

**codex alimentarius commission**

FOOD AND AGRICULTURE  
ORGANIZATION OF  
THE UNITED NATIONS

WORLD HEALTH  
ORGANIZATION

JOINT OFFICE: Via delle Terme di Caracalla 00100 ROME Tel.: 57971 Telex: 625852-  
625853 FAO I Cables: Foodagri Rome Facsimile: (6) 57973152-5782610

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**ALINROM 91/16**

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

**CODEX ALIMENTARIUS COMMISSION**

**Nineteenth Session**

**Rome, 1–10 July 1991**

**REPORT  
OF THE FIFTEENTH SESSION OF THE  
CODEX COMMITTEE ON PROCESSED MEAT AND POULTRY PRODUCTS  
Copenhagen, 8–12 October 1990**

Note: This document incorporates Codex Circular Letter 1990/39-PMPP

**CX 5/27.2**

**CL 1990/39 PMPP  
November 1990**

To : - Codex Contact Points  
- Participants at the Fifteenth Session of the Codex Committee on Processed Meat and Poultry Products  
- Interested International Organizations

From : Chief, Joint FAO/WHO Food Standards Programme, FAO, 00100 Rome, Italy

Subject : Distribution of the Report of the Fifteenth Session of the Codex Committee on Processed Meat and Poultry Products (ALINORM 91/16)

**PART A - MATTERS OF INTEREST TO THE 19TH SESSION OF THE CODEX ALIMENTARIUS COMMISSION**

**1. Draft Guidelines Standards and Codes of Practice at Step 8 of the Procedure**

The following Guidelines Standards and Codes of Practice have been submitted to the 19th Session of the Commission at Step 8 of the Procedure:

- Draft Code of Preservation of Shelf-Stable Cured Meat Products in Consumer Size Hermetically Sealed Containers (Paragraph 38 and Appendix II).
- Draft Guidelines for the Use of Non-Meat Protein Products in Processed Meat and Poultry Products (Paragraph 56 and Appendix IV).

**Draft Revised Codex Standards for:**

- Corned Beef (Appendix V)
- Luncheon Meat (Appendix VI)
- Cooked Cured Ham (Appendix VII)
- Cooked Cured Pork Shoulder (Appendix VIII)
- Cooked Cured Chopped Meat (Appendix IX).

2. Governments wishing to propose amendments to the Draft Guidelines, Standards and Code of Practice should do so in writing in conformity with the Guide to the Consideration of Standards at Step 8 (See 7th ed. of the Procedural Manual of the Codex Alimentarius Commission) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, 00100 Rome, Italy, not later than 30 March 1991.

**3. Draft Code at Steps 5 and 8 of the Procedure**

The following has been submitted to the 19th Session of the Commission for adoption at Steps 5 and 8 of the Procedure.

- Draft Guide for the Microbiological Quality of Spices and Herbs used in Processed Meat and Poultry Products (Paragraph 35 and Appendix III).

Governments wishing to submit economic impact statement and propose amendments should do so in writing in conformity with the Guide to the Consideration of Standards at Step 8 (see 7th ed. of the Procedural Manual of the Codex Alimentarius Commission) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, 00100 Rome, Italy, not later than 30 March 1991.

(A Circular Letter inviting replies to a questionnaire on the types of processed meat and poultry products moving in international trade and the problems and future aspects associated with this trade will be issued at a later date).

## Summary and Conclusions

The 15th Session of the Codex Committee on Processed Meat and Poultry Products reached the following conclusions during its deliberations:

- Agreed to forward the **Draft Guide for the Microbiological Quality of Spices and Herbs Used in Processed Meat and Poultry Products to the Commission** for adoption at Steps 5 and 8 with a recommendation to omit Steps 6 and 7 (Paragraph 35).
- Advanced the Annex D to the Code of **Hygienic Practice for Processed Meat and Poultry Products. Preservation of Shelf-Stable Cured Meat Products in Consumer Size Hermetically Sealed Containers** to Step 8 (Paragraph 38).
- Agreed to a definition for "**Non-Meat Protein Products**" (Paragraph 42).
- Advanced the **Draft Guidelines for the Use of Non-Meat Protein Products in Processed Meat and Poultry Products** to Step 8 (Paragraph 56).
- Agreed to bring the new section 5.2 of the Guidelines for the use of Non-Meat Protein Products in Processed Meat and Poultry Products to the attention of CCNFSDU (Paragraph 55).
- Agreed to wait for the finalization of the revision of the **Code of Hygienic Practice for Game** (CAC/RCP 29-1983) **by the Codex Committee on Meat Hygiene** before considering whether to undertake further work on the use of game meat in Processed Meat and Poultry Products (Paragraph 58).
- Supported the establishment of a figure for collagen/protein ratio in luncheon meat without binder, since that was considered a quality parameter to determine the connective tissue present. However, in the absence of available data for products conforming to Codex Standard, it could not agree to any figure (Paragraph 62).
- Agreed that the question of date marking of shelf-stable products should be addressed by the **CCFL** (Paragraph 85).

Cont.'d

- Advanced the revised **Codex Standards for Processed Meat and Poultry Products** to Step 8 (Paragraph 91).
- Agreed that the establishment of **Protein Fat Free Values** should not be undertaken (Paragraph 94).
- Was unable to provide effective advice on labelling of products similar to those covered by the standards for processed meat and poultry products, but not meeting the essential composition requirements (Paragraph 99).
- Agreed to adjourn sine die unless substantial items for future were identified in response to the survey (Paragraph 100).

## Table of Contents

	<b><u>Page</u></b>
Summary and Conclusions	v
Introduction	1
Opening of the Session	1
Adoption of the Agenda	1
Appointment of Rapporteurs	1
Matters of Interest Arising from the Codex Alimentarius Commission and Other Codex Committees	1
WHO Activities of Interest to the Committees	3
Consideration of Acceptances	4
Various Methods of Spice Decontamination	5
Consideration at Step 4 of the Proposed Draft Guide for the Microbiological Quality of Spices and Herbs used in Processed Meat and Poultry Products.	5
Consideration at Step 7 of Annex D to the Code of Hygienic Practice for Processed Meat and Poultry Products - Preservation of Shelf-Stable Cured Meat Products in Consumer Size Hermetically Sealed Containers	6
Consideration at Step 7 of Draft Guidelines for the Use of Standardized Non-Meat Protein Products in Processed Meat and Poultry Products	6
Use of Game Meat in Processed Meat and Poultry Products.	8
Consideration at Step 7 of the Revision of Existing Codex Standards for Processed Meat and Poultry Products	9
Consideration of the Protein Fat Free (PFF) System	14
Consideration of Labelling including Qualifying Descriptions of Products Similar to those Covered by the Standards for Processed Meat and Poultry Products	15
Future Work	14
Other Business.	16
Date and Place of Next Session	16
Valediction	16
Summary Status of Work	17
<b><u>Appendices:</u></b>	
Appendix I - List of Participants	18
Appendix II - Preservation of Shelf-Stable Cured Meat Products in Consumer Size Hermetically Sealed Containers	23
Appendix III - Draft Guide for the Microbiological Quality of Spices and Herbs Used in Processed Meat and Poultry Products	25
Appendix IV - Draft Guidelines for the Use of Non-Meat Protein Products in Processed Meat and Poultry Products	27
Appendix V - Draft Revised Codex Standard for Corned Beef	29
Appendix VI - Draft Codex Standard for Luncheon Meat	32
Appendix VII - Draft Codex Standard for Cooked Cured Ham.	37
Appendix VIII - Draft Codex Standard for Cooked Cured Pork Shoulder	42
Appendix IX - Draft Codex Standard for Cooked Cured Chopped Meat	47

## **INTRODUCTION**

1. The Fifteenth Session of the Codex Committee on Processed Meat and Poultry Products was held in Copenhagen from 8 to 12 October 1990 through the courtesy of the Government of Denmark. Representatives and observers from 26 countries and 3 international organizations were present. In the absence of Mr. Bent Simonsen, the Chairman of the Committee, the session was chaired by Mrs. Karen Jensen of the Veterinary Service, Food Control Laboratory, Danish Ministry of Agriculture. Mrs. Jensen agreed to convey to Mr. Simonsen the Committees' wishes for his speedy recovery. A list of participants, including members of the Secretariat, is attached as Appendix I.

## **OPENING OF THE SESSION (Agenda Item 1)**

2. The session was formally opened by Ms. Inga Galamba, Head of Division, Danish Ministry of Agriculture. Ms. Galamba welcomed the participants on behalf of the Danish Minister of Agriculture, Mr. Laurits Tørnæs, and emphasized the importance her country places on the work of the Codex Alimentarius Commission, which includes the promotion of international trade in food, consumer protection and the avoidance of technical barriers to trade.

## **ADOPTION OF AGENDA (Agenda Item 2)**

3. The Committee had before it the provisional agenda of the session as outlined in document CX/PMPP 90/1. The Committee was informed that a number of additional documents not included in the provisional agenda were prepared for its consideration. The complete list of documents was contained in CX/PMPP 90/List, a Conference Room Document.

4. To facilitate discussion of agenda items 6 and 7, the Committee agreed to setup a working group, chaired by the UK and consisting of representatives of the USA, Sweden, Denmark, Iran, Finland and the Federal Republic of Germany, to consider documents CX/PMPP 90/4, 90/5 and 90/5A and prepare a revised version of the Draft Guide for the Microbiological Quality of Spices and Herbs used in Processed Meat and Poultry Products for consideration by the Committee (Appendix II, ALINORM 89/16).

## **APPOINTMENT OF RAPORTEURS (Agenda Item 3)**

5. The Committee appointed Mr. K. Millar (UK) and Mr. Jean-Christophe Tosi (France) as rapporteurs for the session.

## **MATTERS OF INTEREST ARISING FROM THE CODEX ALIMENTARIUS COMMISSION AND OTHER CODEX COMMITTEES (Agenda Item 4)**

6. The Committee had before it document CX/PMPP 90/2 and 90/2-Add.2 (Conference Room Document) which summarized matters of interest arising from the Codex Alimentarius Commission and other Codex Committees. The Committee noted that many of these issues would be discussed in detail under other agenda items.

## **Revised Publication of the Codex Alimentarius**

7. The Committee noted that the revised Codex Alimentarius would be published in a loose leaf format, in 14 volumes together with a new abridged version containing the substantive contents of the Codex Alimentarius in a single volume. The first volume had already been sent to the FAO Publications Division for printing and three further volumes were expected to be submitted in the course of the year. Copies of the abridged Codex Alimentarius are available and can be purchased from FAO Sales Division. The Codex Secretariat, together with the Publications Division of the FAO, was exploring ways in

which the contents of the Codex Alimentarius could be transferred to electronic media for storage and publication.

#### Statement on the Use of Food Additives' in Food

8. The Committee noted the steps taken by the FAO to make the statement on the "Use of Food Additives in Food" available to all members of CODEX (CAC/Misc 1-1989). The Committee also noted that in adopting the Statement the Commission had agreed that member countries would be free to use it and could interpret or modify the text to suit their national legislation.

#### International Numbering System

9. The Committee noted that the International Numbering System, the purpose of which is to provide recognized international numbers to identify food additives in compliance with the General Standard for Labelling of Prepackaged Foods (CODEX STAN1-1985), had been adopted by the 18th session of CAC for publication in Volume I of the Revised Codex Alimentarius.

#### Elaboration of Standards for Sausages, Cooked and Uncooked

10. The Committee noted the proposal of the 6th Session of the Coordinating Committee for Latin America and the Caribbean (ALINORM89/36, paras 144-145) to elaborate a Codex standard for cooked and uncooked sausages, and agreed to discuss the need for elaboration of standards for cooked and uncooked sausages when considering future work (Agenda Item 14). The Committee was reminded that it had initiated work on the elaboration of a Code of Hygienic Practice for Dry and Semidry Sausages which was subsequently suspended in view of the restricted amount of international trade in these types of products and the lack of positive evidence that the wide range of products which the Code would cover were of public health concern (ALINORM 81/16, paras 83-88).

#### Microbiological specifications and sampling plans for non-stable meat products

11. The Committee agreed to express its view on the need to establish microbiological specifications and sampling plans for non-stable meat products thermally treated before packaging when considering future work. (Agenda Item 14)

#### Consideration of General Principles on the Application of the Hazard Analysis of Critical Control Points System (HACCP) to Codex Codes of Hygienic Practice

12. As it was not currently developing any Codes of Hygienic Practice, the Committee agreed to wait until clear instructions were received from the Codex Committee on Food Hygiene before discussing HACCP.

#### Guideline levels for Radionuclides in Food in International Trade

13. The Committee noted that the Commission at its 18th session adopted Codex Guideline Levels for Use in International Trade following Accidental Nuclear Contamination of Food. The Committee also noted that the subject remained under review, as levels for radionuclides in food following accidental nuclear contamination may need to be established on a more permanent basis and agreement had to be reached on dilution factors applied and treatment of minor dietary components. This subject would also be discussed by the 23rd session of the CCFAC on the basis of government comments received.

#### Implications of Biotechnology on International Food Standards and Codes of Practice

14. The Committee noted that the subject would be addressed by a Joint FAO/WHO Expert Consultation to be held in Geneva in November 1990 and by the Joint FAO/WHO Conference on Food Standards, Chemicals in Food and Food Trade to be held in Rome in March 1991.

#### WHO Activities of Interest to the Committee (CX/PMPP 90/2 Addendum 1)

##### Joint UNEP/FAO/WHO Food Contamination Monitoring Programme (GEMS/Food)

15. The Committee noted that the Joint UNEP/FAO/WHO Food Monitoring Programme was one of the major health-related activities of the Global Environmental Monitoring System (GEMS) and that thirty-nine countries participated in the programme. The major objectives of the programme are:

- a) to collect and evaluate data on levels of certain chemicals in individual foods;
- b) to obtain estimates of the intake via food of specific chemicals;
- c) to provide technical cooperation to the governments of countries wishing to strengthen food contamination programmes; and
- d) to provide the relevant committees of the Codex Alimentarius Commission with information on levels of contaminants in connection with the establishment of Codex Standards.

##### Consultation on Microbiological Criteria for Foods to be further Processed including by Irradiation (Geneva, 29 May - 2 June 1989)

16. The Committee noted that the ICGFI consultation proposed microbiological guidelines for red meats (beef, pork, lamb), poultry, fish and crustaceans, and provisional criteria for spices, herbs and vegetable seasonings for further processing including by irradiation.

17. The Executive Committee of the Codex Alimentarius Commission at its 37th session noted that the proposals for microbiological criteria for foods for further processing implied that amendments to current Codes of Practice would be required, and decided to request governments to comment on whether or not existing Codes should be amended. Comments received would be analysed by the Codex Committee on Food Hygiene.

##### International Conference on "Acceptance, Control of, and Trade in Irradiated Food"

18. The Committee noted that the international conference which was jointly organized by FAO, WHO, IAEA and ITC-UNCTAD/GATT dealt with the issues of wholesomeness of irradiated food, the contribution of food irradiation to public health, food security and international trade, the control of the process and the acceptance of irradiated food by industry and consumers. The Conference concluded, inter alia, that food irradiation has the potential to reduce the incidence of food-borne diseases.

##### Report of WHO Consultation on Health Surveillance of Food Handling Personnel (Geneva, 18-22 April 1988)

19. The Committee noted that the consultation concluded that routine medical examination of food handlers was ineffective and therefore unnecessary. The matter was brought to the attention of the Executive Committee during its 37th Session which decided that government comments should be requested by means of a circular letter

and that the matter be discussed at the next session of the Codex Committee on Food Hygiene.

WHO Consultation of Food Safety Aspects Relating to Application of X-ray Surveillance Equipment (Neuherberg, 13-17 November 1989)

20. The Committee noted that the consultation concluded that X-ray inspection of food cargos using a maximum energy level of 10 MeV and a maximum dose of up to 0.5 Grays would not cause toxicological or microbiological risks, losses of nutrients or changes in sensory quality, and would not induce radioactivity in detectable amounts.

WHO Consultation on Salmonellosis Control in Agriculture (Orvieto, Italy, 9-12 April 1990)

21. The Committee noted that the main aim of the Consultation was to encourage the agricultural sector, the meat and dairy industry, and particularly the veterinary services in Member States to be mindful of their responsibility in the protection of human health from Salmonella infection.

**WHO Consultation on Research on New Slaughter Technologies to Reduce Cross-Contamination** (Roskilde, Denmark, 5-8 February 1990)

22. The Committee noted that the main tasks of the Consultation were:
- a) to review the present research work and plans on slaughter technologies;
  - b) to identify conditions and procedures favouring and causing cross-contamination; and
  - c) to search for means of monitoring contamination and avoiding, or counteracting cross-contamination.

The report of this Consultation is available as WHO/CDS/WPH/90.87.

WHO Consultation on Epidemiological Emergency in Poultry and Egg Salmonellosis (Geneva, 20-23 March 1989)

23. The Committee noted that the Consultation concluded that the greatest potential for effective control of human salmonellosis originating from poultry and poultry products was agricultural production free of Salmonella and that the strategy of controlled poultry production must be supplemented by increasing efforts to improve hygiene in food processing and preparation and to apply preventive measures, e.g. heat, irradiation and chemical treatment of foodstuffs.

**CONSIDERATION OF ACCEPTANCES OF CODEX STANDARDS FOR PROCESSED MEAT AND POULTRY PRODUCTS** (Agenda Item 5)

24. The Committee noted that since its last Session, the government of Argentina had notified acceptance with specified deviations for the Codex Standards for Luncheon Meat and Cooked Cured Chopped Meat, as outlined in document CX/PMPP 90/3. The Committee also noted a summary table of acceptances in document CX/PMPP 90/3A (Conference Room Document).

25. The delegation of Switzerland informed the Committee that 110 Codex Standards had been accepted for free circulation in Switzerland. The delegation of Poland stated that the results of its studies conducted concerning acceptances would be transmitted to the Commission by the end of 1991.

26. Although the Coommittee noted the importance of acceptance notifications for Codex standards, it agreed that this was not an exclusive measure of Codex success. The use of Codex standards in trade agreements between individual countries and in coordinating regional initiatives undertaken by groups such as the EEC was also stressed. The importance of Codex standards, codes of practice and related training programmes for developing countries was noted, as was the possible use of Codex deliberations to assist in the solution of trade disputes arising under the General Agreement on Tariffs and Trade.

27. The Committee was advised that the improvement of Codex acceptances was a subject scheduled for discussion at the International Conference on Standards to be held in Rome in March 1991. It is anticipated that the transfer of overly detailed aspects of Codex standards into individual Codex codes of practice would be considered as a possible improvement. This procedure was recently initiated in standards developed by the Codex Committee on Fish and Fishery Products in order to create less specific or recipe type standards.

28. The Committee agreed to draw the matters mentioned above to the attention of the Food Standards Conference and the CAC.

**VARIOUS METHODS OF SPICE DECONTAMINATION: NATIONAL LEGISLATION AND PRODUCTS WHERE THE USE OF DECONTAMINATED SPICES IS NECESSARY (Agenda Item 6)**

29. The Committee noted the comments of the Federal Republic of Germany on this subject (see CX/PMPP 90/4) and agreed with the conclusions of the Working Group (See paras 31-33) that provisions concerning various methods of spice decontamination should not be included in the Proposed Draft Guide for the Microbiological Quality of Spices and Herbs used in Processed Meat and Poultry Products.

**CONSIDERATION AT STEP 4 OF THE PROPOSED DRAFT GUIDE FOR THE MICROBIOLOGICAL QUALITY OF SPICES AND HERBS USED IN PROCESSED MEAT AND POULTRY PRODUCTS (Agenda Item 7)**

30. The Chairman of the Working Group (Dr. John Wood of the United Kingdom) informed the Committee that the Group had considered the comments obtained in documents CX/PMPP 90/5 and CX/PMPP 90/5A and had prepared a revised text of the draft Guide. The Chairman of the Working Group referred to the changes proposed.

**Section I: Scope**

31. This section was modified to emphasize that the draft Guide was only applicable to spices and herbs which required treatment prior to their use as ingredients in meat and poultry products.

**Section III: Treatment**

32. The treatments listed under this section were renumbered and rearranged for purposes of clarity. Updated references were also included in Sections 3.4.3 and 3.5. Section 3.6.2 (originally Section 3.5.2) was amended to emphasize "appropriate and recognized methods".

**Section IV: End-Product Criteria**

33. The reference to maximum residue limits for pesticides was removed, as these limits were established by the Codex Committee on Pesticide Residues. The specification limit for spores of aerobic bacteria was also removed, in view of the

difficulty in reconciling this with the range of preservation parameters which exist across the different processed meat and poultry products.

34. The Committee thanked the working group for its efforts and suggested other minor modifications to the text. The Committee also agreed to bring the draft Guide to the attention of the Codex Committee on Food Hygiene for its consideration when elaborating the Code of Hygienic Practice for Spices and Herbs.

Status of the Draft Guide:

35. The Committee agreed to forward the draft Guide to the Commission for adoption at Steps 5 and 8 with a recommendation to omit Steps 6 and 7 in view of the extensive deliberations concerning this issue and the Committee's likely adjournment sine die. The draft guide is included in this report as Appendix III.

**CONSIDERATION AT STEP 7 OF ANNEX D TO THE CODE OF HYGIENIC PRACTICE FOR PROCESSED MEAT AND POULTRY PRODUCTS - PRESERVATION OF SHELF-STABLE CURED MEAT PRODUCTS IN CONSUMER SIZE HERMETICALLY SEALED CONTAINERS (Agenda Item 8)**

36. In discussing this agenda item the Committee had before it document CX/PMPP90/6, summarizing the Committee's deliberations on this issue as well as comments received at Step 6. The Committee noted that Annex D was accepted by the Commission at Step 5 (paras 437-438, ALINORM 89/40).

37. The Committee had a lengthy discussion on ingoing and residual nitrite controls as well as the levels proposed. However, it was noted that specific levels and conditions of use of food additives were specified under individual Codex standards. It was also agreed that this Annex was only meant to provide parameters reflecting good manufacturing practice in preservation of cured meat products.

38. The Committee agreed to forward the draft Annex as presented for adoption at Step 8 by the Commission. The Annex is included as Appendix II to this report.

**CONSIDERATION AT STEP 7 OF DRAFT GUIDELINES FOR THE USE OF STANDARDIZED NON-MEAT PROTEIN PRODUCTS IN PROCESSED MEAT AND POULTRY PRODUCTS (Agenda Item 9)**

39. In discussing this agenda item, the Committee had before it CX/PMPP 90/7 summarizing comments on the proposed draft Guidelines, and Conference Room Documents CX/PMPP 90/7A, 90/7B and 90/7C.

40. The Committee noted that the draft Guidelines were returned to Step 6 by the 18th Session of the Commission at the request of the Chairman of the CCPMPP (ALINORM89/40, para. 442). The Committee also noted that the following items required consideration before the draft Guidelines could be advanced further in the Codex step procedure:

- i. inclusion of a definition for non-meat protein products as requested by the Codex Committee on Vegetable Proteins (CCVP);
- ii. inclusion of a definition of surimi as proposed by the Codex Committee on Fish and Fishery Products (CCFFP);
- iii. reinstatement of paragraph 5.1 (iv) as proposed by the CCVP; and

- iv. inclusion of a new Section 5.2 to provide a clear link with the General Guidelines for the Utilization of Vegetable Protein Products in Foods as suggested by the CCVP.

#### Inclusion of a definition of "Non-Meat Protein Products"

41. The Committee, noting the difficulties of member countries in interpreting the definition of non-meat protein products proposed by the delegation of Denmark for consideration by the 18th session of the CAC (ALINORM 89/32, Part VII), set up a working group to address the problem. In response to a query by the delegation of Belgium, the Chairnam stated that bones are not considered as meat.

42. The working group, chaired by Denmark, and consisting of representatives of Australia, New Zealand, the Netherlands, Sweden, USA, UK, Canada, France and EUVEPRO proposed a definition for non-meat protein products for consideration by the Committee, which was subsequently amended and agreed to as follows:

"Non-meat protein products are edible protein products not derived from meat, game meat or poultry meat, as defined and adopted by CAC".

43. The Committee also agreed to include the definitions of Milk Protein Products (MPP) and Vegetable Protein Products (VPP) as examples of non-meat protein products.

#### Scope

44. In order to accommodate the use of both defined and standardized non-meat protein products, the Committee agreed to the following revised text of the Scope Section as proposed by the working group:

"To provide guidance for the use of non-meat protein products, which are standardized or defined by the CAC, by establishing:

- i) principles for the appropriate use of non-meat protein products in processed meat and poultry products, and
- ii) principles for the appropriate labelling of processed meat and poultry products containing non-meat protein products".

45. It also agreed to make consequential changes to the title and the rest of the text so as to delete the word "standardized "from in front of the words "non-meat protein products".

#### Basic Principle

46. The Committee agreed to include a new paragraph 3.1 proposed by the working group

"Only those non-meat protein products which are standardized or defined by CAC are permitted to be used in processed meat and poultry products".

to further emphasize the scope section. The original paragraph 3.1 was renumbered 3.2.

#### Definition of Surimi

47. The Committee noted that the definition of surimi proposed by CCFFP had not yet been adopted by the Commission and there fore decided not to include it as, once adopted, it would be covered by the definition of non-meat protein product.

#### Reinstatement of paragraph 5.1 (iv)

48. The CCVP at its 5th Session (ALINORM 89/30, paras 102-104) expressed the view that deletion of paragraph 5.1 (iv) resulted in an inconsistency with the General Utilization Guidelines (ALINORM 89/30, Appendix II). It was noted that deletion of the paragraph could result in certain Codex standards becoming meaningless as there would be no guarantee that the meat portion of a product would comply with the applicable Codex Standard. The CCVP proposed that the deleted paragraph be reinserted.

49. The Committee agreed with the views of the CCVP and reinserted the paragraph.

#### Inclusion of a new Section 5.2 in the guidelines

50. The Committee noted that the CCVP at its 5th Session (ALINORM 89/30, para 99) proposed the addition of a new Section 5.2 to the guidelines to provide a clear linkage between the General Utilization Guidelines and the related guidelines developed by the CCPMP. In particular, this reference to the General Utilization Guidelines would introduce the need to consider nutritional equivalence in products where a standardized non-meat protein partially substitutes for meat or poultry protein. However, the Commission (ALINORM 89/40, paras 486-488) rejected the idea of nutritional equivalence and proposed that the term nutritional equivalence be replaced by nutritional adequacy.

51. The Danish Secretariat proposed the following as the text for a new section 5.2:

"When a standardized or defined non-meat protein product partially substitutes for the meat protein of a processed meat or poultry product, consideration should be given to the need for nutritional adequacy of the final product. Nutritional adequacy is defined in section 7.2 of the General Guidelines for the Utilization of Vegetable Protein Products in Food."

52. The Committee agreed to incorporate the first sentence of the Danish proposed text into section 5.2.

53. The Committee was informed that a Joint FAO/WHO Expert Consultation on Protein Quality Measurement recommended the use of amino acid score corrected for digestibility as a parameter for protein quality. Adoption of the recommendation at the 19th session of the CAC is anticipated. The Committee also noted that section 7.2 of the General Guidelines would need to be reworded in view of the recommendations of the Expert Consultation. Based on a text provided by the observer from EUVEPRO the Committee agreed the following definition of nutritional adequacy for inclusion in section 5.2:

"The nutritional adequacy of a product can be defined in terms of protein quality and quantity, and content of minerals and vitamins".

54. Such a product should be considered nutritionally adequate if:

- i) its protein quality, as monitored by way of the CAC adopted methodology (amino acid score corrected for digestibility), is appropriate for the nutritional purposes of its usage;
- ii) it contains a sufficient quantity of protein ( $N \times 6.25$ ) and those vitamins and minerals, which are present in significant amounts in the original animal product, to serve the nutritional purposes of its usage".

55. The Committee agreed that the new section 5.2 of the guidelines should be brought to the attention of CCNFSDU.

#### Status of the Guidelines

56. The Committee decided to advance the draft Guidelines (Appendix IV) to Step 8 of the Codex Procedure.

#### **USE OF GAME MEAT IN PROCESSED MEAT AND POULTRY PRODUCTS (Agenda Item 10)**

57. The Committee had before it document CX/PMPP 90/8 containing Government comments on the subject.

58. The Committee noted that there was growing interest in the use of game meat in processed meat and poultry products. The current Codex standards only permit the use of game meat obtained from animals which have been slaughtered in abattoirs under hygienic conditions. The Committee noted that the Codex Committee on Meat Hygiene was in the process of revising the Code of Hygienic Practice for Game (CAC/RCP29-1983) and agreed to wait for the finalization of the revision before considering to undertake further work on the use of game meat in processed meat and poultry products. In view of the work being undertaken by the Codex Committee on Meat Hygiene, the Committee did not support a proposal from the delegation of Kenya to elaborate a code of practice on the use of game meat in processed products.

#### **CONSIDERATION AT STEP 7 OF THE REVISION OF EXISTING CODEX STANDARDS FOR PROCESSED MEAT AND POULTRY PRODUCTS (Agenda Item 11)**

59. The Committee had before it the revised Codex Standards for Processed Meat and Poultry Products which had been adopted by the 18th session of the Commission at Step 5 and advanced to Step 6 (ALINORM 89/16, Appendices V-IX), Government comments on the Standards as contained in documents CX/PMPP 90/9, 90/9 Addenda 1 and 2, Revised Hygienic Provisions for the Standards proposed by CCFH as contained in CX/PMPP 90/C and Methods of Analysis for tin and lead as contained in CX/PMPP 90/B.

60. For ease of discussion, all the standards were considered together on a section by section basis.

#### **Need for the inclusion of a parameter for Collagen/Protein ratio in the Codex Luncheon Meat Standard**

61. The Committee recalled its discussions at its last session (ALINORM 89/16, paras 110-113) at which many delegations expressed the view that a low collagen content could be considered as a quality parameter and supported establishment of a parameter for collagen/protein ratio in the Luncheon Meat Standard. Comments received from Denmark, Portugal, USA, France and Thailand for consideration at this session supported the establishment of a parameter for collagen/protein ratio. The delegation of France informed the Committee that it could support a figure of 0.3 for collagen/protein ratio for luncheon meat without binder. The Committee noted that for products with binder in which edible offals are permitted, the ratio would be higher. The delegation of Denmark informed the Committee that a figure of 0.45 seemed acceptable for a product with binder. The observer from CLITRAVI informed the Committee that the collagen/protein ratio of luncheon meat moving in international trade varied so widely that the use of such a parameter would not be meaningful.

62. The Committee noted that adequate methodology was available for accurate determination of the collagen/protein ratio but doubted the usefulness of such a parameter in products with binders, which could have other protein foods as optional ingredients. It supported the establishment of a figure for collagen/protein ratio in luncheon meat without binder, since that was considered a quality parameter to determine the amount of connective tissue present. However, in the absence of available data for products conforming to the Codex Standard it could not agree to any figure.

#### Scope Section for the Corned Beef Standard

63. The delegation of the Netherlands proposed that the scope section should be amended to cover bulk packs containing corned beef which are subsequently sliced and repacked. The Committee noted that the present scope section would apply only to shelf-stable products and that the products referred to by the delegation of the Netherlands would require the elaboration of a separate standard. Since the product is meant for the ultimate consumer, the Committee agreed to change the wording "packed in hermetically sealed containers" to read as "sold in hermetically sealed containers".

#### Description of Cooked Ham

64. The Committee noted that comments had been received from the delegations of France and Switzerland proposing a change in the scope and description of the Standard for Cooked Ham to accommodate products such as cooked bone-in hams. The existing provision in the description "all bones and detached cartilage, tendons and ligaments shall be removed" precluded products containing bone. The Committee expressed the view that cooked bone-in hams were an entirely different product from cooked ham and would not be accommodated in the Cooked Ham Standard.

65. The delegation of Switzerland proposed setting up two quality classes for Cooked Cured Ham and Cooked Cured Pork Shoulder. Restrictions on the use of food additives would apply in one of these classes. The delegation of Switzerland informed the Committee that if this proposal was not accepted it would not be possible for Switzerland to accept the Codex Standard for Cooked Ham or Cooked Cured Pork Shoulder. The delegation of France informed the Committee that in its view it would be advisable to make a provision in the Standards for Cooked Cured Ham and Cooked Cured Pork Shoulder for a special category of products differentiated by essential specific factors of composition and quality, specific optional ingredients, the absence of specific food additives and content of meat. Further discussions on this subject were deferred to Agenda Item 12.

#### Essential Ingredients in the Cooked Ham Standard

66. The delegation of France informed the Committee that in its country nitrates were used in traditionally manufactured products and proposed the inclusion of nitrates into the essential ingredients section of the Standard. The Committee recalled that nitrates were included in the Standard when it was first elaborated but they were subsequently removed when it was revised because most national legislations do not permit their use. Therefore the Committee did not support the proposal of France. The Committee noted that varying quantities of nitrates resulting from the oxidation of nitrites are present in the product and that such quantities were governed by the carry-over principle.

### Optional Ingredients in Cooked Cured Ham

67. The Committee agreed, on the basis of proposals from the delegation of France, to amend "hydrolysed protein" to read "water soluble, aromatic hydrolysed proteins" and to amend "edible gelatine" to read "food grade gelatine". The Committee agreed that these changes should also be made to the other standards which permit hydrolysed protein and edible gelatine as optional ingredients. The Committee did not agree to a proposal from the delegation of France to qualify "honey" to distinguish between different qualities of ham, as quality variations were not envisaged in the Standard.

### Food Additives

#### Ingoing and Residual Level of Nitrite

68. The Committee noted that figures for both ingoing and residual nitrite should be maintained since they provided useful information to processors and consumers. The Committee noted that the provisions covering nitrites in the Corned Beef Standard were endorsed by the Codex Committee on Food Additives and Contaminants (CCFAC). The nitrite provisions in the other standards had not been considered for endorsement by the CCFAC because they were still in square brackets. The observer from CLITRAVI informed the Committee that a residual nitrite level of 150 mg/kg should be supported from a product safety and public health point of view. This suggestion was not supported by the Committee which agreed to retain ingoing and residual levels of 200 and 125 mg/kg, respectively, in all the standards other than Corned Beef, and removed the square brackets.

#### Iso-ascorbic acid

69. The Committee noted that JECFA reevaluated iso-ascorbic acid at its 37th meeting and, on the basis of new information available to it, allocated an ADI not specified. Therefore, the square brackets were deleted.

#### Ascorbic acid

70. The Committee agreed to a proposal to reestablish a maximum level of 500 mg/kg ascorbic acid in standards other than Corned Beef. The Committee recalled the discussion at its last session on the provision for ascorbic acid in the Corned Beef Standard (ALINORM 89/16, para 95) and agreed to retain the maximum level for ascorbic acid at 300 mg/kg in the standard.

### Phosphates

71. The Committee noted that the CCFAC, while considering the provision for phosphates in PMPP standards for endorsement, expressed the view that the determination of added phosphates alone was difficult and that the provision should be amended to read "phosphates" and that the maximum level of phosphates should be 3000 mg/kg plus the amount of phosphates naturally present. The Committee noted Conference Room Document CX/PMPP 90/9D in which phosphates naturally present in meat were expressed in terms of protein. However, data from France showed that the natural phosphates in meat and certain offals varied from 0.4 to 0.5% expressed as P<sub>2</sub>O<sub>5</sub>.

72. The Committee, noting that information on added phosphates would be useful to processors, agreed to include provisions for both added and total (naturally present+ added) phosphate with a footnote showing that naturally present phosphates could be calculated using the formula 0.025 x % protein (calculated as P<sub>2</sub>O<sub>5</sub>). The delegation of

Denmark was opposed to the principle of using the total amount of phosphates as a control point.

#### Flavour Enhancers

73. The Committee, noting that both disodium guanylate and disodium inosinate have ADIs not specified (as is also the case for monosodium glutamate), agreed with the proposal from the delegations of Switzerland and the USA to have the maximum level in the product limited by GMP. This was not supported by the delegation of Denmark.

#### Erythrosine

74. The Committee noted that JECFA at its 37th meeting reevaluated erythrosine on the basis of new information available to it and allocated a full ADI of 0-0.1 mg/kg body weight. The Committee, noting that at normal intakes of luncheon meat or cooked cured chopped meat (100-200 g/day) the ADI for erythrosine would not be exceeded, agreed to retain the level of 15 mg/kg. The Committee noted that food colours were not permitted for use in meat products in Belgium, Sweden, Switzerland, Poland, Canada and Finland.

#### Allura Red

75. The Committee agreed to delete the provision for Allura Red since it is not heat stable and the colour obtained fades with time.

#### Contaminants

##### Lead

76. The Committee noted that data available from the Joint Food Contamination Monitoring Programme showed that the average content of lead in processed meat and poultry products was 0.3 mg/kg and the 90 percentile was 0.4 mg/kg. The Committee noted that many countries were supporting programmes to reduce lead content from food and the environment and agreed that the existing figure of 1 mg/kg was rather high. The delegation of the UK informed the Committee that in the case of corned beef cans soldered with a lead seam were still widely used in world trade and proposed that the maximum level of 1 mg/kg for lead should be maintained for the Corned Beef Standard. The Committee agreed to retain a maximum level of 1 mg/kg in the Corned Beef Standard and reduce the maximum level to 0.5 mg/kg in the other standards. The level of 1 mg/kg for corned beef was not acceptable to Denmark.

##### Tin

77. The Committee agreed to retain maximum levels of 200 mg/kg for products in tin containers and 50 mg/kg for products in other containers and removed the square brackets.

#### Provisions for Hygiene

78. The Committee noted that the Codex Committee on Food Hygiene at its last session revised several sections in the hygiene provisions contained in the revised standards for processed meat and poultry products (ALINORM 91/13, para 46, Appendix III) in order to provide meaningful references to existing codes of hygienic practice with a view to their eventual alignment with the General Hygiene Provisions (ALINORM 91/13, para 44). The Committee agreed to the inclusion of the text proposed by the Codex Committee on Food Hygiene.

## Provisions for Labelling

### Labelling

79. The Committee noted that the Codex Alimentarius Commission at its 18th Session, on the advice of the Codex Committees on Food Labelling and General Principles, adopted revised endorsement procedures for the labelling provisions in Codex standards (ALINORM 89/40, para 266). These procedures requested the Commodity Committees to:

- (a) incorporate, by reference, the general texts adopted by the Commission in relation to food labelling and food hygiene into Codex standards, and consider only requests for exemptions or exclusions on an ad hoc basis;
- (b) establish comprehensive, general texts which also could be incorporated by reference in other areas, in preference to endorsing provisions on an individual basis;
- (c) make exclusions or exemptions to the general requirements only where adequately justified.

80. Based on this simplified procedure a new text was proposed by the Secretariat for the labelling sections of the revised Codex standards for processed meat and poultry products presently at Step 5 and contained as Appendices V to IX of ALINORM89/16.

81. The proposed text included the square brackets placed around the sections on date marking and storage instructions by the Committee at the 14th Session. To facilitate discussion at this session comments had been sought on the need for date marking of shelf-stable products. The comments received from countries and international organizations were reproduced in CX/PMPP 90/9.

### Standard for Corned Beef

#### Inclusion of provision for labelling of non-retail containers

82. The Committee agreed to retain this provision noting that corned beef sold in hermetically sealed containers moves in international trade also in bulk containers.

#### Date marking and storage instructions

83. The Committee noted that the need for date marking for canned corned beef, which was a shelf-stable product, was considered at the Committee's 14th session (ALINORM 89/16, paras 163-167). The Committee was unable to take a decision on date marking of canned corned beef and agreed to seek comments on the need for date marking of shelf-stable products.

84. The delegations of the USA and Australia informed the Committee that, in their view, the usefulness of specific date marking of canned shelf-stable meat products was very limited. The Committee noted that there was a European Community directive regulating the date marking of shelf-stable products. It agreed to the following text: "For canned corned beef which is a shelf-stable product, the date of minimum durability shall be declared by the year" for the provision for date marking and storage instructions.

85. The delegation of Egypt informed the Committee that, in regulating date marking, consideration should be given to the conditions prevailing in tropical climates. He proposed that the minimum durability for corned beef should be declared by the month and the year. The Committee, while noting that the problem pointed out by Egypt was taken care of to a certain extent by the storage instructions, agreed to bring this to the

attention of the Codex Committee on Food Labelling. The Committee agreed to a proposal of the delegation of Australia that the question of date marking of shelf-stable products should be addressed by the Codex Committee on Food Labelling.

#### Other Processed Meat and Poultry Products Standards

##### Date Marking and Storage Instructions

86. The Committee noted that luncheon meat, cooked cured ham, cooked cured pork shoulder and cooked cured chopped meat move in international trade both as shelf-stable and non shelf-stable products and agreed that there was a need for inclusion of separate provisions to cover date marking of both types of products. The Committee also noted that elsewhere it defined non shelf-stable products as those products which are not expected to keep for 18 months in normal conditions of storage and sale and that the provisions for date marking of such products are not covered by Section 4.7.1 of the General Standard for Prepackaged Foods (CODEX STAN 1-1985).

87. In line with decisions taken for corned beef, which is a shelf-stable product, the Committee agreed to include the same provision "the date of minimum durability shall be declared by the year" for all shelf-stable luncheon meat, cooked cured ham, cooked cured pork shoulder and cooked chopped meat products. This provision was not acceptable to the United States, Canada and Australia. For products which are not shelf-stable the Committee agreed that the minimum durability shall be declared by the day, month and year

##### Methods of Analysis

###### Tin

88. The Committee noted that the atomic absorption spectrophotometric method published in the 15th Edition of Official Methods of Analysis of AOAC (1990) for tin in canned food satisfied the general criteria for the selection of methods of analysis to be included in Codex standards and agreed to its inclusion in all standards.

89. The reference is:

AOAC (1990), 15th Edition, Tin in Canned Foods by Atomic Absorption Spectrophotometric Method, 985.16.

###### Lead

90. The Committee agreed to update the reference to the determination of lead by the colorimetric dithizone method. The new reference would read as.

AOAC (1990), 15th Edition, Lead in Food by General Dithizone Method, 934.07.

##### Status of the Revised Standards

91. The Committee agreed to advance the revised standards (see Appendices V to IX of the Report) to Step 8 of the Codex Procedure.

#### **CONSIDERATION OF THE PROTEIN FAT FREE (PFF) SYSTEM (Agenda Item 12)**

92. As outlined in documents CX/PMPP 90/10 and CX/PMPP 90/10A, the Committee noted that suggestions were made at its previous session concerning the possible elaboration of additional PFF values for cooked ham and cooked pork shoulder. The delegations of Denmark, France and the Netherlands agreed to develop a draft proposal concerning this issue under the chairmanship of the USA between sessions of the

Committee. The conclusions of the working group were presented to the Committee by Dr. Bill Dennis, working group chairman.

93. The Committee noted that although the working group had agreed on the importance of elaborating a PFF system to differentiate between ham and shoulder products, it could not agree on any specific model out of those proposed. The working group noted the enormously complex issues involved, including different national regulations and preferences which were dependent on individual needs and requirements. In view of the significant time and effort involved, and inconsideration of the Committee's likely decision to adjourn sine die, the working group concluded that further deliberations in this area could not be justified.

94. The Committee thanked the working group for its efforts and agreed that the establishment of PFF values in addition to those currently contained in the standards should not be undertaken.

**CONSIDERATION OF LABELLING INCLUDING QUALIFYING DESCRIPTIONS OF PRODUCTS SIMILAR TO THOSE COVERED BY THE STANDARDS FOR PROCESSED MEAT AND POULTRY PRODUCTS (Agenda Item 13)**

95. The Committee noted that at its last session the subject of labelling products similar to standardized Codex products, but not meeting requirements such as composition, was discussed (ALINORM 89/16, paras 174-178).

96. Two possibilities were proposed, namely:

- a) to add a footnote to the Scope Section of the Standard to illustrate by means of examples of qualifying statements which may appear on products traded internationally.
- b) to include an annex to the Standard giving information on possible qualifying statements used in different countries to cover such products which are marketed under the name of the Codex standard without complying with the requirements of that standard.

97. To enable the Secretariat to evaluate the magnitude of the problem, a circular letter (CL 1989/7-PMPP) was issued asking governments and interested international organizations to provide information on the use of qualifying statements for processed meat and poultry products which did not comply with certain requirements of the Codex Standards. The Committee had before it CX/PMPP90/11 containing Government comments on the subject.

98. The delegation of Denmark informed the Committee that national as well as international trade in a number of products not meeting certain essential requirements of Codex standards could make it difficult for the countries to indicate full acceptance. The delegation proposed the use of a Codex logo mark instead of qualifying descriptions which in its view may not be understood by the consumer.

99. The Committee noted that the use of a Codex logo would be difficult to enforce and agreed that the problem might only be solved by appropriate labelling. However, the Committee realised the difficulties faced in collecting all the qualifying statements that are used. The delegation of the USA informed the Committee that in the USA industry have started questioning the basis for qualifying statements. The Committee also noted that for products not meeting the essential composition in a Codex Standard the standardized name could be used provided it was adequately qualified. Therefore, the Committee concluded, that it was unable to provide any advice that would be effective.

#### **FUTURE WORK (Agenda Item 14)**

100. The Committee had before it CX/PMPP 90/12 which included items for future work proposed at the last session. In addition, there had also been a proposal from the 6th Session of the Codex Regional Coordinating Committee for Latin America and the Caribbean (CCLAC) for the elaboration of standards for cooked and uncooked sausages and microbiological specifications and sampling plans for non stable meat products. Lack of meaningful discussion by the Committee on the proposals from CCLAC was interpreted by the Chairman as lack of support from the Committee to continue work on those two areas.

101. The delegation of Sweden pointed out that the items for future work contained in CX/PMPP 90/12 were not of substantial nature and that many were already under consideration by or fell within the terms of reference of other Codex Committees. The delegation of Sweden also noted that Current Codex deliberations were placing more emphasis on horizontal work as opposed to the traditional recipe or vertical approach and proposed that the Committee should adjourn sine die.

102. The delegation of the United States supported by Poland and Morocco opposed the adjournment of the Committee sine die and reflected on the Committees deliberations as evidenced by the excellent participation of Codex member Countries. Some Countries proposed that the Committee should convene at longer intervals, which increased the likelihood of having a full agenda.

103. The delegation of USA proposed that the Committee should focus future efforts on general subjects such as evaluating new processing methods (e.g. emulsification processes) or technologies, their application (e.g. HACCP) and regulatory requirements. It was also indicated that once national regulatory requirements were established it was very difficult to change them through bodies such as Codex. The delegation of Belgium also proposed that the Committee should consider the elaboration of a standard for low calorie meat products but was not in a position to make a draft proposal.

104. In response to a suggestion from the delegation of the USA, the Committee agreed to conduct a survey by means of a circular letter, to determine the types and quantities processed meat and poultry products moving in international trade and the problems and future aspects associated with this trade. It was thought that comments received in response to the circular letter could possibly indicate areas for future work.

105. The Committee agreed to adjourn sine die unless substantial items of future work were identified in response to the survey. It was understood that the survey would be completed before the 19th session of the CAC.

#### **OTHER BUSINESS (Agenda Item 15)**

106. The Committee did not discuss any other business.

#### **DATE AND PLACE OF NEXT SESSION (Agenda Item 16)**

107. The Committee agreed to adjourn sine die unless substantial work was proposed to justify its continuation (see Future Work - Agenda Item 14). The Committee also noted that any decision concerning this issue would be taken at the 19th session of the Commission.

#### **VALEDICTION:**

108. The Committee learnt that this would be the last appearance for Dr. N. Rao Maturu (FAO) as Secretary to the Codex Committee on Processed Meat and Poultry Products. It extended to him and his family its best wishes for a long and productive retirement.

### SUMMARY STATUS OF WORK

<b>Standard/Code</b>	<b>Step</b>	<b>For Action by:</b>	<b>Document Reference</b>
Canned Corned Beef First Revision	8 8	Governments 19th CAC/Govt.	CODEX STAN 88-1981 ALINORM 91/16,
Luncheon Meat First Revision	8 8	Governments 19th CAC/Govt.	CODEX STAN 89-1981 ALINORM 91-16, App. VI
Cooked Cured Ham First Revision	8 8	Governments	CODEX STAN 96-1981 19th CA/Govt.
Cooked Cured Pork Shoulder First Revision	8 8	Governments 19th CAC/Govt.	CODEX STAN 97-1981 ALINORM 91/16, App. VIII
Cooked Cured Chopped Meat First Revision	8 8	Governments	CODEX STAN 98-1981
Code of Practice for the Production, Storage and Composition of Mechanically Separated Meat and Poultry Meat Intended for Further Processing	8	Governments	CAC/RCP 32-1983 (Vol. C)
Code of Hygienic Practice for Processed Meat and Poultry Products	8	Governments	CAC/RCP 13-1976 Rev. I (1985) (Vol. C)
Preservation of Shelf-Stable Cured Meat Products in Consumer-Size Hermetically Sealed Containers (Annex D)	8	19th CAC/Govt.	ALINORM 91/16, APP. III
Draft Guide for the Microbiological Quality of Spices and Herbs used in Processed Meat and Poultry Products	5 and 8	19th CAC/Govt.	ALINORM 91/16, App. III
Draft Guidelines for the Use of Standardized Non-Meat Protein Products in Processed Meat and Poultry Products	8	19th CAC/Govt.	ALINORM 89/16, App. IV

**LIST OF PARTICIPANTS<sup>1</sup>**  
**LISTE DES PARTICIPANTS**  
**LISTA DE PARTICIPANTES**

**ARGENTINA**  
**ARGENTINE**

Ms. Maria Teresa Delgado,  
Commercial Secretary  
Embassy of Argentine  
Kastelsvej 15  
DK-2100 Copenhagen ø, Denmark

Mr. Manuel Salvado  
Commercial and Economic Dept.  
Embassy of Argentine  
Kastelsvej 15  
DK-2100 Copenhagen ø, Denmark

**AUSTRALIA**  
**AUSTRALIE**

Dr. Kevin John Dunn  
Counsellor (Veterinary Services)  
Australian Mission to the EEC  
Rue Guimard 6-8  
1040 Brussels, Belgium

Dr. Robert Biddle  
Senior Assistant Director (Acting)  
Food Inspection Branch  
Australian Quarantine & Inspection  
Service  
Dept. of Primary Industries & Energy  
Canberra, Act 2600, Australia

Mr. John McCausland  
Technical Manager  
James Barnes Pty. Ltd.  
P.O. Box 738  
Wagga Wagga NSW 2650, Australia

**BELGIUM**  
**BELGIQUE**  
**BELGICA**

Mr. Michel Viaene  
Inspecteur - Chef de Service  
Ministry of Public Health  
Inspection des denrées alimentaires  
Cite Administrative de l'Etat  
Batiment Vesale  
1010 Bruxelles, Belgium

Mr. M. Meyers  
1<sup>er</sup> adjoint technique  
Ministère des Affaires Economiques  
Rue du Commerce 44  
1040 Bruxelles, Belgium

**CANADA**

Dr. Ian Kirk  
Associate Director  
Agriculture Canada  
Meat and Poultry Products Division  
2255 Carling Avenue  
Ottawa, Ontario K1A 0Y9, Canada

Mr. Robert De Valk  
General Manager  
Further Poultry Processors  
Association of Canada  
Canada

**CHINA, People's Rep. of**  
**CHINE, Rép. Pop. de**

Mr. Yang Zong Li  
Veterinary Engineer  
State Administration of Import and  
Export  
No. 12 Jianguomeiwai Street  
Beijing, China

**CZECHOSLOVAKIA**  
**TCHECOSLOVAQUIE**

Mr. Otakar Zalabsky  
Food Standards Officer  
Centre of Meat Industry  
Stephansta 63  
11201 Prague 1, Czechoslovakia

**DENMARK**  
**DANEMARK**  
**DINAMARCA**

Mr. Børge Sørensen  
Food Technologist  
Danish Meat Research Institute  
Maglegaardsvej 2  
DK-4000 Roskilde, Denmark

Mr. K. Hamfeldt Pedersen  
Food Technologist  
DAK  
DK-4000 Roskilde, Denmark

Mr. Leif Bøgh-Sørensen  
Food Technologist  
Danish Veterinary Service  
Food Control Laboratory  
Howitzvej 13  
DK-2000 Frederiksberg, Denmark

Ms. Bente Fabech  
Scientific Officer  
Ministry of Health  
National Food Agency  
Mørkhøj Bygade 19  
DK-2860 Søborg, Denmark

**EGYPT**  
**L'EGYPTE**

Dr. Ezzat Abal E.I. Emara  
Chief of Veterinary Sector  
Ministry of Agriculture  
Elsalam Company for Broiler Production  
Cairo, Egypt

**FINLAND**  
**FINLANDE**  
**FINLANDIA**

Mr. Jorma Hirn  
Professor  
National Veterinary Institute  
P.O. Box 368  
00101 Helsinki, Finland

Mr. Pekka Pakkala  
Assistant Director  
National Food Administration  
Haapahiemenukatu 4  
00530 Helsinki, Finland

**FRANCE**  
**FRANCIA**

Dr. Jean-Christophe Tosi  
Vétérinaire Inspecteur  
Ministère de l'Agriculture  
Direction Générale de l'Alimentation  
175 rue du Chevaleret  
75626 Paris Cedex 13, France

Madame Marie-Noëlle Paillette  
Inspecteur de la Répression des  
Fraudes  
Ministère de l'Economie, des Finances  
et du Budget  
13 Rue Saint Georges  
75009 Paris, France

Mr. Jean-Luc Venduvre  
Centre Technique de la Charcuterie,  
de la Salaison et des Conserves de  
Viande  
7 Avenue du Général de Gaulle  
94700 Maisons-Alfort, France

**GERMANY, Fed. Rep. of**  
**ALLEMAGNE, Rep. Fed. d'**  
**ALEMANIA, Rep. Fed. De**

Dr. Harald Kolb  
Federal Health Office  
P.O. Box 330013  
D-1000 Berlin 33, Germany, Fed. Rep.  
of

Mr. Achim Stiebing  
Wissenschaftlicher Oberrat  
Federal Centre for Meat Research  
D-8650 Kulmbach, Germany

Dr. Bernd Mönning  
Bundesministerium für Ernährung,  
Landwirtschaft und Forsten  
D-5300 Bonn 1, Germany

**IRAN**

Dr. Parviz Sadrzadeh  
Ministry of Health,  
Food Control Laboratory  
Iman Khomeini Ave No. 31  
Tehran, Iran

Mr. Hormoz Zagh  
Food Technologist  
Ministry of Health,  
Food Control Laboratory  
Iman Khomeini Ave No. 31  
Tehran, Iran

Mr. Cirous Eskandari  
Food Technologist  
Ministry of Health  
Dept. for Control of Food and  
Sanitary Products  
Tehran, Iran

Dr. Bozorgmehr Vaziri  
Food Microbiologist  
Ministry of Health  
Dept. for Control of Food and  
Sanitary Products  
Tehran, Iran

**KENYA**  
**KENIA**

Dr. Richard Stephen Kimanzi  
Chief Hygiene Officer  
Livestock Development  
Veterinary Laboratory  
P.O. Kabete, Kenya

**MEXICO**  
**MEXIQUE**  
**MEXICO**

Mr. Moises G.D. Delgado  
Medico Veterinario  
Siana Alimentos  
Mexico

**MOROCCO**

Bouchta Riahi  
Chef du Service de l'Hygiene  
et Inspection des denrees animales  
Direction de l'Elevage  
Ministere de l'Agriculture  
Morocco

**NETHERLANDS**  
**PAYS-BAS**  
**PAISES BAJOS**

Gerrit De Peuter  
Head of Nutrition and Consumer Affairs  
Ministry of Agriculture  
P.O.Box 20401  
NL-2500 EK The Hague, Netherlands

Mr. Wil Groen  
Director of research and development  
COVECO N.V.  
P.O. Box 10  
NL-7390 AA Twello, Netherlands

Gerrit Koenen  
Subst. Head of Food Division  
Ministerie Van Welzijn, Volkgezondheid  
und  
Cultuur  
P.O. Box 5406  
NL-2280 HK Ryswyk, Netherlands

**NEW ZEALAND**  
**NOUVELLE-ZELANDE**  
**NUEVA-ZELANDIA**

Mr. Christopher Baddeley  
Counsellor (Veterinary Services)  
New Zealand Mission to  
the European Communities  
47-48 Bvd. du Regent  
Brussels 1000, Belgium

**PHILIPPINES**

Mr. Horacio Carandang  
Agricultural Attache  
Department of Agriculture  
Philippine Mission to the EEC  
Ave. Moliere 299  
B-1060 Brussels, Belgium

**POLAND**  
**POLOGNE**  
**POLONIA**

Dr. Leszek Michalowski  
Head of Veterinary Sanitary  
Inspection Division  
Ministry of Agriculture and Food  
Economy  
Veterinary Department  
30 Wspólna str.  
00-930 Warsaw, Poland

Mr. Stanislaw Tyszkiewicz  
Professor  
Meat and Fat Research Institut  
Rakowiecka Street  
PL02532 Warszawa, Poland

Mr. Jan Szymborski  
Chief Expert  
Veterinary Department  
Ministry of Agriculture and Food  
Economy  
30 Wspólna str.  
00-930 Warsaw, Poland

**SAUDI ARABIA**

Mr. Abdulmohsen Garout  
Chemist  
Saudi Arabian Standards Organization  
P.O. Box 3437  
Riyadh 11471, Saudi Arabia

Mr. Abdul Aziz Khayat  
Setting Standard  
Saudi Arabian Standard Organization  
P.O. Box 3437  
Riyadh, Saudi Arabia

**SPAIN  
ESPAGNE  
ESPANO**

M<sup>a</sup> O.H. De Mendosa  
Jefe se Seccion  
Secretaria Général de la Cioa  
Ministeria de Sanidad y Consumo  
Cibravo Murillo no. 4  
Madrid, Spain

Jesus Campos Amado  
Jefe Servicio Lab. Arbitral  
Ministerio de Agricultura  
Pesco y Alimentacion  
Pased Infanta Isabel no. 1  
Madrid, Spain

**SWEDEN  
SUEDE  
SUECIA**

Ms. Barbro Blomberg  
Head of International Secretariat  
Swedish National Food Administration  
Box 622  
S-751 26 Uppsala, Sweden

Mr. Bengt Johansson  
Head of Section  
Swedish Meat Research Institute  
P.O. Box 504  
S-244 00 Kävlinge, Sweden

**SWITZERLAND  
SUISSE  
SUIZA**

Mr. Pierre Rossier  
Chief International Standards  
Federal Office of Public Health  
Haslerstrasse 16  
CH-3008 Berne, Switzerland

Mr. Jean Vignal  
Director Veterinaire  
Nestec C.S.A  
Ar. M. Nestle  
CH-1800 Vevey, Switzerland

**THAILAND**

Miss Pornprapai Ganjanarintr  
First Secretary  
Royal Thai Embassy  
Copenhagen, Denmark

**UNITED KINGDOM  
ROYAUME-UNI  
REINO UNIDO**

Mr. Keith Millar  
Head of Food Composition Branch  
Ministry of Agriculture, Fisheries  
and Food  
Ergon House, 17, Smith SQ  
London SW1, England

Dr. John Wood  
Section Manager  
Leatherhead Food Research  
Association  
England

Dr. Mark Woolfe  
Head of Branch  
Ministry of Agriculture, Fisheries  
and Food, Food Science Division II  
Ergon House, 17, Smith SQ  
London SW1, England

**UNITED STATES OF AMERICA  
ETATS-UNIS D'AMERIQUE  
ESTADOS UNIDOS DE AMERICA**

Mr. Bill Dennis  
Special Assistant to Deputy  
Administrator  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
Washington D.C. 20250, USA

Mr.L.L. Cast  
Consultant  
Inspection and Management Resources  
9016 Edgewood Drive  
Gaithersburg, MD 20877, USA  
Representing:  
Western States Meat Association  
South Eastern Meat Association  
National Association of Meat Purveyors  
American Association of Meat  
Processors

Mr. Lloyd Hontz  
Associate Director, Regulatory Affairs  
National Food Processors Association  
1401 NY Avenue, NW  
Washington D.C. 20005, USA

Mr. Marshall Marcus  
Director, Regulatory and Trade Affairs  
Protein Technologies International  
Checkerboard Square  
St. Louis, MO 63164, USA

Mr. Ellis Brunton  
Corporate Director Technical Services  
Tysons Foods Inc.  
3609 Johnson Road Springdate, AR 72,  
764 USA

**INTERNATIONAL ORGANIZATIONS  
ORGANISATIONS NTERNATIONALES  
ORGANIZACIONES  
INTERNACIONALES**

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

Mr. H.W. Hesselink  
Secretary General  
CLITRAVI  
Avenue de Cortenbergh 172  
1040 Bruxelles, Belgium

**EUROPEAN VEGETABLE PROTEIN  
FEDERATION (EUVEPRO)**

Mr. Arnold van Hecke  
Director  
EUVEPRO  
Leuvensestraat 29  
B-1800 Vilvoorde, Belgium

**MARINALG INTERNATIONAL**

Mr. Jean-Jacques Piot, Adviser  
Marinalg International  
(World Association of Seaweeds  
Processors)  
85 Boulevard Haussmann  
F-45008 Paris, France

Mr. John Jensen  
Development  
Copenhagen Pectin Factory  
DK-4623 Lille Skensved, Denmark

**JOINT FAO/WHO SECRETARIAT**

Mr. N. Rao Maturu (Secretary)  
Food Standards Officer  
Joint FAO/WHO Food Standards  
Programme  
Food and Agriculture Organization  
Via delle Terme di Caracalla  
00100 Rome, Italy

Mr. David H. Byron  
Food Standards Officer  
Joint FAO/WHO Food Standards  
Programme  
Food and Agriculture Organization  
Via delle Terme di Caracalla  
00100 Rome, Italy

## **DANISH SECRETARIAT**

Mrs. Karen Jensen (Acting chairman)  
Food Control Laboratory  
Danish Veterinary Service  
Howitzvej 13  
DK-2000 Frederiksberg, Denmark

Ms. Linda Jensen  
Food Scientist  
Food Control Laboratory  
Danish Veterinary Service  
Howitzvej 13  
DK-2000 Frederiksberg, Denmark

Ms. Ulla Knudsen  
Food Scientist  
Food Control Laboratory  
Danish Veterinary Service  
Howitzvej 13  
DK-2000 Frederiksberg, Denmark

<sup>1</sup> The first person listed under countries is the head of Delegation

**PRESERVATION OF SHELF-STABLE CURED MEAT PRODUCTS IN CONSUMER  
SIZE HERMETICALLY SEALED CONTAINERS**

(At Step 8 of the Procedure)

(Annex D to Code of Hygienic Practice for Processed Meat and Poultry Products,  
CAC/RCP 13-1976, Rev. 1 (1985))

In preserving shelf-stable cured meat products in hermetically sealed containers the following factors are critical: salt and moisture content, ingoing nitrite content, microbial contamination of meat and non-meat ingredients, pH, the thermoprocess and the integrity of the container. Shelf stability is assured by partial thermodestruction of the bacterial spore contaminants and/or subsequent inhibition of the surviving spores. The safety of the product depends on correct combinations of the above critical factors.

By convention, the effective heat treatment of a product is expressed as  $F_0$ . A value of  $F_0 = 1$  is equivalent to 1 minute at 121.1°C at the coldest (centre) point of the container. Also, a heat treatment for 10 minutes at 111.1°C or for 100 minutes at 101.1°C is equal to  $F_0 = 1$ .

It is essential to read this text in conjunction with the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods, and with Annex A of this Code.

Critical factors dealt with in this annex are as follows:

- a. The microbial contamination of the raw meat ingredients should be verified periodically. Mean levels in excess of 100 mesophilic bacillary spores/g should be sufficient cause for a thorough examination of the production chain for potential sources of contamination or for application of a more severe heat treatment.
- b. The aerobic mesophilic spore count for spices should not exceed  $1 \times 10^4$  /g.
- c. The contribution of non-meat ingredients other than spices to the contamination of the final raw product should be collectively within 50 mesophilic spores/g.
- d. Provided the requirements in paragraph a) to c) are complied with, the following combinations of brine concentrations ( $\% \text{NaCl} \times 100 / (\% \text{NaCl} + \% \text{H}_2\text{O})$ ) and thermo-processes, in conjunction with 150 mg/kg added nitrite (expressed as sodium nitrite) and an unadjusted pH-range of 6.0-6.7, may serve as broad guidelines in the manufacture of safe shelf-stable luncheon meats and chopped meats, ham (and shoulder), and frankfurter type sausages in hermetically sealed containers:

Luncheon meats and chopped meats:

- 3.0-4.0 % brine/1.0-1.5 $F_0$
- 4.0-4.5 % brine/1.0 $F_0$
- 4.5-5.0 % brine/0.5-1.0 $F_0$
- 5.0-5.5 % brine/0.5 $F_0$

Ham and shoulder:

- 3.3 % brine/0.3-0.5 $F_0$
- 3.7 % brine/0.2-0.3 $F_0$
- 4.0 % brine/0.1-0.2 $F_0$

## Sausages

2.5 % brine/1.5F<sub>o</sub>

Cured pasteurized side bacon: In conjunction with 100 mg/kg added nitrite (expressed as sodium nitrite), shelf-stable cured pasteurized bacon should have a minimum brine concentration of 7% and should be heated to at least 70°C in the center.

e. If less stringent combinations of safety factors are to be applied, these should be based on extensive plant experience, thorough microbiological studies, and on standards of hygiene to ensure minimum levels of bacterial spores.

f. It may be desirable to use levels below 150 mg/kg added nitrite (expressed as sodium nitrite), but this may necessitate an increase in the brine concentration and/or the heat process.

g. The brine concentration and the ingoing amount of nitrite must be carefully controlled to assure that every lot of the product contains not less than the level specified for each.

**DRAFTGUIDE FOR THE MICROBIOLOGICAL QUALITY OF SPICES  
AND HERBS USED IN PROCESSED MEAT AND POULTRY PRODUCTS**

(At Steps 5 and 8 of the Procedure)

**1. Section I - SCOPE**

- 1.1 This Guide applies to spices and herbs, harvested wild, or cultivated, which require treatment prior to their use as ingredients in processed meat and poultry products.

It lists methods for the treatment of spices and herbs together with end-product criteria that will improve and assure their suitability for use in processed meat and poultry products.

**2. Section II - DEFINITIONS**

- 2.1 "Spices and herbs" are the aromatic parts of the leaves, flowers or other parts of plants used to impart an aroma or taste to foods.

- 2.2 "Suitability for use" means a condition where the contamination of spices and herbs with microorganisms causing spoilage or public health problems has been reduced to an extent that the spices and herbs are acceptable as ingredients in processed meat and poultry products.

- 2.3 "Decontamination" means the reduction by physical or chemical means of viable microorganisms that would impair the suitability for use of spices and herbs.

- 2.4 "Treatment" means a decontamination process for spices and herbs. This includes sorting, irradiation, exposure to chemicals, extraction, heat processing, extrusion, and other similar physical or chemical methods.

**3. Section III - TREATMENT**

- 3.1 Treatment should be supervised by technically competent personnel.

- 3.2 All steps in the treatment process, including packaging should be performed without undue delay and under conditions which will minimize contamination, deterioration and development of microorganisms that will impair the suitability for use.

- 3.3 Methods of treatment should be so that the treated spices and herbs will meet the end-product criteria of these Guidelines.

- 3.4 The treatments should be performed in such a way that there is a minimum effect on quality and composition and a maximum decontamination effect.

3.4.1 Although heat processing or extrusion processes can have a strong bactericidal effect, not all spices and herbs can be exposed to such treatments without adversely affecting flavour and colour.

3.4.2 Where the treatment involves an extraction process, the extractant should be approved for use in food and used according to good manufacturing practice.

3.4.3 Where irradiation is used for the control of microbial contamination or insect infestation, this should be done in accordance with good irradiation practice and in conformity with the "Codex General Standard for Irradiated Foods" (CODEX STAN 106-1983) and the "Recommended International Code of Practice for the Operation of Irradiation Facilities Used for the Treatment of Foods" (CAC/RCP 19-1979-Rev.1).

3.4.4 Where the treatment involves exposure to chemicals to control microorganisms (e.g. fumigants) whether in solid, fluid or gaseous form, the chemicals used should be those approved for the purpose.

### 3.5 Process Identification

If the spices, herbs or mixtures thereof have been exposed to one of the above treatments, labelling of the bulk containers should be in accordance with the relevant procedures concerning "Relations between Commodity Committees and General Committees"(CAC Procedural Manual, 7th Edition, page 131).

### 3.6 Sampling and Quality Control Procedures

3.6.1 Each plant treating spices and herbs should employ a quality control programme to assure the safety and suitability for use of its products. This programme should be developed in accordance with the principles of HACCP for the specific treatment process, product and end use of the product. The programme should provide for rejection of product whose suitability for use is impaired.

3.6.2 Laboratory procedures used should follow appropriate and recognized methods in order that the results may be readily interpreted.

## 4. **Section IV - END-PRODUCT CRITERIA**

Standard methods should be used for sampling, analysis and other determinations to meet the following criteria for spices, herbs and mixtures thereof with or without other food ingredients, and which have been treated according to this Draft Guide:

- 4.1 Spices and herbs treated as in 3.4.2 and 3.4.4 should contain the lowest attainable amount of residue of the chemical(s) or extractant(s) used.
- 4.2 The microbiological specification of the treated spices or herbs should be compatible with the preservation parameters of the meat and poultry products in which they are used.

**DRAFT GUIDELINES FOR THE USE OF NON-MEAT PROTEIN  
PRODUCTS IN PROCESSED MEAT AND POULTRY PRODUCTS**

(At Step 8 of the Procedure)

1. **SCOPE**

To provide guidance for the use of those non-meat protein products, which are standardized or defined by the Codex Alimentarius Commission, by establishing:

- (i) principles for the appropriate use of non-meat protein products in processed meat and poultry products, and
- (ii) principles for the appropriate labelling of processed meat and poultry products containing non-meat protein products.

2. **DEFINITIONS**

Non-meat protein products are edible protein products not derived from meat, game meat or poultry meat as defined and adopted by Codex Alimentarius Commission.

Examples:

Milk Protein Products (MPP): For the purpose of these Guidelines are: milk products as covered by Article 2 of the Code of Principles concerning Milk and Milk Products with a protein content of at least 25% (m/m) in the fat free dry matter, which, if designated with a name of a standardized milk product, conform to the applicable standard.

Vegetable Protein Products (VPP): Vegetable products which have been processed in a manner which results in a significant increase in the protein content of the final product, and that conform to applicable standards described by the Codex Committee on Vegetable Proteins.

3. **BASIC PRINCIPLES**

3.1 Only those non-meat protein products, standardized or defined by CAC, are permitted to be used in processed meat and poultry products.

3.2 The presence of non-meat protein products in processed meat and poultry products should be clearly indicated on the label.

In this connection, processed meat and poultry products containing non-meat protein products should be labelled in accordance with the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985), with the proviso that:

- (a) A complete list of ingredients should be declared on the label in descending order of proportion.
- (b) The ingredient statement should contain the source (e.g. pea, groundnut), and may contain product type and processed form (e.g. textured, spun) of each non-meat protein in the meat or poultry product.

#### 4. USES OF NON-MEAT PROTEIN PRODUCTS FOR FUNCTIONAL AND OPTIONAL PURPOSES

4.1 Non-meat protein products may be used for functional purposes, or as optional ingredients, provided their use does not result in any replacement of meat and poultry content required by a compositional standard.

4.2 For the purpose of defining non-meat protein products as a functional or optional ingredient the level of non-meat protein products should be calculated on a dry weight basis in the final product. The actual level of use will vary according to the nature of the added protein product and of the product concerned.

4.3 The use of non-meat protein products as a functional or optional ingredient should be regulated in the same way as other functional or optional ingredients with no required change in the name of the product.

#### 5. USES OF NON-MEAT PROTEIN PRODUCTS IN PARTIAL SUBSTITUTION OF THE MEAT OR POULTRY PRODUCT

5.1 When non-meat protein partially substitutes for the meat protein of a processed meat or poultry product., the following nomenclature criteria should apply:

- (i) The presence of non-meat protein product should be indicated by its source in the name of the meat or poultry product.
- (ii) The name of the resulting product should describe its true nature; it should not mislead the consumer; and it should enable the resulting product to be distinguished from products with which it could be confused.
- (iii) In cases where the substitution results in a lower meat protein content in the processed meat or poultry product than that required by a Codex or national standard, the name of the standardized processed meat or poultry product should not be used as part of the name of the resulting product unless properly qualified.
- (iv) The provisions of a Codex Standard or a national standard should be taken into full account when determining the name of the food.

5.2 When a non-meat protein product partially substitutes for the meat: protein of a processed meat or poultry product, consideration should be given to the need for nutritional adequacy of the final product.

The nutritional adequacy of a product can be defined in terms of protein quality and quantity, and content of minerals and vitamins.

Such a product should be considered nutritionally adequate if:

- i) its protein quality, as monitored by way of the methodology adopted by the Codex Alimentarius Commission (amino acid score corrected for digestibility) is appropriate for the nutritional purposes of its usage.
- ii) it contains a sufficient quantity of protein (N x 6,25) and those vitamins and minerals, which are present in significant amount in the original animal product, to serve the nutritional purposes of its usage.

**DRAFT CODEX STANDARD FOR CORNED BEEF**

(at Step 8 of Codex Procedure)

1. **SCOPE**

This standard applies to canned beef products designated as "Corned Beef" and sold in hermetically sealed containers which have been heat treated after sealing to such an extent that the product is shelf-stable.

It does not apply to meat products of the type "Corned Beef" with compositional characteristics different from those specified. These products shall be designated with a qualifying statement which describes the true nature in such a way that it does not mislead the consumer and that it does not lead to confusion with products covered by this standard.

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; 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 and that it presents no public health hazard.

**Subsidiary Definition**

Hermetically sealed container means a container which is completely sealed 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
- curing ingredients consisting of food grade salt and sodium or potassium nitrite

3.2 **Optional Ingredients**

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

3.3 **Composition**

The total protein content in the final product shall not be less than 21% m/m.

3.4 **Essential Quality Factors**

3.4.1 **Raw material**

The meat from which the product is prepared shall be of a quality suitable for human consumption and free from objectionable odours and flavours.

### 3.4.2 Final products

The final 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, when chilled.

## 4. FOOD ADDITIVES

<u>Additive</u>	<u>Maximum ingoing amount</u>
4.1 <u>Preservatives</u>	
4.1.1 Nitrite, potassium and/or sodium salts	100 mg/kg total nitrite expressed as sodium nitrite <u>Maximum level calculated on the total net content of the final product</u>
4.1.2 Nitrite, potassium and/or sodium	50 mg/kg total nitrite expressed as sodium nitrite
4.1.3 Potassium chloride	Limited by Good Manufacturing Practice
4.2 <u>Antioxidants</u>	300 mg/kg (expressed as ascorbic acid singly or in combination)
4.2.1 Ascorbic acid and its sodium salt)	
4.2.2 Isoascorbic acid and sodium salt)	

### 4.3 Carryover

Section 3 of the Principle relating to the Carry-Over of Additives into Food, as set forth in Volume XIV of the Codex Alimentarius, shall apply.

## 5. CONTAMINANTS

	<u>Maximum level</u>
5.1 Lead (Pb)	1 mg/kg
5.2 Tin (Sn)	
5.2.1 Tin (Sn): Products in tinfoil containers	200 mg/kg
5.2.2 Tin (Sn): Products in other containers	50 mg/kg

## 6. HYGIENE

- 6.1 It is recommended that the Recommended International Code of Hygienic Practice for Processed Meat and Poultry Products (Ref. No. CAC/RCP 13-1976 (Rev. 1, 1985)), the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP 23-1979, Rev. 1, 1989), the Recommended International Code of Practice - General Principles of Food Hygiene (Ref. No. CAC/RCP1-1969 (Rev. 2) (1985)) and the Recommended International Code of Hygienic Practice for Fresh Meat (CAC/RCP 11-1971) should apply.
- 6.2 All meat used in the manufacture of corned beef shall have been subjected to the inspection processes prescribed in the Code of Hygienic Practice for Fresh Meat and in the Code of Practice for Ante-Mortem and Post-Mortem Judgment of Slaughter Animals and Meat. It shall have been passed by an inspector as fit for human consumption. Meat shall not, subsequent to being examined by an inspector, have been exposed to contamination or processed or handled or subjected to the addition of any harmful substance, which renders it unfit for human consumption.
- 6.3 Raw or semi-processed meat and corned beef shall be handled, stored or transported in an establishment in a manner that will protect the meat and the corned beef from contamination and deterioration.

- 6.4 Corned beef shall be packed in hermetically sealed containers in compliance with Subsection 7.4 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev.1, 1989)).
- 6.5 Corned beef shall be thermally processed in compliance with Subsections 7.5 and 7.6.1 to 7.6.7 inclusive, of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev.1, 1989)).
- 6.6 The cooling of the thermally processed filled and sealed containers shall be carried out in compliance with Subsection 4.6.8 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev.1, 1989)).
- 6.7 After thermal processing the fitted, sealed containers shall be handled in compliance with Subsection 7.7 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev.1, 1989)).

## 7. LABELLING

The provisions of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985), excepting Section 5.2 (Irradiated Foods) which is not relevant, shall apply.

### 7.1 The Name of the Food

The name of the food to be declared on the label shall be "Corned Beef".

### 7.2 Date marking and Storage Instructions

For canned corned beef which is a shelf-stable product the date of minimum durability shall be indicated by the year.

### 7.3 Labelling of Non-Retail Containers

Information, as appropriate needed for labelling of retail containers is given either on the non-retail container or in accompanying documents except that the name of the food, date marking and storage instructions, lot identification and the name and address of the manufacturer or packer shall appear on the non-retail container.

However, lot identification, and the name and address of the manufacturer or packer may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

## 8. METHODS OF ANALYSIS

### 8.1 Nitrite

Recommended method: ISO/DIS 2918

### 8.2 Lead

According to the AOAC (1990, 15th Edition), Lead in Food by General Dithizone Method, 934.07.

### 8.3 Tin

According to AOAC (1990, 15th Edition), Tin in Canned Foods by Atomic Absorption Spectrophotometric Method, 985.16.

**DRAFT CODEX STANDARD FOR LUNCHEON MEAT**

(at Step 8 of Codex Procedure)

1. **SCOPE**

This standard applies to products designated as "Luncheon Meat" <sup>1</sup> which have been packed in any suitable packing material.

<sup>1</sup> Only the English language shall be used whatever the language of the text.

2. **DESCRIPTION**

The product shall be prepared from meat or poultry meat or a combination of these as defined below which has been comminuted and cured and which may have been smoked.

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 subsections 6.4 and 6.5.

**Subsidiary Definitions**

For the purpose of this standard:

**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. Edible offal also includes poultry skin.

**Meat** means the edible part including edible offal from 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 any domesticated birds including chickens, turkeys, ducks, geese, guinea-fowls or pigeons slaughtered in an abattoir.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

3.1 **Essential Ingredients**

- meat or poultry meat or a combination of these excluding edible offal
- water
- curing ingredients consisting of food-grade salt and sodium or potassium nitrite

3.2 **Optional Ingredients**

- edible offal, fat per se, cured and uncured pork rind per se;
- carbohydrate and protein binders such as:
- 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, caseinate, whey powder, egg protein, dried blood products, vegetable protein products;
- sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose
- syrup (including corn syrup);
- spices, seasonings and condiments;
- water soluble, aromatic hydrolyzed protein.

<u>3.3 Composition</u>	<u>Product with binder</u>	<u>Product without binder and edible offal (but may include heart, tongue or head meat from mammals)</u>
- Minimum ingoing meat content	80% <sup>1</sup>	90%
- Maximum fat content	35%	30%

### 3.4 Essential Quality Factors

#### 3.4.1 Raw material

The ingredients from which the product is prepared shall be of a quality suitable for human consumption and 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

Maximum ingoing amount

### 4.1 Preservatives

4.1.1 Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite <u>Maximum level calculated on the total net content of the final product</u>
4.1.2 Nitrite, potassium and/or sodium .	125 mg/kg total nitrite expressed as sodium nitrite
4.1.3 Potassium chloride	Limited by Good Manufacturing Practice

Additive

### 4.2 Antioxidants

4.2.1 Ascorbic acid and sodium salt	500 mg/kg (expressed as ascorbic acid) singly or in combination
4.2.2 Isoascorbic acid and sodium salt	

### 4.3 Flavours

4.3.1 Natural flavouring substances and Natureidentical flavouring substances defined in the Codex Alimentarius	Limited by Good Manufacturing Practice
-----------------------------------------------------------------------------------------------------------------	----------------------------------------

<sup>1</sup> The meat content includes meat, edible offal and poultry meat

#### 4.4 Flavour enhancers

- |       |                        |                                        |
|-------|------------------------|----------------------------------------|
| 4.4.1 | 5'-Guanylate, disodium | Limited by Good Manufacturing Practice |
| 4.4.2 | 5'-Inosinate, disodium | Limited by Good Manufacturing Practice |
| 4.4.3 | Monosodium glutamate   | Limited by Good Manufacturing Practice |

#### 4.5 Acidity regulators

- |       |                      |                                        |
|-------|----------------------|----------------------------------------|
| 4.5.1 | Gluconodelta lactone | 3000 mg/kg                             |
| 4.5.2 | Sodium citrate       | Limited by Good Manufacturing Practice |

#### 4.6 Water retention agents

- |       |                                                                                   |                                                                                   |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 4.6.1 | Phosphates (naturally present plus added) <sup>1</sup>                            | 8000 mg/kg (expressed as P <sub>2</sub> O <sub>5</sub> )                          |
| 4.6.2 | Added phosphates (mono-, di- and poly-), sodium and potassium salts) <sup>2</sup> | 3000 mg/kg (expressed as P <sub>2</sub> O <sub>5</sub> ) singly or in combination |

#### 4.7 Colours

- |       |                                                                                     |          |
|-------|-------------------------------------------------------------------------------------|----------|
| 4.7.1 | Erythrosine (CI 45430) to replace loss of colour (for the product with binder only) | 15 mg/kg |
|-------|-------------------------------------------------------------------------------------|----------|

#### 4.8 Carryover

Section 3 of the Principle relating to the Carry-Over of Additives into Food, as set forth in Volume XIV of the Codex Alimentarius, shall apply.

#### 5. CONTAMINANTS

##### Maximum level

- |       |                                              |           |
|-------|----------------------------------------------|-----------|
| 5.1   | Lead (Pb)                                    | 0.5 mg/kg |
| 5.2   | Tin (Sn)                                     |           |
| 5.2.1 | Tin (Sn): For products in tinfoil containers | 200 mg/kg |
| 5.2.2 | Tin (Sn): For products in other containers   | 50 mg/kg  |

#### 6. HYGIENE

- 6.1 It is recommended that the Recommended International Code of Hygienic Practice for Processed Meat and Poultry Products (Ref. No. CAC/RCP 13-1976 (Rev. 1, 1985)), where applicable the Recommended International Code of Hygienic Practice for Poultry Processing (Ref. No. CAC/RCP 14-1976), the Recommended International Code of Practice - General Principles of Food Hygiene (Ref. No. CAC/RCP 1-1969(Rev. 2) (1985)), the Recommended International Code of Hygienic Practice for Fresh Meat (CAC/RCP 11-1971) and where applicable the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP 23-1979 (Rev. 1, 1989)) should apply.

<sup>1</sup> Natural phosphate (mg/kg P<sub>2</sub>O<sub>5</sub>) be calculated as 250 x % protein.

<sup>2</sup> Having INS n° 339, 340, 450, 451 and 452.

- 6.2 All meat<sup>1</sup> used in the manufacture of luncheon meat shall have been subjected to the inspection processes prescribed in the Code of Hygienic Practice for Fresh

Meat and, where applicable, the Code of Hygienic Practice for Poultry Processing. Meat from mammals shall have been inspected according to the Code of Practice for Ante-Mortem and Post-Mortem Judgment of Slaughter Animals and Meat. It shall have been passed by an inspector as fit for human consumption. Meat shall not, subsequent to being examined by an inspector, have been exposed to contamination or processed or handled or subjected to the addition of any harmful substance, which renders it unfit for human consumption.

- 6.3 Raw or semi-processed meat and luncheon meat shall be handled, stored or transported in an establishment in a manner that will protect the meat and the luncheon meat from contamination and deterioration.
- 6.4 Luncheon Meat shall be packed in hermetically sealed containers in compliance with Subsection 7.4 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev. 1,1989)).
- 6.5 Luncheon Meat is heat treated before packaging it 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 themselves shall not present any health hazard or permit contamination under normal conditions of handling. They shall be clean, and where applicable, show evidence of vacuum.
- 6.6 Luncheon Meat shall be thermally processed in compliance with Subsections 7.5 and 7.6.1 to 7.6.7 inclusive, of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev. 1, 1989)).
- 6.7 The cooling of the thermally processed filled and sealed containers shall be carried out in compliance with Subsection 4.6.8 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev. 1, 1989)).
- 6.8 After thermal processing the fitted, sealed containers shall be handled in compliance with Subsection 7.7 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev. 1, 1989)).

## 7. LABELLING

The provisions of the Codex General Standard for the Labelling of Prepackaged Foods (Ref. No. CODEX STAN 1-1985) shall apply.

### 7.1 The Name of the Food

The name of the food to be declared on the label shall be "Luncheon Meat".

A declaration of the presence of binders and of edible offal and a declaration indicating the species of animal from which the meat, poultry meat or a combination of these is derived shall be given in connection with the name of the product if their omission would mislead the consumer.

<sup>1</sup> Wherever the word "meat" is used in this section, it includes meat, edible offal and poultry meat.

### 7.2 List of Ingredients

The list of ingredients shall indicate the species of animals from which the meat, poultry meat or a combination of these is derived.

### 7.3 Date Marking and Storage Instructions

7.3.1 For shelf-stable products the date of minimum durability shall be declared by the year.

7.3.2 For products which are not shelf-stable i.e. which may be expected not to keep for at least 18 months in normal conditions of storage and sale, and which are packaged in a container ready for offer to the consumer or for catering purposes, the date of minimum durability shall be declared by day, month and year.

7.3.3 For products which are not shelf-stable and which are packaged in containers not sold directly to the consumer or for catering purposes, adequate storage and distribution instructions shall be declared.

### 7.4 Labelling of Non-Retail Containers

Information, as appropriate needed for labelling of retail containers is given either on the non-retail containers or in accompanying documents except that the name of the food, date marking and storage instructions, lot identification and the name and address of the manufacturer or packer shall appear on the non-retail container.

However, lot identification, and the name and address of the manufacturer or packer may be replaced by an identification mark provided that such mark is clearly identifiable with the accompanying documents.

## 8. METHODS OF ANALYSIS

### 8.1 Fat

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

### 8.2 Nitrite

Recommended method: ISO/DIS 2918.

### 8.3 Lead

According to the AOAC (1990, 15th Edition), Lead in Food by General Dithizone Method, 934.07.

### 8.4 Tin

According to the AOAC (1990, 15th Edition), Tin in Canned Food by Atomic Absorption Spectrophotometric Method, 985.16.

**DRAFT CODEX STANDARD FOR COOKED CURED HAM**

(at Step 8 of Codex Procedure)

1. **SCOPE**

This standard applies to products designated as "Cooked Ham" packaged in any suitable packaging material as defined in subsections 6.4 and 6.5 below.

It does not apply to cooked ham products with compositional characteristics different from those specified. These products shall be designated with a qualifying statement which describes the true nature in such a way that it does not mislead the consumer and that it does not lead to confusion with products covered by this Standard.

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. 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 the conditions of storage, transport and sale as indicated in subsections 6.4 and 6.5.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

3.1 **Essential Ingredients**

- Uncured ham
- Brine consisting of water and food-grade salt and sodium or potassium nitrite

3.2 **Optional Ingredients**

- Sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose syrup (including corn syrup), honey
- Spices, seasonings and condiments
- Water soluble, aromatic hydrolyzed protein
- Food grade gelatine

3.3 **Essential Quality Factors**

3.3.1 Raw material - The ingredients from which the product is prepared shall be of a quality suitable for human consumption and 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

- Average percentage meatprotein on fatfree basis ≥ 18.0%
- Minimum percentage meatprotein on fatfree basis = 16.5%  
(absolute minimum)

(For canned products the percentage of meatprotein is calculated on the total content of the can and corrected for gelatine, if added - see subsection 8.4).

## 4. FOOD ADDITIVES

### 4.1 Preservative

#### Maximum ingoing amount

- 4.1.1 Nitrite potassium and/or sodium salts 200 mg/kg total nitrite expressed as sodium nitrite

#### Maximum level calculated on the total net content of the final product

- 4.1.2 Nitrite, potassium and/or sodium 125 mg/kg total nitrite expressed as sodium nitrite

- 4.1.3 Potassium chloride Limited by Good Manufacturing Practice

### 4.2 Antioxidants

- 4.2.1 Ascorbic acid and sodium salt 500 mg/kg (expressed as ascorbic acid) singly or in combination
- 4.2.2 Iso-ascorbic acid and sodium salt

### 4.3 Flavours

- 4.3.1 Natural flavouring substances and Natureidentical flavouring substances defined in the Codex Alimentarius Limited by Good Manufacturing Practice

- 4.3.2 Smoke flavourings as evaluated by JECFA

### 4.4 Flavour enhancers

- 4.4.1 5'-Guanylate, disodium Limited by Good Manufacturing Practice
- 4.4.2 5'-Inosinate, disodium
- 4.4.3 Monosodium glutamate

### 4.5 Acidity regulators

- 4.5.1 Citrate, sodium salt Limited by Good Manufacturing Practice

### 4.6 Water retention agents

- 4.6.1 Phosphates (naturally present plus added) <sup>1</sup> 8000 mg/kg (expressed as P<sub>2</sub>O<sub>5</sub>)

- 4.6.2 Added phosphates (mono-, di- and poly-), <sup>2</sup> 3000 mg/kg (expressed as P<sub>2</sub>O<sub>5</sub>) sodium and potassium salts singly or in combination

### 4.7 Thickeners

- 4.7.1 Agar Limited by Good Manufacturing Practice
- 4.7.2 Carrageenan
- 4.7.3 Alginates, potassium and/or sodium salts

<sup>1</sup> Natural phosphate (mg/kg P<sub>2</sub>O<sub>5</sub>) be calculated as 250 x % protein.

<sup>2</sup> Having INS N° 339, 340, 450,451 and 452.

### 4.8 Carry-over

Section 3 of the Principle relating to the Carry-Over of Additives into Food, asset forth in Volume XIV of the Codex Alimentarius shall apply.

5.	<u>CONTAMINANTS</u>	<u>Maximum level</u>
5.1	Lead (Pb)	0,5 mg/kg
5.2	Tin (Sn)	
5.2.1	Tin (Sn): Products in tinsplate containers	200 mg/kg
5.2.2	Tin (Sn): Products in other containers	50 mg/kg

## 6. HYGIENE

- 6.1 It is recommended that the Recommended International Code of Hygienic Practice for Processed Meat and Poultry Products (Ref. No. CAC/RCP 13-1976 (Rev. 1, 1985)), the Recommended International Code of Hygienic Practice for Fresh Meat (CAC/RCP11-1971), the Recommended International Code of Practice - General Principles of Food Hygiene (Ref. No. CAC/RCP 1-1969 (Rev. 2, 1985)) and where applicable the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP 23-1979 (Rev. 1, 1989)) should apply.
- 6.2 All meat used in the manufacture of cooked cured ham shall have been subjected to the inspection processes prescribed in the Code of Hygienic Practice for Fresh Meat and the Code of Practice for Ante-Mortem and Post-Mortem Judgement of Slaughter Animals and Meat. It shall have been passed by an inspector as fit for human consumption. Meat shall not, subsequent to being examined by an inspector, have been exposed to contamination or processed or handled or subjected to the addition of any harmful substance, which renders it unfit for human consumption.
- 6.3 Raw or semi-processed meat and cooked cured ham shall be handled, stored or transported in an establishment in a manner that will protect the meat and the cooked cured ham from contamination and deterioration.
- 6.4 Cooked cured ham shall be packed in hermetically sealed containers in compliance with Subsection 7.4 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev. 1, 1989)).
- 6.5 If cooked cured ham is heat treated before packaging it shall be packaged in such away 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 themselves shall not present any health hazard or permit contamination under normal conditions of handling. They shall be clean, and where applicable, show evidence of vacuum.
- 6.6 Cooked cured ham shall be thermally processed in compliance with Subsections 7.5 and 7.6.1 to 7.6.7 inclusive, of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979(Rev. 1, 1989)).
- 6.7 The cooling of the thermally processed filled and sealed containers shall be carried out in compliance with Subsection4.6.8 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N°CAC/RCP 23-1979 (Rev. 1, 1989)).

6.8 After thermal processing the fitted, sealed containers shall be handled in compliance with Subsection 7.7 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979(Rev. 1, 1989)).

## 7. LABELLING

The provisions of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) shall apply.

### 7.1 The Name of the Food

7.1.1 The name of the food to be declared on the label shall be "Cooked Ham".

7.1.2 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".

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

### 7.2 Date Marking and Storage Instructions

7.2.1 For shelf-stable products the date of minimum durability shall be declared by the year.

7.2.2 For hams which are not shelf-stable i.e which may be expected not to keep for at least 18 months in normal conditions of storage and sale, and which are packaged in a container ready for offer to the consumer or for catering purposes, the date of minimum durability shall be declared by day, month and year.

7.2.3 For products which are not shelf-stable and which are packaged in containers not sold directly to the consumer or for catering purposes, adequate storage and distribution instructions shall be declared.

### 7.4 Labelling of Non-Retail Containers

Information, as appropriate needed for labelling of retail containers is given either on the non-retail containers or in accompanying documents except that the name of the food, date marking and storage instructions, lot identification and the name and address of the manufacturer or packer shall appear on the non-retail container.

However, lot identification, and the name and address of the manufacturer or packer may be replaced by an identification mark provided that such mark is clearly identifiable with the accompanying documents.

## 8. METHODS OF ANALYSIS

### 8.1 Protein

Recommended method: Determination of Nitrogen Content of Meat and Meat Products, ISO Recommendation R 937. (Conversion factor for nitrogen: 6.25).

### 8.2 Fat

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

### 8.3 Nitrite

Recommended method: ISO/DIS 2918.

### 8.4 Correction for added gelatine

For products in which the amount of added gelatine is not known 0,5% protein should be deducted from the percentage protein expressed on a fat-free basis.

### 8.5 Lead

According to AOAC (1990, 15th Edition) Lead in Food by General Dithizone Method, 934.07.

### 8.6 Tin

According to AOAC (1990, 15th Edition), Tin in Canned Foods by Atomic Absorption Spectrophotometric Method, 985.16.

**DRAFT CODEX STANDARD FOR COOKED CURED PORK SHOULDER**

(at Step 8 of Codex Procedure)

1. **SCOPE**

This standard applies to products designated as "Cooked Pork Shoulder" packaged in any suitable packaging material as defined in sub-sections 6.4 and 6.5 below.

It does not apply to cooked cured pork shoulder products with compositional characteristics different from those specified. These products shall be designated with a qualifying statement which describes the true nature in such a way that it does not mislead the consumer and that it does not lead to confusion with products covered by this Standard.

2. **DESCRIPTION**

The product shall be made of meat from foreleg of a pig. 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 the conditions of storage, transport and sale as indicated in subsections 6.4 and 6.5.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

3.1 **Essential Ingredients**

- Uncured pork shoulder
- Brine consisting of water and food-grade salt and sodium or potassium nitrite.

3.2 **Optional Ingredients**

- Sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose syrup (including corn syrup), honey
- Spices, seasonings and condiments
- Water soluble, aromatic hydrolyzed protein
- Food-grade gelatine.

3.3 **Essential Quality Factors**

3.3.1 Raw material - The ingredients from which the product is prepared shall be of a quality suitable for human consumption and 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

- Average percentage meat-protein on fat-free basis ≥ 17.5%
  - Minimum percentage meat-protein on fat-free basis = 16.0%
- (absolute minimum)

(For canned products the percentage of meat-protein is calculated on the total content of the can and corrected for gelatine, if added - see subsection 8.4).

## 4. FOOD ADDITIVES

### 4.1 Preservative

#### Maximum ingoing amount

- 4.1.1 Nitrite potassium and/or sodium salts 200 mg/kg total nitrite expressed as sodium nitrite

#### Maximum level calculated on the total net content of the final product

- 4.1.2 Nitrite, potassium and/or sodium salts 125 mg/kg total nitrite expressed as sodium nitrite

- 4.1.3 Potassium chloride Limited by Good Manufacturing Practice

### 4.2 Antioxidants

- 4.2.1 Ascorbic acid and sodium salt 500 mg/kg (expressed as ascorbic acid) singly or in combination
- 4.2.2 Iso-ascorbic acid and sodium salt

### 4.3 Flavours

- 4.3.1 Natural flavouring substances and Nature identical flavouring substances defined in the Codex Alimentarius} Limited by Good Manufacturing Practice

- 4.3.2 Smoke flavourings as evaluated by JECFA

### 4.4 Flavour enhancers

- 4.4.1 5'-Guanylate, disodium
  - 4.4.2 5'-Inosinate, disodium
  - 4.4.3 Monosodium glutamate
- Limited by Good Manufacturing Practice

### 4.5 Acidity regulators

- 4.5.1 Citrate, sodium salt Limited by Good Manufacturing Practice

### 4.6 Water retention agents

- 4.6.1 Phosphates (naturally present plus added) <sup>1</sup> 8000 mg/kg (expressed as P<sub>2</sub>O<sub>5</sub>)
- 4.6.2 Added phosphates (mono-, di- and poly-) sodium and potassium salts 2/ 3000 mg/kg (expressed as P<sub>2</sub>O<sub>5</sub> singly or in combination)

### 4.7 Thickeners

- 4.7.1 Agar Limited by Good Manufacturing Practice
- 4.7.2 Carrageenan
- 4.7.3 Alginates, potassium and/or sodium salts maximum level 10 mg/kg

<sup>1</sup> Natural phosphate (mg/kg P<sub>2</sub>O<sub>5</sub>) be calculated as 250 x % protein.

<sup>2</sup> Having INS n° 3 39, 340, 450, 451, 452.

### 4.8 Carry-Over

Section 3 of the Principle relating to the Carry-Over of Additives into Food, asset forth in Volume XIV of the Codex Alimentarius shall apply.

5.	<u>CONTAMINANTS</u>	<u>Maximum Level</u>
5.1	Lead (Pb)	0,5 mg/kg
5.2	Tin (Sn)	
5.2.1	Tin (Sn): Products in tinsplate containers	200 mg/kg
5.2.2	Tin (Sn): Products in other containers	50 mg/kg

## 6. HYGIENE

6.1 It is recommended that the Recommended International Code of Hygienic Practice for Processed meat and Poultry Products (CAC/RCP 13-1976 (Rev.1, 1985)), the Recommended International Code of Hygienic Practice for Fresh Meat (CAC/RCP 11-1971), the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP1-1969, Rev.2 (1985)) and, where applicable, the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP23-1979, Rev.1, 1989)) should apply.

6.2 All meat used in the manufacture of cooked pork shoulder shall have been subjected to the inspection processes prescribed in the Code of Hygienic Practice for Fresh Meat and the Code of Practice for Ante-Mortem and Post-Mortem Judgement of Slaughter Animals and Meat. It shall have been passed by an inspector as fit for human consumption. Meat shall not, subsequent to being examined by an inspector, have been exposed to contamination or processed or handled or subjected to the addition of any harmful substance, which renders it unfit for human consumption.

6.3 Raw or semi-processed meat and cooked cured chopped meat shall be handled, stored or transported in an establishment in a manner that will protect the meat and the cooked cured pork shoulder from contamination and deterioration.

6.4 Cooked cured pork shoulder shall be packed in hermetically sealed containe RS in compliance with Subsection 7.4 of the Recommended International Code of HYgienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev.1, 1989)).

6.5 If cooked cured pork shoulder is heat treated before packaging it 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 themselves shall not present any health hazard or permit contamination under normal conditions of handling. They shall be clean, and where applicable, show evidence of vacuum.

6.6 Cooked cured pork shoulder shall be thermally processed in compliance with Subsections 7.5 and 7.6.1 to 7.6.7 inclusive, of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP23-1979 (Rev. 1, 1989)).

6.7 The cooling of the thermally processed filled and sealed containers shall be carried out in compliance with Subsection4.6.8 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N°CAC/RCP23-1979 (Rev. 1, 1989)).

6.8 After thermal processing the fitted, sealed containers shall be handled in compliance with Subsection 7.7 of the Recommended International Code of Hygienic

Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. N° CAC/RCP 23-1979 (Rev.1, 1989)).

## 7. LABELLING

The provisions of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) shall apply.

### 7.1 The Name of the Food

7.1.1 The name of the food to be declared on the label shall be "Cooked Pork Shoulder".

7.1.2 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".

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

### 7.2 Date Marking and Storage Instructions

7.2.1 For shelf-stable products the date of minimum durability shall be declared by the year.

7.2.2 For Cooked Cured Pork Shoulders which are not shelf-stable i.e which may be expected not to keep for at least 18 months in normal conditions of storage and sale, and which are packaged in a container ready for offer to the consumer or for catering purposes, the date of minimum durability shall be declared by day, month and year.

7.2.3 For products which are not shelf-stable and which are packaged in containers not sold directly to the consumer or for catering purposes, adequate storage and distribution instructions shall be declared.

### 7.3 Labelling of Non-Retail Containers

Information, as appropriate needed for labelling of retail containers is given either on the non-retail containers or in accompanying documents except that the name of the food, date marking and storage instructions, lot identification and the name and address of the manufacturer or packer shall appear on the non-retail container.

However, lot identification, and the name and address of the manufacturer or packer may be replaced by an identification mark provided that such mark is clearly identifiable with the accompanying documents.

## 8. METHODS OF ANALYSIS

### 8.1 Protein

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

### 8.2 Fat

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

### 8.3 Nitrite

Recommended method: ISO/DIS 2918.

### 8.4 Correction for added gelatine

For products in which the amount of added gelatine is not know 0,5% protein should be deducted from the percentage protein expresed on a fat-free basis.

### 8.5 Lead

According to AOAC (1990, 15th Edition), Lead in Food by General Dithizone Method,934.07.

### 8.6 Tin

According to AOAC (1990, 15th Edition), Tin in Canned Foods by Atomic Absorption Spectrophotometric Method, 985.16.

**DRAFT CODEX STANDARD FOR COOKED CURED CHOPPED MEAT**

(At Step 8 of Codex Procedure)

1. **SCOPE**

This standard applies to products designated as "Chopped Meat" <sup>1</sup> which have been packed in any suitable packaging material.

<sup>1</sup> The word "meat" may be replaced by a word describing the kind (s) of meat used.

2. **DESCRIPTION**

The product shall be prepared from meat or poultry meat or a combination of these as defined below which has been cured and which may have been smoked. At least 50% of the meat used shall consist of coarsely cut pieces equivalent to meat ground through holes of not less than 8 mm in diameter. No piece shall be greater than 15 mm in any one dimension.

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 subsections 6.4 and 6.5.

**Subsidiary Definitions**

For the purpose of this Standard:

**Edible offal** means such offals as have been passed as fit for human consumption but not including lungs, ears, scalp, snout (including lips and muzzle), mucous membrane, sinews, genital system, udders, intestines and urinary bladder. Edible offal does not include poultry skin.

**Meat** means the edible part including edible offal 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 any domesticated birds including chickens, turkeys, ducks, geese, guinea-fowls or pigeons slaughtered in an abattoir.

3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

3.1 **Essential Ingredients**

- Meat or poultry meat or a combination of these excluding edible offal;
- Water;
- Curing ingredients consisting of food-grade salt (sodium chloride) and potassium or sodium nitrite.

3.2 **Optional Ingredients**

- Edible offal, fat per se, cured and uncured pork rind per se, poultry meat;
- Carbohydrate and protein binders such as:
  - meal, flour or starch prepared from grain, or potato or sweet potato;

- bread, biscuit or bakery products;
- milk powder, skimmed milk powder, butter milk powder, caseinate, whey powder, egg protein, dried blood products, vegetable protein products;
- Sucrose, invert sugar, dextrose (glucose), lactose, maltose, glucose syrup (including corn syrup);
- Spices, seasonings and condiments;
- Water soluble, aromatic hydrolyzed protein.

### 3.3 Composition

	<u>Product with binder</u>	<u>Product without binder and edible offal (but may include heart, tongue or head meat from mammals)</u>
- Minimum ingoing meat content	80% <sup>1</sup>	90%
- Maximum fat content	30%	25%

<sup>1</sup> The meat content includes meat, edible offal and poultry meat.

### 3.4 Essential Quality Factors

3.4.1. Raw material - the ingredients from which the product is prepared shall be of a quality suitable for human consumption and 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

<u>Additive</u>	<u>Maximum ingoing amount</u>
4.1 <u>Preservatives</u>	
4.1.1 Nitrite, potassium and/or sodium salts	200 mg/kg total nitrite expressed as sodium nitrite <u>Maximum level calculated on the total net content of the final product</u>
4.1.2 Nitrite, potassium and/or sodium salts	125 mg/kg total nitrite expressed as sodium nitrite
4.1.3 Potassium chloride	Limited by Good Manufacturing Practice
4.2 <u>Antioxidants</u>	<u>Maximum level calculated on the total net content of the final product</u>
4.2.1 Ascorbic acid and sodium salt	500 mg/kg (expressed as ascorbic acid)
4.2.2 Isoascorbic acid and sodium salt	singly or in combination
4.3 <u>Flavours</u>	
4.3.1 Natural flavouring substances and Nature identical flavouring substances defined in the Codex Alimentarius	Limited by Good Manufacturing Practice
4.4 <u>Flavour Enhancers</u>	
4.4.1 5'-Guanylate, disodium	
4.4.2 5'-Inosinate, disodium	Limited by Good Manufacturing Practice
4.4.3 Monosodium glutamate	

#### 4.5 Acidity Regulators

- 4.5.1 Gluconodeltalactone 3000 mg/kg  
4.5.2 Sodium citrate Limited by Good Manufacturing Practice

#### 4.6 Water Retention Agents

- 4.6.1 Phosphates (naturally present plus added)<sup>1</sup> 8000 mg/kg (expressed as P<sub>2</sub>O<sub>5</sub>)  
4.6.2 Added phosphates (mono-, diand poly-), sodium and potassium salts<sup>2</sup> 3000 mg/kg (expressed as P<sub>2</sub>O<sub>5</sub>) singly or in combination

#### 4.7 Colours

- 4.7.1 Erythrosine (CI 45430) to replace loss of colour (for the product with binder only) 15 mg/kg

<sup>1</sup> Natural phosphate (mg/kg P<sub>2</sub>O<sub>5</sub>) calculated as 250 x % protein.

<sup>2</sup> Having INS n° 339, 340, 450, 451, 452.

#### 4.8 Carry-Over

Section 3 of the Principle relating to the Carry-Over of Additives into Food, asset forth in Volume XIV of the Codex Alimentarius shall apply.

### 5. CONTAMINANTS

	<u>Maximum Level</u>
5.1 Lead (Pb)	0.5 mg/kg
5.2 Tin (Sn)	
5.2.1 Tin (Sn): For products in tinplate containers	2000 mg/kg
5.2.2 Tin (Sn): For products in other containers	50 mg/kg

### 6. HYGIENE

6.1 It is recommended that the Recommended International Code of Hygienic Practice for Processed Meat and Poultry Products (CAC/RCP 13-1976 (Rev.1, 1985)), the Recommended International Code of Hygienic Practice for Fresh Meat (CAC/RCP 11-1971), the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP1-1969, Rev.2 (1985)) and, where applicable, the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23-1979, Rev.1, 1989) should apply.

6.2 All meat<sup>1</sup> used in the manufacture of cooked chopped meat shall have been subjected to the inspection processes prescribed in the Code of Hygienic Practice for Fresh Meat and, where applicable, the Code of Hygienic Practice for Ante-Mortem and Post-Mortem Judgement of Slaughter Animals and Meat. It shall have been passed by an inspector as fit for human consumption. Meat shall not, subsequent to being examined by an inspector, have been exposed to contamination or processed or handled or subjected to the addition of any harmful substance, which renders it unfit for human consumption.

<sup>1</sup> Wherever the word "meat" is used in this section it includes meat, edible offal and poultry meat.

6.3 Raw or semi-processed meat and cooked cured chopped meat shall be handled, stored or transported in an establishment in a manner that will protect the meat and the cooked cured chopped meat from contamination and deterioration.

6.4 Cooked cured chopped meat shall be packed in hermetically sealed containers in compliance with Subsection 7.4 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP 23-1979 (Rev.1, 1989)).

6.5 If cooked cured chopped meat is heat treated before packaging it 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 themselves shall not present any health hazard or permit contamination under normal conditions of handling. They shall be clean and, where applicable, show evidence of vacuum.

6.6 Cooked cured chopped meat shall be thermally processed in compliance with Subsections 7.5 and 7.6.1 inclusive, of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP 23-1979 (Rev.1,1989)).

6.7 The cooling of the thermally processed filled and sealed containers shall be carried out in compliance with Subsection 4.6.8 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP23-1979 (Rev. 1,1989)):

6.8 After thermal processing the fitted, sealed containers shall be handled in compliance with Subsection 7.7 of the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (Ref. No. CAC/RCP 23-1979 (Rev.1,1989)).

## 7. LABELLING

The provisions of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) shall apply.

### 7.1 The Name of the Food

7.1.1 The name of the food to be declared on the label shall be "Chopped Meat" except that the word "Meat" may be replaced by a word describing the kind of meat used, or where more than one kind of meat has been used, by the names in descending order of proportion, e.g. "Chopped Pork", "Chopped Pork and Beef".

A declaration of the presence of binders and of edible offal and a declaration indicating the species of animal from which the meat, poultry meat or a combination of these is derived shall be given in connection with the name of the product if their omission would mislead the consumer.

### 7.2 List of Ingredients

The list of ingredients shall indicate the species of animals from which the meat, poultry meat or a combination of these is derived.

### 7.3 Date Marking and Storage Instructions

7.3.1 For shelf-stable products the date of minimum durability shall be declared by the year.

7.3.2 For products which are not shelf-stable i.e which may be expected not to keep for at least 18 months in normal conditions of storage and sale, and which are packaged in a container ready for offer to the consumer or for catering purposes, the date of minimum durability shall be declared by day, month and year.

7.3.3 For products which are not shelf-stable and which are packaged in containers not sold directly to the consumer or for catering purposes, adequate storage and distribution instructions shall be declared.

#### 7.4 Labelling of Non-Retail Containers

Information, as appropriate needed for labelling of retail containers is given either on the non-retail containers or in accompanying documents except that the name of the food, date marking and storage instructions, lot identification and the name and address of the manufacturer or packer shall appear on the non-retail container.

However, lot identification, and the name and address of the manufacturer or packer may be replaced by an identification mark provided that such mark is clearly identifiable with the accompanying documents.

### 8. METHODS OF ANALYSIS

#### 8.1 Fat

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

#### 8.2 Nitrite

Recommended method: ISO/DIS 2918.

#### 8.3 Lead

According to AOAC (1990, 15th Edition) Lead in Food by General Dithizone Method, 934.07.

#### 8.4 Tin

According to AOAC (1990, 15th Edition), Tin in Canned Foods by Atomic Absorption Spectrophotometric Method, 985.16.