution:
 - (i) All water used in establishments should be potable. FM 27(f)
FM 27(f)
(i)
 - (ii) Non-potable water may be used for such purposes as producing steam, cooling, refrigeration and fire control. Such water should be carried in completely separate lines, identified preferably by colour, and with no cross connection or backsiphonage with the lines carrying potable water. FM 27(f)
(ii)
 - (e) Ice should be made from potable water and should be manufactured, handled, stored and used so as to protect it from contamination.
 - (f) An adequate supply of hot potable water at no less than 82°C should be available at all times during the working hours. FM 27(g)
 - (g) 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, floors and walls. Inedible meat should be of such character or so treated that it cannot be used for human consumption, or supply food for or harbour vermin.
 - (h) Establishments should have an efficient plumbing and waste disposal system. All plumbing and waste disposal lines (including sewer systems) must be large enough to carry peak loads. All lines must be watertight and have adequate traps and vents. Disposal of waste should be effected in such a manner as to avoid contamination of potable water supplies. The plumbing and the manner of waste disposal should be approved by the controlling authority. FM 27(h)
 - (i) Adequate natural or artificial lighting which does not alter colours should be provided throughout the establishment. The intensity

should not be less than:

540 lux (50 foot candles) at all inspection points,

220 lux (20 foot candles) in work rooms,

110 lux (10 foot candles) in other areas.

Light bulbs and fixtures suspended over meat in any step of preparation should be of the safety type or otherwise protected to prevent contamination of meat and meat products in case of breakage.

FM 27(i)

- (j) Adequate ventilation should be provided to prevent excessive heat, steam and condensation and ensure that the air of premises is not contaminated with odours, dust, vapour or smoke. Ventilation openings should be screened. Windows should be fitted with whole panes and those which open should be screened. The screens should be made so as to be easily movable for cleaning. Internal window sills, if present, should be sloped to prevent use as shelves. FM 27(j)
- (k) All doors should be sufficiently wide and those opening from departments where edible material is handled, unless provided with an effective and operating air screen, should be solid, as far as practicable self-closing, or snug-fitting double action doors. FM 27(k)
- (l) All stairs located in any room used in any department where edible material is handled should be constructed so that: FM 27(l)
 - (i) They can be easily cleaned and no contamination can be caused by material passing through the risers or treads.
 - (ii) They should have side curbs that are at least 10 cm in height measured at the leading edge of the treads.
- (m) Lift cages should be so constructed as to afford adequate protection of the meat against contamination. In particular the base and sides should be finished to a smooth impervious surface. Lift shafts should be smoothly finished or tiled. If painted, a light colour should be used. The floor of lift shafts should be drained so as to permit effective cleaning. FM 27(m)
- (n) Platforms, ladders, chutes and similar equipment in any room used for the preparation or processing of meat and meat products should be constructed so as to be capable of being effectively cleaned and should consist of material which is resistant to fracture, abrasion or corrosion and which can be effectively cleaned. Where chutes are provided they should be constructed with inspection and cleaning hatches. FM 27(n)
- (o) Floor drains should be kept in good condition and repair with strainers in place.
- (p) 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; 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.

- (q) All rooms used for de-boning, preparation, processing, packing or other handling of meat and meat products should be equipped with adequate facilities for washing hands, furnished with waste pipes leading to drains and conveniently located for the use of personnel during operations. The water used for the washing of hands should be warm. Taps of hand-washing facilities should be of a type not requiring operation by hand. An adequate supply of odourless liquid soap or other cleansing agents should be provided.) FM 27(o)
- (r) (i) All rooms used for boning, preparing, packing or other handling of meat and meat products should be equipped with adequate facilities for cleaning and disinfecting implements, conveniently located for the use of personnel during operations. These facilities are for use exclusively in the cleaning and disinfection of knives, steels, cleavers, saws and other implements. FM 27(p)
 - (i) (ii) (iii) (iv)
- (ii) All facilities for cleaning and disinfecting implements should be of such nature and size as to permit proper cleaning and disinfection of implements. These facilities should be constructed of corrosion-resistant materials and should be capable of being easily cleaned.
- (iii) All facilities for cleaning and disinfecting of implements should be fitted with suitable means of supplying water in sufficient quantity at a temperature of not less than 82°C at all times while meat or meat products are being handled in that part of the establishment.
- (iv) Facilities should be provided in each establishment for the cleaning and disinfection of equipment and working implements.

30. Every establishment should include the following amenities:

- (a) Facilities for employees: adequate changing-room accommodation, drying room, lunch room, toilets with flushing water closets, showers and handwashing facilities which should have adequate lighting, ventilation and heating and should not open directly to any work areas. Handwashing facilities with taps of a type not requiring operation by hand and suitable hygienic means of drying the hands should be provided adjacent to every toilet. Where paper towels are used a sufficient number of dispensers with paper towels and receptacles for used towels should be provided adjacent to each washing facility. Waste from these facilities should not join the plant effluent system prior to the final save-all; and FM 28(a)

(b) Facilities for meat inspection personnel: adequate changing room accommodation, drying room, lunchroom, toilets with flushing water closets, showers and handwashing facilities. The amenities reserved for the meat inspection service, and toilets and shower and handwashing facilities should have adequate lighting, ventilation and heating. Handwashing facilities with taps of a type not requiring operation by hand and suitable hygienic means of drying the hands should be provided adjacent to every toilet. Where paper towels are used a sufficient number of dispensers with paper towels and receptacles for used towels should be provided adjacent to each washing facility.

FM 28(b)

31. Office accommodation should be provided for the exclusive use of the meat inspection service. Laboratory facilities should be readily available for the purpose of meat inspection and meat hygiene.

FM 29

B. Equipment and Utensils

32. All equipment, implements and utensils used in establishments which come in contact with meat and meat products should present a smooth impervious surface and be resistant to corrosion and should be made of a material which does not transmit odour or taste, is non-toxic, smooth, free from pits and crevices, non-absorbent and capable of withstanding repeated exposure to normal cleaning and disinfection. Stationary equipment should be installed in such a manner as will permit easy access and thorough cleaning and disinfection. Such equipment should be so constructed that it may be easily cleaned.

FM 30

33. Equipment and utensils used for inedible or condemned materials should be so identified and should not be used for edible products.

FM 31

34. No containers, particularly wooden crates, wooden boxes or cartons, should be assembled and no containers, equipment or utensils should be stored in any part of an establishment in which meat or meat products are prepared, processed, handled, packed or stored unless the container, equipment or utensils are required for use in that part.

FM 33

C. Hygienic Operating Requirements

35. (a) Rooms should be kept in good repair and clean at all times, and as far as practicable, free from steam, vapour and surplus water.
- (b) Amenities provided for the use of employees and the meat inspection service including the meat inspection office space should be kept clean at all times.
- (c) If a room normally used for the handling, preparation, processing, packaging or storage of meat and meat products is used for any other purpose, then sanitisation and disinfection are necessary immediately after such use.
- (d) Where meat is boned and trimmed in rooms other than rooms under temperature control as defined in 29(c) the room should at least every four hours be cleaned and all equipment and utensils thoroughly cleaned.
- (e) Any cooking or smoking of meat products should be done in separate

FM 34(a)

areas suitably equipped for this purpose.

- (f) All equipment, implements, tables, utensils including knives, cleavers, knife pouches, saws and containers should be cleaned at frequent intervals during the day and immediately and thoroughly cleaned and disinfected whenever they come in contact with diseased material, infected material or become contaminated. They shall also be cleaned and disinfected at the conclusion of each working day. FM 34(b)
- (g) The manager should ensure that washing down, cleaning and disinfection are carried out in compliance with this Code. FM 34(c)
- (h) Meat or meat products should not be contaminated during cleaning or disinfection of rooms, equipment or utensils. FM 34-(d)
- (i) Immediately after cessation of work for the day, or at such other times as may be required, the floors and walls should be thoroughly cleaned.
- (j) Where any skip or trolley or any container used in a department where edible material is handled enters or is used in an area where inedible material is handled it should be cleaned and disinfected immediately before re-entering any edible department. FM 34(e)
- (k) Detergents, sanitizing agents and disinfectants should conform to public health requirements and should not be allowed to come into contact with meat or meat products. Any residue of these cleaning agents used for the washing of floors, walls or edible product equipment should be removed by thorough rinsing with potable water before the area or equipment is again used for handling meat or meat products. Prior to use of the equipment any residue of sanitizing agents or disinfectants should be removed by thorough rinsing with potable water. FM 34(f)
- (l) No cleaning preparation or material or any paint likely to contaminate meat or meat products should be used in any establishment where any meat or meat product is or may be prepared, processed, handled, packaged or FM 34(g)
- (m) Except as required for purposes of hygiene no substance which may contaminate meat or meat products should be handled or stored in any part of any establishment in which meat or meat products are prepared, processed, handled, packed or stored. However, materials employed in the construction or maintenance of an establishment may be used at any time when an inspector is satisfied that there would be no danger of contamination of meat or meat products. FM 34(h)

36. Pest Control

- (a) An effective and continuous programme for the control of insects, birds, rodents or other vermin within the establishment should be maintained. FM 35(a)
- (b) Establishments and surrounding areas should be regularly examined for evidence of infestation with insects, birds, rodents or other vermin. FM 35(b)
- (c) Should pests gain entrance to establishments, approved eradication measures should be instituted. The eradication of pests should always be carried out under skilled supervision and with the full FM 35(c)

- knowledge of the inspector.
- (d) Only pesticides approved for use in an establishment by the competent authority should be used in an establishment and the greatest care should be exercised to prevent any contamination of the meat or meat products. Pesticides should only be employed if other precautionary methods cannot be used effectively. FM 35 (d)
 - (e) Before pesticides are applied all meat and meat products should be removed from the room and all equipment and utensils covered. After spraying the equipment and utensils should be thoroughly washed prior to being used again. FM 35(e)
 - (f) Pesticides or other toxic substances should be stored in separate locked rooms or locked cabinets and dispensed or handled only by authorised and properly trained personnel. Every precaution should be taken to avoid contaminating meat or meat products. FM 35(f)
37. No animals are allowed to enter establishments. FM 36
38. (a) It is recommended that national legislation should provide for a medical examination of meat handlers, meat inspectors and other persons who have access to and come into contact with meat in establishments. Medical examination should be carried out before these persons are employed and be repeated as frequently as necessary. FM 37(a)
- (b) The 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 microorganisms, 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 a person contaminating meat or meat products with pathogenic organisms. Any such person should immediately report to the management. FM 37(b)
- (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. FM 37(c)
- (d) No person who is suffering from any out or injury should engage in any establishment in the preparation, processing, handling, packaging or transportation of any meat or meat product unless and until the out or injury has been so treated or dressed that the discharge of blood on to the meat or meat product has been prevented. FM 37(d)
39. Hygiene of Personnel and Handling Practices of Meat and Meat Products
- (a) 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. FM 38(a)
 - (b) Every person engaged in an establishment should wash his hands frequently and thoroughly with soap or detergents under running FM 38(b)

warm potable water while on duty. In each instance hands should be washed before commencing work, immediately after using the lavatory, after handling contaminated material and whenever else necessary. After handling diseased or suspect material hands must be washed and disinfected immediately. Notices requiring hand-washing should be displayed.

- (c) 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 and footwear all of which articles should be washable unless capable of being disposed of and which should be maintained in a clean condition consistent with the nature of the work in which the person is engaged. Aprons and similar items should not be washed on the floor. FM 38 (c)
- (d) Every person who visits an establishment should wear clean protective clothing. FM 38 (d)
- (e) No clothing or personal effects other than protective clothing should be deposited in any part of an establishment used for the preparation, processing, handling, storing, packaging or transportation of meat or meat products. FM 38(e)
- (f) Protective clothing, knife pouches, belts and working implements may be left in a place provided for the purpose in such a manner that they will not contaminate any meat or meat product. FM 38(f)
- (g) Eating, use of tobacco or chewing gum, and spitting should be prohibited in any part of an establishment used for the preparation, processing, handling, storing, packaging or preservation of meat and meat products. FM 38(g)
- (h) 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. Gloves should be made of an impermeable material except where the use of such material would be inappropriate or incompatible with the work involved. (FM 38(h))
- (i) No person working in any establishment should wear any exposed bandage unless the bandage is completely protected by a waterproof covering which is conspicuous in colour and is of such a nature that it cannot become accidentally detached. FM 38(i)
- (j) Staff handling raw materials or semi-processed products capable of contaminating the end product 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 with or have been soiled by the raw material or semi-processed products. Hands and arms should always be washed thoroughly and disinfected after handling raw materials and semi-processed products prior to handling finished products.

D. Operating Practices and Production Requirements

40. Where the inspector considers that the manner under which meat or meat FM 39(u) products are being prepared, processed, handled, stored or packaged will adversely affect

- (i) the cleanliness of the meat and meat product, or
- (ii) the hygiene of production, or
- (iii) the efficiency of inspection of meat and meat products,

he may require the manager to take action to correct the deficiency or to reduce the rate of production or to suspend operations for the time being in any specified section of the establishment.

41. 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 handled, stored or transported in FM 41(a) an establishment in a manner that will protect the meat and meat products from contamination and deterioration.

42. Raw materials and semi-manufactured goods should be kept separated from outgoing finished products.

[43. 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.]

43. All steps in the production process, including packaging, shall be performed as rapidly as possible and under conditions which will prevent the possibility of contamination, deterioration, spoilage or the development of pathogenic microorganisms.

44. Equipment such as trays, vats, tables etc. should not be used interchangeably for raw products and cooked products unless it is completely cleaned and disinfected before moving to the area designated for cooked products. Exposed ready-to-eat or cooked products should not be stored in the same room with raw meat.

45. The operation of boning-out and trimming should always be carried out as rapidly as possible and meat should not be allowed to accumulate in rooms used for boning-out and trimming.

46. Storage

(a) The following provisions should apply where meat or meat products are placed in chilling rooms, freezing rooms or frozen storage as the case may be: FM 41(c)
(i) - (iv)

- (i) Entry should be restricted to personnel necessary to carry out operations efficiently.
 - (ii) Doors should not be left open for extended periods and should be closed immediately after use.
 - (iii) No chilling room, freezing room or freezer store should be loaded beyond its designed capacity.
 - (iv) Where refrigerating equipment is not manned, automatic temperature recorders should be installed.
 - (v) If no automatic device is installed, temperatures should be read at regular intervals and the readings recorded in a log book.
 - (vi) A record should be maintained of all meat placed in or taken out of the chilling room, freezing room or freezer store.
- (b) In chilling rooms, the following provisions should be observed in addition to those in subsection 46(a):
- (i) Temperature, degree of relative humidity and air flow should be maintained at a level suitable for the preservation of meat and meat products. FM 41(d)
(iv)
 - (ii) Condensation should be prevented by the efficient operation of refrigerating facilities combined with proper insulation of walls and ceilings, the application of heat near the ceilings, or by any other suitable method. If overhead refrigerating coils are installed, insulated drip pans should be placed beneath them. All floor type refrigerating units should be placed within curbed and separately drained areas unless FM 41(d) located adjacent to floor drains. (v)
- (c) Where meat and meat products to be stored are placed in any freezer store, the following provisions should be observed in addition to those in subsection 46(a)
- (i) Meat or meat products should not be stacked directly on the floor but should be placed on pallets or on dunnage in such a way that there is adequate air circulation. (FM 41(f)
(ii))
 - (ii) The freezer store should be operated at a temperature which will give adequate protection to the type of product. Temperature fluctuations in the freezer store should be kept to a minimum. Where unpackaged meat is stored, the temperature difference between the evaporator and the meat should be kept to a minimum. (FM 41(f)(iii))
 - (iii) Refrigeration coils should be defrosted as required to prevent excessive accumulation of ice and loss of refrigerating efficiency. Provision should be made for removal, without effecting the product, of water resulting from defrosting. FM 41(f)
(iv)

47. Transportation

- (a) Meat or meat products should not be carried in any means of transport which is used for conveying live animals. FM 43(a)
- (b) Meat or meat products should not be carried in the same means of transport as other goods in a way which may adversely affect the

meat or meat products. FM 43(b)

(c) Meat or meat products should not be placed in any means of transport which has not been cleaned before loading and if necessary also disinfected. FM 43(d)

(d) Means of transport should comply with the following conditions: FM 43(f)

(i) Design and equipment should be such that a required temperature can (i) (iii) be maintained throughout the whole period of transport.

(ii) All parts which may come in contact with meat or meat products should be made of corrosion resistant material, present a smooth surface with smooth joints and be easy to clean and disinfect.

(iii) Floors should be effectively sealed so as to prevent the entry of contaminants or any leakage during transport.

(iv) Vehicles should be so constructed as to protect against the entry (FM 43(f) of pests. (v))

48. Packaging of Finished Product

Packaging material should be stored and used in a clean and sanitary manner. FM 42(a)

49. Preservation of Finished Product

Requirements for the preservation of specific groups of meat products are given in annexes to this Code (to be developed).

50. 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

51. All aspects covered by this Code should be supervised by an official veterinarian. In particular, care should be taken that for every establishment at least one official veterinarian is appointed for the supervision of hygiene including inspection of meat and meat products. FM 45

52. It is desirable that each establishment in its own interest designates 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 or employed by the organization and should be well trained in the use of special cleaning tools, methods of dismantling equipment for cleaning and in the significance of contamination and the hazards involved. A permanent cleaning and disinfection schedule should be drawn up to ensure that all parts of the establishment are cleaned appropriately and that critical areas, equipment and material are designated for cleaning and/or disinfection daily or more frequently if required. FM 46

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. Analytical procedures used should follow recognized or standard methods in order that the results may be FM 47

readily interpreted.

SECTION V - END PRODUCT SPECIFICATIONS

54. 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, as well as free from toxic substances in a concentration believed to constitute a public health hazard.
 - (b) The products should not contain micro-organisms that are pathogenic to man in detectable amounts 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.

ANNEX A

Preservation of Canned Meat Products in Rigid Containers

- (a) Meat products packed in hermetically sealed containers should be processed so that they present no public health hazard and withstand spoilage during subsequent storage, transport and sale. The temperature and duration of processing of specific formulations of canned meats should be based on the recommendations of technical specialists competent in canning technology.
- (b) Processing should be supervised in the establishment by technically competent personnel and be subject to check by the Inspector. Seam measurements should be made regularly during production and these, with processing records adequate to identify the processing and history of each batch of product should be kept by the management and made available to the Inspector.
- (c) No water, other than potable, water, should be used for washing of empty containers or for the cooking or cooling of any hermetically sealed container. Where heat processed containers are cooled in water, any recirculated water should be treated by the addition of chlorine. Such water, depending upon the potential degree of non-potability, should contain from one to two parts per million of residual chlorine at the discharge end of the cooler. Any other acceptable disinfectant may be used in effective concentration in place of chlorine.
- (d) Rough treatment of containers both before and after processing must be avoided to prevent the possibility of contamination of the processed product. If it is essential to handle wet cans, personnel should do so exercising hygienic precautions. Belts, runways and other conveying equipment should be maintained in a clean condition and good repair.
- (e) Processed hermetically sealed containers should be inspected and any defective container rejected.
- (f) Adequate facilities should be provided for the incubation of random samples of individual batches of containers and, after establishment of a satisfactory history for the product involved, batches may be released provided the controlling inspection authority is assured that the product will be returned, if required.

- (g) Every container should be permanently marked, in code or otherwise, to identify the establishment, country and date of production.

ANNEX B

Preservation of Meat Products Heat Treated Prior to Packaging
(To be elaborated)

TABLE OF CONTENTS

	<u>Paragraph</u>	<u>Page</u>
Introduction	1- 2	1
Adoption of Provisional Agenda	3	1
Election of Rapporteurs	4	2
Matters arising from the Report of the 9th Session of the Codex Alimentarius Commission (November 1972)	5 - 6	2
Consideration of Draft Standard for Canned Corned Beef (Step 7)	7-40	2-6
Reconsideration of Draft Standard for Cooked Cured Hams (Step 7)	41-71	6-9
Reconsideration of Draft Standard for Cooked Cured Pork Shoulder (Step 7)	72-73	9
Expression for Meat Content	74-87	9-11
Consideration of Draft Standard for Luncheon Meat (Comminuted Meat Products)	88 -106	11 - 13
Draft Standard for Canned Chopped Meat	107	13
Sampling Plans for Microbiological Examination of Processed Meat Products	108 -111	13
Consideration of Revised Code of Hygienic Practice for Processed Meat Products (Step 4)	112 -114	13 - 15
Justification for the Elaboration of Standards for Canned Corned Mutton and Canned Meat and Vegetables	115 -119	15 - 16
Future Work	120	16
Other Business	121 -124	16
Date and Place of Next Session	125	16
Summary Status of Work	-	17

APPENDICES

	<u>Appendix</u>	<u>Page</u>
List of Participants	I	18 - 24
Draft Standard for Canned Corned Beef	II	24-26
Draft Standard for Cooked Cured Ham	III	27 - 30
Draft Standard for Cooked Cured Pork Shoulder	VI	38-49