codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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ALINORM 93/16A

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION
20th Session
Geneva, Switzerland, 28 June – 7 July 1993

REPORT OF THE 7TH SESSION OF THE CODEX COMMITTEE ON MEAT HYGIENE
Rome, 29 March – 2 April 1993

N.B.: This document contains also Circular Letter CL 1993/9-MH

CX 5/25 CL 1993/9-MH
April 1991

TO:
- Codex Contact Points
- Participants at the 7th Session of the Codex Committee on Meat Hygiene
- Interested International Organizations

FROM: Chief, Joint FAO/WHO Food Standards Programme FAO, Via delle Terme di Caracalla, 00100 Rome, Italy

SUBJECT: Distribution of the Report of the 7th Session of the Codex Committee on Meat Hygiene, Rome. 29 March–2 April 1993. ALINORM 93/16A

MATTERS FOR ADOPTION BY THE COMMISSION

1. Draft Revised Code of Hygienic Practice for Fresh Meat (ALINORM 93/16A. paras 17–35 and Appendix II)

   The Committee revised Draft Revised Code in the light of comment and agreed to advance to Step 5 with a recommendation that the Commission consider omitting Steps 6 and 7 and adopt at Step 8.

2. Draft Revised Code for Ante-mortem and Post-mortem Inspection of Slauahter Animais and for Ante-mortem and Post-mortem Judgement of Slauahter Animais and Meat (ALINORM 93/16A, paras 36–61 and Appendix III)

   The Committee revised Draft Revised Code in the light of comment and agreed to advance to Step 5 with a recommendation that the Commission consider omitting Steps 6 and 7 and adopt at Step 8.

3. Draft Revised Code of Hygienic Practice for Game (ALINORM 93/16A. paras 62–96 and Appendix IV)

   The Committee revised Draft Revised Code in the light of comment and agreed to advance to Step 5 with a recommendation that the Commission consider omitting Steps 6 and 7 and adopt at Step 8.

Governments wishing to submit comments regarding the implications which the above matters or any provisions thereof may have for their economic interests should do so in writing in conformity with the Procedures for the Elaboration of Worldwide Codex Standards at Step 5 and at Step 8 (see Codex Alimentarius Procedural Manual, Seventh Edition) to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy, **no later than 31 May 1993.**

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

The Seventh Session of the Codex Committee on Meat Hygiene (Rome, 29 March 2 April 1993, ALINORM 93/16A) reached the following conclusions and recommendations:

Matters of Interest to the Commission

The Committee:

- Revised in the light of comment and agreed to advance to Step 5 the Code of Hygienic Practice for Fresh Meat and recommended that the Commission consider omitting Steps 6 and 7 and adopt the Code at Step 8 (para. 32, Appendix II).
- Revised in the light of comment and agreed to advance to Step 5 the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat and recommended that the Commission consider omitting Steps 6 and 7 and adopt the Code at Step 8 (para. 60, Appendix III).
- Revised in the light of comment and agreed to advance to Step 5 the Code of Hygienic Practice for Game and recommended that the Commission consider omitting Steps 6 and 7 and adopt the Code at Step 8 (para. 96, Appendix IV).

Other Matters

The committee:

- Requested that the Codex Secretariat correct and update the paper titled "Information item on work elsewhere within the Codex Alimentarius on residues, including contaminants, in relation to fresh meat", and circulate it for information to delegates and Codex Contact Points (para 16).
- - Having completed its immediate programme of work agreed to adjourn *sine die* (para 100).

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REPORT OF THE 7TH SESSION OF THE CODEX COMMITTEE ON MEAT HYGIENE
Rome, 29 March - 2 April 1993

INTRODUCTION

1. The Codex Committee on Meat Hygiene held its Seventh Session at FAO Headquarters in Rome from 29 March to 2 April 1993, by courtesy of the Government of New Zealand. The meeting was chaired by Dr. Russell Ballard, Director-General of the New Zealand Ministry of Agriculture and Fisheries, and was attended by delegates and observers from 36 countries, and observers representing 5 international organizations. Appendix I comprises a list of participants, including officials and advisers from FAO and WHO.

OPENING OF THE SESSION (Agenda Item 1)

2. Delegates were welcomed, and the session formally opened, by the New Zealand Minister of Agriculture, the Honourable John Falloon. The Minister expressed his delight that on this occasion a New Zealand Minister of Agriculture was available to welcome delegates.

3. Regretting that the GATT Uruguay Round still remained unfinished the Minister, however, was of the view that the work on sanitary measures in the Round had changed thinking and attitudes nationally and internationally and that in the work of the Committee there could be "no looking back". Emphasising the importance of the GATT Draft Decision on Sanitary and Phyto-Sanitary Measures, Mr. Falloon believed that, although not signed, it was being observed in the spirit. It had put the "spotlight" on Codex, as the Draft Decision acknowledged Codex as one of the three main international bodies on which GATT would depend for "securing the best available scientific and technical advice". In the belief that the Committee was following the new spirit of GATT in the sanitary measures area, Mr. Falloon stated that realities of the world dictated that quality systems, including risk assessment, were the tools of tomorrow, rather than labour intensive traditional approaches to meat inspection.

4. New Zealand believed that much of the responsibility to provide consumers with safe and wholesome products at a reasonable price often lay elsewhere than with government, although government ultimately bore responsibility to the public, and external markets. There was a tendency for regulatory authorities to assume responsibility to the point where industry sectors were deprived of their full role in the chain of events. Increasing farmer and industry responsibility for good products was often seen by consumers as putting them more at risk, but a partnership between government and industry should be aimed at, so as to produce a safe product employing the best and most cost-effective scientific methods available. In terms of total quality management, the product needed to be monitored from paddock to plate.

5. The Minister drew attention to the importance of quality systems to meet the demands of the market and the call for "due diligence". ISO accreditation, or equivalent, was becoming increasingly used as a basis for providing assurance of quality in the meat trade.

6. Mr. Falloon said that scientifically sound methods employed by one country should be acceptable to other countries, provided that the systems met the requirements of the importing countries. On the question of equivalence, Mr. Falloon congratulated

Codex on progressing work on international criteria for risk assessment, including HACCP.

7. In the Minister's view, Codex standards, codes, and guidelines provided a valuable resource for trading nations and there should be no need for member countries to "reinvent the wheel" when establishing their own national standards. Mr. Falloon rejected the criticism that Codex standards represented the lowest common denominator; such standards represented acceptable and safe criteria born of international negotiation, and had the backing of FAO/WHO.

8. In concluding his comments on meat hygiene matters, the Minister said that the Committee's innovative work entailing sound scientific principles, its placing of more responsibility on the farmer and industry, and also devising quality control management systems which could be applied in meat inspection situations internationally, would well serve the meat and game industries into the next century.

9. In confirming that his Government would be willing and honoured to continue its chairmanship of the Committee, Mr. Falloon also sought support of delegations for New Zealand's candidacy for chairmanship of the proposed Codex Committee on Milk and Milk Products.

10. In response to Mr. Falloon's opening address, Mr. John R. Lupien, Director, Food Policy and Nutrition Division, FAO, thanked the Honourable Minister on behalf of the Directors-General of FAO and WHO, and added their welcome to the delegates. He expressed the Organizations' appreciation of the role played by the Government of New Zealand in support of the work of Codex and the work of this Committee in particular. Mr. Lupien stated that the draft Codes under consideration represented a careful mix of provisions that safeguarded the consumer, ensured safe food and recognising the importance of trade facilitation and the concept of equivalence. Mr. Lupien also noted New Zealand's interest in hosting the proposed Codex Committee on Milk and Milk Products.

ADOPTION OF THE AGENDA (Agenda Item 2)

11. The Committee adopted the Provisional Agenda as contained in document CX/MH 93/1 as its agenda for the Session. It agreed to discuss under Item 8, Other Business", the Harmonization of Brands and other Marking Procedures.

12. The Committee appointed Mr. S.C. Hutchins (United Kingdom), Mr. P. Merlin (France) and Mr. J. Martin Ruiz (Spain) as rapporteurs for the English, French and Spanish texts of the report respectively.

MATTERS OF INTEREST (Agenda Item 3)

13. The Codex Secretariat introduced documents CX/MH 93/2 and CX/MH 93/2-Add.1 containing matters of interest arising from the work of the Executive Committee of the Commission and other Codex Committees. The Committee noted the stress being placed by the Executive Committee on the need to accelerate Codex elaboration procedures so as to produce timely, accurate and appropriate documents for the use of Member governments. The Committee on General Principles had prepared draft amendments to the Elaboration Procedures to allow this.

14. The Committee also noted the work being undertaken by the Codex Committees on Food Import and Export Inspection and Certification Systems, Residues of Veterinary Drugs in Foods, Food Additives and Contaminants and Food Hygiene. The Observer from the EEC noted that links needs to be made between the work of the Codex

Committee on Food Hygiene and this Committee's codes, and with the Codex Committee on Residues of Veterinary Drugs in Food (CCRVDF) in relation to consumer protection and residue control programmes for livestock. The Committee noted that the CCRVDF had submitted final drafts of a Code of Practice for Control of the Use of Veterinary Drugs and Guidelines for the Establishment of a Regulatory Programme for the Control of Veterinary Drug Residues in Foods to the Commission for adoption at Step 8.

INFORMATION ON THE WORK ELSEWHERE WITHIN THE CODEX ALIMENTARIUS ON RESIDUES, INCLUDING CONTAMINANTS, IN RELATION TO FRESH MEAT (Agenda Item 4)

15. The Committee had before it an information paper (CX/MH 93/3) prepared by the Secretariat in response to a request made by the Committee's Sixth Session (ALINORM 93/16, para. 89) for a paper which outlined the current status and future programmes of work of the Codex Alimentarius Commission on residues, including contaminants. It was noted that the Commission had an advanced programme on residues and contaminants handled variously by the Codex Committees on Food Additives and Contaminants, Pesticide Residues, and Residues of Veterinary Drugs in Foods.

16. The Committee, noting that the paper contained some editorial errors, also noted that there had been a number of further developments since the preparation of the document in April 1992. It requested the Secretariat to update the document, with corrections, and circulate it for information to delegates and all Codex Contact Points.

CONSIDERATION OF THE DRAFT REVISED CODE OF HYGIENIC PRACTICE FOR FRESH MEAT AT STEP 4 (Agenda Item 5)

17. The Committee had before it the proposed Draft Revised Code as contained in Appendix II to ALINORM 93/16. Additional provisions based on discussions at the Committee's Sixth Session and contained in document CX/MH 93/4, were also before the Committee for consideration. Governments and interested international organizations were invited by means of Circular Letter 1992/6-MH to comment on the Draft Revised Code and the additional provisions. These comments were contained in document CX/MH 93/4-Add.1 (Cote d'Ivoire, New Zealand, Thailand). The Committee also considered comments provided by the EEC and certain comments made by Norway and Sweden on the Draft Revised Code for Ante-Mortem and Post-Mortem Inspection of Slaughter Animals and Ante-Mortem and Post-Mortem Judgement of Slaughter Animals and Meat (comments contained in documents CX/MH 93/5-Add.l and 2 and in letter supplied by EC) where these applied to the common Preamble to all of the Code sunder consideration at the present Session.

Preamble (Common to all Codes)

Principles and Objectives

18. The Committee agreed to delete the footnote to paragraph 3 on *"risk assessment"* and replace it with a definition of *"risk analysis"* in Section III DEFINITIONS. The new definition was consistent with the definition adopted by the Office Internationale des Epizooties (OIE). The term "risk assessment" was replaced with "risk analysis" throughout the Codes in order to be consistent with the new definition.

19. In view of the progress made by the Codex Committee on Food Hygiene in developing General Principles for the Use of the Hazard Analysis Critical Control Point

(HACCP) System (ALINORM 93/13A, Appendix II), the Committee agreed to make broad reference to this text in the footnote to paragraph 3(d) and to amend the footnote to make it consistent with the new draft Codex text on HACCP. The separate appendices to each of the Codes outlining the general principles of HACCP were consequently deleted.

20. The Committee decided to strengthen paragraph 7 by including a reference to foodborne diseases occurring in human beings as important knowledge required for the application of control measures.

21. In discussing the concept of equivalence (Paragraph 8), the Committee agreed to include the appropriate section of the Draft Final Act of the Uruguay Round relating to sanitary and phytosanitary measures as an explanatory footnote.

22. The Committee also discussed at length incorporating the concept of "regionalization" in Paragraph 8. It was recognized that the Uruguay Round text covered this concept in its treatment of recognized "disease-free zones", however this treatment did not extend to areas or regions which might present particular problems in relation to residues and environmental contaminants. The Committee noted that the formal application of Codex Maximum Limits for Pesticide Residues and Residues of Veterinary Drugs in Foods and Codex Guideline Levels for Environmental Contaminants was defined by the General Principles of the Codex Alimentarius. However the control procedures followed by individual member governments, including frequency of sampling, depended on a knowledge of the production and processing conditions often at a regional level, and the effects of applying such different procedures to countries or parts of countries could be regarded as meeting the principles of "equivalence". Paragraph 8 was modified to reflect this.

SECTION I – SCOPE

SECTION II - OBJECTIVES OF THE CODE

23. No changes were made to these Sections.

SECTION III - DEFINITIONS

24. Editorial or other minor amendments to improve clarity, were made to the definitions for "Abattoir", "Condemned", and "Meat". As noted above a new definition for "Risk Analysis" was inserted and the definition of "Hazard Analysis Critical Control Point (HACCP) System" was deleted. The definition of "Potable Water" was amended so as to refer to the WHO "Guidelines for Drinking-Water Quality". The Committee considered comments on the definitions for "Cleaning" and "Residues" and "Dressing" but did not amend them.

25. The Committee agreed to adopt the following definition of "Safe and Wholesome":

> *"Safe and wholesome" refers to meat that has been passed as being fit for human consumption using the criteria that it:*
>
> *(a) will not cause foodborne infection or intoxication when properly handled and prepared with respect to the intended use;*
>
> *(b) does not contain residues in excess of established Codex limits;*
>
> *(c) is free of obvious contamination;*

(d) is free of defects that are generally recognized as objectionable to consumers;

(e) has been produced under adequate hygienic control; and

(f) has not been treated with illegal substances as specified in relevant national legislation."

SECTION IV ANIMAL PRODUCTION FOR FRESH MEAT

26. The introductory narrative to this Section was revised on the basis of the comments of New Zealand (CX/MH 93/4-Add.l) to make it more concise. The Committee also agreed to incorporate the new provisions circulated in document CX/MH 93/4 as amended by the comments of New Zealand. Paragraph 3 was further amended to state that animals intended for slaughter should not be fed feedstuffs capable of recycling human or animal pathogens "unless precautions are taken to minimize this risk".

SECTION V - TRANSPORT OF SLAUGHTER ANIMALS

27. In view of the possibility, in some cases, of injuries being caused during transport by animals of the same species, the Committee agreed to amend Paragraph 27(b) to provided for separation of all animals likely to cause such injuries.

28. The Committee agreed to provide for the disinfection (in addition to their cleaning) of vehicles used for the transport of animals to the abattoir "*if necessary*".

SECTION VI - REQUIREMENTS FOR ANIMALS PRESENTED FOR SLAUGHTER

SECTION VII - ABATTOIR AND ESTABLISHMENT PLANT AND FACILITIES

29. No changes were made in these Sections.

SECTION VIII - HYGIENIC OPERATING REQUIREMENTS AND PRACTICES

30. The Committee agreed to incorporate the draft provisions circulated in document CX/MH 93/4 on F. Process Control Programmes into this Section. These provisions were modified on the basis of the comments of New Zealand as contained in document CX/MH 93/4-Add.l.

SECTION IX - SPECIAL REQUIREMENTS FOR INSPECTION

31. No changes were made in this Section.

Status of the Proposed Draft Revised Code of Hygienic Practice for Fresh Meat

32. The Committee agreed to advance the draft revised Code to Step 5 of the Codex Procedure and recommended to the Commission that it be adopted at Step 8 with the omission of Steps 6 and 7.

33. In making this recommendation, the Committee noted the opinion of the Representative of the European Community on the principle that a health risk that could be transmitted through meat must be controlled at the livestock production level. Meat hygiene and consumers protection must include a consideration of residue status of livestock. A proper control programme must be in place to ensure that adequate protection of consumers is possible.

34. The Representative of the EC stated that a comprehensive consumer protection programme must be aimed at minimizing the use of veterinary drugs and at controlling their illegal use. This can only be achieved by regular animal controls at the farm level.

For this purpose new strategies had to be developed, which allowed discrimination between therapeutic and illegal administration of drugs.

35. The Codex Committee on Meat Hygiene recommended that the Codex Committees on General Principles and on Residues of Veterinary Drugs in Foods explore a new approach of residue control in livestock and include appropriate principles into Codex recommendations on residue monitoring policies.

CONSIDERATION OF THE DRAFT REVISED CODE FOR ANTE-MORTEM AND POSTMORTEM INSPECTION OF SLAUGHTER ANIMALS AND FOR ANTE-MORTEM AND POSTMORTEM JUDGEMENT OF SLAUGHTER ANIMALS AND MEAT AT STEP 4 (Item 6)

36. The Committee had before it the Draft Revised Code (CX/MH 93/5) and government comments as contained in documents CX/MH 93/5-Add.1 and Add.2, as well as comments provided by the EC. It was noted that the Code had been prepared by combining the revised draft Code for Ante-Mortem and Post-Mortem Inspection of Slaughter Animals and the revised draft Code of Practice for the Post-Mortem Judgement of Slaughter Animals and Meat as recommended by the Committee at its last Session. The revised Judgement Tables attached to the draft Code had been prepared in cooperation with OIE, WHO and the Animal Production and Health Division of FAO.

PREAMBLE

37. Decisions taken in respect of the Preamble to this draft Code are reported above in the context of the Committee's discussions on the Draft Revised Code of Hygienic Practice for Fresh Meat (see paras. 18 to 22). The Committee noted that in this Code in particular the concepts of risk analysis, risk assessment and risk management played an important role. It noted that its decision to delete the Appendix outlining the "Principles of Risk Assessment" in no way reduced this importance but was taken in the interest of preparing a concise and well-focused document.

SECTION I - SCOPE

38. The Committee agreed to simplify the presentation of paragraph (b) of the Scope.

SECTION II - PRINCIPLES AND OBJECTIVES OF THIS CODE

39. The Committee agreed that the acquisition of relevant information on the status of the animals presented for slaughter should not be limited to their health status and amended paragraph (d) accordingly. It also agreed to make reference to other applicable Codex texts, in particular the draft Code of Practice for Control of the Use of Veterinary Drugs (Appendix VII, ALINORM 93/31A) being submitted to the Commission for adoption at Step 8.

40. In relation to the principle of "equivalency" (paragraph (g)), the Committee noted the comment of the EC that equivalency should take into account the prevalence of diseases and defects in animals presented for slaughter. The Committee also noted that the Codex Committee on Food Import and Export Inspection and Certification Procedures (CCFICS) had decided to elaborate guidelines for the application of the principle of equivalency in international trade in foods.

SECTION III - DEFINITIONS

41. Several decisions taken in respect of this Section of the draft Code are reported above in the context of the Committee's discussions on the Draft Revised Code of Hygienic Practice for Fresh Meat (see paras. 24 and 25).

42. In reference to the definition of *"Emergency Slaughter"* (Paragraph 15), the Committee did not accept a proposal to require that emergency slaughter be carried out by a veterinary officer. It was the view of several delegations that the welfare of the animal was the overriding factor to consider when emergency slaughter was required and that a veterinary officer may not be immediately available.

43. The Committee debated in depth the definition of "Inspector", particularly the sentence which stated that "The supervision of meat hygiene, especially the inspection of meat, should be under the supervision of a veterinary inspector. "It was the view of several delegations that meat inspection was the direct responsibility of, and final decisions should be taken by, the veterinary inspector. The Committee recalled the lengthy discussions at its last session which had led to the compromise formulated in the present text and agreed to retain this sentence of the definition. It was noted that the French text of the definition required amendment to be consistent with the English (original) and Spanish versions.

SECTION IV - ANTE-MORTEM INSPECTION

44. The Committee did not accept a proposal in Paragraph 34 ("No animal should proceed for slaughter .") to limit the exceptions to this general rule to cases where emergency slaughter was required as a result of traumatic injury. The Committee agreed to amend Paragraph 35 to indicate that animals should be inspected on arrival at the abattoir or as soon as practicable thereafter.

45. The Delegation of Norway, supported by Denmark, Germany, Italy, Poland and the Representative of the European Community, proposed that this Paragraph and subsequent paragraphs be amended to require that animals must be inspected ante-mortem by a veterinary inspector. These Delegations noted that ante-mortem inspection by a veterinary inspector was required in their national legislations. Other delegations pointed out that there were a wide range of operating conditions covered by this Code and these, together with the movement towards quality assurance arrangements between companies and the regulating authority, and the application of risk assessment principles, meant that a requirement that inspection may only be carried out by a veterinary inspector, was unduly restrictive and might restrict the introduction of alternative practices which would become increasingly widespread in the future. The proposal to require inspection by a veterinary inspector was not accepted by the Committee. It was noted that the definition of "Inspector" already indicated that ante-mortem inspection should be under the supervision of a veterinary inspector even when carried out by a properly trained officer other than a veterinary inspector. It was agreed to link the provision in Paragraph 34 to the definition of "Inspector" by stating specifically that the inspection should be done "by an inspector".

SECTION V - POST-MORTEM INSPECTION

46. Minor amendments were made to the introductory text.

47. The Committee noted that the paragraph in square brackets (Paragraph 56) towards the end of this Section indicating when an inspector might take specimens for

further examination contained statements which were self-evident or redundant and agreed to delete this Paragraph.

SECTION VI - POST-MORTEM INSPECTION PROCEDURES

48. The Committee agreed that the procedures described in the Code could be modified as a result of thorough risk analysis. These modifications could result in inspection procedures which could be of either increased or decreased intensity depending on the result of the risk analysis. In this case, it was agreed that the procedures outlined in the Code were not "Minimum requirements", but rather guidelines to requirements for inspection. Changes were made throughout this Section and in the corresponding tables to reflect this.

49. Concerning the specific guidelines for inspection (Paragraph 57),[1] the Delegations of Norway and Sweden, supported by the Representative of the EC, proposed that all udders, whether or not recovered for human consumption, should be inspected (Paragraph 57(b)). Other delegations (Australia, Canada, New Zealand, USA) stated that the inspection of udders not recovered for human consumption was not scientifically justified within the context of veterinary public health. The Committee noted that in certain countries risk analysis might show that the inspection of udders irrespective of whether they were intended for human consumption was justified, but agreed that this should not be included in the Code as a guideline for a minimum inspection requirement.

[1] Paragraph 56 of the Draft Revised Code was deleted by the Committee. From this point on, this report refers to the revised paragraph numbering given in Appendix III to the present report.

50. The Committee agreed that the inspection by incision of lungs recovered for human consumption was justified and amended Paragraph 57(b) accordingly.

51. The Committee did not accept a proposal from Sweden that in countries where the prevalence of *Cysticercus bovis* was very low, incisions could be limited to the heart muscle (Paragraph 57(e)). In not accepting the proposal, the Committee recognized that where a thorough risk assessment had been carried out such reduced inspection procedures could be justified, and that such cases were covered by the general provisions contained in the introductory paragraphs to this Code. For the sake of precision, the Committee agreed to replace the word "endemic" where it appeared in Paragraph 57(f) in relation to the prevalence of C. bovis as a common post-mortem inspection finding".

SECTION VII -INSPECTION JUDGEMENTS AND ENFORCEMENT

52. No changes were made in this Section.

SECTION VIII - ANTE-MORTEM AND POST-MORTEM JUDGEMENTS

53. The Committee decided to incorporate into the text of Paragraph 75 the statement that Category 1 meat approved as fit for human consumption could enter international trade without restriction. The previous footnote to former paragraph 73 which contained a similar statement was deleted. The Committee recognized that trade in other categories of meat (e.g., Category 5) was subject to the concurrence of the authorities of the importing country.

54. Paragraph 98 was amended by deleting statements which potentially restricted the reasons for which laboratory examination would be used as an adjunct to decision-making. The former paragraph 101 was deleted as no longer being scientifically

accurate or relevant. Minor or editorial changes were also made to a number of other paragraphs in this Section.

SECTION X - DISPOSITION AND BRANDING

SECTION XI - UTILIZATION OF MEAT INSPECTION FINDINGS

55. No changes were made to these Sections.

TABLES A, B AND C

56. In view of previous discussions (see para 48 above), these headings of these Tables were changed to read "Guidelines to Post-Mortem Inspection Requirements". A note was added to indicate that the guidelines to requirements applied unless more appropriate requirements, which may be more or less intensive, had been established following thorough risk analysis.

57. Consequent to this decision, the Committee decided not to accept proposals to delete the recommendation for the incision of lymph nodes in pigs as proposed by Sweden, or to require the incision of all pig hearts to inspect for endocarditis as proposed by the EC. It was agreed that a proposal from Germany to amend Table B to require the incision of all lungs intended for human consumption be dealt with by an amendment to paragraph 57(b) (see para 50).

JUDGEMENT TABLES

58. Consequent to its earlier decisions, the Committee amended the Title of these tables to "Recommended Judgements".

59. Apart from minor or editorial changes the Committee made the following statements or changes:

> 1.7.4 Sexual odour: The Committee noted that this was not a pathological condition and had been included as a matter related to defects generally considered as objectionable to consumers. The Committee decided not to specify any chemical methods for the quantification of odour, as this was not done in any other part of the Code.
>
> 3.3.11 Salmonellosis: The Committee did not accept a proposal made by Norway and Sweden to consider contamination by Salmonella as leading to the total condemnation of meat as unfit for human consumption. It noted that the matter of contamination was suitably covered by controls included in other Codes elaborated by Codex.
>
> 3.4.15 Bovine Spongiform Encephalopathy (BSE): The Committee noted and supported the work of the OIE in providing standards for the control of BSE. It further noted that OIE recommendations would be taken into account by the controlling authorities of signatory countries when applying the judgement outlined in the present Table.
>
> A separate entry was included in the Tables to cover viral leucoses other than bovine leucoses.

Status of the Proposed Draft Revised Code for Ante-Mortem and Post-Mortem Inspection of Slaughter Animals and for Ante-Mortem and Post-Mortem Judgement of Slaughter Animals and Meat

60. The Committee agreed to advance the draft revised Code to Step 5 of the Codex Procedure and recommended to the Commission that it be adopted at Step 8 with the Omission of Steps 6 and 7.

61. In making this recommendation, the Committee noted the opinion of the Representative of the European Community expressed above in relation to the advancement of the Code of Hygienic Practice for Fresh Meat (see paras. 33 and 34 above).

CONSIDERATION OF THE DRAFT REVISED CODE OF HYGIENIC PRACTICE FOR GAME AT STEP 4 (Agenda Item 7)

62. The Committee recalled that at its Sixth Session it had deferred discussion on this Code, and had requested the Secretariat to prepare a revised draft based on points made in relation to the discussion of the other Codes under review. It had also indicated that the new draft should cover as wide a range of game species as possible while drawing attention to international law applying to the protection of certain animals. (ALINORM 93/16, para. 88)

63. The revised draft was circulated to governments in May 1992 as document CX/MH 93/6 and comments were invited by means of Circular Letter 1992/6-MH. These comments were before the Committee as documents CX/MH 93/6-Add.1 and Add.2.

PREAMBLE

64. Decisions taken in respect of the Preamble to this draft Code are reported above in the context of the Committee's discussions on the Draft Revised Code of Hygienic Practice for Fresh Meat (see paras. 18 to 22).

SECTION I - SCOPE

65. The Committee recognized that the extension of the Scope of the Code to cover a wide variety of game animals which might be harvested from very diverse environments using differing processing facilities would require a certain amount of flexibility in applying the Code's provisions. The structure and facilities provisions applying to temporary game depots or game establishments were particularly affected by this consideration. The Committee agreed however, that such game depots and game establishments would need to satisfy the hygiene, operational, inspection and judgement requirements of the Code. It agreed to incorporate a new paragraph in the Scope of the Code to emphasize this and to make the general statement applicable throughout the Code.

66. The Delegation of the United States noted that it had made a number of written comments concerning the scope of application of the Code and subsequent provisions. The Delegation advised the Committee that having studied the whole of the draft Code and in the light of comments from other delegations, it was now able to withdraw most of its comments on the Code, particularly those arising from different interpretations of the Scope.

SECTION II - OBJECTIVES OF THIS CODE

67. Sub-paragraph (f) was amended to clarify and simplify the wording.

SECTION III - DEFINITIONS

68. Noting a number of problems inherent in defining "Game Animal" (Paragraph 11) on the basis of its being actually or essentially unowned, the Committee decided to change the first part of this definition to read as follows:

> *(a) has not been herded or handled in a manner of a farmed animal and has of necessity to be killed in a location where it is not available for ante-mortem inspection by an inspector: and*

69. The definition of "Hazard Analysis Critical Control Point" (Former Paragraph 18) was deleted for consistency with other Codes, and a definition of "Risk analysis" was added (Paragraph 27).

70. The question was raised as to whether Paragraphs 25 and 28 should refer to residues of veterinary drugs, as in most cases, game animals would not be treated with veterinary drugs. The Committee decided to maintain these references to cover cases where such residues might be present in game meat. The Committee also decided to amend the definition of *"Safe and Wholesome"* in order to make it appropriate for game meat (Paragraph 28).

SECTION IV - HARVESTING, FIELD DRESSING, COLLECTION AND HOLDING IN A GAME DEPOT

71. A number of editorial amendments were made throughout this Section.

Harvesting of Game Animals

72. The Committee noted that the proposed text of Paragraph 33, and also the comments proposed by New Zealand on this Paragraph, required hunters to make judgements which would normally be made by an inspector. The Committee decided to require only that a hunter should note any abnormal conditions and report it to the inspector if the game animal carcase is taken to a game establishment. The first sentence of Paragraph 33 was accordingly deleted.

Evisceration and field dressing of game animal carcases

73. The introduction to this section was amended to indicate that all large game animal carcases should be bled and at least part eviscerated which would normally be restricted to removal of the intact gastrointestinal tract, as soon as possible after killing.

Cooling of game animal carcases

74. The Committee agreed to require the cooling of small game animal carcases to 4ºC, especially in view of the fact that the gastrointestinal tract may have been damaged at the time of killing and remain within these carcases until they reach the game establishment

Transport of game animal carcases

75. No changes were made in this Section.

General provisions

76. The Committee was concerned that the provision that game depots not be used for any other purpose than the collection and interim holding of game animal carcases was unduly restrictive. Many such premises were used for these purposes only during seasonal hunting periods. However, it was of the firm opinion that while being used for

the collection and interim holding of game animal carcases they should not be used concurrently for any other purpose. It agreed to amend Paragraph 47 accordingly.

77. Several delegations were concerned that the provision (Paragraph 49) requiring all game animal carcases to arrive at a game establishment and be inspected within 24 hours after killing was unduly restrictive. The Committee agreed that this provision should apply to most game animal carcases, but where the carcase had already been chilled in accordance with Paragraph 39, it should arrive at the game establishment "as soon as practicable". Paragraph 49 was amended to reflect this.

SECTION V - PLANT AND FACILITIES

Game depot structure and facilities

Game establishment structure and facilities

78. Extensive discussions took place on these sections, particularly in regard to premises and facilities which were mobile, temporary or located in remote, particularly polar, regions. As a result of these discussions the Committee agreed to amend the Scope of the Code as referred to above (see para. 65). Amendments were also made to Paragraph 50, where the words "where necessary" were added to indicate that in cold environments active refrigeration systems may not be required, and in the introductory wording under Game establishment structure and facilities, the phrase "of both the building and equipment contained with it" was deleted.

79. The Committee agreed to require that equipment in dressing areas should be constructed of materials which were impermeable as well as being corrosion resistant (Paragraph 52(e)). In Paragraph 52(h) the Committee agreed that part of a room could be set aside for the secure holding of condemned meat. The wording of sub-Paragraph 53(f), dealing with the controls over the use of non-potable water was clarified.[1]

[1] Consequential amendments were made to the corresponding paragraphs in the Draft Revised Code of Hygienic Practice for Fresh Meat (Appendix II to this report).

80. The Delegation of Poland noted that some importing countries required that in temperature controlled rooms in a game establishment, recording of the room temperatures was also necessary. The Committee reiterated its general position that the recording of air temperatures in rooms where operations were carried out was not necessary. (Paragraph 55)

Amenities

81. A number of editorial amendments were made throughout this Section.

SECTION VI - HYGIENIC OPERATING REQUIREMENTS AND PRACTICES

82. A number of editorial amendments were made throughout the subsections contained in this Section.

83. The Committee considered at length the question of temperature control in the work areas of a game establishment (Paragraphs 80 and 100). For Paragraph 80, it was agreed that temperatures in these areas should be controlled where necessary to prevent any rise in temperature of game animal carcases, game carcases and game meat that would be of a magnitude such as to jeopardize safety and wholesomeness. It amended the Paragraph 80 accordingly. Several delegations suggested specifying a maximum room temperature of 12ºC, but this was not felt to be appropriate for inclusion into the Code taking into consideration the objectives of the Code and the application of risk analysis principles.

Process control programmes

84. The introductory paragraph to this subsection dealing with HACCP was amended to be consistent with the Fresh Meat Code.

Operational hygiene of dressing in a game establishment

85. Several delegations were concerned that the washing and trimming of skinned game animal carcases prior to inspection could deny to the inspector some of the information required for a proper inspection judgement to be made (Paragraph 96(c)). It was noted that there was a wide variety of animal species covered by the Code which were harvested under a wide variety of conditions and environments. It was also stated that in some cases the washing of skinned game animal carcases had been shown to improve their microbiological quality. The Committee agreed to amend the sub-Paragraph to emphasise that the washing of skinned carcases prior to inspection should be the exception, but that it could be permitted with the approval of an inspector.

86. Paragraph 97(b) was amended by deleting reference to the exception provided for use of brushes in the dressing of singed carcases.

Operational hygiene after dressing

87. Referring to its decisions concerning the temperatures for handling of game meat carcases, the Committee decided to amend Paragraph 98(c) to specify that the internal temperatures of game meat should not exceed 7ºC for large game animals or 4ºC for small game animals during handling. It agreed that this requirement allowed Paragraph 100 to remain unchanged. (see para. 74 above).

Operational hygiene of transportation of game meat

88. The Delegation of Germany proposed that game meat accidentally exposed to adverse conditions during transport (Paragraph 107) should automatically be withdrawn from international trade. The Committee did not support this proposal: it noted that the paragraph as written provided for a veterinary inspector or a suitably qualified person, accountable to a veterinary inspector to determine whether the game meat was fit for human consumption and in the event of a favourable opinion the game meat should be able to enter international trade. It further noted that the Agreement on the Transport of Perishable Produce (the ATP agreement) developed by the United Nations Economic Commission for Europe and adopted by a number of countries outside Europe covered some of the concerns, particularly the question of temperature control, raised by the Delegation of Germany.

SECTION VII - SPECIAL REQUIREMENTS FOR INSPECTION

SECTION VIII - GAME MEAT INSPECTION

89. Only editorial changes were made in these Sections.

SECTION IX - GAME MEAT INSPECTION PROCEDURES

90. Several delegations expressed concern that this Section of the Code was incomplete, and did not contain adequate specific guidance for the use of control authorities and inspectors when inspecting game meat. They referred to the current version of the Game Code (CAC/RCP 29/1983) from which elements of this Section had been adopted into, for example, European Community legislation. The Committee agreed to reinstate the main specific points of guidance for inspection as laid out in Paragraph 4.5.3 (CAC/RCP 29/1983) with minor amendments. (New Paragraph 128).[1]

[1] From this point on in the report paragraph numbers refer to the new paragraph numbering as found in Appendix IV.

91. The Committee was also concerned that the introductory statement to this Section was too broadly worded, and agreed to strengthen the paragraph by removing reference to the possible limitations and constraints on inspection procedures.

SECTION X - GAME MEAT INSPECTION JUDGEMENTS AND ENFORCEMENT

92. Consequent to the decision reported in the previous paragraph, the Committee agreed to strengthen this Section of the Code by including in Paragraph 141 several defects which would require game meat to be declared as totally unfit for human consumption. The list of defects was based on the current adopted version of the Game Code.

93. For consistency with its decision relating to the combined Judgement Code (see para 53, above) Paragraph 137 was amended by the deletion of the footnote, the contents of which were incorporated into Paragraph 139.

94. On the recommendation of the Delegation of Spain, the Committee agreed to delete former Paragraph 147 which indicated that game meat could be made fit for human consumption by heat treatment or freezing following inspection. The Committee noted that this paragraph was inconsistent with Paragraph 138.

95. A number of minor or editorial amendments were also made throughout these sections of the Code.

Status of the Proposed Draft Revised Code for Game

96. The Committee agreed to advance the draft revised Code to Step 5 of the Codex Procedure and recommend to the Commission that it be adopted at Step 8 with the omission of Steps 6 and 7.

OTHER BUSINESS AND FUTURE WORK (Agenda Item 8)

97. The Committee noted that at its Sixth Session, during its discussions on provisions for the Disposition and Branding as part of the Draft Revised Code of Practice for Ante-and Post-Mortem Inspection of Slaughter Animals, a question had arisen concerning the harmonization of brands and other marking procedures (ALINORM 93/16, paragraph 72). The Secretariat was requested to obtain government comments on this matter.

98. Only two governments (Poland and the United States of America) had replied to Circular Letters 1991/25-MH and 1992/6-MH which invited comments in this regard. The Committee concluded that governments had no real wish to undertake work in this area.

99. No other items of future work were proposed to the Committee

DATE AND PLACE OF NEXT SESSION (Agenda Item 9)

100. The Committee agreed that until such time as the Commission would require it to undertake further work it should remain adjourned *sine die*.

SUMMARY STATUS OF WORK

Recommendation		Step	For Action by	Document Ref. (ALINORM 93/16A)
1.	Proposed Revised Code of Hygienic Practice for Fresh Meat	5/8	CAC Governments	Paragraph 32 Appendix II
2.	Proposed Revised Code for Ante-mortem and Post-mortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat	5/8	CAC Governments	Paragraph 60 Appendix III
3.	Code of Hygienic Practice for Game	5/8	CAC Governments	Paragraph 96 Appendix IV
4.	Correct, update and reissue the paper titled "Information item on work elsewhere within the Codex Alimentarius on residues, including contaminants, in relation to fresh meat".	-	Secretariat	Paragraph 16

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Les chefs de délégation figurent en tête et les suppléants, conseillers et consultants sont énumérés par ordre alphabétique.
Figuran en primer lugar los Jefes de las delegaciones; los Suplentes, Assesores y Consultores aparecen por orden alfabético.

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ALINORM 93/16A
APPENDIX II

DRAFT REVISED CODE OF HYGIENIC PRACTICE FOR FRESH MEAT
April 1993

TABLE OF CONTENTS

CODE OF HYGIENIC PRACTICE FOR FRESH MEAT

PREAMBLE

Veterinary science and the science of meat hygiene should be applied throughout the food chain, starting at the farm of origin, so that fresh meat produced from slaughtered animals is safe and wholesome. This Code, together with the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat, describes requirements necessary to achieve that goal. Traditional practices may permit departures from some of the requirements when fresh meat is produced for local trade.

PRINCIPLES AND OBJECTIVES OF THIS CODE AND FOR THE CODE FOR ANTE-MORTEM AND POST-MORTEM INSPECTION OF SLAUGHTER ANIMALS AND FOR ANTE-MORTEM AND POST-MORTEM JUDGEMENT OF SLAUGHTER ANIMALS AND MEAT

1. Ante-mortem and postmortem inspection of slaughtered animals and the maintenance of hygienic practice is carried out to ensure that fresh meat produced for human consumption is safe and wholesome.

2. Rules of meat inspection and hygienic practice that are described in this and its associated code of practice provide the requirements that have been developed from current scientific knowledge and practice.

3. Risk analysis based on accepted scientific methodology should be undertaken wherever possible, so as to improve current knowledge. These analyses will promote the following principles of meat hygiene:

(a) there should be consistently applied food safety standards so as to assure a safe and wholesome meat supply; if an adequate food supply is threatened in some local trade situations, safety standards may include treatment sufficient to remove any hazard.;

(b) Ante-mortem and postmortem inspection procedures should be appropriate to the spectrum and prevalence of diseases and defects present in the particular class of slaughter livestock being inspected;

(c) process control systems should limit microbial contamination of meat to as low a practicable level as possible, and prevent subsequent growth to levels that may constitute a hazard;

(d) Hazard Analysis Critical Control Point (HACCP) [1/] under the control and supervision of the controlling authority provides a scientific approach to food safety and wholesomeness throughout the production, processing and distribution of fresh meat, and the HACCP approach should wherever possible, together with other quality assurance procedures, be utilised in the application of this Code;

1 The considerable benefits that Hazard Analysis Critical Control Point (HACCP) offers with respect to food safety are recognised within the Codex Alimentarius, and the inclusion of HACCP in codes of practice has been endorsed. HACCP provides a systematic approach to sanitation and process control in food production, thereby assuring safe and wholesome food. A HACCP plan should be based on an assessment, as appropriate to the circumstances, of the risks to human health and animal health, taking into account accepted risk analysis techniques. A specific HACCP system, tailored to its individual product, processing and distribution conditions, should be developed by each abattoir or establishment. The principles and applications of HACCP, as they apply generally to Codex codes of practice, are documented elsewhere in the Codex Alimentarius.

(e) where risk analysis has shown that safety is not compromised by the failure to remove a defect of a type specified by the controlling authority, and any necessary product identification procedures are in place, the controlling authority should allow production for the end use it specifies.

4. The responsibility for production of safe and wholesome meat should be shared by industry and the controlling authority. Industry personnel should be involved as widely as possible in voluntary quality assurance systems and in the monitoring and control of meat hygiene, with supervision and audit by the controlling authority to ensure compliance with requirements. Training and education programmes involving both industry and the controlling authority are necessary to meet this objective.

5. The controlling authority should be adequately resourced, have the legal power to enforce requirements necessary to produce meat that is safe and wholesome, and be independent of the management of the establishment and of other industry interests. There should be a legal obligation on managers to comply with meat hygiene and inspection instructions and to provide such information and assistance as may be reasonably required by the controlling authority.

6. In meeting the goal of reducing meat borne hazards, the controlling authority should maintain cost effective and efficient allocation of resources.

7. Monitoring to identify meat borne hazards introduced at the point of production is an important component of a meat hygiene programme. A knowledge of the health status of livestock presented for slaughter, as well as of food borne diseases occurring in human beings, is important for the application of control measures and requires an adequate system for data collection.

8. Meat hygiene regulations should be scientifically based, should protect the health of consumers and facilitate fair practices in the international trading of meat. Policies of equivalence [2], for countries or parts of countries, that provide the same safety and wholesomeness guarantees remove the necessity of replicating individual country requirements or applying identical procedures.

[2] "equivalence" is not separately defined for the purposes of this Code, but rather is as determined by the General Agreement on Tariff and Trade (GATT). The following text, relating to Sanitary and Phytosanitary Measures, is an extract from the Draft Final Act of the Uruguay Round of the Multilateral Trade Negotiations:

> "Contracting parties shall accept the sanitary or phytosanitary measures of other contracting parties as equivalent, even if these measures differ from their own or from those used by other contracting parties trading in the same product, if the exporting contracting party objectively demonstrates to the importing contracting party that its measures achieve the importing contracting party's appropriate level of sanitary or phytosanitary protection. For this purpose, reasonable access shall be given, upon request, to the importing contracting party for inspection, testing and other relevant procedures. Contracting parties shall, upon request, enter into consultations with the aim of achieving bilateral and multilateral agreements on recognition of the equivalence of specified sanitary or phytosanitary measures."

9. The controlling authority should facilitate adoption of new technologies and developments, provided they are consistent with the safe and wholesome production of fresh meat.

10. Controlling authorities should promote integrated food safety practices, taking into account the entire spectrum of food safety concerns and knowledge. This should be combined with international cooperation in food safety programmes.

NOTE

The contents of this Code are not intended to:

(a) preclude the adoption of technical and other innovations by; or

(b) restrict the throughput or productivity of;

the meat industry provided innovations and production are consistent with the hygienic production of safe and wholesome meat.

SECTION I - SCOPE

This Code of Hygienic Practice applies to fresh meat [3/], other than commodities covered by other Codex codes, namely poultry, fish and game [4/], intended for human consumption, whether sold direct to the consumer in that form or after further processing. It contains the minimum requirements of meat hygiene up to and including the transport of meat. This Code should be read in conjunction with the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat.

3 International trade in meat derived from many wildlife species is either banned or controlled under the provisions of the Convention on International Trade of Endangered Wildlife Species (CITES).

4 This Code does not contain labelling requirements for fresh meat. For this reason, nothing in this Code prevents meat prepared in accordance with both this Code and the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat, being labelled as game meat when that meat is derived from animals traditionally accepted as being "game", provided the controlling authority is satisfied that such labelling is not misleading.

SECTION II - PRINCIPLES AND OBJECTIVES OF THIS CODE

The principles and objectives of this Code are to ensure:

(a) hygienic practices during animal production and transport of animals to slaughter;

(b) availability of information on hazards that may be present in slaughter animals;

(c) hygienic facilities and equipment for holding, slaughter, dressing and further processing, storage and distribution;

(d) hygienic practices during holding, slaughter, processing, storage and distribution; and

(e) provision of adequate facilities for inspection activities.

SECTION III - DEFINITIONS

For the purposes of this Code:

1. "Abattoir" means any premises that is approved and registered by the controlling authority in which animals are slaughtered and dressed for human consumption.

2. "Brand" means any mark or stamp approved by the controlling authority and also includes any tag or label bearing such mark or stamp.

3. "Carcase" means the body of any slaughtered animal after bleeding and dressing.

4. "Cleaning" means the removal of objectionable matter.

5. "Condemned", in relation to a slaughter animal or meat, means inspected and judged as, or otherwise officially determined to be, unfit for human consumption and requiring destruction. "Total condemnation" means the entire carcase and offal are condemned (Judgement symbol T). "Partial condemnation", means only parts of the slaughtered animal are condemned, while others are judged otherwise (Judgement symbol D for the condemned diseased or defective parts).

6. "Contamination" means objectionable matter, and includes substances and/or microorganisms that make fresh meat unsafe and/or unwholesome.

7. "Controlling authority" means the official authority charged by the government with the control of meat hygiene, including meat inspection.

8. "Disease or defect" means a pathological change or other abnormality.

9. "Disinfection", of plant, facilities and equipment, means the reduction, without adversely affecting the meat, by means of hygienically satisfactory chemical agents and/or physical methods, of the number of microorganisms to a minimum.

10. "Dressing" means the progressive separation on the dressing floor of a slaughter animal into a carcase (or sides of a carcase), offals and inedible byproducts and may include the removal of the head. Examples of dressing include the removal of the head, hide or skin, genital organs, urinary bladder, feet, and in lactating animals, the removal of the udder.

11. "Edible offal" in relation to slaughtered animals means offals that have been passed as fit for human consumption.

12. "Establishment" means any premises other than an abattoir that is approved and registered by the controlling authority in which fresh meat is prepared, handled, packed or stored.

13. "Fit for human consumption" in relation to meat means meat that has been passed by an inspector as safe and wholesome, unless found unwholesome in subsequent examinations, which may include laboratory tests.

14. "Fresh meat" means meat that has not yet been treated in any way other than by modified atmosphere packaging or vacuum packaging to ensure its preservation, except that if it has been subjected only to refrigeration, it continues to be considered "fresh" for the purposes of this Code.

15. "Inedible" means inspected and judged to be, or otherwise officially determined to be, unfit for human consumption but not requiring destruction.

16. "Inspector" means a properly trained officer appointed by the controlling authority for the purpose of meat inspection and control of hygiene, and includes a veterinary inspector. The supervision of meat hygiene, including the inspection of meat, should be under the responsibility of a veterinary inspector.

17. "Manager" in relation to an abattoir or establishment includes any person for the time being responsible for the management of the abattoir or establishment.

18. "Meat" means the edible part of any slaughter animal slaughtered in an abattoir and includes edible offal.

19. "Potable water" means water that is pure and wholesome at the point of usage in accordance with requirements contained in the WHO publication Guidelines *for drinking water quality*.

20. "Protective clothing" means special garments intended to prevent the contamination of meat and used as outer wear by persons in an abattoir or establishment, and includes head coverings and footwear.

21. "Residues" means residues of veterinary drugs, pesticide residues, and contaminants, as defined for the purposes of the Codex Alimentarias.[5]

[5] Definitions in the Seventh Edition of the Codex Alimentarius Commission's Procedural Manual are as follows:
"Veterinary drug" means any substance applied or administered to any food-producing animal, such as meat or milk-producing animals, poultry, fish or bees, whether used for therapeutic, prophylactic or diagnostic purposes or for modification of physiological functions or behaviour.
"Residues of veterinary drugs" include the parent compounds and/or their metabolites in any edible portion of the animal product, and include residues of associated impurities of the veterinary drug concerned.
"Pesticide" means any substance intended for preventing, destroying, attracting, repelling, or controlling any pest including unwanted species of plants or animals during the production, storage, transport, distribution and processing of food, agricultural commodities, or animal feeds or which may be administered to animals for the control of ectoparasites. The term includes substances intended for use as a plant-growth regulator, defoliant, desiccant, fruit thinning agent, or sprouting inhibitor and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. The term normally excludes fertilizers, plant and animal nutrients, food additives, and animal drugs.
"Pesticide Residue" means any specified substance in food, agricultural commodities, or animal feed resulting from the use of a pesticide. The term includes any derivatives of a pesticide, such as conversion products, metabolites, reaction products, and impurities considered to be of toxicological significance. "Contaminant" means any substance not intentionally added to food, which is present in such food as a result of the production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine) , manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food or as a result of environmental contamination. The term does not include insect fragments, rodent hairs and other extraneous matter.

22. "Risk analysis" includes risk assessment, risk management and risk communication, all of which are essential to the decision making process that determines acceptable levels of risk, and the implementation of those decisions.

23. "Safe and wholesome" refers to meat that has been passed as fit for human consumption using the criteria that it:

(a) will not cause food borne infection or intoxication when properly handled and prepared with respect to the intended use;

(b) does not contain residues in excess of established Codex limits;

(c) is free of obvious contamination;

(d) is free of defects that are generally recognised as objectionable to consumers;

(e) has been produced under adequate hygiene control; and

(f) has not been treated with illegal substances as specified in relevant national legislation.

24 "Slaughter animal" means any animal lawfully brought into an abattoir for slaughter."

25. "Veterinary Inspector" means an inspector who is professionally qualified as a veterinarian.

SECTION IV - ANIMAL PRODUCTION FOR FRESH MEAT

The controlling authority should encourage all aspects of the health management of food animals that improve the safety and wholesomeness of fresh meat produced for human consumption.

The conditions under which animals are raised for meat production should be conducive to the production of meat that is safe and wholesome and full consideration needs to be taken of the environment in which the animals have been raised or through which they have moved. Systematic monitoring and surveillance of the health status of the population, control over animal and plant treatments to ensure the absence of harmful residues in meat, and the proper disposal of animal wastes are of particular importance. The controlling authority also should have the ability to prevent or control the movement of animals to abattoirs from areas under sanitary restriction.

Monitoring of the health status of slaughtered animals allows accumulation of information that will assist in the efficient application of particular dressing and meat inspection systems. Meat inspection judgements will also be enhanced. The full benefit of such information will only be realised if there is an identification system linking animals with their place of production and an efficient information transfer system

26. There should be in place, applying to areas where slaughter animals are produced and through which they pass en-route to an abattoir, a government administered regulatory programme mandating measures related to the health of animals and the safety and wholesomeness of meat derived from those animals. The regulatory programme should be soundly based in law and should include measures to:

(a) prevent the entry of exotic diseases of public health or animal health importance; and

(b) provide surveillance for endemic diseases of significant public health or animal health importance, and apply control and/or eradication programmes as appropriate [6].

[6] For animal health rules for international trade and for guidelines for the organisation of animal health services see Sections 1.3 and 1.4 of the OIE International Health Code.

27. There should be in place, applying to areas where slaughter animals are produced and through which they pass en-route to an abattoir, a government administered regulatory programme mandating measures to control the use of chemical substances (such as veterinary drugs [7], pesticides, and other agricultural chemicals) or contaminants that may give rise to harmful levels of residues or contaminants in fresh meat. Systematic monitoring and surveillance to test the effectiveness of the regulatory programme is an essential component.

[7] A document titled Guidelines for the Establishment of a Regulatory Programme for Control of Veterinary Drugs Residues in Foods is under development by the Codex Committee on Residues of Veterinary Drugs in Foods. The document titled Recommended National Regulatory Practices to Facilitate Acceptance and Use of Codex MRLs developed by the Codex Committee on Pesticide Residues includes recommended regulatory practices for governments to follow in achieving internationally agreed maximum levels for pesticide residues in food.

28. Animals intended for slaughter should at all times be raised according to good animal husbandry practices. They should not be fed feedstuffs:

(a) capable of recycling human or animal pathogens unless precautions are taken to minimise this risk; or

(b) that contain chemical substances (such as veterinary drugs, pesticides and other agricultural chemicals) or contaminants at levels that could result in residues or contaminants in fresh meat at greater than maximum levels as adopted by the Codex Alimentarius.

29. In intensive animal production systems where active disposal is carried out, the method of disposal should not constitute a hazard to public or animal health, and should be environmentally sound.

30. There should be in place a system capable of reliably identifying, back from an abattoir, the place of production of slaughter animals.

31. Controlling authorities should where applicable encourage the use of HACCP systems in all aspects of food production, and actively utilise the data generated from such systems for regulatory purposes.

32. Where the owner or any other person has reason to believe that, as a result of:

(a) any accident;

(b) any disease or defect;

(c) the administration of any drug or chemical; or

(d) any treatment;

the meat derived from any animal might not be suitable for human consumption, that person should not send the animal to an abattoir unless the animal is the subject of veterinary certification to the effect that it has been attended by a veterinarian who is of the opinion that it is suitable to be slaughtered for human consumption. However, irrespective of any certificate that may have been given, a veterinary inspector should be the sole judge of whether an animal is fit for slaughter.

SECTION V - TRANSPORT OF SLAUGHTER ANIMALS

Food animals need to be transported in such a way that they are not unduly contaminated or stressed, that the spread of pathogens is minimised, that the identification to place of production is maintained and that animal welfare considerations are met.

Construction and maintenance of means of transport

33. Livestock transport vehicles should be so constructed that:

(a) animals can be loaded and unloaded easily and with minimal risk of injury;

(b) animals of different species, and animals of the same species likely to cause injury to one another, are physically separated during transport;

(c) soiling of animals by excreta deposited on the floor of vehicles is minimised by the use of floor gratings or similar devices;

(d) ventilation is adequate;

(e) where they have more than one deck, animals conveyed on a lower deck are protected by an impervious floor to the deck above; and

(f) they can be readily cleaned and disinfected.

34. Vehicles used to transport animals to an abattoir should be maintained in good repair. They should be cleaned and if necessary disinfected as soon as practicable after animals have been unloaded.

Maintenance of identification

35. The transport of slaughter animals to an abattoir should be in a manner that ensures their identification back to the place of production is not lost.

SECTION VI - REQUIREMENTS FOR ANIMALS PRESENTED FOR SLAUGHTER

The controlling authority should have access to all information on the production history that is relevant to the processing and inspection of slaughter animals. Differential allocation of processing and inspection resources is dependent on acquiring detailed information on animals presented for slaughter.

A knowledge of the health and condition of the animals that comprise the raw material for meat production is important in determining optimal dressing and inspection procedures. Identification of animals both to their place of production and throughout their time at the abattoir is a prerequisite to adequate veterinary control and appropriate information systems are necessary to optimise the use of available data.

Identification of animals

36. While being handled and held on an abattoir prior to slaughter, all necessary measures should be taken to ensure that the ability to identify slaughter animals back to their place of production is retained.

Identification of animals requiring special attention

37. Where a slaughter animal has been identified prior to its arrival at an abattoir or at Ante-mortem inspection, or its carcase has been identified at postmortem inspection or during dressing as requiring special attention, all necessary measures should be taken to ensure that the animal or carcase and the information relating to it can be correlated.

Information systems and segregation at the abattoir

38. An effective system should be in place to ensure that information concerning slaughter animals that is relevant to postmortem inspection or to special dressing requirements, whether originating prior to arrival at the abattoir or from Ante-mortem inspection, is conveyed to the inspector undertaking postmortem inspection and, in the case of special dressing requirements, to those persons involved in dressing of carcases.

Adequate rest for slaughter

Animals need to be rested prior to slaughter so as to optimise their physiological condition and ensure that evidence of any diseases or defects that may be present is not masked. Animals found to be diseased or defective need to be separated from others, to enable them to receive any special attention they require and to prevent cross contamination to normal animals or facilities.

Separation of different categories of animals within species allows better application of processing and inspection resources, and facilitates hygienic dressing. The level of cleanliness of animals prior to slaughter also has a significant effect on hygienic slaughter and dressing.

39. Slaughter animals should be adequately rested prior to being slaughtered.

40. Animals that have been identified as being affected by any disease or defect that affects, or might affect, the suitability of their meat for human consumption, should be segregated from other animals.

41. If during the Ante-mortem inspection a disease or defect has been detected that does not prevent an animal from being slaughtered for human consumption, it should be identified and released for slaughter and postmortem veterinary inspection.

42. Groups of animals that are found to be normal at Ante-mortem inspection but that are of different categories with respect to age and system of production, should be slaughtered and dressed as separate lines.

43. Any animal that is in an unreasonably dirty condition should be cleaned to the extent necessary to lessen the risk of contamination of meat and the slaughter and dressing areas before it is allowed to enter the killing floor.

Veterinary responsibility

All animals should be inspected Ante-mortem. A veterinary inspector should have the final responsibility as to fitness for, and any conditions applying to, slaughter of animals for the production of fresh meat.

44. The ultimate decision as to whether or not an animal may be slaughtered and dressed in an abattoir, and any conditions applying to such slaughter and dressing, should rest with a veterinary inspector.

SECTION VII - ABATTOIR AND ESTABLISHMENT PLANT AND FACILITIES

Abattoir and establishment plant and facilities for holding, slaughter, dressing, further processing and distribution should provide an environment that allows the application of consistently applied minimum food safety requirements. The structure of the abattoir or establishment and the equipment used should limit microbial contamination to as low a practicable level as possible and prevent subsequent growth to levels that may constitute a hazard. The structure and equipment should also protect meat from contamination from outside sources.

Some level of microbial contamination is inevitable in the abattoir environment and facilities should be such that dressing and further processing can take place in an environment that minimises contamination of the meat. The facilities need to be such that all services necessary to support hygienic operations (including meat inspection) are available and are laid out in a manner that enables personnel to operate effectively and safely. The standard of design and construction of both the building and equipment contained within it needs to be such that they do not themselves pose a risk of directly or indirectly contaminating meat and furthermore the rooms within the building and the equipment can be kept acceptably clean while operations are taking place and be readily cleaned when operations have concluded. Support areas, such as

areas set aside for inedible material, all contribute to the general environment and need to be of a standard appropriate to a food producing establishment. The overall design and construction of the premises needs to be such that contamination from exogenous sources such as objectionable odours, dust and pests is prevented. A process control system that prevents hazards in fresh meat should be in place and this should be based on the HACCP approach.

Structure

45. Abattoirs and establishments should:

(a) be located in areas that are not subject to regular or frequent flooding, and that are free from objectionable odours, smoke, dust or other contaminants;

(b) have adequate working space for the satisfactory performance of all operations;

(c) be soundly constructed and ensure adequate ventilation, good natural or artificial lighting and easy cleaning;

(d) with respect to both the building and the facilities it contain3, be kept in good repair at all times;

(e) be laid out and equipped so as to facilitate proper supervision of meat hygiene, including the carrying out of meat inspection;

(f) be constructed so as to protect against the entrance and harbouring of insects, birds, rodents and other vermin;

(g) have a physical separation between departments in which edible material is handled and departments set aside for the handling of inedible material;

(h) have a physical separation between departments in which edible material is handled and places where animals are held;

(i) in all rooms, other than rooms provided for the accommodation of workers and inspectors, have:

(i) floors that are of waterproof, nontoxic, nonabsorbent materials and that are easy to clean and disinfect;

(ii) floors that are non-slip and without crevices and (except in the case of rooms where meat is frozen or stored frozen) that slope sufficiently for liquids to be drained off to trapped outlets that are protected by a grill;

(iii) walls that are of waterproof, nontoxic, nonabsorbent materials, light coloured, easy to clean and disinfect, smooth, and of a height appropriate to the operation conducted;

(iv) the angles between adjoining walls, and the angles at wall to floor junctions, coved; and

(v) ceilings so designed and constructed as to prevent the accumulation of dirt and condensation and that are light coloured and easy to clean; and

(j) have an efficient effluent and waste disposal system:

(i) that is maintained at all times in good order and repair;

(ii) in which all lines, including sewer lines, are large enough to carry peak loads;

(iii) in which all lines are watertight and adequately trapped and vented;

(iv) with catch basins, traps, save-alls and sumps that are fully separate from any department in which meat is prepared, handled, packed or stored;

(v) from which waste is disposed of in such a manner as to avoid contamination of potable water supplies;

(vi) with waste lines from toilets not joining the plant effluent system prior to the final save-all; and

(vii) that is approved by the controlling authority.

46. Abattoirs should include:

(a) areas reserved for the use of the meat inspection service that comply with the requirements set out in Section IX of this Code;

(b) suitable accommodation for animals that:

(i) is large enough to house all animals that are to be held;

(ii) s covered, except where climate permits otherwise;

(iii) is so arranged and fitted out as to permit the proper inspection of animals before slaughter;

(iv) has a sufficient number of pens to facilitate Ante-mortem inspection;

(v) is suitably constructed and maintained;

(vi) is paved or slatted and is well drained;

(vii) is provided with an adequate water supply;

(viii) is so provided with hose connection points as to enable lairages, yards, races, unloading ramps and livestock transport vehicles to be cleaned; and

(ix) has suitable restraining devices for the close examination of animals;

(c) separate facilities for the physical isolation of sick animals or animals suspected of being sick, and that:

(i) are covered if climatic conditions so require;

(ii) are capable of being locked; and

(iii) have drainage that is separate and does not connect with any open drain that runs through other lairages and yards;

(d) slaughter and dressing areas that enable work to be performed in a satisfactory manner;

(e) equipment in slaughter and dressing areas being constructed of impermeable, corrosion resistant materials, capable of being easily cleaned, and designed, constructed and installed such that meat will not touch the floor;

(f) a separate area reserved for the skin on dressing of pigs or other animals where other classes of animals are dressed at the same time;

(g) where animals are dressed, facilities for their scalding and dehairing or similar operation that are situated in an area adequately separated from other areas;

(h) a separate room for emptying and cleansing alimentary tracts;[8/]

(i) a separate room for the further preparation of emptied and rinsed alimentary tracts where these are to be prepared for human consumption: [8/]

(j) if necessary, separate facilities for the preparation of edible fats and, if they are not removed daily from the premises, proper facilities for their storage;

(k) separate rooms for the storing of hides, horns and hooves, and inedible animal fats unless these are removed daily from the abattoir;

(l) refrigerated rooms suitable for the effective cooling and storage of meat;

(m) except where the national rules of the controlling authority either prohibit the killing of such animals in abattoirs or specify hygienically acceptable alternate arrangements, separate facilities for the slaughter and dressing of animals as specified in paragraph 44 of the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat, that:

[8] However, the controlling authority may approve other systems in the light of technological developments which will ensure that contamination is prevented to an equivalent extent.

(i) are capable of being locked;

(ii) are solely for the slaughter and dressing of such animals and the holding of meat derived from them; and

(iii) are located within easy reach of the pens reserved for isolation of such animals;

(n) separate facilities in the form of a separate room or portion of a room capable of being controlled and capable of being locked whenever required, for storing suspect meat, and designed so as to prevent the risk of contaminating other meat and the risk of substitution;

(o) facilities in the form of a room or portion of a room capable of being locked and suitable for the secure holding of condemned meat, unless other adequate arrangements for disposal exist;

(p) facilities for the control of the entrances and exits;

(q) suitable facilities for the adequate cleaning and disinfecting of vehicles (except that the controlling authority may instead permit a satisfactory operational alternative to facilities located on the abattoir); and

(r) suitable facilities for the hygienic collection and subsequent disposal of manure.

47. Abattoirs and establishments should be designed, constructed and equipped such that:

(a) those operations that carry a risk of contamination of meat are sufficiently separated from meat to avoid the risk of such contamination;

(b) meat does not come into contact with floors, walls or fixed structures, other than those that are specifically designed for such contact;

(c) there is an overhead rail, so installed as to avoid contamination of meat, for the moving of meat;

(d) there is an ample supply of potable water under adequate pressure, together with facilities for its storage and distribution under conditions that guard against back siphonage and adequately protect against contamination;

(e) there is equipment installed capable of providing an adequate supply of:

(i) hot potable water at no less than 82ºC; and

(ii) hot and cold running water or water premixed to a suitable temperature for hand washing; or

(iii) cold or warm sanitising solution of acceptable concentration;

(f) where a supply of non-potable water exists under circumstances set out in paragraph 76:

(i) that supply is completely separate from the supply of potable water; and

(ii) all pipes and any vessels within which it is contained are distinctively identified by colour or by other means approved by the controlling authority;

(g) there is adequate natural or artificial lighting installed throughout the premises of a type that does not alter colours and that is capable of providing illumination of an intensity not less than that detailed in paragraphs 72 and 113;

(h) where light bulbs or light fixtures are located over meat, they are of the safety type, or otherwise protected so as to prevent contamination of meat in case of breakage;

(i) there is adequate ventilation provided to prevent excessive heat, steam and condensation and to ensure that the air of premises is not contaminated with odours, dust, vapour or smoke;

(j) any windows are fitted with whole panes and that those that open, and any other ventilation openings, are fitted with screens of a type that are easily removable for cleaning;

(k) door ways are sufficiently wide to permit ready traffic;

(l) doors that open from departments where edible material is handled, unless fitted with an effective air screen, are solid and:

(i) as far as practicable self-closing; or

(ii) snug-fitting and of the double action type;

(m) any stairs located in a room where edible material is handled are constructed so that they can be easily cleaned and no contamination can be caused by material falling from them;

(n) any lift cage is so constructed as to afford adequate protection of meat against contamination and it and its shaft are capable of being effectively cleaned;

(o) any platform, ladder, chute or similar equipment in a room used for the preparation of meat is constructed so as to be capable of being effectively cleaned and is of material that is:

(i) resistant to fracture, abrasion and corrosion; and

(ii) capable of being effectively cleaned;

(p) any chutes are fitted with inspection and cleaning hatches where these are necessary to ensure cleanliness;

(q) all rooms used for slaughtering, dressing, deboning, preparation, packaging or other handling of meat, are equipped with adequate facilities for washing hands, and these facilities:

(i) have waste water lines leading to drains;

(ii) are conveniently located for the use of personnel who will work in the room;

(iii) are connected to a warm water supply;

(iv) have taps of a non-hand operable type; and

(v) are fitted with a dispenser (or dispensers, as appropriate) for liquid soap or other hand cleansing agent;

(r) all rooms used for slaughtering, dressing, deboning, preparation, packaging or other handling of meat are equipped with adequate facilities for the cleaning and disinfecting of implements, and these:

(i) have waste water lines leading to drains;

(ii) are conveniently located for the use of personnel who will use the implements;

(iii) are set aside exclusively for the cleaning and disinfection of knives, steels, cleavers, saws and other implements; and

(iv) are of such nature and size as to permit proper cleaning and disinfection of implements;

(s) all rooms in which carcases, parts of carcases or edible offals are placed for chilling, freezing or refrigerated storage are fitted with temperature recorders; and

(t) all rooms in which carcases, parts of carcases or edible offals are placed for chilling have proper insulation of walls and ceilings and:

(i) if overhead refrigerating coils are installed, have insulated drip pans fitted beneath them; and

(ii) if floor type refrigerating units are installed, they are placed within curbed and separately drained areas unless located adjacent to floor drains.

48. The construction and layout of any chilling room, freezing room or freezer store should satisfy the relevant provisions of paragraph 47.

49. Abattoirs and establishments in which meat is deboned and/or cut up should have:

(a) a room or rooms, capable of being temperature controlled, for the holding of meat;

(b) a room or rooms, physically separated from other rooms and capable of being temperature controlled, for deboning and cutting up of meat; and

(c) separation of the area in which deboning, cutting and primary wrapping operations are to be undertaken from the place where packaging is to be undertaken, unless the controlling authority permits an operational approach to prevent the packaging causing contamination of meat.

Amenities

50. Each abattoir or establishment should include amenities for employees that:

(a) are commensurate in size with the number of employees;

(b) include changing room, separate area for eating meals, toilets with flushing water closets, and showers;

(c) have hand washing facilities, in close association with toilets, that:

(i) are connected to a warm water supply;

(ii) have taps of a non-hand operable type;

(iii) are fitted with a dispenser (or dispensers, as appropriate) for liquid soap or other hand cleansing agent; and

(iv) are associated with suitable hygienic means of drying hands;

(d) are equipped to permit adequate lighting, ventilation and, where necessary, heating; and

(e) do not open directly to any work area.

51. Each abattoir or establishment should have adequate and suitably equipped working areas and amenities for meat inspection personnel and office accommodation for the meat inspection service that complies with the requirements set out in Section IX of this Code.

Equipment and related items

52. All equipment, implements and utensils used in abattoirs or establishments that come in contact with meat should be of a design and construction that facilitates cleaning, and:

(a) have smooth impervious surfaces;

(b) be resistant to corrosion and made of a material that is nontoxic and does not transmit odour or taste;

(c) be smooth, free from pits and crevices; and

(d) be capable of withstanding repeated exposure to normal cleaning and disinfection;

and if fixed or stationary, be installed in such a manner as to permit easy access and thorough cleaning.

53. Equipment and utensils for use with inedible or condemned materials should be distinctively identified.

Transport vehicles

Vehicles in which meat is transported need to be designed, constructed and equipped to prevent contamination of that meat, whether from external sources or from the vehicle itself, and to prevent or limit the growth of microbes.

54. Vehicles or shipping containers in which meat is to be transported should:

(a) have all internal finishes made of corrosion resistant material that is smooth, impervious and easy to clean and disinfect;

(b) have joints and doors sealed so as to prevent the entry of pests and other sources of contamination;

(c) be designed, constructed and equipped such that the required temperature can be maintained while meat is being carried; and

(d) be designed, constructed and equipped such that meat does not come into contact with the floor.

SECTION VIII - HYGIENIC OPERATING REQUIREMENTS AND PRACTICES

Operations and practices for holding, slaughter, dressing, further processing and distribution should ensure the application of consistently applied minimum food safety standards. Hygienic operations and practices should limit microbial contamination to as low a practicable level as possible and prevent subsequent growth to levels that may constitute a hazard. Operations and practices should also protect meat from other sources of contamination. A process control system should be in place to prevent hazards in fresh meat and should be based on the HACCP approach.

Health of persons

Personnel who work in abattoirs and establishments should have a health status consistent with the prevention of the contamination of meat.

55. Persons who come in contact with fresh meat in the course of their work should have a medical examination prior to their employment if the controlling authority, acting on medical advice, considers that this is necessary. In such circumstances, the manager should maintain the medical certificates of employees in a systematic manner and they should be available for perusal by an inspector. Medical examination of a person who handles fresh meat should be carried out at other times when clinically or epidemiologically indicated or as prescribed by the controlling authority.

56. Care should be taken to ensure that no person, while known or suspected to be suffering from, or to be a carrier of a disease likely to be transmitted through meat or while afflicted with infected wounds, skin infections, sores or with diarrhoea, is permitted to work or be present in any meat handling area of an abattoir or establishment in any capacity in which there is any likelihood of such a person directly or indirectly contaminating meat with pathogenic microorganisms. Any person so affected should immediately report that illness to the manager.

Cleanliness of premises

Cleanliness of plant and equipment so that there is neither direct nor indirect contamination of meat is a fundamental principle of meat hygiene.

57. A cleaning and sanitation programme should be established by the manager of an abattoir or establishment that ensures:

(a) the premises, including the amenities, are kept clean;

(b) equipment, implements and utensils (including knives, knife pouches, cleavers, saws and trays) are:

(i) cleaned at frequent intervals during and/or between periods of work;

(ii) immediately and effectively cleaned and disinfected whenever they come into contact with pathological material, infective material or otherwise become contaminated; and

(iii) in a clean and disinfected state at the beginning of each working day;

(c) washing down, cleaning and disinfection are carried out in compliance with this Code;

(d) carcases or meat are not contaminated during cleaning or disinfection of rooms, equipment or utensils;

(e) that no detergents, sanitising agents or disinfectants are allowed to come into either direct or indirect contact with meat unless they conform to public health requirements for such contact;

(f) any residue of detergents, sanitising agents or disinfectants used for the washing of floors, walls or edible product equipment are removed by thorough rinsing with potable water before the area or equipment is again used for handling meat; and

(g) no cleaning preparation or material, or any paint or other surface treatment, likely to contaminate meat, is used in any part of an abattoir or establishment where animals are slaughtered or dressed or meat is prepared, handled, packaged or stored.

Pest control

Pests always retain the potential to contaminate meat by direct or indirect contact. Pest control programmes are an integral part of meat hygiene, with caution being required that the means of control does not in itself become a source of contamination.

58. An effective and continuous programme for the control of pests, including insects, birds, rodents and other vermin, should be maintained in abattoirs and establishments, and should include:

(a) detailed documentation of the programme;

(b) the programme being under the direct control of a representative of the manager who is suitably qualified for the task;

(c) the regular examination of the surroundings for evidence of infestation with pests;

(d) if pests are in evidence, eradication measures carried out under skilled supervision and with the knowledge of the inspector;

(e) only the use of pesticides approved for such use by the controlling authority;

(f) ensuring that chemicals used for pest control purposes do not contaminate meat;

(g) the use of pesticides only if other control methods cannot be used effectively;

(h) the removal of all meat from rooms to be treated before pesticides are used;

(i) the thorough washing of all equipment and utensils that are in a room that has been treated with pesticides before they are used again; and

(j) the storage of any pesticides or other toxic substances used for pest control in separate locked rooms or locked cabinets with access to them limited to authorized and properly trained personnel acting in accordance with the pest control programme.

General operational hygiene

All operations and practices should be carried out in a manner that limits contamination to as low a level as possible. Good personal hygiene and adequate training programmes are important components, as is adequate supervision to ensure compliance with operational requirements.

59. Managers of abattoirs and establishments should arrange for adequate and continuing training of all employees who work in the production of fresh meat in hygienic handling of meat and in personal hygiene. Instruction should include relevant parts of this Code.

60. Every person, including a visitor, in an area of an abattoir or establishment where meat is prepared or handled, should maintain a high degree of personal cleanliness, and at all times while in the area wear suitable light coloured protective clothing including:

(a) head covering; and

(b) footwear;

that is washable (unless disposable) and that is maintained in a clean condition consistent with the nature of the work in which the person is engaged.

61. Personal effects and clothing should not be deposited or stored in an area of an abattoir or establishment used for slaughter of animals, dressing of carcases, or the

preparation, handling, packaging or storing of meat. Protective clothing, knife pouches, belts and working implements not being used should be kept in a place provided for the purpose where they will not contaminate meat or become contaminated themselves.

62. All persons, while engaged in the preparation, handling, packaging or transport of meat, should wash their hands frequently and thoroughly with liquid soap under running warm potable water. Hands should always be washed before commencing work, immediately after using the toilet, after handling contaminated material and whenever else necessary. After handling any material that might be capable of transmitting disease, hands should immediately be washed and disinfected. Notices requiring hand washing should be prominently displayed.

63. Gloves, if used in the handling of meat, should be maintained in a sound, clean and sanitary condition. The wearing of gloves does not exempt any person from having thoroughly washed hands. Gloves should be made of an impermeable material except where their usage would be inappropriate or incompatible with the work involved and where the use of gloves of permeable material does not adversely affect hygiene.

64. Any behaviour or unhygienic practices that could potentially result in contamination of meat should be prohibited in any part of an abattoir or establishment.

65. Any person in an abattoir or establishment who has a cut or wound should discontinue handling meat or meat contact surfaces until the injury is completely protected by a water proof covering that is firmly secured, and that is conspicuous in colour. Adequate first aid facilities should be provided for this purpose.

66. Doors opening to the outside from departments where edible material is handled, unless protected by an effective air screen, should be kept closed as far as practicable.

67. Where a skip or trolley, or any container used in a department where edible material is handled, enters an area set aside for the handling or storage of inedible material, it should not reenter any edible department until it has been cleaned and disinfected.

68. Where containers or cartons are assembled in parts of an abattoir or establishment where animals are slaughtered or dressed, or where meat is cut up or deboned, prepared, handled, packaged or stored, they should be assembled in such a manner that there is minimal risk of contaminating meat.

69. Where containers, equipment and utensils are held in any area of an abattoir or establishment where animals are slaughtered or dressed, or where meat is cut up ordeboned, prepared, handled, packaged or stored, they should be held in such a manner that there is minimal risk of contaminating meat.

70. Aprons and other items of protective clothing, other than footwear, should not be washed on the floor.

71. Effective ventilation should be provided in work areas of an abattoir or establishment to prevent excessive heat, steam and condensation and to ensure that the air is not contaminated with odours.

72. Lighting intensity throughout an abattoir or establishment should not be less than:

(a) 540 lux in areas where detailed examination or trimming is undertaken;

(b) 220 lux elsewhere in work rooms; and

(c) 110 lux in other areas;

while slaughtering and dressing of animals is being undertaken, and when meat is being deboned or prepared.

73. No animal other than an animal for slaughter, or an animal used for transport or for stock handling, should enter any part of an abattoir. Animals present in an abattoir for purposes of transport or stock control should be kept outside or have entry restricted to lairages, and should be kept under control.

74. No animal should enter any part of an establishment.

75. Notwithstanding anything elsewhere in this Code, materials employed in the construction or maintenance of an abattoir or establishment may be used at any time that such use is necessary, provided an inspector is satisfied that there would be no danger of contamination of meat.

Water and operational hygiene

Water is used extensively in abattoirs and establishments both for cleaning and disinfecting. Water itself can carry contaminants and it is therefore important that its quality is appropriate to the operation and that it is used carefully to prevent inadvertent direct or indirect cross contamination.

76. All water used in abattoirs and establishments should be potable, except that water that falls outside of the standard for potable water because of physical and/or chemical characteristics may be used in situations where there is no risk of contamination of meat.

77. There should be an adequate supply of hot potable water at not less than 82ºC, and of warm potable water for hand washing, at all times while slaughtering and dressing of animals is being undertaken, and when meat is being deboned or prepared.

78. Sterilisers should be reserved exclusively for cleaning and disinfection of knives, steels, cleavers, saws and other such implements.

79. Soap and detergent dispensers located in areas that are in use should be adequately filled.

80. Hand drying facilities that have been provided should be useable in any area where persons are working with meat. When this entails the provision of disposable towels, suitable receptacles for used towels should be available and be used.

Process control programmes

The process of converting slaughter animals to edible meat and then transporting that meat involves many steps; at each of these steps there can be risk to safety and wholesomeness. To adequately control those risks and protect the consumer requires a systematic approach to the process. A process control programme includes systematic identification of hazards (raw materials, processes, procedures), establishment of target levels and tolerances, monitoring, corrective actions, verification procedures and documentation. The HACCP approach is a valuable tool to this end and efficient process control programmes require a joint approach by industry and the controlling authority.

Both the meat industry and the controlling authority have important roles in process control. This necessitates a joint approach.

There are advantages in standardisation of process control systems in abattoirs and establishments (such as the facilitating of training, the assessment of

compliance and the certification of fresh meat) but each programme should be individually designed on a premises-by-premises basis for the particular circumstances in which it is to operate.

81. Each step in the process of producing fresh meat should be the subject of an effective process control programme. The process control programme should be designed specifically for the operation concerned and have as its objective the production of safe and wholesome meat that complies with all the provisions of this Code and the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat, as well as any additional requirements prescribed by the controlling authority.

82. The manager of an abattoir or establishment should be responsible for the development and continuance of the process control program. While the manager may delegate supervision of the process control programme to a properly trained subordinate, overall responsibility should never be delegated. The successful application of a process control programme requires a team approach, and the full commitment and involvement of management and employees.

83. An inspector should monitor the application and results of the process control programme with respect to all matters touching on the safety and hygiene of fresh meat as well as all matters relating to additional requirements imposed by the controlling authority.

84. The details of measures that comprise the process control programme should be fully documented and reviewed as frequently as necessary to ensure their continued relevance; the inspector with responsibility for monitoring the programme should have unrestricted access to details of the programme, as well as to records of the results of monitoring the process.

Operational hygiene of slaughtering and dressing

There is a substantial risk of seen and unseen contamination of meat during slaughtering and dressing. Good hygienic practice and good manufacturing practice will minimise this risk. Training programmes also are an important component in achieving hygienic slaughtering and dressing as is adequate supervision to ensure compliance with operational requirements.

85. Rooms, equipment and utensils for slaughtering and dressing should be used for that purpose only and not for cutting-up or deboning. However, in some situations, preparatory operations such as partial deboning of the neck, or removal of head meat, may be acceptable to the controlling authority once the carcase has passed inspection.

86. Except under emergency slaughter provisions described in paragraph 35 of the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat, an animal should not be slaughtered or dressed in any abattoir except when an inspector is present.

87. All animals brought to the killing floor should be slaughtered without delay.

88. Stunning, sticking and bleeding of animals should not proceed at a rate faster than that at which carcases can be promptly accepted for dressing.

89. Sticking, bleeding and dressing should be carried out so as to ensure the production of clean meat.

90. Bleeding should be as complete as possible. If blood is intended to be used in food preparation, it should be collected and handled hygienically and, if stirred, should only be stirred with hygienically acceptable implements and never with the hand.

91. Once the removal of the hide, skin or pelt has commenced, carcases should be separated from each other to avoid contact between them and the risk of cross contamination. Separation of carcases should be maintained until they have been examined and passed by an inspector. Carcases should only come into contact with surfaces or equipment essential to handling, dressing and inspection.

92. Before the removal from any head of any meat or brain intended for human consumption, the head should be clean and, except in the case of scalded and dehaired carcases, be skinned to a sufficient extent to facilitate inspection and the hygienic removal of head meat and/or the brain.

93. Where the tongue is dropped this should be done in such a way that the tonsils are not cut.

94. The following should apply in skinning and associated dressing operations:

(a) where carcases are skinned, skinning should be done before evisceration, in a manner that avoids contamination of meat;

(b) pumping of air or gas between the skin and the carcase to facilitate skinning should only be permitted if it is of such nature and quality that it does not contaminate the meat;

(c) skinned carcases that are uneviscerated, if washed, should only be washed in a manner that does not allow water to enter either the abdominal or thoracic cavities;

(d) slaughtered animals that are scalded, flamed or similarly treated should be scoured of all bristles, hair, scurf and dirt;

(e) the water in scalding tanks should be changed as frequently as practicable; and

(f) with respect to udders:

(i) lactating or obviously diseased udders should be removed at the earliest appropriate time during dressing; and

(ii) no secretion from, or contents of, udders should be allowed to contaminate the carcase and therefore udders should be removed in such a manner that teat and udder substance remains intact and milk ducts or sinuses are not opened.

95. With respect to further dressing:

(a) evisceration should be undertaken without delay and in a hygienic manner;

(b) discharge of any material from the oesophagus, stomach or stomachs, intestines or rectum, or from the gall bladder, urinary bladder, uterus or udder should be effectively prevented;

(c) intestines should not be severed from the stomach during evisceration and no other opening should be made during evisceration into any intestine, unless the intestines are first effectively tied to prevent spillage;

(d) no paper, cloth, wad, sponge or brush should be used in the washing of any carcase, except that brushes may be used in the dressing of singed pig carcases provided this is done as the next operation after singeing;

(e) no carcase, meat or edible offal should be inflated with air or gas in a way that alters its appearance prior to postmortem inspection or causes contamination;

(f) no hide, skin or pelt should be washed, defleshed or left in any part of an abattoir or establishment used for the slaughtering or dressing of animals or for the preparation or holding of meat intended for human consumption;

(g) stomachs and intestines and all inedible material derived from the slaughtering or dressing of animals should:

(i) be removed, as soon as the inspection procedure permits, from the dressing area in a manner that avoids contaminating the area or meat; and

(ii) after removal from the dressing area, be subsequently treated in parts of the abattoir intended for this purpose in a way that does not risk contamination of meat;

(h) faecal and other objectionable matter that contaminates carcases during dressing should be carefully trimmed off; and

(i) where an inspector considers that the manner in which animals are being slaughtered or dressed or under which the carcases or meat are being handled, prepared or packaged, will adversely affect:

(i) the safety and wholesomeness of the carcase or meat;

(ii) the hygiene of production; or

(iii) the efficiency of meat inspection;

and the manager has not taken effective action to correct the problem, the inspector should have the power to require a reduction in the rate of production or the suspension of operations for the time being in any specified area of the abattoir.

Operational hygiene after slaughtering and dressing

The operations following slaughter, dressing and inspection, including deboning and cutting, freezing and storing, also entail a risk of contamination, and a risk of growth of microbial contaminants. Good hygienic practice and good manufacturing practice will minimise this risk. Time, temperature and water activity are all important interacting factors in controlling microbial growth and they need to be controlled in such a way that the growth of microbiological contaminants is limited to non-hazardous levels.

Packaging and wrapping is used to protect meat from external contamination during handling, storage and transport. It is important that neither the packaging or wrapping itself, nor the packaging or wrapping procedure, causes contamination of meat.

96. Meat passed as fit for human consumption should:

(a) be handled, stored or transported in a manner that will protect it from contamination and deterioration;

(b) be removed without delay from the dressing area; and

(c) unless cut up or deboned prerigor, be held under conditions that reduce its temperature and/or water activity.

97. Where carcases, parts of carcases or edible offals are placed in a holding room:

(a) there should be a reliable method of monitoring the process control programme;

(b) carcases should be hung in a manner permitting adequate circulation of air around them;

(c) parts of carcases should be hung, or placed in suitable corrosion resistant trays, in a manner permitting adequate circulation of air around the meat;

(d) they should be held in a manner that precludes drip from one piece falling on to any other piece;

(e) temperature, relative humidity and air flow should be maintained in accordance with the process control programme; and

(f) dripping water, including dripping condensation, should be prevented.

98. Rooms, equipment and utensils for cutting-up, deboning or further preparing meat should be reserved for those purposes and not used for any other purpose.

99. Rooms in which deboning or cutting is in progress should be maintained at a temperature and humidity appropriate to the operation.

100. If meat is cut up or deboned pre-rigor:

(a) it should be transported directly from the dressing area to the cutting up or deboning room;

(b) the cutting up or deboning room should be temperature controlled and directly linked to the dressing areas, except that the controlling authority may approve alternative procedures that provide the same degree of hygienic protection; and

(c) cutting up, deboning and packing should be done without delay and it should be handled or held in accordance with a suitable process control programme, that programme to include the rapid reduction of temperature where appropriate.

101. If meat is packaged or wrapped:

(a) packaging material should be stored and used in a clean and sanitary manner;

(b) wrapping and packaging should be sufficient for the purpose of protecting the meat from contamination in the conditions under which it is to be handled, transported and/or stored;

(c) wrapping should be nontoxic and should not leave harmful deposits of any kind on the meat, or otherwise contaminate it; and

(d) cases or cartons used should be provided with a suitable inner liner or other satisfactory means of protecting meat, except that the liner or other protection may not be required if individual pieces of meat, such as cuts, are individually wrapped before packing.

102. Inventory control should be maintained over all frozen meat and there should be effective monitoring of the freezing and storage process to ensure that time and temperature parameters are met.

103. Where carcases, parts of carcases or edible offals are placed in a freezing room for freezing, the following provisions should be observed:

(a) meat that is not in cartons should be hung or placed on suitable corrosion resistant trays in a manner permitting adequate circulation of air around the meat;

(b) cartons that contain meat should be stacked so as to permit adequate circulation of air around each carton;

(c) meat that is not in cartons should be held in a manner that precludes drip from one piece of meat falling on to any other piece; and

(d) care should be taken where meat is held on trays to avoid contact between the base of any tray and any meat stored beneath that tray.

104. Where carcases, parts of carcases or edible offals are placed in any freezer store, the following provisions should be observed:

(a) they should not be placed in that freezer store until the temperature of the meat has been reduced to an acceptable level;

(b) meat, whether in carcase form or in cartons, should not be stacked directly on the floor and should be positioned so that there is adequate air circulation; and

(c) the freezer store should be operated and maintained at a temperature that will give adequate protection to the meat.

105. Where carcases, parts of carcases or edible offals are placed in freezing rooms or frozen storage rooms:

(a) entry to those rooms should be restricted to personnel necessary to carry out operations;

(b) doors of those rooms should not be left open for extended periods and should when possible be closed immediately after use; and

(c) temperatures should be recorded.

Operational hygiene of transportation

Transportation is an area of particular risk for contamination of meat from a variety of sources and of increased difficulty in maintaining water activity and temperature parameters that assure safety and wholesomeness. Particular care should be taken during transportation to prevent the growth of microorganisms that might be present.

106. Meat should only be transported!

(a) in a means of transport that was clean and in good repair before loading and, if necessary, that was disinfected;

(b) if with other goods, in a way that does not adversely affect the meat;

(c) in the case of stomachs, if they have been cleaned or scalded;

(d) in the case of heads and trotters, if they have been skinned, or scaldedand dehaired;

(e) if carcases, sides or quarters, as a hanging load or in a suitable manner on racks or similar equipment, except that if they are adequately wrapped and frozen, they may be carried under other hygienic arrangements;

(f) if unwrapped and unfrozen edible offal, in suitable closed containers;

(g) so that it does not contact the floor;

(h) in a vehicle or container that prevents the entry of pests and other sources of contamination; and

(i) in a way that prevents unacceptable rises in temperature;

107. Where meat is accidentally exposed to adverse conditions during transport and the wholesomeness of the meat is in doubt it should be examined and evaluated by a veterinary inspector, or by another suitably qualified person who is accountable to a veterinary inspector, before any further step is taken.

Operational hygiene for separate slaughter

108. Particular care should be exercised over the operational hygiene of the slaughter and dressing of animals of a category that a veterinary inspector has decided should be slaughtered and dressed in the separate facility specified in subparagraph 46 (m) of this Code. Slaughter and dressing should be consistent with the requirements set out in paragraphs 85 to 95.

109. Meat from animals slaughtered and dressed in the separate facility specified in subparagraph 46 (m) of this Code that is being held pending a decision on its fitness for human consumption, and any suspect meat, should be held under conditions that prevent it contaminating other meat and preclude it being substituted.

Operational hygiene for meat condemned or otherwise unfit for human consumption

Particular care and attention needs to be paid to handling practices for meat that has not been passed for human consumption and is either designated condemned or inedible, or is being held pending further investigatory testing. This meat must be prevented from being mixed with, substituted for, or in any way contaminating meat for human consumption.

110. Rooms, equipment and utensils for use with inedible or condemned materials should be reserved for that purpose and not used for edible product.

111. Meat that has been condemned or is otherwise unfit for human consumption, under supervision by a veterinary inspector:

(a) should be placed without delay into clearly identified chutes, containers, trucks, trolleys, skips, or rooms, or handled in accordance with other adequate arrangements provided for these purposes;

(b) may be identified by means of cuts or brands provided these clearly identify the meat as condemned or unfit for human consumption; and

(c) should be conveyed to the rendering station or other place of destruction in a manner that ensures that no removal of such meat is possible and no contamination can be caused.

SECTION IX - SPECIAL REQUIREMENTS FOR INSPECTION

Facilities and equipment should be provided that allow adequate monitoring and control of neat hygiene by industry personnel and the controlling authority. All aspects of meat hygiene should be supervised by an official veterinarian. Each abattoir or establishment and its supervising veterinarian should have access to laboratory facilities and analytical procedures to support hygienic practices and process control programmes.

Facilities and equipment

112. Abattoirs and establishments should be laid out and equipped so as to facilitate proper supervision of meat hygiene including the performance of meat inspection.

113. Lighting intensity at all inspection points should not be less than 540 lux.

114. Each abattoir or establishment should include amenities for meat inspection personnel that are commensurate in size with the number of inspectors and that comply with the requirements of subparagraphs (b) to (e) of paragraph 50 of this Code. However, in the case of establishments, the controlling authority may waive this requirement where satisfactory arrangements are made for access to amenities elsewhere so long as they are conveniently located and meet the above requirements.

115. Suitably equipped office accommodation should be provided for the exclusive use of the meat inspection service.

116. Laboratory facilities should be readily available for the purpose of meat inspection and meat hygiene.

Veterinary supervision of meat hygiene

117. All meat hygiene requirements in this Code should be supervised by an official veterinarian (though those in Sections IV and V may be supervised by a separate authority in strict collaboration with the official veterinarian). For every abattoir or establishment there should be at least one official veterinarian appointed to supervise hygiene, including meat inspection.

Laboratory control procedures

118. It is desirable that the management of each abattoir or establishment, in its own interest, have access to laboratory services. Analytical procedures used should follow recognized or standard methods in order that the results may be readily interpreted.

ALINORM 93/16A
APPENDIX III

DRAFT REVISED CODE FOR ANTE-MORTEM AND POST-MORTEM INSPECTION OF SLAUGHTER ANIMALS AND FOR ANTE-MORTEM AND POST-MORTEM JUDGEMENT OF SLAUGHTER ANIMALS AND MEAT

April 1993

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ANTE-MORTEM AND POST-MORTEM INSPECTION
OF SLAUGHTER ANIMALS
AND FOR
ANTE-MORTEM AND POST-MORTEM JUDGEMENT
OF SLAUGHTER ANIMALS AND MEAT

PREAMBLE

Veterinary science and the science of meat hygiene should be applied throughout the food chain, starting at the farm of origin, so that fresh meat produced from slaughtered animals is safe and wholesome. This Code, together with the Code of Hygienic Practice for Fresh Meat, describes requirements necessary to achieve that goal. Traditional practices may permit departures from some of the requirements when fresh meat is produced for local trade.

PRINCIPLES AND OBJECTIVES OF THIS CODE AND THE CODE OF HYGIENIC PRACTICE FOR FRESH MEAT

1. Ante-mortem and postmortem inspection of slaughtered animals and the maintenance of hygienic practice is carried out to ensure that fresh meat produced for human consumption is safe and wholesome.

2. Rules of meat inspection and hygienic practice that are described in this and associated codes of practice provide the requirements that have been developed from current scientific knowledge and practice.

3. Risk analysis based on accepted scientific methodology should be undertaken wherever possible, so as to improve current knowledge. These analyses will promote the following principles of meat hygiene:

(a) there should be consistently applied food safety standards so as to assure a safe and wholesome meat supply; if an adequate food supply is threatened in some local trade situations, safety standards may include treatment sufficient to remove any hazard.;

(b) Ante-mortem and postmortem inspection procedures should be appropriate to the spectrum and prevalence of diseases and defects present in the particular class of slaughter livestock being inspected;

(c) process control systems should limit microbial contamination of meat to as low a practicable level as possible, and prevent subsequent growth to levels that may constitute a hazard;

(d) Hazard Analysis Critical Control Point (HACCP) [1/] under the control and supervision of the controlling authority provides a scientific approach to food safety and wholesomeness throughout the production, processing and distribution of fresh meat, and the HACCP approach should wherever possible, together with other quality assurance procedures, be utilised in the application of this Code;

(e) where risk analysis has shown that safety is not compromised by the failure to remove a defect of a type specified by the controlling authority, and any necessary product identification procedures are in place, the controlling authority should allow production for the end use it specifies.

[1] The considerable benefits that Hazard Analysis Critical Control Point (HACCP) offers with respect to food safety are recognised within the Codex Alimentarius, and the inclusion of HACCP in codes of practice has been endorsed. HACCP provides a systematic approach to sanitation and process control in food production, thereby assuring safe and wholesome food. A HACCP plan should be based on an assessment, as appropriate to the circumstances, of the risks to human health and animal health, taking into account accepted risk analysis techniques. A specific HACCP system, tailored to its individual product, processing and distribution conditions, should be developed by each abattoir or establishment. The principles and applications of HACCP, as they apply generally to Codex codes of practice, are documented elsewhere in the Codex Alimentarius.

4. The responsibility for production of safe and wholesome meat should be shared by industry and the controlling authority. Industry personnel should be involved as widely as possible in voluntary quality assurance systems and in the monitoring and control of meat hygiene, with supervision and audit by the controlling authority to ensure compliance with requirements. Training and education programmes involving both industry and the controlling authority are necessary to meet this objective.

5. The controlling authority should be adequately resourced, have the legal power to enforce requirements necessary to produce meat that is safe and wholesome, and be independent of the management of the establishment and of other industry interests. There should be a legal obligation on managers to comply with meat hygiene and inspection instructions and to provide such information and assistance as may be reasonably required by the controlling authority.

6. In meeting the goal of reducing meat borne hazards, the controlling authority should maintain cost effective and efficient allocation of resources.

7. Monitoring to identify meat borne hazards introduced at the point of production is an important component of a meat hygiene programme. A knowledge of the health status of livestock presented for slaughter, as well as of food borne diseases occurring in human beings, is important for the application of control measures and requires an adequate system for data collection.

8. Meat hygiene regulations should be scientifically based, should protect the health of consumers and facilitate fair practices in the international trading of meat. Policies of equivalence [2], for countries or parts of countries, that provide the same safety and wholesomeness guarantees remove the necessity of replicating individual country requirements or applying identical procedures.

[2] "equivalence" is not separately defined for the purposes of this Code, but rather is as determined by the General Agreement on Tariff and Trade (GATT). The following text, relating to Sanitary and Phytosanitary Measures, is an extract from the Draft Final Act of the Uruguay Round of the Multilateral Trade Negotiations:

> "Contracting parties shall accept the sanitary or phytosanitary measures of other contracting parties as equivalent, even if these measures differ from their own or from those used by other contracting parties trading in the same product, if the exporting contracting party objectively demonstrates to the importing contracting party that its measures achieve the importing contracting party's appropriate level of sanitary or phytosanitary protection. For this purpose, reasonable access shall be given, upon request, to the importing contracting party for inspection, testing and other relevant procedures.
>
> "Contracting parties shall, upon request, enter into consultations with the aim of achieving bilateral and multilateral agreements on recognition of the equivalence of specified sanitary or phytosanitary measures."

9. The controlling authority should facilitate adoption of new technologies and developments, provided they are consistent with the safe and wholesome production of fresh meat.

10. Controlling authorities should promote integrated food safety practices, taking into account the entire spectrum of food safety concerns and knowledge. This should be combined with international cooperation in food safety programmes.

SHORT TITLE

(The short title of this Cods is "the inspection and judgement code (for fresh meat)")

SECTION I SCOPE

This Code applies to:

(a) the Ante-mortem and postmortem inspection of slaughter animals [3]/ other than animals covered by other Codex Codes, namely poultry, fish and game [4], when those animals are intended for human consumption; and

(b) the judgement at abattoirs of slaughter animals and the meat of such animals.

3 International trade in meat derived from many wildlife species is either banned or controlled under the provisions of the Convention on International Trade of Endangered Wildlife Species (CITES).

4 This Code does not contain labelling requirements for fresh meat. For this reason, nothing in this Code prevents meat prepared in accordance with both this Code and the Code of Hygienic Practice for Fresh Meat, being labelled as game meat when that meat is derived from animals traditionally accepted as being "game", provided the controlling authority is satisfied that such labelling is not misleading.

This Code should be read in conjunction with the Code of Hygienic Practice for Fresh Meat. It may also serve as a general guideline for the judgement of other species of slaughter animals and at places other than abattoirs,

SECTION II - PRINCIPLES AMD OBJECTIVES OF THIS CODE

The principles and objectives of this Code ares

(a) Ante-mortem and postmortem inspection of slaughter animals is carried out to ensure that fresh meat intended for human consumption is safe and wholesome; the responsibility for achieving this objective should be shared by the controlling authority and industry;

(b) Ante-mortem and postmortem inspection should be carried out under the responsibility and supervision of a veterinary inspector; the basis for allowing animals to enter the food chain should primarily be a consideration of public health, with the economic worth of the animal being secondary;

(c) Ante-mortem and postmortem inspection programmes should be applied in a cost effective and efficient manner and should reflect a risk based allocation of inspection resources throughout the entire inspection system;

(d) acquisition of all relevant information on the status of animals presented for slaughter is necessary for optimal Ante-mortem and postmortem inspection [5/]

(e) inspection procedures applied to each species of slaughtered animal should be appropriate to the spectrum and prevalence of diseases and defects in each class of livestock; the production

5 See, for example, the [draft] Code of Practice for Control of the Use of Veterinary Drugs (ALINORM 93/31A, Appendix VII), especially paragraph 16, "Record Keeping".

(f) the inspection requirements described in this Code are based on current practice and scientific knowledge; risk analysis should be

undertaken to enable the development of inspection programmes and procedures that reflect advances in the science of meat hygiene;

(g) controlling authorities should accept equivalence of different inspection procedures where risk analyses have shown that they achieve the same guarantees of safety and wholesomeness;

(h) judgement of slaughter animals and meat following Ante-mortem and/or postmortem inspection should ensure that meat passed for human consumption is safe and wholesome; all judgements should ensure that animal health is protected at all times and that abattoir workers and food handlers are protected against occupational zoonoses;

(i) the controlling authority should be responsible for all decisions relating to human health and animal health at admission of slaughter animals to the abattoir and at Ante-mortem and postmortem inspection;

(j) diagnosis of diseases and defects, and judgements, should take into account all available information from Ante-mortem and postmortem inspection and facilities should be provided that maintain identification of slaughter animals or meat assigned to a particular category of judgement (refer to paragraph 102 for the judgement categories);

(k) in the event of suspicion, a provisional decision on the safety and/or wholesomeness of slaughter animals or meat should be confirmed by more detailed examination that may include laboratory tests; where suspicion cannot be allayed, the most severe category of judgement applicable to the suspected condition should be applied;

(l) while it cannot serve as a substitute for judgement based on professional expertise, legislation relating to judgements should provide a consistent standard of judgement across all abattoirs to which it applies;

(m) judgements should be based on scientific knowledge and the relevant legislation; the controlling authority may take into account the prevailing economic conditions and varying wholesomeness needs, so that judgements do not deprive the consumer of an adequate food supply;

(n) the category of judgement specified in this Code for meat that has undergone postmortem inspection should not be regarded as rigidly defined and is intended to be used with some flexibility to accommodate diverse situations and different legal frameworks; and

(o) controlling authorities should make available meat inspection findings that can be used by other agencies to improve human and animal health.

6 The FAO-WHO-OIE Animal Health Yearbook, together with notifications issued from time to time by the International Office of Epizootics (OIE), is the prime source of information as to national and regional animal disease status.

SECTION III - DEFINITIONS

For the purposes of this Code:

1. "Abattoir" means any premises that is approved and registered by the controlling authority in which animals are slaughtered and dressed for human consumption.

2. "Approved as fit for human consumption" means the meat has been inspected and passed without any restrictions, and branded accordingly (Judgement symbol A).

3. "Approved as fit for human consumption with distribution restricted to limited areas" means the meat has been inspected and approved for human consumption with the requirement that the distribution be limited to restricted areas, for reason of the protection of animal health (Judgement symbol L).

4. "Brand" means any mark or stamp approved by the controlling authority and also includes any tag or label bearing such mark or stamp.

5. "Carcase" means the body of any slaughtered animal after bleeding and dressing.

6. "Cleaning" means the removal of objectionable matter.

7. "Condemned", in relation to a slaughter animal or meat, means inspected and judged as, or otherwise officially determined to be, unfit for human consumption and requiring destruction. "Total condemnation" means the entire carcase and offal are condemned (Judgement symbol T) . "Partial condemnation", means only parts of the slaughtered animal are condemned, while others are judged otherwise (Judgement symbol D for the condemned diseased or defective parts).

8. "Conditionally approved as fit for human consumption" means meat that has been inspected and approved for human consumption subject to it being treated under official supervision in order to make it safe for human consumption and to avoid risk to animal health, prior to it being branded and distributed (Judgement symbol K).

9. "Contamination" means objectionable matter, and includes substances and/or microorganisms that make fresh meat unsafe and/or unwholesome.

10. "Controlling authority" means the official authority charged by the government with the control of meat hygiene, including meat inspection.

11. "Disease or defect" means a pathological change or other abnormality.

12. "Diseased or defective" means:

(a) related to organs, the organ or organs in which pathological changes or other abnormalities are found;

(b) related to parts of an organ, the parts of an organ in which pathological changes or other abnormalities are found and which may be separated from the other parts of the organ that are not affected; and

(c) related to parts of the carcase, the parts of the carcase in which pathological changes or other abnormalities are found and that may be separated from the other parts of the carcase that are not affected.

13. "Dressing" means the progressive separation on the dressing floor of a slaughter animal into a carcase (or sides of a carcase), offals and inedible byproducts and may include the removal of the head. Examples of dressing include the removal of the head,

hide or skin, genital organs, urinary bladder, feet, and in lactating animals, the removal of the udder.

14. "Edible offal" in relation to slaughtered animals means offals that have been passed as fit for human consumption.

15. "Emergency slaughter" means slaughter by necessity of any animal that:

(a) has recently suffered traumatic injury and is judged to be in pain; or

(b) is affected by a condition that does not preclude its partial or conditional fitness for human consumption, but that is likely to deteriorate unless slaughter takes place immediately.

16. "Establishment" means any premises other than an abattoir that is approved and registered by the controlling authority in which fresh meat is prepared, handled, packed or stored.

17. "Fit for human consumption" in relation to meat means meat that has been passed by an inspector as safe and wholesome, unless found unwholesome in subsequent examinations, which may include laboratory tests.

18. "Fresh meat" means meat that has not yet been treated in any way other than by modified atmosphere packaging or vacuum packaging to ensure its preservation, except that if it has been subjected only to refrigeration, it continues to be considered "fresh" for the purposes of this Code.

19. "Inedible" means inspected and judged to be, or otherwise officially determined to be, unfit for human consumption but not. requiring destruction.

20. "Inspector" means a properly trained officer appointed by the controlling authority for the purpose of meat inspection and control of hygiene, and includes a veterinary inspector. The supervision of meat hygiene, including the inspection of meat, should be under the responsibility of a veterinary inspector.

21. "Manager" in relation to an abattoir or establishment includes any person for the time being responsible for the management of the abattoir or establishment.

22. "Meat" means all edible parts of any slaughter animal slaughtered in an abattoir and includes edible offal.

23. "Offal" in relation to slaughtered animals means any edible or non-edible part of the animal other than the carcase.

24. "Potable water" means water that is pure and wholesome at the point of usage in accordance with requirements contained in the WHO publication *Guidelines for drinking-water quality*.

25. "Protective clothing" means special garments intended to prevent the contamination of meat and used as outer wear by persons in an abattoir or establishment, and includes head coverings and footwear.

26. "Residues" means residues of veterinary drugs, pesticide residues, and contaminants, as defined for the purposes of the Codex Alimentarius.[7/]

[7] **Definitions in the Seventh Edition of the Codex Alimentarius Commission's Procedural Manual are as follows:**
"Veterinary drug" means any substance applied or administered to any food-producing animal, such as meat or milk-producing animals, poultry, fish or bees, whether used for therapeutic, prophylactic or diagnostic purposes or for modification of physiological functions or behaviour.
"Residues of veterinary drugs" include the parent compounds and/or their metabolites in any edible portion of the animal product, and include residues of associated impurities of the veterinary drug concerned.
"Pesticide" means any substance intended for preventing, destroying, attracting, repelling, or controlling any pest including unwanted species of plants or animals during the production, storage, transport, distribution and processing of food, agricultural commodities, or animal feeds or which may be administered to animals for the control of ectoparasites. The term includes substances intended for use as a plant-growth regulator, defoliant, desiccant, fruit thinning agent, or sprouting inhibitor and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. The term normally excludes fertilizers, plant and animal nutrients, food additives, and animal drugs.
"Pesticide Residue" means any specified substance in food, agricultural commodities, or animal feed resulting from the use of a pesticide. The term includes any derivatives of a pesticide, such as conversion products, metabolites, reaction products, and impurities considered to be of toxicological significance. "Contaminant" means any substance not intentionally added to food, which is present in such food as a result of the production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food or as a result of environmental contamination. The term does not include insect fragments, rodent hairs and other extraneous matter.

27. "Retained" means held under the control and security of the controlling authority pending final judgement.

28. "Risk analysis" includes risk assessment, risk management and risk communication, all of which are essential to the decision making process that determines acceptable levels of risk, and the implementation of those decisions.

29. "Safe and wholesome" refers to meat that has been passed as fit for human consumption using the criteria that it:

(a) will not cause food borne infection or intoxication when properly handled and prepared with respect to the intended use;

(b) does not contain residues in excess of established Codex limits;

(c) is free of obvious contamination;

(d) is free of defects that are generally recognised as objectionable to consumers;

(e) has been produced under adequate hygiene control; and

(f) has not been treated with illegal substances as specified in relevant national legislation.

30. "Slaughter" means the killing of a slaughter animal for the purpose of human consumption and includes bleeding.

31. "Slaughter animal" means any animal lawfully brought into an abattoir for slaughter.

32. "Veterinary Inspector" means an inspector who is professionally qualified as a veterinarian.

33. "Viscera" means the organs of the thoracic and abdominal cavity and includes the kidneys.

SECTION IV - ANTE-MORTEM INSPECTION

The health status of the farm of origin and the husbandry of slaughter animals has a significant effect on the safety and wholesomeness of meat. In this respect, all efforts should be made to collect and evaluate information that might have influence on Ante-mortem and postmortem inspection.

Ante-mortem inspection should be carried out in a systematic manner in accordance with routine procedures established by the controlling authority, and should ensure that animals found to be affected by a disease or defect that would render their meat unfit for human consumption are removed from the human food chain and so identified.

Ante-mortem inspection should ensure that animals whose meat may be fit for human consumption but that require special handling during slaughter and dressing, and animals that will require special attention during postmortem inspection, are segregated and so handled or inspected.

Adequate animal Identification and record keeping systems are essential if full use is to be made of on-farm information relevant to Ante-mortem and postmortem inspection. Data collection and recording systems should accurately reflect on-farm health status and allow meaningful epidemiological analysis. In addition, the data collection and recording system should be capable of responding to changes in local or regional human health and animal health status.

One of the most important functions of Ante-mortem inspection is to ensure that animals are rested sufficiently so that signs important to inspection disposition are not masked. It also ensures that signs that are important to inspection disposition but that may be less readily observed (or not evident) at postmortem inspection can be taken into account in reaching a decision as to the safety and wholesomeness of meat. When it is found on Ante-mortem inspection that an animal is not fit to be slaughtered for human consumption, a judgement should be based on that finding and not delayed until after slaughter and postmortem inspection. Ante-mortem inspection enables animals that require special handling on the slaughter and dressing floor (whether because of uncleanliness, disease or defect) to be identified and given that special handling, as well as permitting the identification of animals requiring special post-mortem inspection.

34. Information available from the farm of origin should be used in an effective and appropriate manner if optimal Ante-mortem and postmortem inspection is to be achieved.

35. No animal should proceed for slaughter until an inspector has carried out an Ante-mortem inspection and has passed it as suitable for slaughter. Exceptions may be made under emergency slaughter provisions where a delay in carrying out Ante-mortem inspection would result in undue suffering.

36. Animals should be inspected by an inspector on arrival at the abattoir or as soon as practicable after delivery to the abattoir. If an animal is kept for more than 24 hours after its post-arrival Ante-mortem inspection, the Ante-mortem inspection should be repeated so that it takes place within 24 hours of slaughter.

37. Inspected animals should be identified and correlated with Ante-mortem inspection findings by a method that is approved by the controlling authority.

38. The manager should provide every assistance necessary to enable an adequate Ante-mortem inspection to be carried out.

39. Ante-mortem inspection should be carried out with a full knowledge of all relevant information gained on the animals prior to their arrival at the abattoir.

40. Animals should be inspected in a way that allows the inspector to detect deviations from normality, whether of demeanour, behaviour, appearance or other clinical signs, that might indicate a disease or defect requiring special handling or closer examination. The inspector should also consider the cleanliness of animals when determining fitness for slaughter.

41. The inspector undertaking postmortem inspection should be notified in a systematic manner of the result of the Ante-mortem inspection.

42. An animal should be released for slaughter without any restriction when an Ante-mortem inspection has revealed that it is adequately rested, that there are no diseases or defects that would render it unfit for slaughter for human consumption or require special attention during dressing or postmortem inspection, and that it is not unacceptably dirty.

43. If during the Ante-mortem inspection any disease or defect has been noted that does not prevent the animal from being slaughtered for human consumption but may influence the postmortem inspection or judgement, the animal should be identified and released by a veterinary inspector for slaughter and postmortem inspection.

44. Where signs of disease are equivocal, the animal should be withdrawn from normal slaughter and placed in an isolation pen set aside for that purpose for:

(a) detailed examination, observation or treatment; or

(b) slaughter under special conditions so as to preclude contamination of the premises, equipment and personnel.

45. Where signs of disease indicate a systemic involvement, communicability to humans, or toxicity from chemical or biological agents that render or may render the meat unsound, the animal so affected should be:

(a) condemned forthwith as unfit for human consumption; or

(b) where appropriate, set aside and remain under the control of an inspector until a further decision regarding disposition is taken.

46. Animals exhibiting normal behaviour but known to be carrying residues should either be condemned or withheld from slaughter until the residues are excreted or metabolized to levels such that they do not exceed established safety levels. In cases of doubt the animal should be identified and slaughtered and the carcase and viscera should be subjected to all necessary laboratory examinations.

47. Any animal that as a result of Ante-mortem inspection is not passed for slaughter should be examined for a final decision on its disposition by a veterinary inspector.

48. The remains of animals that have died, and of those that have been condemned at Ante-mortem inspection and killed, should be removed immediately to the rendering station or other place of destruction, and there should be adequate precautions to prevent misuse, and to avoid danger to human health and animal health. Unless the cause of death of such animals is known, it is desirable that they undergo postmortem examination so that their disease status can be further established and human and animal disease surveillance requirements satisfied.

SECTION V - POST-MORTEM INSPECTION

Postmortem inspection should be carried out in a systematic manner and should ensure that meat passed for human consumption is safe and wholesome.

Inspection procedures should ensure the absence of all contamination identifiable at post-mortem inspection and should limit the potential for unseen contamination to as low a practicable level as possible.

During postmortem inspection, the inspector correlates information available from the field and from Ante-mortem inspection with what can be discerned by examining the head, carcase and viscera. When a decision cannot be taken at that stage as to suitability or otherwise for human consumption, the carcase and all its relevant parts can he set aside under suitable safeguards and further testing arranged. Postmortem inspection should be efficient and effective and this implies tailoring procedures to the particular circumstances. To do this properly necessitates formal risk analysis. Monitoring of stunning and bleeding is required to ensure adequate animal welfare and hygienic practices.

49. Postmortem inspection should be undertaken as soon as the orderly dressing of a carcase allows and should not be delayed.

50. Where a lymph node, organ or any carcase tissue is being incised for inspection, the cut surface should be cleanly sliced to present a view that is not distorted. Where an incision is required to be made, it should as far as possible be made in a way that overcomes any risk of contamination, whether to meat, premises, equipment or personnel.

51. The head, organs, viscera and any other part of a carcase required for postmortem inspection should be identifiable with the carcase from which they were removed until inspection has been completed. Blood of slaughtered animals, when intended for human consumption should, until inspection of the carcase from which it was recovered has been completed, be so kept as to permit its condemnation should this be necessary.

52. No person should remove from the inspection area of an abattoir any part of any carcase, organ, or any viscera (other than a part, organ or viscera that is not being recovered for human or animal consumption and is not required for inspection), until the inspector has completed the inspection and a decision has been made.

53. Except with the permission of the inspector, or in accordance with arrangements established by the controlling authority in the case of certain categories of defect, no person should, prior to the inspection of any carcase being completed:

(a) remove any serous membrane or any other part from the carcase;

(b) remove, modify, or obliterate any evidence of disease or defect in the carcase or organ; or

(c) remove any mark or identification from the hide, carcase, head or viscera;

until the inspector has completed the inspection and given a decision.

54. Heads that are to be inspected should be skinned to the extent necessary to facilitate inspection, and be clean. The base of the tongue should be detached or dropped where this is necessary to give access to the masticatory muscles and lymph nodes. Where head loops are used to hold heads for inspection and incision of lymph nodes is required, the lymph nodes may be incised and examined before the tongue is dropped.

55. Any carcase or viscera suspected of being unfit for human consumption but which requires a more detailed examination before a decision can be made, should be suitably identified and retained, separate from other meat, under the control of an inspector. The relevant parts of that animal should be assembled for further examination. This examination, and any laboratory test or other examination deemed necessary by a veterinary inspector for reaching a final decision, should be undertaken.

56. The method of identification that denotes that a carcase and viscera have been retained for further inspection should be laid down by the controlling authority.

57. The final responsibility for inspection decisions on fitness for human consumption rests with a veterinary inspector.

SECTION VI - POST-MORTEM INSPECTION PROCEDURES

The controlling authority should establish the routine procedures .required to inspect individual tissues and organs. The procedures described in this Code are a guideline to requirements.

The inspector should carry out additional procedures whenever necessary in cases of suspicion of a disease or defect, and be provided with adequate facilities to do so.

Tissues and organs not Intended for human consumption should be inspected in terms of relevance to overall judgements asset dispositions for the carcase and other parts. Additional sentinel procedures may be periodically required to check for diseases that may occur unexpectedly in a slaughter population.

The postmortem inspection procedures set out in the tables included in this Code (Tables A, B and C) are based on current practice and knowledge and are a guideline to the inspection that should be carried out unless more appropriate requirements have been established following thorough risk analysis, undertaking risk analysis of different meat inspection procedures is highly desirable and enables the development of procedures that correctly reflect advances in the science of meat hygiene and the health status of the animals to be inspected. It is only when the most effective and efficient postmortem inspection procedures for detecting diseases and defects that are, or may be, present in the line of animals being inspected are applied, that postmortem inspection is optimised. The procedures that are most appropriate to any particular line of animals will vary not only according to species, but also with

such factors as the system under which they were produced, treatments and other procedures to which they were subjected, their age and the animal health situation in the areas from which they were derived or through which they transited.

In interpreting the postmortem inspection tables included in this Code, it is important to appreciate that they are a guideline to requirements (unless more appropriate requirements have been established following risk analysis), and additional inspection procedures should be undertaken whenever necessary to resolve a suspicion or clarify a situation. In the tables, the words "palpate" and "incise" are to be clearly understood to include visual examination where this is possible.

58. A guideline to postmortem inspection procedures that should be undertaken are set out in the inspection tables attached to this Code (Tables A, B and C). Further postmortem inspection requirements that are not detailed in the inspection tables are:

(a) in all animals in which a systemic or generalized disease is suspected, in all animals positive to a diagnostic test for tuberculosis, in all animals in which lesions suggestive of tuberculosis are found at postmortem inspection, and in all horses reacting to the mallien test, the main carcase lymph nodes (being the precrural, popliteal, anal, superficial inguinal, ischiatic, internal and external iliac, lumbar, renal, sternal, prepectoral, prescapular and atlantal nodes), as well as the lymph nodes of the head and viscera, should be incised and examined;

(b) udders and lungs that are to be recovered for human consumption should be inspected by incision;

(c) tissues and organs that are usually discarded should, when recovered for human consumption, be inspected as appropriate;

(d) except in calves up to 6 weeks of age, the oesophagus of all cattle and calves should be separated from its attachment to the trachea, and viewed;

(e) as part of the inspection of all cattle and calves over the age of 6 weeks for Cysticercus bovis, the muscles of mastication should be viewed and one or more linear incisions made parallel to the lower jaw into the external and internal muscles of mastication;

(f) the hearts of all cattle and calves over the age of 6 weeks should be inspected for Cysticercus bovis either by making one or more incisions from base to apex or by everting the heart and making shallow incisions that enable the cardiac valves and muscle tissue to be inspected - this inspection of the heart should also be undertaken in calves up to 6 weeks of age from areas where Cysticercus bovis is a common postmortem inspection finding.

(g) the head should be split lengthwise in the medial line and the nasal septum removed and examined in all horses from areas where glanders is endemic;

(h) the muscles and the lymph nodes (lymphonodi subrhomboidei) beneath one of the two scapular cartilages of all grey or white horses should be examined for melanosis after loosening the attachment of that one shoulder;

(i) where there is a risk of Cysticercus cellulosae being present, the outer muscle of mastication, the abdominal and diaphragmatic muscles and the root of

the tongue of all pigs should be incised and the blade of the tongue viewed and palpated; and

(j) the heart of all pigs derived from areas where there is a risk of Cysticercus cellulosae being present should be opened up and a deep incision made into the septum.

59. Countries should have measures in force in their meat inspection system to protect the public from trichinosis.

SECTION VII - INSPECTION JUDGEMENTS AND ENFORCEMENT

The process of inspection judgement begins with decisions at the time of admission of slaughter animals to an abattoir, and normally ends with final judgement at the completion of postmortem inspection. A judgement is taken by an inspector as to whether an animal is suitable to be slaughtered for human consumption, and into which of six categories meat from slaughtered animals should be placed. Meat may be judged:

(a) unconditionally safe and wholesome and therefore fit for human consumption;

(b) totally unfit for human consumption, and therefore reguiring to be condemned or otherwise disposed of; if unfit for human consumption, a subsequent decision has to be taken as to whether the meat can be recovered for some other purpose or whether it needs to be destroyed;

(c) partially unfit for human consumption, which requires the removal and disposal of abnormal parts before the remainder can be passed as fit for human consumption; a subsequent decision has to be taken as to whether the parts removed because they are unfit for human consumption can be recovered for some other purpose or whether they need to be destroyed;

(d) conditionally fit for human consumption, in which case a prescribed treatment is necessary to make it safe and wholesome;

(e) fit for human consumption despite showing minor deviations from what is normally considered wholesome, those deviations being the presence of defects of a type specified as acceptable by the controlling authosrity; or

(f) fit for human consumption, with distribution restricted for animal health reasons to a limited geographic area.

The judgement must protect:

(a) consumers against food borne infection, intoxication, and hazards associated with residues;

(b) food handlers against occupational zoonoses;

(c) livestock against the spread of infections, intoxications and other diseases of socioeconomic importance, in particular notifiable contagious diseases, officially controlled diseases, genetic defects, and toxic effects originating from feed or the environment;

(d) companion and other animals that closely associate with humans, and wild fauna, against zoonoses they may transmit to humans; and

(e) consumers (and indirectly the meat processing industry) against economic damage from meat of inferior standard or abnormal properties

60. Consideration should be taken of any infection, disease or defect encountered and an appropriate final judgement made based on all available evidence, such as certificates, farm records, observation during lairage, findings made at Ante-mortem and postmortem inspection and the results of any laboratory examinations that may be required.

61. In case of suspicion, and if the initial findings at Ante-mortem and/or post-mortem inspection do not enable the drawing of final conclusions, a provisional decision should be taken. Meat that is awaiting a final judgement should be "retained for further inspection" or "retained pending laboratory examination", and remain under the control of an inspector until further information enables a final judgement to be made. If the necessary further examinations or tests cannot be made, or are not made, and the suspicions cannot be dismissed by any other means, the meat should be condemned or otherwise judged as consistent with the confirmation of the disease or defect suspected.

62. Meat that has been conditionally approved as fit for human consumption should remain under the control of a veterinary inspector, or of another person who is accountable to a veterinary inspector, until the required treatment has been applied. The meat should be condemned or otherwise disposed of if the required treatment is not applied.

63. Judgement should be based on the relevant legislation administered by the controlling authority. While safeguarding human health and animal health, judgements should not impose unnecessary costs on industry.

64. It is important that the individual inspector making judgements is fully supported by legislation and indemnified against the consequences of decisions taken in good faith.

65. The controlling authority should have ultimate responsibility for all decisions concerning admission of slaughter animals to an abattoir and all judgements at Ante-mortem and postmortem inspection.

66. If the decision of the controlling authority is contested, the national legislation for arbitration should apply. The contesting of a decision should not, however, delay the taking of any action when the controlling authority decides such delay would jeopardise human health or animal health.

SECTION VIII - ANTE-MORTEM AND POST-MORTEM JUDGEMENTS

Judgements at the admission of slaughter animals to an abattoir

67. When an animal or a consignment of animals arrives at an abattoir, a determination should be made as soon as practicable about admission. Animals with significant diseases or defects should be evaluated by a veterinary inspector. The following are the judgement categories available:

(a) not admitted (the further disposal of consignments not admitted to an abattoir should be governed by legislation intended to prevent the spread of contagious animal diseases - if circumstances are such that neither removal nor retention in quarantined holding areas is feasible without danger to human health or animal health, the animals should be admitted for slaughter under special precautions and restriction, or destroyed, as appropriate, but when already on

the premises the animals should not be removed alive except with the approval of the controlling authority); or

(b) admitted to the abattoir under special control, according to the provisions detailed in paragraph 71.

68. A decision to not admit an animal or a consignment of animals is the responsibility of a veterinary inspector, and should be based on the following criteria or sources of information:

(a) admittance would risk the introduction of contagious disease of human health or animal health significance;

(b) certificates of origin and/or health required under animal health legislation are missing, or do not correspond to the consignment;

(c) animal health requirements concerning the route and means of transportation have not been observed; or

(d) certification or other official information reveals drug treatment or exposure to noxious agents within periods shorter than the officially required withholding period when circumstances such as lack of facilities do not permit admission under special control until the required withholding period has expired.

69. A decision to admit an animal or consignment of animals under special control is the responsibility of a veterinary inspector, and should be based on the following criteria or sources of information:

(a) the animals originated from an area of sanitary action, or restriction, arid were delivered under special permit subject to prescribed precautions being applied;

(b) the presence of dead or sick animals gives reason to suspect a contagious disease; or

(c) the animals were submitted to drug treatment or exposed to noxious influences within periods shorter than the officially required withholding period.

Judgements at Ante-mortem inspection

70. An animal that has been admitted to an abattoir for normal slaughter should be released for slaughter without any restriction when the Ante-mortem inspection has revealed no evidence of any significant disease or defect, provided it has been adequately rested.

71. Animals that are not released for slaughter without restriction should be put into one of the following judgement categories based on the criteria outlined:

(a) condemned;

(i) if at Ante-mortem inspection a disease or defect is diagnosed, that at final judgement would require total condemnation, that represents an unacceptable health hazard for meat handlers, or that involves an unacceptable risk of contaminating the slaughter premises or other carcases;

(b) slaughter authorized under special precautions (slaughter in a separate room or in a separate slaughter area or at a different time to other animals, at the end of the working day or on a special day);

(i) if at Ante-mortem inspection a disease or defect is suspected, that at postmortem inspection would give reason for total condemnation; or

(ii) if at Ante-mortem inspection a disease or defect is diagnosed or suspected that if confirmed at postmortem inspection would give reason for partial condemnation or conditional approval;

(c) authorization for slaughter delayed;

(i) if the period of rest has not been adequate or if the slaughter animal is affected by a condition that temporarily makes it unfit for human consumption, provided always that local circumstances enable holding and feeding the animal under sanitary, safe conditions for the length of time required; or

(d) emergency slaughter ordered;

(i) if the animal is found to be affected by a condition, that does not preclude its partial or conditional fitness for human consumption, and it is likely to deteriorate unless slaughter takes place immediately; or

(ii) if due to recent traumatic lesions caused by accident, immediate slaughter is indicated to release the animal from suffering, or to prevent deterioration adversely affecting the animal's fitness for human consumption.

72. In cases where authorisation for slaughter has been delayed, the animal should be kept in isolation, under conditions determined by the controlling authority, and Ante-mortem inspection repeated at intervals as is appropriate.

Judgements at post-mortem inspection

73. The decisions at postmortem inspection are classed into the following categories of judgement:

1. Approved as fit for human consumption
2. Totally unfit for human consumption
3. Partially condemned or otherwise disposed of as unfit for human consumption
4. Conditionally approved as fit for human consumption
5. Meat showing minor deviations from normal but fit for human consumption
6. Approved as fit for human consumption, with distribution restricted to limited areas.

74. Lists of categories of diseases and defects requiring judgement according to these six categories are given in paragraph 101. These categories should not be regarded as rigidly defined, and are intended to be used with some flexibility to accommodate diverse situations and different legal frameworks.

75. The following should be the general criteria and principles of implementation for the categories of postmortem judgement:

CATEGORY 1 - Approved as fit for human consumption

76. When the postmortem examination has revealed no evidence of any unacceptable disease or defect and the slaughter operation has been implemented in accordance with hygienic requirements, the carcase and edible offals should be approved as fit for human consumption without any restriction, and as such may enter unrestricted trade, provided no animal health restrictions are otherwise applicable (symbol A in the list in paragraph 102.)

CATEGORY 2 - Totally unfit for human consumption

77. The carcase and offals should be condemned or otherwise disposed of for inedible purposes in one or more of the following circumstances (symbol T in the list in paragraph 102):

(a) they are hazardous to food handlers, consumers and/or livestock;

(b) they contain residues that exceed established limits;

(c) there are unacceptable organoleptic deviations from normal meat; or

(d) the meat has been conditionally approved as fit for human consumption, but the treatment stipulated is either unavailable or not intended to be carried out.

78. The disposal and utilization of meat judged unfit for human consumption should reliably prevent such meat from causing a pollution problem, endangering human health or animal health, or illegally reentering the human food chain.

79. Wherever feasible, meat that is unfit for human consumption may be authorised to be used for animal feeding, provided there are adequate precautions to prevent misuse and to avoid dangers to human health and animal health.

80. In general terms, the following criteria should apply:

(a) utilization for animal feeding:

if no health hazard involved, and if deviation from the authorized purpose can be reliably prevented;

(b) utilization for sterilized pet food:

if no hazard involved, for human health and animal health, and if misuse for human consumption can be reliably prevented;

(c) dry or wet high temperature rendering:

if the process used reliably destroys pathogens, the resultant product will not contain residues harmful to human health or animal health, and recontamination after rendering is reliably prevented;

(d) utilization for industrial nonfood purposes after heat treatment, provided no hazards are involved for human health or animal health;

(e) incineration or deep burial or other safe means of destruction.

CATEGORY 3 - Partially condemned or otherwise disposed of as unfit for human consumption

81. Where lesions are localized, affecting only part of the carcase or offals, the affected parts should be removed, and the unaffected parts passed as fit for human consumption (unconditionally and unrestricted, or conditionally, or otherwise as

appropriate). In the judgement tables, the symbol D is used to indicate the parts that should be removed and condemned or otherwise disposed of. The methods for the disposal or utilization of the removed parts should be the same as those applicable under judgement category 2 (totally unfit for human consumption).

CATEGORY 4 - Conditionally approved as fit for human consumption

82. Carcases that are contaminated, or that are hazardous to human health or animal health but may be treated under official supervision in a manner resulting in safe and wholesome meat, may be judged as conditionally approved as fit for human consumption (symbol K in the list in paragraph 102). Where necessary, the organs should be treated in the same manner as carcases or else partly or wholly disposed of as unfit for human consumption.

83. Different criteria may be used in accordance with economic and technological feasibility.

84. Until the required treatment has been applied, the meat should remain under the control of an inspector.

85. Different diseases and defects may require different methods of treatment. The procedures that can be used to eliminate the potential hazard from the meat are listed below. In the lists of categories of diseases and defects in paragraph 101, the appropriate method or methods are indicated for each specific case.

"K_h" - meat that, before distribution, undergoes boiling or steaming; the period of time required for such heat treatment should be stipulated, in accordance with the size and shape of the meat to be heated, so that a temperature of 90ºC is reached in the centre of each piece of the meat. This is achieved by boiling for not less than 150 minutes as long as the pieces are no larger than 10 centimetre cubes. Alternatively, legislation may authorize any treatment or technological process that guarantees inactivation of the pathogenic agent of concern.

"K_f" - meat that, before distribution, undergoes treatment either by heat treatment or freezing at a temperature that will kill the parasite of concern. The time and temperature will vary according to the nature and size of the piece of meat undergoing treatment and the parasite concerned.

86. Alternative methods proven to be of equal effectiveness to those in paragraph 85 may be authorized by the controlling authority.

87. Once the required treatment has been applied, the meat may be marketed according to the requirements of the controlling authority.

88. The meat should be condemned or otherwise disposed of as inedible if the required treatment is not applied in the prescribed manner.

CATEGORY 5 - Meat showing minor deviations from normal but fit for human consumption

89. Where risk analysis has shown that meat does not constitute a risk to human health despite the presence of a defect or defects that are specified by the controlling authority and not normally present in wholesome meat, that meat may be judged fit for human consumption (Judgement symbol I in the list in paragraph 102) provided it is identified in such a way that the consumer is made aware that the meat is inferior. This approach needs to be regulated by the controlling authority to ensure that the consumer is not misled. If the controlling authority does not accept and provide for this category of

meat, the alternative postmortem judgement shall be Category 2, namely totally unfit for human consumption.

CATEGORY 6 - Approved as fit for human consumption, with distribution restricted to limited areas

90. If so provided for under animal health legislation, meat obtained from animals coming from an area that is under quarantine because of an outbreak of a contagious animal disease and that otherwise meets all the requirements for meat approved as fit for human consumption (Category 1) may be approved for distribution in a restricted area, provided no hazard to human health is involved. Such meat should not be distributed or marketed outside the restricted area (Judgement symbol L in the list in paragraph 102).

91. If so provided for under animal health legislation, meat derived from animals coming from a restricted area that have been vaccinated and may therefore be carriers of a disease should not be marketed and distributed outside that restricted area.

92. Meat approved as fit for human consumption, with distribution restricted to limited areas, should be effectively identified. Its sale and distribution should be authorized only through specially licensed and closely supervised commercial channels or, if economically feasible, limited to utilization in institutions that are under reliable management.

Retention of meat for further inspection

93. Meat should be retained, pending laboratory examination:

(a) if microbiological examination or bioassay is required, because findings at Ante-mortem or postmortem inspection would give reason for condemnation, unless the suspicion of an infectious or other condition can be reliably discarded by laboratory examination;

(b) if chemical, toxicological, histological or other laboratory examination is required in view of circumstances, suspicion arising from inspection findings, records from the area of production, or other official sources of information;

(c) if examinations for *Trichinella spiralis* or for any other organism are required and not available immediately at the time of postmortem inspection.

Note: The role of laboratory examination in the framework of postmortem judgement is, for the purposes of this Code, governed by the following principles:

(a) The judgement based on clinical and morphological evidence at Ante-mortem and post-mortem inspection is regarded as self-contained, and laboratory confirmation should not be required for unequivocal clinical and morphological findings. In case of doubt, the meat should be condemned, unless the results of a laboratory examination indicate that a less severe decision can be taken without detriment to human health and animal health.

(b) Laboratory examination may in many instances remove suspicion arising from inspection and thus save valuable food that otherwise would have to be condemned. From the economic and nutritional point of view, laboratory examination may thus be regarded as virtually indispensable.

(c) It is recognized that, by a statute or in practice, some national meat inspection systems may assign a different role, and possibly wider scope of function to laboratory examination. It is also recognized that advances in routine laboratory testing techniques may possibly favour future developments in such a direction. This should not be considered as being in conflict with this present Code, provided that the basic fact finding procedures are at least equivalent in efficiency to those described herein and that the actual judgement, with regard to the various diseases and defects, is not less stringent than that recommended in this Code.

94. Retained meat should remain under the control of an inspector until final judgement.

SECTION IX - RECOMMENDED FINAL JUDGEMENTS

95. It is important to note that the judgements set out in the appended judgement tables should be used only as a guideline and are not intended to replace judgement based on professional expertise.

96. The purpose of the judgement tables is to indicate the appropriate judgement, should a particular diagnosis be made, in the light of current knowledge and the principles laid down in this Code.

97. In the judgement tables diseases and defects are listed under three main headings: general findings, topographic listing and aetiological listing, as indicated in paragraph 101, under "Serial Group Number of Diseases and Defects". The relevant judgement is indicated by the "Judgement Symbols" A, T, D, K, I and L, as explained in paragraphs 73 to 92, and summarised in the list in paragraph 102. There are also notes referring to special precautions to be taken, or indicating criteria for the choice of alternative judgements.

98. The judgements based on the general findings will generally overrule those applicable to more specific topographic and/or aetiological conditions, except where the judgement based on these findings is more severe.

99. Laboratory examination for purposes of judgement should only be carried out in cases where the additional information obtained contributes to the decision making. Laboratory examinations should be in accordance with the principles laid down in paragraph 93 and as deemed appropriate by the controlling authority.

100. Where full Ante-mortem and postmortem inspection cannot be accomplished, the slaughter animals and their meat should be condemned, unless laboratory examination precludes any risk to human health and/or animal health.

101. Serial Group Number of Diseases and Defects

1. General Findings

2. Topographic Listing

2-1 Umbilical infection
2-2 Diseases of the nervous system
2-3 Diseases of the pericardium, heart and vessels
2-4 Diseases of the respiratory system
2-5 Diseases of the pleura
2-6 Diseases of the stomach and intestines
2-7 Diseases of the peritoneum
2-8 Diseases of the liver
2-9 Diseases of the urinary tract
2-10 Diseases of the female genitalia and associated diseases
2-11 Diseases of the male genitalia
2-12 Diseases of the udder
2-13 Diseases of bones, joints and tendon sheaths
2-14 Diseases of the musculature
2-15 Skin diseases

3. Aetiological listing

3-1 Parasitic Conditions
3-2 Protozoal Diseases
3-3 Bacterial Conditions (including related organisms)
3-4 Virus Conditions
3-5 Syndromes of Unidentified or Non-Infectious Aetiology
3-6 Mycotoxins and Mycotic Infections

102. The following judgement symbols are used in the tables:

A Approved as fit for human consumption

T Totally unfit for human consumption

D Designates organs or parts of carcase unfit for human consumption

K Conditionally approved as fit for human consumption
(Kh - heat treatment; Kf - freezing or heat treatment)

I Meat showing minor deviations from normal but fit for human consumption

L Approved as fit for human consumption, with distribution restricted to limited areas

... Not applicable (e.g. in case of total condemnation the columns referring to partial condemnation are not applicable).

SECTION X - DISPOSITION AND BRANDING

After a decision has been made by an inspector that meat is fit for human consumption, conditionally fit for human consumption or unfit for human consumption, it is necessary that it be marked in a systematic manner to show the result of inspection. This is to enable control and proper handling/disposal

prior to its reaching the consumer as well as to assure consumers of the official guarantee of safety and wholesomeness of meat.

103. The size, shape, and wording of any brand, as well as the colour and composition of marking ink used for the branding of meat, should be laid down by the controlling authority and should be uniform throughout the country. Consideration should be given at the design stage to the need to achieve legible impressions of brands under working conditions. Only firebrands or brands comprising suitable ink should be applied to the meat.

104. Carcases, heads, organs and viscera that as a result of ante-rnortem and postmortem inspection are passed as fit for human consumption without further restrictions should be legibly and appropriately branded.

105. Any meat (including heads, organs and viscera) that requires treatment by heat or by freezing to render it fit for human consumption should be suitably identified and, if necessary, branded as such and kept under the supervision of an inspector until the necessary treatment has been completed and the carcase and any parts can be passed as fit for human consumption.

106. All carcases, parts of carcases, organs and viscera that as a result of Ante-mortem and postmortem inspection are found to be unfit for human consumption, and foetuses, should be held securely to the satisfaction of the inspector until they are branded, stained, rendered, denatured or otherwise destroyed, so excluding them from the human food chain.

107. Brands and stamps used to apply the marks of inspection should be kept clean while in use. They should be held under the control of an inspector and used only under an inspector's supervision.

SECTION XI - UTILIZATION OF MEAT INSPECTION FINDINGS

The controlling authority should make meat inspection findings available to assist other agencies involved in human health and animal health. In meeting this objective, the controlling authority should ensure that surveillance activities are distinguished from normal meat inspection activities, and do not jeopardise the efficient delivery of meat inspection services or the efficient operation of the meat industry. Where possible the controlling authority should take an active role in animal health management programmes that assure a safe and wholesome food supply and information on zoonotic disease should be provided to the appropriate agencies.

108. The controlling authority should closely collaborate with the authorities responsible for animal disease control and with public health authorities so that the greatest possible use can be made of meat inspection findings.

109. Research and surveillance activities should be distinguished from routine meat inspection and from those laboratory examinations that may be required for the immediate purpose of decision making, and should have no delaying effect upon the normal course of postmortem judgement.

110. Notifiable animal disease detected at Ante-mortem or postmortem inspection should be reported directly to the veterinary authority responsible for animal disease control.

111. In the framework of surveys related to special disease control or eradication schemes, full use should be made of Ante-mortem and postmortem inspection findings,

including saving or recording details from animal identification devices (ear tags, tattoos, brands, etc.) from diseased animals. If required as part of such schemes, specific diagnostic tests should be permitted in addition to the normal inspection procedures in an abattoir, provided that this can be done without detriment to the normal meat inspection and abattoir management operations.

112. The controlling authority should periodically assemble and evaluate statistics relating to meat inspection findings and of the judgement decisions taken. These statistics should be made available to animal health authorities, for the monitoring of fluctuations in the animal health situation, as reflected by meat inspection findings.

113. Where applicable, veterinary inspectors in abattoirs should take an active part in animal disease and health control, not only as providers of information for feedback but also as associates in the field control of animal health.

TABLE A - GUIDELINE POST-MORTEM INSPECTION REQUIREMENTS - HEADS

These are guideline inspection requirements - see the narrative for Section VI on page 69. Inspection can be made more intensive or less intensive depending upon the outcome of risk analysis.

	CATTLE (includes calves)	**HORSES**	**SHEEP & GOATS (includes lambs)**	**PIGS**
GENERAL	View external surfaces. For cattle, horses and pigs view the oral and nasal cavities.			
LYMPH NODES **SUBMAXILLARY** **PAROTID** **RETROPHARYNGEAL**	Incise (a) Incise (a) Incise (a)	Incise Incise Incise	---------- ---------- ----------	Incise ---------- ----------
TONGUE	Palpate (a)	Palpate	----------	----------
OTHER	Inspection for *C. bovis* as per subparagraph 58 (d) of this Code.	Inspection for glanders as per sub-paragraph 58 (f) of this Code.		Inspection for *C. cellulosae* as per sub-paragraph 58 (h) of this Code.

NOTE

- "incise" as used above means to examine by viewing and multiple incision or slicing,
- "palpate" as used above means to view and palpate.
- "submaxillary" are the lymph nodes lymphonodi mandibulares.
- "parotid" are the lymph nodes lymphonodi parotidei.
- "retropharyngeal" are the lymph nodes lymphonodi retropharingei.
- (a) means inspection is view only in calves up to 6 weeks of age.

TABLE B - GUIDELINE POST-MORTEM INSPECTION REQUIREMENTS – VISCERA

These are guideline inspection requirements - see the narrative for Section VI on page 69. Inspection can be made more intensive or less intensive depending upon the outcome of risk analysis

	CATTLE (includes calves)	HORSES	SHEEP & GOATS (includes lambs)	PIGS
LYMPH NODES				
MESENTERIC	View	View	View	Palpate (b)
PORTAL	Incise (a)	Palpate	Palpate	Palpate
BRONCHIAL &	Incise (a)	Incise	Palpate	Incise
MEDIASTINAL				
GASTRO-INTESTINAL TRACT	View (a)	View	View	View
SPLEEN	Palpate	Palpate	View	View
LIVER	Palpate. View the gall bladder (does not apply to horses). For cattle over 6 weeks of age, incision as deemed appropriate to detect liver fluke.			
LUNGS	Palpate. Except in sheep and goats, the bronchi should be opened up by a transverse incision across the diaphragmatic lobe. For horses, the larynx, trachea and main bronchi should be incised.			
HEART	View after removal of the pericardium. Additional inspection requirements for cattle over 6 weeks of age are in sub-paragraph 58 (f) of this Code. Conditional additional inspection requirements for pigs are set out in subparagraph 58 (j) of this Code.			
KIDNEYS	View after enucleation. In grey or white horses incise entire kidney.			
UTERUS (ADULTS)	Palpate	View	View	View

NOTES

- "incise" as used above means to examine by viewing and multiple incision or slicing.
- "palpate" as used above means to view and palpate.

- "mesenteric" are the lymph nodes lymphonodi mesenterici.
- "portal" are the lymph nodes lymphonodi hepatici (portales).
- "bronchial and mediastinal" are the lymph nodes lymphonodi tracheobronchiales et mediastinales.
- (a) means inspection is view only in calves up to 6 weeks of age.
- (b) means incise if any lesions were observed in the submaxillary lymph nodes.

TABLE C - GUIDELINE POST-MORTEM INSPECTION REQUIREMENTS – CARCASES

These are guideline inspection requirements - see the narrative for Section VI on page 69. Inspection can be made more intensive or less intensive depending upon the outcome of risk analysis.

	CATTLE (includes calves)	HORSES	SHEEP & GOATS (includes lambs)	PIGS
GENERAL	Examine carcases (including musculature, exposed bone, joints, tendon sheaths etc) to determine any disease or defect. Attention should be paid to bodily condition, efficiency of bleeding, colour, condition of serous membranes (pleura and peritoneum), cleanliness and presence of any unusual odours.			
LYMPH NODES **SUPERFICIAL INGUINAL** **EXTERNAL & INTERNAL ILIAC** **PRE-PECTORAL** **POPLITEAL** **RENAL**	Palpate (a) Palpate Palpate ---------- Palpate	Palpate Palpate Palpate ---------- Palpate	Palpate (a) Palpate Palpate Palpate ----------	Palpate Palpate (b) ---------- ---------- Palpate
OTHERS		Inspection of grey or white horses as per sub-paragraph 58 (h) of this Code.		Palpate castration site.

NOTES

- "superficial inguinal" (also called supramammary) are the lymph nodes lymphonodi inguinales superficiales.
- "external and internal iliac" are the lymph nodes lymphonodi iliaci.
- "prepectoral" are the lymph nodes lymphonodi cervicales profundi caudales,
- "renal" are the lymph nodes lymphonodi renales.
- "popliteal" are the lymph nodes lymphonodi popliteae.
- (a) means incise as a routine when udder is, or has been, in lactation.
- (b) means iliac nodes in pigs. BFGF

APPENDIX - RECOMMENDED FINAL JUDGEMENTS

DISEASES, PATHOLOGICAL CONDITIONS OR ABNORMALITIES	RECOMMENDED FINAL JUDGEMENT					
	CARCASE	VISCERA	DISEASED OR AFFECTED		OTHERS	NOTES
			PARTS OF CARCASE	ORGANS		
1. GENERAL FINDINGS						
1.1 Fever syndrome, debility and general signs indicating acute infectious disease	T	T	…	…	…	Alternatively, K_h/D/.../.../... when detected first at post-mortem inspection, provided laboratory examination shows the causal agent non pathogenic for man, and no evidence of bacteraemia, drugs or antimicrobial substances; when detected at Ante-mortem inspection, slaughter and post-mortem inspection to be under special precautions; if possible withhold from slaughter until recovered provided no hazard to human health or animal health, no undue suffering and recovery considered likely with treatment; destruction in an appropriate place and manner if a disease is

							diagnosed at ante-mortem inspection that calls for total condemnation
1.2	Excitement, raised temperature or exhaustion caused by stress, without signs of acute disease	…	…	…	…	…	Slaughter to be delayed and Ante-mortem inspection to be repeated after adequate rest. If delay not possible, see item 1.10.
1.3	Moribund state as indicated by signs such as subnormal temperature, slow weak pulse, disturbed senses	T	T	…	…	…	To be destroyed in an appropriate place and manner; if no undue suffering and recovery considered possible, final judgement may be delayed and Ante-mortem inspection repeated later. If signs less severe when reinspected, I or K_h, subject to satisfactory bleeding and laboratory examination eliminating risk
1.4	General chronic conditions such as anaemia. cachexia, emaciation, loathsome appearance, degeneration of organs and oedema	T	T	…	…	…	Depending upon extent of condition also L. I or K_h, if economically justified; T always if condition caused by chronic infection; laboratory examination if infection, recent use of antimicrobial substances or drug residues suspected.
1.5	Signs of acute infection by protozoan parasite of the blood, such as haemaglobinuria, anaemia or debility	T	T	...	...	...	Alternatively K_h/D/..J...I..., provided general condition not too severe and laboratory examination rules out drug

							residues and/or secondary bacterial infection.
1.6	Septicaemia, pyaemia or toxaemia	T	T	…	…	…	
1.7	Abnormal odour, colour, etc.:			…	…	…	
1.7.1	Caused by acute or chronic disease	T	T	…	…	…	
1.7.2	Caused by feedstuff (such as fishmeal etc.)	I	I	I	I	…	In severe cases T/T/.../.../...
1.7.3	Caused by drug treatment:						
	a) if generalized	T	T	…	…	…	
	b) if localized	A	A	D	D	…	Provided prescribed post treatment withholding periods have been observed and laboratory examination confirms localized nature; otherwise T/T/.../.../...
1.7.4	Sexual odour	I	I	…	…	…	Alternatively A/A/.../.../... if not persisting after cooking test; L or I, if in accordance with local consumer tastes. Alternatively Kh for use in cooked, comminuted products that, because they will be consumed cold, will not cause the odour to be noticed by the consumer. Other alternative judgement, if so required by local consumer tastes; persisting slight sexual odour: I/I/.../.../...; strong sexual odour: T/T/.../.../...

1.8	Advanced pregnancy and recent parturition or abortion	…	…	…	…	…	Withhold from slaughter whenever possible provided no risk to human health or animal health. Otherwise A, I, K_h, or T, depending on general condition and result of laboratory examination, if required. Normally animals should not be sent to the abattoir within 10 days after parturition or abortion.
1.9	Foetuses and undeveloped neonatal animals	T	T	…	…	…	L where local custom permits.
1.10	Slaughter under special precautions or emergency slaughter						
1.10.1	with unsatisfactory bleeding, discolouration, oedematous condisions, etc.	T	T	…	…	…	
1.10.2	sudden collapse without prior evidence of disease and no general signs or pathological changes found post-mortem (e.g. cardiovascular crisis)	T	T	…	…	…	Alternatively K_h/K_h/.../.../... subject to satisfactory bleeding and results of laboratory examination.
1.10.3	cadaver bled after natural death or animal slaughtered in agony	T	T	…	…	…	
1.10.4	animal that has suffocated	T	T	…	…	…	
1.10.5	emergency slaughter necessitated by accidental trauma during transport to, or while in the vicinity of, the abattoir	I	I	…	…	…	Alternatively, provided satisfactory bleeding and adequate sanitary conditions of slaughter, A/A/.../.../... but excluded from international trade; T/T/.../.../... if unsatisfactory bleeding or if

							bleeding after natural death is suspected.
1.10.6	animal slaughtered without ante-mortem inspection						
	a) evidence of justified emergency due to trauma (i.e. accident)	A	A	D	D	…	Provided satisfactory bleeding and subject to results of laboratory examination, but excluded from international trade; T/T/.../.../... if unsatisfactory bleeding.
	b) insufficient evidence of justified emergency due to trauma	T	T	…	…	…	
1.11	Animal slaughtered as part of a disease eradication programme or sanitary campaign but that is not a reactor to a diagnostic test and shows no evidence of disease at ante-mortem or post-mortem inspection	L	L	…	…	…	Alternatively K_hI K_hI ...I...!...; note that reactors and diseased animais are judged in accordance with the entry in these tables for the specific disease involved.
1.12	Absence of rigor mortis in a carcase retained for further inspection	I	D	…	…	…	Except if T or K_h because of other inspection findings.
1.13	Animal killed in a separate facility for diagnostic purposes or to prevent the spread of an animal disease (e.g. a suspected case of a notifiable disease)	T	T	…	…	…	
2.	TOPOGRAPHIC LISTING						
2.1	Umbilical infection with systemic involvement	T	T	…	…	…	
2.2	Diseases of the nervous system						

2.2.1	Acute encephalitis and meningitis	T	T	…	…	…	Alternatively A/A/.../.../brain D if confirmed after laboratory examination as of noninfectious origin (e.g. sun stroke).
2.2.2	Chronic encephalitis, meningitis and staggers with normal body temperature and no other complicating signs	A	A	D		brain D	Except if T under item 1.4.
2.2.3	Brain abscesses:						
	a) resulting from pyaemia	T	T	…	…	…	
	b) localized lesion only with no other complicating signs	A	A	…	…	brain D	Subject to results of laboratory examination.
2.2.4	Abnormal behaviour (disturbed senses, etc.)						
	a) with satisfactory bleeding and no other complicating signs or suspicious circumstances or records	A	A	…	…	…	Subject to checking farm record, and a laboratory examination to exclude toxic or infectious conditions that may require disposition T or K.
	b) accompanied by other signs or indications of exposure to infection or poison	T	T	…	…	…	
2.3	Diseases of the pericardium, heart and vessels						
2.3.1	Pericarditis:						
	a) acute infectious exudative pericarditis, septicaemia and bovine traumatic pericarditis with fever, large accumulation of exudate, circulatory disturbances, degenerative changes in	T	T	…	…	…	

		organs, or abnormal odour						
	b)	subacute infectious exudative pericarditis	K_h	K_h	D	D	…	Subject to laboratory examination excluding generalized infection or antimicrobial substances.
	c)	chronic infectious pericarditis with no other complications in a well nourished animal	A	A	D	D	…	
	d)	chronic bovine traumatic pericarditis	A	A	D	D	…	Subject to results of laboratory examination.
2.3.2	Endocarditis:							
	a)	ulcerative endocarditis and verrucose endocarditis, without complications	K_h	K_h	…	D	…	Alternatively L instead of Kh if Kh not economically feasible, subject to negative bacteriological results for laboratory examination (see also item 3.3.13).
	b)	if fully cicatrized	A	A	…	D	…	
	c)	verrucose endocarditis with consequential lesions in lungs or liver, recent infiltration, general debility, etc.	T	T	…	…	…	
2.3.3	Heart lesions of noninfectious nature (malformation, etc.)		A	A	…	D	…	Except if T under item 1.4.
2.3.4	Worm aneurisms in horses:							
	a)	with oedema, infarction, or haemorrhages confined to the hind leg	A	A	D	D	…	
	b)	with recent peritonitis, conspicuous	T	T	…	…	…	

	circulatory disturbances in the mesentery or intestines, or general debility						
2.4	Diseases of the respiratory system						For asphyxia see item 1.10.4.
2.4.1	Sinusitis	A	A	D	…	head D	Provided items 1.1 or 1.4 not applicable.
2.4.2	Any form of acute pneumonia such as widespread, severe, purulent bronchopneumonia, gangrene of the lungs, or necrotic pneumonia	T	T	…	…	…	
2.4.3	Catarrhal pneumonia	A	A	…	D	…	Subject to results of laboratory examination if bacteraemia suspected.
2.4.4	Pleuropneumonia in pigs						
	a) with pathological changes distinctly healing (ie. organization)	A	A	D	D	…	
	b) other cases or signs of complications	K_h	K_h	D	D	…	Subject to results of laboratory examination.
2.4.5	Subacute pneumonia in any slaughter animal (eg. croupous pneumonia, bronchopneumonia, aspiration pneumonia)	K_h	K_h	…	D	…	Subject to results of laboratory examination and provided item 1.1 not applicable.
2.4.6	Subacute bronchopneumonia in calves and young cattle, with slight lesions	A	K_h	D	D	lungs D	Subject to results of laboratory examination
2.4.7	Multiple pulmonary abscesses	T	T	…	…	…	Alternatively K_h /D/.../.../..., subject to results of laboratory examination, or A/A/.../D/..., if no metastases are found in the carcase or in other organs and

							the animal is in good nutritional condition.
2.4.8	Bronchitis	A	A	…	D	…	
2.4.9	Verminous bronchopneumonia	A	A	…	D	…	Provided item 1.4 not applicable.
2.4.10	Atelectasis, emphysema, pigmentation, haemorrhages or aspiration of blood, scalding water or ingested material	A	A	…	D	…	
2.5	Diseases of the pleura						
2.5.1	Diffuse fibrinous or serofibrinous pleurisy	T	T	…	…	…	Alternatively K_h, depending on results of laboratory examination and general condition of the animal.
2.5.2	Adhesions and patches of fibrinous tissue	A	A	D	D	…	Unless tuberculous, in which case see item 3.3.8.
2.5.3	Suppurative or gangrenous pleurisy	T	T	…	…	…	
2.6	Diseases of the stomach and intestines						
2.6.1	Acute gastrointestinal catarrh in adult animals						
	a) with congested mesenteric lymph nodes but no other changes	A	A	…	D	intestines D	Alternatively T or K_h depending upon results of laboratory examination.
	b) with congestion of mucosa and mesenteric lymph nodes, enlargement of spleen or degeneration of organs	K_h	K_h	…	D	intestines D	Alternatively T, depending upon results of laboratory examination.
2.6.2	Chronic gastrointestinal catarrh	A	A	…	D	intestines D	Alternatively T or K_h depending upon results of laboratory

							examination. Alternatively K_h depending upon results of laboratory examination.
2.6.3	Septic, croupous, diphtheritic or haemorrhagic enteritis	T	T	…	…	…	
2.6.4	Constipation and intestinal obstructions (including colic in the horse)						
	a) severe, acute or showing systemic effects	T	T	…	…	…	Alternatively K_h depending upon results of laboratory examination. In horses normally T.
	b) mild cases with no systemic effects	A	A	…	D	…	
2.6.5	Bloat or impaction of stomach or rumen						
	a) severe cases	A	A	…	D	…	Alternatively I, K_h or T depending on general condition and results of laboratory examination.
	b) mild cases	A	A	…	D	…	
2.6.6	Emphysema of the mesentery in pigs	A	A	…	D	…	
2.7	Diseases of the peritoneum						
2.7.1	Peritonitis						
	a) acute, diffuse or extensive	T	T	…	…	…	
	b) fibrinous localized peritonitis	A	A	D	D	…	
2.7.2	Adhesions and patches of fibrinous tissue, or localized encapsulated abscesses	A	A	D	D	…	Unless tuberculous, in which case see item 3.3.8.

2.8	Diseases of the liver						
2.8.1	Telangiectasis, cyst formation, gallstones	A	A	…	D	…	
2.8.2	Fatty infiltration	A	A	…	D	…	
2.8.3	Degeneration of the liver (parenchymatous, fatty or amyloid degeneration)	A	A	…	D	…	Depending on general condition and results of laboratory examination.
2.8.4	Hepatitis of toxic, parasitic or nonspecific infectious nature	A	A	…	D	…	Depending on general condition and results of laboratory examination if indicated.
2.8.5	Parasitic nodules in the liver	A	A	…	D	…	D for affected part of liver, provided circumscribed
2.8.6	Recent bacterial necrosis of the liver	K_h	K_h	…	D	…	Alternatively T depending on general condition and results of laboratory examination.
2.8.7	Abscesses of the liver						
	a) embolic abscesses associated with recent umbilical infections, traumatic abscesses in the spleen, etc.	T	T	…	…	…	
	b) old encapsulated abscesses	A	A	…	D	…	
2.8.8	Miliary necrosis of the liver in calves	T	T	…	…	…	
2.9	Diseases of the urinary tract						
2.9.1	Renal calculi, cyst formation, pigmentation	A	A	…	D	…	
2.9.2	Nephritis (including parasitic nephritis)						
	a) accompanied by abnormal odour of urine, uraemia or oedema	T	T	…	…	…	

	b)	chronic nephritis with no systemic effects	A	A	…	D	…	Subject to laboratory examination being negative for ochratoxin in countries where ochratoxicosis is prevalent; (see item 3.6.2).
2.9.3	Disseminated leucocytic nephritis (colinephritis)		T	T	…	…	…	Alternatively K_h, subject to results of laboratory examination.
2.9.4	Suppurative and embolic nephritis		T	T	…	…	…	Alternatively K_h, subject to results of laboratory examination.
2.9.5	Pyelonephritis in cattle							
	a)	with renal insufficiency (uraemia)	T	T	…	…	…	
	b)	no signs of systemic effect	A	A	…	D	…	
2.9.6	Cystitis							
	a)	exudative form accompanied by fever, odour of urine, or urinogenous pyelonephritis	T	T	…	…	…	
	b)	no signs of systemic effects	A	A	…	D	…	
2.9.7	Rupture of the bladder or urethra							
	a)	in cases of urinogenous peritonitis, odour of urine, or urinary cellutitis	T	T		…	…	
	b)	no signs of systemic effects	A	A	D	D	…	
2.10	Diseases of the female genitalia and associated diseases							
2.10.1	inflammation of the uterus							

a)	acute metritis (croupous, diphtheritic, necrotic, septic, etc., or the presence of a putrefied foetus)	T	T	…	…	…	
b)	chronic metritis (including macerated or mummified foetus) with no signs of systemic effects	A	A	…	D	…	Subject to results of laboratory examination.
2.10.2	Retention of placenta						
a)	with no signs of systemic effects	A	A	…	D	…	Subject to results of laboratory examination.
b)	accompanied by fever or other signs of systemic effects	T	T	…	…	…	
2.10.3	Parturition complicated by acute metritis, necrotizing vaginitis or presence of a putrefied foetus	T	T	…	…	…	
2.10.4	Prolapse, torsion or rupture of the uterus accompanied by fever or peritonitis	T	T	…	…	…	If no signs at Ante-mortem inspection and no postmortem signs of generalization, A or Kh, subject to results of laboratory examination.
2.10.5	Excessive fluid in the uterus	A	A	…	D	…	Subject to the general condition of the animal being satisfactory and no generalised signs.
2.10.6	Bovine puerperal haemoglobinuria	A	A	D	D	…	
2.11	Diseases of the male genitalia						
2.11.1	Orchitis and/or epididymitis	A	A	…	D	…	Subject to farm history or laboratory examination (brucellosis; see also item

								3.3.21).
2.12	Diseases of the udder							
2.12.1	Inflammation of the udder (mastitis)							
	a)	no signs of systemic effects	A	A	…	D	…	
	b)	septic, gangrenous or signs of systemic effects	T	T	…	…	…	
2.12.2	Pigmentation of the mammary glands in pigs		A	A	D	D	…	
2.12.3	Oedema of the udder		A	A	…	D	…	
2.13	Diseases of bones, joints and tendon sheaths							
2.13.1	Fractures							Lesions of old, completely healed fractures may be removed in accordance with procedures determined by the controlling authority.
	a)	uncomplicated (recent or healing)	A	A	D	…	…	
	b)	infected or accompanied by signs indicating generalized effects	T	T	…	…	…	
2.13.2	Osteomyelitis							
	a)	localized	A	A	D	…	…	Subject to results of laboratory examination.
	b)	gangrenous, suppurative or accompanied by metastasis	T	T	…	…	…	
2.13.3	Deposits of pigment in bones or periosteum		A	A	D	…	bones D	
2.13.4	Arthritis and/or tendonitis							

	a)	noninfectious or chronic, with no systemic effects	A	A	D	…	…	For pigs see also item 3.3.13.
	b)	acute infectious (fibrinous, purulent), e.g. polyarthritis in newborn animals	T	T	…	…	…	A/A/D/.../... subject to results of laboratory examination.
2.13.5	Presternal calcification in cattle		A	A	D	…	…	
2.13.6	Osteofluorosis		A	A	D	…	…	
2.14	Diseases of the musculature							Absence of rigor mortis see 1.12.
2.14.1	Calcareous deposits		A	A	D	…	…	
2.14.2	Aseptic degenerative myopathy e.g. "White Muscle Disease"		A	A	D			
2.14.3	Other abnormalities of muscles							
	a)	in pigs (fat not affected) e.g. "porcine stress syndrome", "pale soft exudative" (PSE) or "dark firm dry" (DFD)	A	A	I	…		Affected parts of carcase D instead of 1, if lesions severe. Carcase D, if extensive.
	b)	in other animals (e.g. dark cutting beef)	A	A	I	…	…	Affected parts of carcase D instead of I, if lesions severe. Carcase D, if extensive.
2.15	Skin diseases							
2.15.1	Wounds and cellulitis							
	a)	recent granulating	A	A	D	…	…	
	b)	infected wounds and discharging skin lesions						
		(i) without general signs	A	A	D	…	…	
		(ii) accompanied by generalised	T	T	…	…	…	

		signs such as fever, or with metastasis or sepsis						
2.15.2	Contusions (bruising)							
	a)	localized	A	A	D	…	…	
	b)	generalized effects or secondary changes in the carcase	T	T	…	…	…	
2.15.3	Burns							
	a)	localized, no systemic effects	A	A	D	...	…	
	b)	with extensive oedema or systemic signs such as fever	T	T	...	...	…	
2.15.4	Eczema and chronic dermatitis in pigs (primary in nature)		A	A	D	...	…	
2.15.5	Erythema and acute dermatitis {eg. frostbite, sunburn, chemical corrosion, photosensitization)							
	a)	no signs of systemic effects	A	A	D	...	...	
	b)	with systemic effects, such as fever	T	T	…	…	…	
3.	AETIOLOGICAL LISTING							
3.1	PARASITIC CONDITIONS							
3.1.1	Trichinellosis {Trichinella spiralis)		T	T	…	…	…	Except in countries free of T. spiralis, where routine inspection procedures do not include specific laboratory examination for trichinellae other measures should be in force to protect public health (eg heating,

							freezing or curing, in accordance with approved schedules, of meat of animals susceptible to trichinella infestation).
3.1.2	Cysticercosis (Cysticercus bovis)						
	a) Heavy infestation	T	T	...	...	...	The extent of infestation that constitutes "heavy infestation" to be prescribed by the controlling authority.
	b) Moderate or light infestation, or small number of dead/degenerated cysticerci	K_1	K_1	…	…	…	Alternatively heat treatment that achieves 60ºC in the centre of the meat.
3.1.3	Cysticercosis (C. cellulosea)						
	a) Heavy infestation	T	T	...	...	…	The extent of infestation that constitutes "heavy infestation" to be prescribed by the controlling authority.
	b) Moderate or light infestation, or small number of dead/degenerated cysticerci	K_1	K_1	...	...	...	Alternatively heat treatment that achieves 60ºC in the centre of the meat.
3.1.4	Cysticercosis (C. o vis)						
	a) Heavy infestation	T	T	…	…	…	The extent of infestation that constitutes "heavy infestation" to be prescribed by the controlling authority.
	b) Moderate or light infestation	A	A	...	...	...	This judgement only after removal of all detected lesions. K1 instead of A where

						economically feasible.
3.1.5 Cysticercosis (C. tenuicollis)	A	A	...	D	…	This judgement provided item 1.4 does not apply and lesions are first removed by stripping affected serous membranes.
3.1.6 Coenurosis (Coenurus cerebralis)	A	A	…	D	Brain D	
3.1.7 Distomatosis - Liver fluke disease						
a) Heavy infestation	A	A	...	D	...	Provided item 1.4 does not apply.
b) moderate or light infestation	A	A	...	D	...	D the affected part of the liver provided lesions clearly circumscribed. Remainder of liver: 1.
3.1.8 Echinococcosis (Hydatidosis)	A	A	D	D	...	Provided item 1.4 does not apply; D part of organ affected in cases of very low infestation with rest of organ L or I.
3.1.9 Pulmonary and gastrointestinal strongylosis	A	A	...	D	...	Provided item 1.4 does not apply.
3,1.10 Parasitic lesions in the liver or intestines	A	A	...	D	...	D the affected part of the liver provided lesions clearly circumscribed.
3.1.11 Gastrophilus infestation in horses	A	A	...	D	...	

3.1.12	Oestrus ovis infestation in sheep			A	A	...	D	head D	L acceptable instead of D where feasible.
3.1.13	Warble infestation (Hypodermosis			A	A	D	…	…	Provided item 1.4 does not apply.
3.1.14	Mange and scab								
	a)	Sarcoptic mange in pigs							
		(i)	localized and no systemic effects	A	A	D			
		(ii)	extensive lesions or signs of systemic effects	K_h	K_h	D			Provided item 1.4 does not apply.
	b)	Psoroptic scab in sheep							
		(i)	no systemic effects	A	A	D			
		(ii)	with suppurative skin lesions	T	T	...	...	...	Alternatively K_n, subject to results of bacteriological examination.
3.2	PROTOZOAL DISEASES								**Note for all protozoal diseases,** T or K_h instead of A where any of the general findings listed under item 1 apply.
3.2.1	Dourine			A	A	D	D	...	
3.2.2	Trypanosomiasis			A	A	...	D	...	
3.2.3	Babesiosis			A	A	...	D	...	
3.2.4	Theileriosis			A	A	..	D	...	
3.2.5	Trichomonas infection (*Trichomonas foetus*)			A	A	..	D	...	
				A	A	...	D	...	

3.2.6	Sarcosporidiosis (macroscopic lesions)						
	a) Heavy infestation	T	T	...	...	...	
	b) slight or localized infestation	A	A	D	D	...	A only after removal of detected lesions.
3.2.7	Toxoplasmosis						
	a) Clinical signs or systemic effect	T	T	...	...	...	
	b) Serological only	A	A	...	...	...	
3.2.8	Coccidiosis	A	A	...	D	intestines D	
3.2.9	Besnoitiosis						
	a) Localized lesions, no systemic effect	A	A	D	D		
	b) Disseminated lesions or systemic effect	T	T	...			
3.3	**BACTERIAL DISEASES AND CONDITIONS (INCLUDING RELATED ORGANISMS)**						
3.3.1	Anthrax (affected, including non-infected but contaminated animals or meat)	T	T	...	...	...	Affected animals should not be admitted to an abattoir; if detected at Ante-mortem or postmortem inspection, thorough disinfection of premises is necessary. Special precautions are required to prevent occupational hazards.
3.3.2	Blackquarter/Blackleg (*Clostridium chauvoei*)	T	T		...	...	
3.3.3	Braxy (*Cl. septicum*)	T	T	...	...		
3.3.4	Enterotoxaemia (Lamb dysentery, *Cl. perfringens*)	T	T	...	...	...	

3.3.5	Malignant oedema (*Cl. septicum* etc.)		T	T	...	...	...	
3.3.6	Tetanus		T	T	...	...	...	
3.3.7	Botulism		T	T	...	...	...	
3.3.8	Tuberculosis							Meat from animals affected in any way by tuberculosis is excluded from international trade.
	a)	In cattle and buffaloes						
		(i) cases of residual infection or re-infection where an eradication scheme has terminated (including reactors without lesions)	T	T	...	...	...	
		(ii) during final stages of an eradication scheme and where natural prevalence is low						
		- reactor without lesions	K_h	K_h	...	...	lungs, udder: D	Alternatively L or A, but excluded from international trade.
		- one organ only affected, and no miliary lesions	K_h	K_h	...	D	lungs, udder: D	Provided item 1.4 does not apply; T if economically feasible.
		- more than one organ affected, or miliary lesions in one organ	T	T	...	...	...	
		(iii) during early stages of an eradication scheme and in high prevalence areas						
		- reactor without lesions	L	L	...		lungs, udder: D	A instead of L if L economically not feasible, but excluded from

								international trade.
			- one organ only affected, and no miliary lesions	K_h	K_h	...	D	lungs, udder: D	Provided item 1.4 does not apply.
			- more than one organ affected but no signs of generalization or recent haematogenic spread	K_h	K_h	...	D	lungs, udder: D	Except T if economically feasible or if item 1.4 applies.
			- generalization	T	T	...	...	...	
			- signs of recent haematogenic spread	T	T	...	...	...	
	b)	In pigs							
		(i)	localized in throat or mesenteric lymph nodes (bovine or avian type)	K_h	K_h	D	D	intestines D	However T in areas where bovine tuberculosis eradication scheme concluded or in final stages, or at any time if of bovine type. Alternatively to K_h, heat treatment at 77ºC if not found beyond one primary site.
		(ii)	avian type confined to submaxillary glands	A	A	D	...	head D	
		(iii)	extensive lesions in lymph nodes, or other organs affected	T	T	...	...	...	
	c)	In small ruminants and in horses		T	T	...	...	...	
3.3.9	Johne's disease (Paratuberculosis)			A	A	...	D	intestines, mesentery: D	Provided item 1.4 does not apply.
3.3.10	Actinomycosis and actinobacillosis								
	a)	Confined to the head, or not more than		A	A	D	D	...	Provided item 1.4 does not

	slight lung lesions						apply.
b)	Extensive lesions of the lungs	T	T	...	...	...	
3.3.11	Salmonellosis	T	T	...	...	...	
3.3.12	White scour, omphalophlebitis, polyarthritis and other septicaemic conditions of new-born animals	T	T	...	...	...	
3.3.13	Swine erysipelas						
a)	Acute erysipelas with erythema, or diffuse cutaneous erysipelas with erythema	T	T	...	...	...	T at Ante-mortem inspection because of occupational hazard; if feasible, slaughter to be delayed until after treatment and recovery.
b)	Localized chronic arthritis caused by erysipelas, or localized erysipelas endocarditis without signs of systemic effect	K_h	K_h	D	D	...	Bacteriological examination; T if found not to be localized, or if antimicrobial substances detected. See also item 2.3.2. Alternatively A if feasible without health hazard to consumers and food handlers.
c)	slight cutaneous lesions	K_h	K_h	D	...	...	Alternatively A if feasible without health hazard to consumers and food handlers.
d)	Arthritis or skin lesions complicated by necrosis or signs of systemic effect	T	T	...	...	...	
3.3.14	Listeriosis	T	T	...	...	...	Particular precautions necessary to prevent infection of meat industry workers and other food handlers.

3.3.15	Corynebacterial infections in submaxillary lymph nodes in pigs	A	A	D	D	...	Subject to results of laboratory examination.
3.3.16	Caseous lymphadenitis in sheep (Corynebacterium ovis)	A	A	D	D	lungs D	Except if T or K_h under item 1.4.
3.3.17	Ulcerative lymphangitis in horses (C. ovis)	A	A	D	D	...	In areas where glanders occurs, judge as for glanders (item 3.3.18) unless confirmed by laboratory examination.
3.3.18	Glanders	T	T	...	...	...	Should not be admitted to abattoir.
3.3.19	Melioidosis	T	T	...	...	...	
3.3.20	Strangles (Streptococcus equi)	A	A	D	...	...	Except if T or K_h in cases of item 1.1.
3.3.21	Brucellosis						Where brucellosis of any species is prevalent, special precautions are necessary to prevent occupational hazards.
	a) Cattle	A	A	...	D	udder, genital organs and related lymph nodes: D	If B. melitensis suspected: T or K_h, depending on prevalence and as economically feasible; animals slaughtered in brucellosis eradication programmes: L instead of A, if economically feasible, epidemiologically justified, and/or warranted for the prevention of occupational hazards.
	b) Pigs	T	T	...	...	...	If T not economically feasible,

							K_h, but with mammary glands, genital organs and related lymph nodes: D.
	c) Sheep, goats, buffaloes	T	T	...	...	...	If T not economically feasible: K_h or L, but with mammary glands, genital organs and related lymph nodes: D.
	d) Horses	A	A	D	D	...	
3.3.22	Infectious ovine epididymitis (fl. ovis)	A	A	...	D	...	
3.3.23	Bovine campylobacteriosis (Campylobacter fetus)	A	A		D	...	
3.3.24	Pasteurellosis	K_h	K_h	...	D	...	Except if T in case of item 1.1 or 1.4.
3.3.25	Haemorrhagic septicaemia (Pasteurella multocida serotypes 6:B and 6:E)	T	T	...	...	...	Should not be admitted to abattoir.
3.3.26	Shipping fever						
	a) Clinical stage	T	T	...	...	...	If feasible, slaughter to be delayed until after recovery.
	b) Recovered	A	A	...	D	...	
3.3.27	Atrophic rhinitis	A	A	D	...	...	D where combined with deformity of facial bones.
3.3.28	Calf Diphtheria (Necrobacillosis)						
	a) Generalized	T	T	...	...	...	
	b) Localized	K_h	K_h	D	D	head D	
3.3.29	Foot rot in sheep	A	A	D	...	...	Care needed to differentiate

							from FMD (see item 3.4.1).
3.3.30	Dermatophilosis (Streptothricosis, Dermatophilus congoiensis)	A	A	D	...	...	Provided item 1.4 does not apply.
3.3.31	Leptospirosis						Particular precautions necessary to prevent infection of meat industry workers and other food handlers.
	a) Acute	T	T	...	...	...	
	b) Chronic, localized	A	A	...	D	kidney D	
3.3.32	Contagious bovine pIeuropneumonia (Mycoplasma mycoides subsp. mycoides SC (bovine biotype))	A	A	...	D	lungs, pleura: D	
3.3.33	Contagious caprine pieuropneumonia (Mycoplasma sp. F.38 biotype)	A	A	...	D	lungs, pleura: D	
3.3.34	Contagious agalactia of goats and sheep (Mycoplasma agalactiae)	A	A	...	D	udder D	
3.3.35	Heartwater (Cowdria ruminantium)	A	A	...	D	...	Except if T or K_h because of item 1.1.
3.3.36	Q fever (Coxiella burneti)						Precautions necessary to prevent infection of meat industry workers.
	a) Clinical disease	T	T	...	...	...	K_h/D/.../D/udder D, if T is not economically feasible.
	b) Serological reaction only	A	A	...	...	udder D	T cr Kn preferred if technically and economically feasible.
3.3.37	Anaplasmosis	A	A	...	D	...	Except if item 1.1, 1.4 or 1.7

							applicable.
3.4	VIRUS CONDITIONS						For all virus conditions, laboratory examination to exclude bacterial infection or presence of antimicrobial substances may be necessary. Strict adherence to national animal health legislation is necessary, particularly for OIE list A diseases.
Vesicular and pox diseases							
3.4.1	Foot-and-mouth disease						
	a) In normally free or nearly free countries or zones within a country						
	- diseased animals and contacts	T	T	...	...	...	Mot admitted to abattoirs.
	b) In other countries or areas	...	...	...	...	...	Judgement to be in accordance with the. current animal health requirements, and consistent with effective public health protection; particular attention to secondary bacterial infections and general findings (see e.g. items 1.1, 1.6 and 3.3.11). Sanitary measures to comply with national animal health policy. For indication of national control policies see FAO/WHO/OIE Animal Health Yearbook.

3.4.2	Vesicular stomatitis	A	A	D	D	...	If differential diagnosis not confirmed, judgement as FMD item 3.4.1.
3.4.3	Vesicular exanthema of pigs	T	T	...	...	...	Kh if T is not economically feasible.
3.4.4	Swine vesicular disease	K_h	K_h	D	D	intestines D	T and exclusion from abattoirs in countries where eradication 6cheme operating. If differential diagnosis not confirmed, judgement as FMD item 3.4. 1.
3.4.5	Contagious pustular dermatitis (Contagious Ecthyma)	A	A	...	D	head D	If differential diagnosis not confirmed, judgement as FMD item 3.4.1.
3.4.6	Sheep pox and goat pox						
	a) Clinical disease	K_h	K_h	D	D	...	Except if T applicable under item 1.1; L if K_h is not economically feasible.
	b) Recovered	A	A	D	D	...	
3.4.7	Lumpy skin disease						
	a) Clinical disease	K_h	K_h	D	D	...	Except if T applicable under item 1.1; L if K_h is not economically feasible.
3.4.8	Other pox diseases						
	a) Horse pox	L	L	D	D		
	b) Cow pox	A	A	D	...	udder D	
	c) Swine pox	L	L	D	...	skin D	I if economically feasible.

Various cattle diseases							
3.4.9	Rinderpest						
	a) In normally free zones and at advanced stages of eradication	T	T	...	...	...	
	b) In endemic zones	L	D	...	...	...	Unless item 1.1 applicable; where L, distribution limited to areas affected by outbreak and covered by vaccination; K_h if economically feasible.
3.4.10	Bovine malignant catarrh	I	D	...	...	…	Provided item 1.1 does not apply.
3.4.11	Infectious bovine rhinotracheitis-IBR/IPV	A	A		D	…	Provided item 1.1 does not apply.
3.4.12	Bovine virus diarrhoea/Mucosal disease	A	A	...	D	…	Provided item 1.1 does not apply.
3.4.13	Bovine parainfluenza	A	A	...	D	…	Provided item 1.1 does not apply.
3.4.14	Bovine leucosis					…	
	a) Multiple macroscopic lesions	T	T	...	...	…	
	b) Reactor only	A	A	...	...	…	Depending on prevalence ¡K,, instead of A, if economically feasible.;
3.4.15	Bovine Spongiform Encephalopathy (BSE)	T	T				Cattle suspected on clinical grounds of BSE infection should be dealt with in strict accordance with requirements determined by the controlling authority. Laboratory examination where appropriate to confirm diagnosis.

Various pig diseases							
3.4.16 Classical swine fever (Hog cholera)							
a)	Diseased	T	T	...	...	…	(f economically not feasible: K_h (unless T applicable under item 1.1).
b)	Contacts	K_h	D	...	...	…	
3.4.17 African swine fever (diseased and contacts)		T	T	...	...	...	Not to be admitted to abattoir.
3.4.18 Teschen disease		K_h	D	...	...	brain, spinal cord, alimentary tract: D	Except if T/T under item 1.1 or 1.3.
3.4.19 Aujeszky's disease (Pseudorabies)							
a)	Diseased	K_h	K_h	D	D	brain, spinal cord: D	
b)	Reactor only	A	A	...	...	…	Including vaccinated animals.
3.4.20 Swine influenza		A	A	...	D	lungs: D	Except if T or K_n applicable under item 1.1.
Various arthropod-transmined diseases of ruminants							
3.4.21 Bluetongue							
a)	Clinical disease	T	T	...	...	…	
b)	Reactor only	A	A	...	...	…	
3.4.22 Rift Valley Fever							Precautions to prevent occupational hazards.
a)	Clinically affected	T	T	...	...	…	

b) Reactor only	A	A	...	...	liver, blood: D	
3.4.23 Louping ill	A	A	...	...	brain, medulla: D	Except if T or K_h applicable under item 1.1.
3.4.24 Nairobi sheep disease	A	A	...	D	...	Except if T or K_h applicable under item 1.1.
3.4.25 Ephemeral fever	A	A		D		Slaughter to be delayed until temperature normal; otherwise T or K_h under item 1.1.
Various equine diseases						
3.4.26 Equine encephalomyelitis						
a) Clinical disease	T	T	...	...	…	
b) Reactor only	L	L	...	...	brain, medulla: D	
3.4.27 African horse sickness						
a) Clinical disease	T	T	...	...	…	
b) Reactor only	L	L	...	...	…	
3.4.28 Equine rhinopneumonitis	A	A	...	D	…	Except if T or K_h under item 1.1.
3.4.29 Equine influenza	A	A	...	D	lungs D	Movement from place of origin to abattoir not to be permitted during acute stage; immediate emergency slaughter if detected upon arrival at abattoir; T or K_h instead of A in case of item 1.1.
3.4.30 Equine infectious anaemia						

	a)	Clinical disease	T	T	...	...	…	
	b)	Reactor only	L	L	...	...	…	Provided no lesions found at postmortem inspection; otherwise T.
Others								
3.4.31	Rabies		T	T	...	...	...	
	a)	Animals slaughter within 48 hours of being bitten	A	A	D	...	...	D: bite area with surroundings: special precautions to prevent occupational hazards. Alternatively slaughter may be delayed during an extended quarantine period to permit confirmation.
3.4.32	Japanese encephalitis							
	a)	In pigs	L	L	...	D	blood, brain, medulla, genital organs: D	K_h if economically feasible; T in case of acute disease.
	b)	In horses						
		(i) Clinical disease	T	T	...	...	...	
		(ii) Reactor only	L	L	...	...	blood, brain, medulla: D	K_h if economically feasible.
3.4.33	Scrapie							
	a)	Clinical disease	T	T	...	...	…	
	b)	Contacts, offspring and ancestors	L	L	...	...	see note	T instead of L, if economically feasible.

3.4.34	Viral leucosis (other than bovine)							
	a)	Multiple macroscopic lesions	T	T	...	...	…	
	b)	Reactor only	A	A	...	...	…	Depending on prevalence (K_h instead of A, if economically feasible.)
3.5	SYNDROMES OF UNIDENTIFIED OR NON-INFECTIOUS AETIOLOGY							
3.5.1	Sweating disease		K_h	D	...	...	...	
3.5.2	Tick paralysis		T	T	...	...	...	L or K_h if T is not economically feasible.
3.5.3	Tumours							
	a)	Circumscribed benign tumours, myxofibromas and neurofibromas of intercostal nerves, nerve plexuses, etc.	A	A	D	D	...	D for part of organ, if clearly circumscribed, otherwise D for whole organ.
	b)	Malignant tumours, e.g. carcinoma and sarcoma, including melanosarcoma	T	T	…	…	…	Laboratory examination where necessary to differentiate.
	c)	Multiple tumours, e.g. metastasis or multiple benign tumours in different organs	T	T	...	...	...	Laboratory examination where necessary to differentiate.
3.5.4	Metabolic disorders, deficiency diseases, intoxications							
	a)	Bovine ketosis	T	T	...	...	...	Alternatively K_h/D or I/D subject to results of laboratory examination. Preferably delay slaughter until recovered.
	b)	Parturient paresis (hypocalcaemia, etc.)	T	T	...	...	...	Alternatively K_h/D or I/D subject

							to results of laboratory examination. Preferably delay slaughter until recovered.
c)	Nutritional mineral deficiencies	A	A	D	...	...	Provided item 1.4 does not apply.
d)	Grass tetany (hypomagnesaemia)	T	T	...	...	...	Alternatively K_h/D or I/D subject to results of laboratory examination. Preferably delay slaughter until recovered.
e)	Intoxications (acute and chronic poisoning)	T	T	...	...	...	Applies to animals showing clinical or postmortem signs.
f)	Subacute or chronic poisoning with secondary changes (gastroenteritis, degeneration of organs, etc.) - after clinical recovery	A	A	D	D	...	Subject to laboratory examination to eliminate risk of residues.
g)	Icterus (jaundice)						
	(i) haemolytic	T	T	...	...	...	
	(ii) toxic	T	T	...	...	...	
	(iii) obstructive (slight, disappearing within 24 hours)	A	A	...	D	liver D	Alternatively I in cases where A not justifiable.
	(iv) obstructive (severe)	T	T	...	...	...	
	(v) physiological (eg neonates) or due to fracture, torsion of spleen, etc.						
	- if discolouration is distinct 24 hours after slaughter	T	T	...	...		Alternatively I in mild cases where T not justifiable.

	- if discolouration disappears after 24 hours	A	A	...	...		
h)	Disseminated melanosis in calves						
(i)	where removal of affected parts not feasible	T	T	...	...		
(ii)	where removal of affected parts feasible	A	A	D	D	...	
3.5.5	Residues of administered anabolics	T	T	...	...	...	
3.5.6	Residues in excess of nationally or internationally established maximum residue limits	T	T	...	...	...	If national legislation permits residue level higher than internationally accepted maximum residue limit, L or exclusion from international trade. D if exceeding maximum residue limit (national or international) in certain organs or tissues only. Note also that residues of antimicrobial substances render inconclusive the results of bacteriological tests
3.6	**MYCOTIC INFECTIONS AND MYCOTOXICOSES**						
3.6.1	Epizootic lymphangitis	A	A	D	D	...	If differential diagnosis not made, same judgement as glanders item 3.3.18.
3.6.2	Ochratoxicosis in pigs	T	T				This judgement when ochratoxin exceeds 25 mg/kg in kidney tissue (laboratory examination

						when suspicion arises from history of cases of chronic abnormalities in pigs from the same source).
3.6.3 Aflatoxicosis	A	A		D	liver, kidneys, udder: D	This judgement when aflatoxin exceeds 0.001 mg/kg (laboratory examination when suspicion arises in pigs from a single source).
3.6.4 Acute or chronic mycotoxicosis detected at either Ante-mortem or postmortem inspection	T	T				

ALINORM 93/16A
APPENDIX IV

DRAFT REVISED CODE OF HYGIENIC PRACTICE FOR GAME
April 1993

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CODE OF HYGIENIC PRACTICE FOR GAME

PREAMBLE

Veterinary science and the science of meat hygiene should be applied throughout the food chain that produces game meat, starting in the field, so that game meat is safe and wholesome. This Code describes requirements necessary to achieve that goal. Traditional practices may permit departures from some of the requirements when game meat is produced for local trade.

PRINCIPLES AND OBJECTIVES OF HYGIENIC GAME MEAT PRODUCTION

1. Inspection of game animal carcases and the maintenance of hygienic practice is carried out to ensure that game meat produced for human consumption is safe and wholesome.

2. Rules of game meat inspection and hygienic practice that are described in this Code of Practice provide the requirements that have been developed from current scientific knowledge and practice.

3. Risk analysis based on accepted scientific methodology should be undertaken wherever possible, so as to improve current knowledge. These analyses will promote the following principles of game meat hygiene:

(a) there should be consistently applied food safety standards so as to assure that any game meat supply is safe and wholesome; if an adequate food supply is threatened in some local trade situations, safety standards may include treatment sufficient to remove any hazard;

(b) inspection procedures should be appropriate to the species and to the spectrum and prevalence of diseases and defects present in the particular population of game animals being harvested;

(c) process control systems should limit microbial contamination of game meat to as low a practicable level as possible, and prevent subsequent growth to levels that may constitute a hazard;

(d) Hazard Analysis Critical Control Point (HACCP) 1/ under the control and supervision of the controlling authority provides a scientific approach to food safety and wholesomeness throughout the harvesting, processing and distribution of game meat, and the HACCP approach should wherever possible, together with other quality assurance procedures, be utilised in the application of this Code; and

(e) where risk analysis has shown that safety is not compromised by the failure to remove a defect of a type specified by the controlling authority, and any necessary product identification procedures are in place, the controlling authority should allow production for the end use it specifies.

[1] The considerable benefits that Hazard Analysis Critical Control Point (HACCP) offers with respect to food safety are recognised within the Codex Alimentarius, and the inclusion of HACCP in codes of practice has been endorsed. HACCP provides a systematic approach to sanitation and process control in food production, thereby assuring safe and wholesome food. A HACCP plan should be based on an assessment, as appropriate to the circumstances, of the risks to human health and animal health, taking into account accepted risk analysis techniques. A specific HACCP system, tailored to its individual product, processing and distribution conditions, should be developed by each game operation. The principles and applications of HACCP, as they apply generally to Codex codes of practice, are documented elsewhere in the Codex Alimentarius.

4. The responsibility for production of safe and wholesome game meat should be shared by industry and the controlling authority. Industry personnel should be involved as widely as possible in voluntary quality assurance systems and in the monitoring and control of game meat hygiene, with supervision and audit by the controlling authority to ensure compliance with requirements. Training and education programmes involving both industry and the controlling authority are necessary to meet this objective. These principles also should be applied, to the extent possible, to the operation of harvesting game animals.

5. The controlling authority should be adequately resourced, have the legal power to enforce requirements necessary to produce game meat that is safe and wholesome, and be independent of the management of the game establishment and of other industry interests. There should be a legal obligation on managers to comply with game meat hygiene and inspection instructions and to provide such information and to give such assistance as may be reasonably required by the controlling authority.

6. In meeting the goal of reducing game meat borne hazards, the controlling authority should maintain cost effective and efficient allocation of resources.

7. A knowledge of the health status of wildlife harvested for game meat production is important for the application of control measures and requires an adequate system for data collection.

8. Game meat hygiene regulations should be scientifically based and should protect the health of consumers and facilitate fair practices in the international trading of game meat. Policies of equivalence [2], for countries or parts of countries, that provide the same safety and wholesomeness guarantees remove the necessity of replicating individual country requirements or applying identical procedures.

9. The controlling authority should facilitate adoption of new technologies and developments, provided they are consistent with the safe and wholesome production of game meat.

[2] "equivalence" is not separately defined for the purposes of this Code, but rather is as determined by the General Agreement on Tariff and Trade (GATT). The following text, relating to Sanitary and Phytosanitary Measures, is an extract from the Draft Final Act of the Uruguay Round of the Multilateral Trade Negotiations:

> "Contracting parties shall accept the sanitary or phytosanitary measures of other contracting parties as equivalent, even if these measures differ from their own or from those used by other contracting parties trading in the same product, if the exporting contracting party objectively demonstrates to the importing contracting party that its measures achieve the importing contracting party's appropriate level of sanitary or phytosanitary protection. For this purpose, reasonable access shall be given, upon request, to the importing contracting party for inspection, testing and other relevant procedures.
>
> "Contracting parties shall, upon request, enter into consultations with the aim of achieving bilateral and multilateral agreements on recognition of the equivalence of specified sanitary or phytosanitary measures."

NOTE

The contents of this Code are not intended to:

(a) preclude the adoption of technical and other innovations by; or

(b) restrict the throughput or productivity of;

the game meat industry provided innovations and production are consistent with the hygienic production of safe and wholesome game meat.

This Code pursues the same public health objectives for, and applies the same hygiene standards to, game meat as pertain to fresh meat derived from slaughter animals. The nature of game animal harvesting and subsequent field operations imposes some practical limitations on the application of these objectives and standards to that phase of the production of game meat that takes place prior to the arrival of game animal carcases at a game depot or game establishment.

SECTION I - SCOPE

This Code of hygienic practice applies to fresh game meat [3], whether sold direct to the consumer in that form or after further processing. It contains the minimum requirements of hygiene in harvesting of game animals, the transfer of game animal carcases to game establishments, the dressing of game animal carcases, and the packaging, storage and transport of game meat, but does not contain product description requirements for game meat [4]. Provision is made for all vertebrate animals encompassed by the definition of game animal, whether large or small, and whether mammal, bird, reptile or of any other Class within the animal kingdom other than fish.

[3] International trade in meat derived from many wildlife species is either banned or controlled under the provisions of the Convention on International Trade of Endangered Wildlife Species (CITES).

[4] For this reason, nothing in this Code prevents the describing of meat prepared in accordance with the provisions of both:

(a) the Code of Hygienic Practice for Fresh Meat; and

(b) the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat;

(and therefore the product of an Ante-mortem and postmortem inspection system, and sometimes known as "slaughter game") as game meat.

This Code also recognises that in some cases game depots and game establishments are by necessity impermanent, and requirements for structure and facilities described would be unpractical. In such circumstances the controlling authority may permit variations but needs to then ensure that the structures and facilities that are in use will enable production and processes that satisfy the hygiene, operational, inspection and judgement requirements in this Code.

SECTION II - OBJECTIVES OF THIS CODE

The objectives of this Code are to ensure:

(a) game meat is safe and wholesome;

(b) recognition of the unique nature of game animal harvesting and the constraints this introduces in terms of game meat hygiene;

(c) hygienic premises, facilities and equipment, at game depots and game establishments;

(d) hygienic practices through all stages of game meat production;

(e) inspection procedures and judgements appropriate to game meat inspection; and

(f) controlling authorities can accommodate hygiene requirements for a wide range of animal species.

SECTION III - DEFINITIONS

For the purposes of this Codes

1. "Brand" means any mark or stamp approved by the controlling authority and also includes any tag or label bearing such mark or stamp.

2. "Cleaning" means the removal of objectionable matter.

3. "Condemned", in relation to a game animal carcase or game meat, means inspected and judged as, or otherwise officially determined to be, unfit for human consumption and requiring destruction. "Total condemnation" means the entire game animal carcase and offal are condemned. "Partial condemnation™, means only parts of the game animal carcase are condemned, while others are judged otherwise.

4. "Contamination" means objectionable matter, and includes substances and/or microorganisms that make game meat unsafe and/or unwholesome.

5. "Controlling authority" means the official authority charged by the government with the control of game meat hygiene, including game meat inspection.

6. "Disease or defect" means a pathological change or other abnormality.

7. "Diseased or defective" means:

(a) related to organs, the organ or organs in which pathological changes or other abnormalities are found;

(b) related to parts of an organ, the parts of an organ in which pathological changes or other abnormalities are found and which may be separated from the other parts of the organ that are not affected; and

(c) related to parts of the game animal carcase, the parts of the carcase in which pathological changes or other abnormalities are found and that may be separated from the other parts of the carcase that are not affected.

8. "Disinfection", of plant, facilities and equipment, means the reduction, without adversely affecting the game meat, by means of hygienically satisfactory chemical agents and/or physical methods, of the number of microorganisms to a minimum.

9. "Edible game offal" means offal, taken from a game animal carcase, that has been passed by an inspector as fit for human consumption.

10. "Fit for human consumption" in relation to game meat means game meat that has been passed by an inspector as safe and wholesome, unless found unwholesome in subsequent examinations, which may include laboratory tests,

11. "Fresh game meat" means game meat that has not yet been treated in any way other than by modified atmosphere packaging or vacuum packaging to ensure its preservation, except that if it has been subjected only to refrigeration, it continues to be considered "fresh" for the purposes of this Code,

12. "Game animal" means any animal that:

(a) has not been herded or handled in the manner of a farmed animal and has of necessity to be killed in a location where it is not available for Ante-mortem inspection by an inspector; and

(b) is of a species the carcase of which may legally be dressed in a game establishment.

13. "Game animal carcase" means the undressed, partially dressed or dressed body of a game animal that is being, or is intended to be, dressed or prepared in a game establishment, and includes any associated organs.

14. "Game carcase" means the body of a game animal that has been dressed or prepared in a game establishment, and that has been passed by an inspector as fit for human consumption.

15. "Game depot" means any premises that is approved by the controlling authority for the temporary holding of game animal carcases prior to their transfer to a game establishment.

16. "Game establishment" means any premises that is approved and registered by the controlling authority to dress, prepare, handle, pack or store game animal carcases, game carcases or game meat, but does not include a game depot.

17. "Game meat" means the edible part of any game animal that has been dressed or prepared in a game establishment and passed by an inspector as fit for human consumption, and includes edible game offal.

18. "Hunter" means any person involved in the killing of game animals and/or the bleeding, partial evisceration and limited field dressing of game animal carcases, whether as part of a commercial harvesting operation or otherwise.

19. "Inedible" means inspected and judged to be, or otherwise officially determined to be, unfit for human consumption but not requiring destruction.

20. "Inspector" means a properly trained officer appointed by the controlling authority for the purpose of game meat inspection and control of hygiene, and includes a veterinary inspector. The supervision of game meat hygiene, including the inspection of game animal carcases and game meat, should be under the responsibility of a veterinary inspector.

21. "Manager" in relation to game harvesting, a game depot or a game establishment includes any person for the time being responsible for the management of the harvesting, the depot or the establishment.

22. "Offal" in relation to a game animal carcase or a game carcase means any edible or non-edible part of the animal other than the carcase.

23. "Potable water" means water that is pure and wholesome at the point of usage in accordance with requirements contained in the WHO publication *Guidelines for drinking-water quality.*

24. "Protective clothing" means special garments intended to prevent the contamination of game meat and used as outer wear by persons in a game establishment, and includes head coverings and footwear.

25. "Residues" means residues of veterinary drugs, pesticide residues, and contaminants, as defined for the purposes of the Codex Alimentarius [5].

[5] Definitions in the Seventh Edition of the Codex Alimentarius Commission's Procedural Manual are as follows:
"Veterinary drug" means any substance applied or administered to any food-producing animal, such as meat or milk-producing animals, poultry, fish or bees, whether used for therapeutic, prophylactic or diagnostic purposes or for modification of physiological functions or behaviour.
"Residues of veterinary drugs" include the parent compounds and/or their metabolites in any edible portion of the animal product, and include residues of associated impurities of the veterinary drug concerned.
"Pesticide" means any substance intended for preventing, destroying, attracting, repelling, or controlling any pest including unwanted species of plants or animals during the production, storage, transport, distribution and processing of food, agricultural commodities, or animal feeds or which may be administered to animals for the control of ectoparasites. The term includes substances intended for use as a plant-growth regulator, defoliant, desiccant, fruit thinning agent, or sprouting inhibitor and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. The term normally excludes fertilizers, plant and animal nutrients, food additives, and animal drugs.
"Pesticide Residue" means any specified substance in food, agricultural commodities, or animal feed resulting from the use of a pesticide. The term includes any derivatives of a pesticide, such as conversion products, metabolites, reaction products, and impurities considered to be of toxicological significance. "Contaminant" means any substance not intentionally added to food, which is present in such food as a result of the production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food or as a result of environmental contamination. The term does not include insect fragments, rodent hairs and other extraneous matter.

26. "Retained" means held under the control and security of the controlling authority pending final judgement.

27. "Risk analysis" includes risk assessment, risk management and risk communication, all of which are essential to the decision making process that determines acceptable levels of risk, and the implementation of those decisions.

28. "Safe and wholesome" refers to game meat that has been passed as fit for human consumption using the criteria that it:

(a) will not cause food borne infection or intoxication when properly handled and prepared with respect to the intended use;

(b) does not contain residues in excess of established Codex limits;

(c) is free of contamination to the extent consistent with consumer expectations of game meat;

(d) is free of defects that are generally recognised as objectionable to consumers; and

(e) has been produced under adequate hygiene control.

29. "Veterinary Inspector" means an inspector who is professionally qualified as a veterinarian.

30. "Viscera" means the organs of the thoracic and abdominal cavity and includes the kidneys.

SECTION IV - HARVESTING, FIELD DRESSING, COLLECTION AND HOLDING IN A GAME DEPOT

Game animals need to be harvested with due cognisance of potential environmental hazards and field operations should be such that contamination is limited to the greatest practical extent.

The natural environment in which game animals live affects the safety and wholesomeness of game meat. The potential exists for contamination of the tissues of game animals with chemical residues and this must be considered along with the more general health status of game animal populations and the health status of any farmed animals that share their habitat.

As game animals are unhusbanded their likely status with respect to chemical residues may not be well known. Obtaining all data that is available on potential chemical contamination, as well as on health status, is vital. The responsibility in this area that rests with hunters should not be overlooked.

The way in which game animals are killed, the hygiene of the bleeding and evisceration of game animal carcases when this is undertaken in the field, and their post-harvest handling, has a major impact on the safety and wholesomeness of game meat. Both the controlling authority and the operators of game establishments should undertake whatever measures are necessary to ensure that hunters and employees of game meat enterprises are aware of their obligations for hygienic harvesting of game animals and hygienic handling of game animal carcases. Where necessary the controlling authority should have , a system in place to monitor field Aspects of game meat production.

Harvesting of game animals

Game animals are shot or otherwise killed in the field, and the humaneness with which this is carried out is an important consideration. Care needs to be taken that game animals are not harvested from areas where hazards that may effect the safety of game meat exist. Likewise, the hunter is expected to accept responsibility for only harvesting apparently normal animals, or of reporting signs of disease.

31. Game animals should be killed by a method that:

(a) will not contaminate the game animal carcase in a way inconsistent with the production of hygienic game meat; and

(b) can be reliably expected to cause immediate death.

32. Game animals should not be harvested for the production of game meat from areas that are subject to an official prohibition on such harvesting, whether that prohibition be for reasons of conservation, animal health, animal or plant chemical control, or any other reason.

33. Hunters should note any abnormal condition they detect in the live game animal, or during the evisceration or bleeding of a game animal carcase, and such abnormal condition should be reported to an inspector if that game animal carcase is taken to a game establishment.

Evisceration and field dressing of game animal carcases

It is necessary with the carcases of most species of game animals that they be bled and part eviscerated as soon as possible after killing. Part evisceration (normally restricted to removal of the intact gastrointestinal tract) serves to reduce the weight and bulk of the carcase and to speed cooling. Other parts, such as heads, tails and legs, may also be removed and discarded to facilitate handling. Such removal should be restricted to those parts the removal of which will not increase exposure to contamination to an unacceptable level and which the controlling authority determines are not required for inspection judgement.

34. A game animal carcase should be bled and eviscerated without undue delay once a game animal is killed, except in the following circumstances. With the consent of the controlling authority and subject to any conditions it determines, for specified species of game animals, bleeding may be omitted, evisceration delayed and the carcases of those game animals conveyed to a game establishment without having first been eviscerated or bled.

35. Additional field dressing procedures (such as removal of the head and/or feet) may be permitted by the controlling authority where it is satisfied that they will not impede subsequent inspection or jeopardise the hygiene of game meat.

36. Where a game animal carcase is eviscerated in the field, the lungs, liver, heart and kidneys should be left in the carcase attached by their natural attachments (though they may be partially freed) to enable an inspector to inspect them in correlation with the carcase. However, with the consent of the controlling authority and subject to any conditions it determines, the lunge, liver and heart of designated species of game animals may be removed from the carcase provided that they are presented for inspection in correlation with the carcase.

37. A game animal carcase should not be skinned or dressed beyond the extent required by paragraphs 34 and 35 other than in a game establishment.

38. Game animal carcases should be removed to a game depot or game establishment without undue delay.

Cooling of game animal carcases

It is normal, but not always necessary, to rapidly reduce the temperature of game animal carcases using active refrigeration, either in a game depot or in a game establishment. The steps necessary to achieve adequate cooling vary according to the prevailing ambient temperature.

39. Game animal carcases, and any organs being recovered, should be rapidly and effectively cooled to a temperature not exceeding 7ºC (or 4ºC in the case of small game animal carcases) . Except where the ambient temperature is sufficiently low to achieve this, game animal carcases should be placed under refrigeration soon after harvesting, either in a game depot, game establishment or other specifically approved facility.

Transport of game animal carcases

The transport of game animal carcases from where they were harvested, mostly to a game depot but occasionally direct to a game establishment, may either be in small numbers by casual hunters or in larger numbers by professional hunters who work with the game processing operation in an ongoing commercial venture. Good hygienic practices should be required, particularly in the case of the latter.

Transport of game animal carcases from a game depot to a game establishment is undertaken on behalf of the manager of the game processing operation, and hence greater control can be exercised.

40. Vehicles used as part of a commercial operation to transport game animal carcases from the place the game animal was killed to either a game depot or a game establishment should be so constructed that:

(a) game animal carcases can be loaded, transported and unloaded without being contaminated; and

(b) they can be readily cleaned.

41. Vehicles used as part of a commercial operation to transport game animal carcases from the place the game animal was killed to either a game depot or a game establishment should be maintained in good repair and cleaned as necessary to ensure the production of hygienic game meat.

42. Vehicles used to transport game animal carcases from a game depot to a game establishment should be so constructed that:

(a) game animal carcases can be loaded, transported and unloaded without being contaminated; and

(b) they can be readily cleaned.

43. Vehicles used to transport game animal carcases from a game depot to a game establishment should be cleaned as soon as practicable after game animal carcases have been unloaded.

44. The transport of game animal carcases should be such that identification back to the time and place of harvesting is not lost.

General provisions

45. Where necessary to maintain standards of hygiene, contamination should be removed from a game animal carcase prior to it being transported to a game establishment, by trimming or other means approved by the controlling authority.

46. Game animal carcases should be protected from contamination and against deterioration by whatever means is necessary to maintain standards of hygiene, during transport and at all other times prior to their arrival at a game establishment.

47. Game depots should not be used simultaneously for any purpose other than the collection and interim holding of game animal carcases that are to be transferred to a game establishment.

48. Game animal carcases should not be frozen, except where this occurs naturally in cold climates, before arrival at a game establishment or inspection by an inspector.

49. A game animal carcase should arrive at a game establishment not later than 24 hours after the game animal has been killed or as soon as practicable in the case of chilled game animal carcases. The controlling authority may extend the 24 hour limit if it is satisfied that the conditions of handling, chilling and transport are such that an extension will not lead to a deterioration in the standard of hygiene of the resulting game meat.

SECTION V - PLANT AND FACILITIES

Plant and facilities in game depots and game establishments for dressing, further processing and distribution should provide an environment that allows the application of consistently applied minimum food safety requirements. The structure of the game depot or game establishment and the equipment used should limit microbial contamination to as low a practicable level as possible and prevent subsequent growth to levels that may constitute a hazard. The structure and equipment should also protect game meat from contamination from outside sources.

Game depot structure and facilities

Game depots are premises, located in areas where game animals are harvested, in which game animal carcases may be held temporarily prior to their transfer to a game establishment. Their purpose is two fold; firstly to provide a hygienic environment in which game animal carcases may be cooled and secondly to enable the accumulation of carcases in sufficient numbers for economical transportation. The standard of construction of, and equipment in, game depots is in general the same as for game establishments, though they are usually more basic because no dressing or inspection takes place in them.

50. Game depots should comply with all relevant provisions for game establishments as set out in paragraphs 51 and 53, and should include a suitable storage area for game animal carcases that is equipped where necessary with refrigeration adequate to effectively cool such carcases.

Game establishment structure and facilities

Game establishment are frequently simple in design and usually do not include the full range of ancillary operations normally found in abattoirs. The facilities need to be such that all services necessary to support hygienic operations (including game meat inspection) are available and are laid out in a manner that enables personnel to operate effectively and safely. The standard of design and construction needs to be in keeping with that in an abattoir, and not pose a risk of directly or indirectly contaminating game meat. The establishment and its equipment must be capable of being kept acceptably clean while operations are taking place and of being readily cleaned when operations have concluded. Any support facilities need to be of a standard appropriate to a food producing establishment. The structural and equipment provisions that follow should be interpreted in the context of this paragraph.

51. Game establishments should:

(a) be located in areas that are not subject to regular or frequent flooding, and that are free from objectionable odours, smoke, dust or other contaminants;

(b) have adequate working space for the satisfactory performance of all operations;

(c) be soundly constructed and ensure adequate ventilation, good natural or artificial lighting and easy cleaning;

(d) with respect to both the building and the facilities it contains, be kept in good repair at all times;

(e) be laid out and equipped so as to facilitate proper supervision of game meat hygiene, including the carrying out of inspection;

(f) be constructed so as to protect against the entrance and harbouring of insects, birds, rodents and other vermin;

(g) have a physical separation between departments in which edible material is handled and any departments set aside for the handling of inedible material;

(h) in all rooms, other than rooms provided for the accommodation of employees and inspectors, have:

(i) floors that are of waterproof, non-toxic, non-absorbent materials and that are easy to clean and disinfect;

(ii) floors that are non-slip and without crevices and (except in the case of rooms where game meat is frozen or stored frozen) that slope sufficiently for liquids to be drained off to trapped outlets that are protected by a grill;

(iii) walls that are of waterproof, nontoxic, nonabsorbent materials, light coloured, easy to clean and disinfect, smooth, and of a height appropriate to the operation conducted;

(iv) the angles between adjoining walls, and the angles at wall to floor junctions, coved; and

(v) ceilings so designed and constructed as to prevent the accumulation of dirt and condensation and that are light coloured and easy to clean; and

(i) have an efficient effluent and waste disposal system:

(i) that is maintained at all times in good order and repair;

(ii) in which all lines, including sewer lines, are large enough to carry peak loads;

(iii) in which all lines are watertight and adequately trapped and vented;

(iv) with catch basins, traps, save-alls and sumps that are fully separate from any department in which game meat is prepared, handled, packed or stored;

(v) from which waste is disposed of in such a manner as to avoid contamination of potable water supplies;

(vi) with waste lines from toilets not joining the plant effluent system prior to the final save-all; and

(vii) that is approved by the controlling authority.

52. Game establishments should include:

(a) areas reserved for the use of the inspection service that comply with the requirements set out in paragraphs 108 to 112;

(b) suitable storage areas for game animal carcases awaiting dressing and inspection;

(c) dressing areas that enable work to be performed in a satisfactory manner and that are capable of being temperature controlled to the extent necessary to enable compliance with the provision of paragraph 80;

(d) equipment in dressing areas being constructed of impermeable, corrosion-resistant materials, capable of being easily cleaned, and designed, constructed and installed such that game meat will not touch the floor;

(e) a separate room for emptying and, where undertaken, cleansing alimentary tracts should these operations occur within the game establishment 6/;

(f) refrigerated rooms suitable for the effective cooling and cool storage of game meat;

(g) facilities in the form of a room or portion of a room capable of being set aside and controlled and capable of being locked whenever required, for storing suspect game meat, and designed so as to prevent the risk of contaminating other game meat and the risk of substitution;

(h) facilities in the form of a room or portion of a room capable of being locked and suitable for the secure holding of condemned game meat, unless other adequate arrangements for disposal exist;

(i) facilities for the control of the entrances and exits; and

(j) suitable facilities for the adequate cleaning and disinfecting of transport vehicles (except that the controlling authority may instead permit a satisfactory operational alternative to facilities located on the game establishment).

[6] However, the controlling authority may approve other systems in the light of technological developments which will ensure that contamination is prevented to an equivalent extent.

53. Game establishments should be designed, constructed and equipped such that:

(a) those operations that carry a risk of contamination of game meat are sufficiently separated from game meat to avoid the risk of such contamination;

(b) game meat does not come into contact with floors, walls or fixed structures, other than those that are specifically designed for such contact;

(c) where necessary there is an overhead rail, so installed as to avoid contamination of game meat, for the moving of game animal carcases, game carcases and game meat;

(d) there is an ample supply of potable water under adequate pressure, together with facilities for its storage and distribution under conditions that guard against back siphonage and adequately protect against contamination;

(e) there is equipment installed capable of providing an adequate supply of:

(i) hot potable water at no less than 82ºC; and

(ii) hot and cold running water or water premixed to a suitable temperature for hand washing; or

(iii) cold or warm sanitising solution of acceptable concentration;

(f) where a supply of non-potable water exists under circumstances set out in paragraph 85:

(i) that supply is completely separate from the supply of potable water; and

(ii) all pipes and any vessels within which it is contained are distinctively identified by colour or by other means approved by the controlling authority;

(g) there is adequate natural or artificial lighting installed throughout the premises of a type that does not alter colours and that is capable of providing illumination of an intensity not less than that detailed in paragraphs 82 and 109;

(h) where light bulbs or light fixtures are located over game animal carcases, game carcases or game meat, they are of the safety type, or otherwise protected so as to prevent contamination of game meat in case of breakage;

(i) there is adequate ventilation provided to prevent excessive heat, steam and condensation and to ensure that the air of premises is not contaminated with odours, dust, vapour or smoke;

(j) any windows are fitted with whole panes and that those that open, and any other ventilation openings, are fitted with screens of a type that are easily removable for cleaning;

(k) door ways are sufficiently wide to permit ready traffic;

(l) doors that open from departments where edible material is handled, unless fitted with an effective air screen, are solid and:

(i) as far as practicable selfclosing; or

(ii) snug-fitting and of the double action type;

(m) any stairs located in a room where edible material is handled are constructed so that they can be easily cleaned and no contamination can be caused by material falling from them;

(n) any lift cage is so constructed as to afford adequate protection of game meat against contamination and it and its shaft are capable of being effectively cleaned;

(o) any platform, ladder, chute or similar equipment in a room used for the preparation of game meat is constructed so as to be capable of being effectively cleaned and is of material that is:

(i) resistant to fracture, abrasion and corrosion; and

(ii) capable of being effectively cleaned;

(p) any chutes are fitted with inspection and cleaning hatches where these are necessary to ensure cleanliness;

(q) all rooms used for dressing of game animal carcases, or the deboning, preparation, packaging or other handling of game carcases or game meat, are equipped with adequate facilities for washing hands, and these facilities:

(i) have waste water lines leading to drains;

(ii) are conveniently located for the use of personnel who will work in the room;

(iii) are connected to a warm water supply;

(iv) have taps of a non-hand operable type; and

(v) are fitted with a dispenser (or dispensers, as appropriate) for liquid soap or other hand cleansing agent;

(r) all rooms used for dressing of game animal carcases, or the deboning, preparation, packaging or other handling of game carcases or game meat are equipped with adequate facilities for the cleaning and disinfecting of implements, and these:

(i) have waste water lines leading to drains;

(ii) are conveniently located for the use of personnel who will use the implements;

(iii) are set aside exclusively for the cleaning and disinfection of knives, steels, cleavers, saws and other implements; and

(iv) are of such nature and size as to permit proper cleaning and disinfection of implements;

(s) all rooms in which game animal carcases, or game carcases, parts of game carcases or edible game offals, are placed for chilling, freezing or refrigerated storage are fitted with temperature recorders; and

(t) all rooms in which game carcases, parts of game carcases or edible game offals are placed for chilling have proper insulation of walls and ceilings and:

(i) if overhead refrigerating coils are installed, have insulated drip pans fitted beneath them; and

(ii) if floor type refrigerating units are installed, they are placed within curbed and separately drained areas unless located adjacent to floor drains.

54. The construction and layout of any chilling room, freezing room, freezer store or freezer should satisfy the relevant provisions of paragraph 53.

55. Game establishments in which game carcases are deboned and/or game meat is cut up should have:

(a) a room or rooms, capable of being temperature controlled, for the holding of game carcases unless deboning and/or cutting up is undertaken as part of a line operation after game animal carcase dressing without intervening storage;

(b) a room or rooms, physically separated from other rooms and capable of being temperature controlled, for deboning of game carcases and cutting up of game meat; and

(c) separation of the area in which deboning, cutting and primary wrapping operations are to be undertaken from the place where packaging is to be undertaken, unless the controlling authority permits an operational approach to prevent the packaging causing contamination of game meat.

Amenities

56. Each game establishment should include amenities for employees that:

(a) are commensurate in size with the number of employees;

(b) include changing room, separate area for eating meals, toilets with flushing water closets, and showers;

(c) have hand washing facilities, in close association with toilets, that:

(i) are connected to a warm water supply;

(ii) have taps of a non-hand operable type;

(iii) are fitted with a dispenser (or dispensers, as appropriate) for liquid soap or other hand cleansing agent; and

(iv) are associated with suitable hygienic means of drying hands;

(d) are equipped to permit adequate lighting, ventilation and, where necessary, heating; and

(e) do not open directly to any work area.

57. Each game establishment should have adequate and suitably equipped working areas and amenities for game meat inspection personnel and office accommodation for the inspection service that complies with the requirements set out in paragraphs 108 to 112.

Equipment and related items

58. All equipment, implements and utensils used in game establishments that come in contact with game animal carcases or game meat should be of a design and construction that facilitates cleaning, and:

(a) have smooth impervious surfaces;

(b) be resistant to corrosion and made of a material that is nontoxic and does not transmit odour or taste;

(c) be smooth, free from pits and crevices; and

(d) be capable of withstanding repeated exposure to normal cleaning and disinfection;

and if fixed or stationary, be installed in such a manner as to permit easy access and thorough cleaning.

59. Equipment and utensils for use with inedible or condemned materials should be distinctively identified.

Transport vehicles

Vehicles in which game meat is transported from a game establishment should be designed, constructed and equipped to prevent contamination of that game meat and to prevent or limit the growth of microbes.

60. Vehicles or shipping containers in which game carcases or game meat is to be transported should:

(a) have all internal finishes made of corrosion resistant material that is smooth, impervious and easy to clean and disinfect;

(b) have joints and doors sealed so as to prevent the entry of pests and other sources of contamination;

(c) be designed, constructed and equipped such that the required temperature can be maintained while game carcases or game meat is being carried; and

(d) be designed, constructed and equipped such that game carcases or game meat does not come into contact with the floor.

SECTION VI - HYGIENIC OPERATING REQUIREMENTS AND PRACTICES

Operations and practices for holding, dressing, further processing and distribution should ensure the application of consistently applied minimum food safety standards. Hygienic operations and practices should limit microbial contamination to as low a practicable level as possible and prevent subsequent growth to levels that may constitute a hazard. Operations and practices should also protect game meat from other sources of contamination. A process control system should be in place to prevent hazards in game meat and should be based on the HACCP approach.

Health of persons

Personnel who work in the game meat industry, whether in the field, in game depots or in game establishments, should have a health status that does not contribute to the transmission of food-borne diseases.

61. Persons:

(a) who as part of a commercial operation, bleed and eviscerate game animal carcases in the field; as well as persons

(b) who come in contact with game animal carcases, game carcases or game meat in the course of their work in a game depot or game establishment;

should have a medical examination prior to their employment if the controlling authority, acting on medical advice, considers that this is necessary. In such circumstances, the manager of the field operation or the manager of the game depot or game establishment, as appropriate, should maintain the medical certificates of employees in a systematic manner and they should be available for perusal by an inspector. Medical examination of such persons should be carried out at other times when clinically or epidemiologically indicated or as prescribed by the controlling authority.

62. Care should be taken to ensure that persons, while known or suspected to be suffering from, or to be a carrier of a disease likely to be transmitted through game meat or while afflicted with infected wounds, skin infections, sores or with diarrhoea, are:

(a) not permitted to bleed and eviscerate game animal carcases in the fieldas part of a commercial operation; or

(b) not permitted to work or be present in any area of a game depot or game establishment in any capacity in which there is any likelihood of them directly or indirectly contaminating game meat with pathogenic microorganisms.

Any person so affected should immediately report that condition to the manager.

Cleanliness of premises

Cleanliness of plant and equipment so that there is neither direct nor indirect contamination of game meat is a fundamental principle of game meat hygiene.

63. For game depots, a cleaning and sanitation programme should be established by the manager that ensures:

(a) the premises, including any amenities, and any equipment and utensils, are kept clean and are immediately and effectively cleaned and disinfected whenever they come into contact with pathological material, infective material or otherwise become contaminated;

(b) ¡game animal carcases are not contaminated during cleaning or disinfection of the premises or of any equipment or utensils;

(c) that no detergents, sanitising agents or disinfectants are allowed to come into either direct or indirect contact with game animal carcases unless they conform to public health requirements for such contact; and

(d) no cleaning preparation or material, or any paint or other surface treatment, likely to contaminate game meat, is used in any part of a game depot where such contamination is possible.

64. For game establishments, a cleaning and sanitation programme should be established by the manager that ensures:

(a) the premises, including the amenities, are kept clean;

(b) equipment, implements and utensils (including knives, knife pouches, cleavers, saws and trays) are:

(i) cleaned at frequent intervals during and/or between periods of work;

(ii) immediately and effectively cleaned and disinfected whenever they come into contact with pathological material, infective material or otherwise become contaminated; and

(iii) in a clean and disinfected state at the beginning of each working day;

(c) washing down, cleaning and disinfection are carried out in compliance with this Code;

(d) game animal carcases, game carcases or game meat are not contaminated during cleaning or disinfection of rooms, equipment or utensils;

(e) that no detergents, sanitising agents or disinfectants are allowed to come into either direct or indirect contact with game animal carcases, game carcases or game meat unless they conform to public health requirements for such contact;

(f) any residue of detergents, sanitising agents or disinfectants used for the washing of floors, walls or edible product equipment are removed by thorough rinsing with potable water before the area or equipment is again used; and

(g) no cleaning preparation or material, or any paint or other surface treatment, likely to contaminate game animal carcases, game carcases or game

meat, is used in any part of a game establishment where game animal carcases are dressed or where game carcases or game meat is prepared, handled, packaged or stored.

Pest control

Pests always retain the potential to contaminate game meat by direct or indirect contact. Pest control programmes are an integral part of game meat hygiene, with caution being required that the means of control does not in itself become a source of contamination.

65. An effective and continuous programme for the control of pests, including insects, birds, rodents and other vermin, should be maintained in game depots and game establishments, and should include:

(a) detailed documentation of the programme;

(b) the programme being under the direct control of a representative of the manager who is suitably qualified for the task;

(c) the regular examination of the surroundings for evidence of infestation with pests;

(d) if pests are in evidence, eradication measures carried out under skilled supervision and with the knowledge of an inspector;

(e) only the use of pesticides approved for such use by the controlling authority;

(f) ensuring that chemicals used for pest control purposes do not contaminate game animal carcases, game carcases or game meat;

(g) the use of pesticides only if other control methods cannot be used effectively;

(h) the removal of all game animal carcases, game carcases or game meat from rooms to be treated before pesticides are used;

(i) the thorough washing of all equipment and utensils that are in a room that has been treated with pesticides before they are used again; and

(j) the storage of any pesticides or other toxic substances used for pest control in separate locked rooms or locked cabinets with access to them limited to authorized and properly trained personnel acting in accordance with the pest control programme.

General operational hygiene

All operations and practices should be carried out in a manner that limits contamination to as low a level as possible. Good personal hygiene and adequate training programmes are important components, as is adequate supervision to ensure compliance with operational requirements.

66. Managers of:

(a) the field segment of a commercial game animal harvesting operation;

(b) game depots; and

(c) game establishments;

should arrange for adequate and continuing training of all employees who work in the production of game meat, and of hunters with whom they have a continuing commercial relationship, in hygienic handling of game meat and in personal hygiene. Instruction should include relevant parts of this Code.

67. Managers of game depots and managers of game establishments should promote the principles of, and offer instructions in, the hygienic handling of game animal carcases to hunters with whom they have no continuing commercial relationship but who may supply them with game animal carcases. Such promotion and instruction should include relevant parts of this Code.

68. Every person, including a visitor, in an area of a game establishment where game animal carcases are stored or dressed or game meat is prepared or handled, should maintain a high degree of personal cleanliness, and at all times while in the area wear suitable light coloured protective clothing including:

(a) head covering; and

(b) footwear;

that is washable (unless disposable) and that is maintained in a clean condition consistent with the nature of the work in which the person is engaged.

69. Personal effects and clothing should not be deposited or stored in an area of a game depot or of a game establishment used for holding or dressing game animal carcases, or the preparation, handling, packaging or storing of game carcases or game meat. Protective clothing, knife pouches, belts and working implements not being used should be kept in a place provided for the purpose where they will not contaminate game meat or become contaminated themselves.

70. All persons at a game establishment, while engaged in the dressing of game animal carcases or the preparation, handling, packaging or transport of game meat, should wash their hands frequently and thoroughly with a liquid soap under running warm potable water.

71. All persons working at a game depot or game establishment should always wash their hands before commencing work, immediately after using the toilet, after handling contaminated material and whenever else necessary. After handling any material that might be capable of transmitting disease, hands should immediately be washed and disinfected. Notices requiring hand washing should be prominently displayed.

72. Gloves, if used in the handling of game meat, should be maintained in a sound, clean and sanitary condition. The wearing of gloves does not exempt any person from having thoroughly washed hands. Gloves should be made of an impermeable material except where their usage would be inappropriate or incompatible with the work involved and where the use of gloves of permeable material does not adversely affect hygiene.

73. Any behaviour or unhygienic practices that could potentially result in contamination of game meat should be prohibited in any part of a game depot or game establishment.

74. Any person in a game depot or game establishment who has a cut or wound should discontinue handling game animal carcases or game meat, or game meat contact surfaces, until the injury is completely protected by a water proof covering that is firmly secured, and that is conspicuous in colour. Adequate first aid facilities should be provided for this purpose.

75. Doors opening to the outside from departments where game animal carcases are held or dressed, or game meat is handled, unless protected by an effective air screen, should be kept closed as far as practicable.

76. In game establishments, where a skip or trolley, or any container used in a department where edible material is handled, enters an area set aside for the handling or storage of inedible material, it should not reenter any edible department until it has been cleaned and disinfected.

77. Where containers or cartons are assembled in parts of a game establishment where game animal carcases are dressed, or where game meat is cut up or deboned, prepared, handled, packaged or stored, they should be assembled in such a manner that there is minimal risk of contaminating game meat.

78. Where containers, equipment and utensils are held in any area of a game establishment where game animal carcases are dressed, or where game meat is cut up or deboned, prepared, handled, packaged or stored, they should be held in such a manner that there is minimal risk of contaminating game meat.

79. Aprons and other items of protective clothing, other than footwear, should not be washed on the floor.

80. Work areas of a game establishment, including areas in which game animal carcases are dressed, should be temperature controlled where this is necessary to prevent a rise in the temperature of game animal carcases, game carcases and game meat that is of sufficient magnitude to jeopardise safety and wholesomeness.

81. Effective ventilation should be provided in work areas of a game establishment to prevent excessive heat, steam and condensation and to ensure that the air is not contaminated with odours.

82. Lighting intensity throughout a game establishment should not be less than:

(a) 540 lux in areas where detailed examination or trimming is undertaken;

(b) 220 lux elsewhere in work rooms; and

(c) 110 lux in other areas;

while the dressing of game animal carcases is being undertaken, and when game meat is being deboned or prepared.

83. No animal should enter any part of a game depot or game establishment.

84. Notwithstanding anything elsewhere in this Code, materials employed in the construction or maintenance of a game depot or game establishment may be used at any time that such use is necessary, provided there would be no danger of contamination of game animal carcases or game meat.

Water and operational hygiene

Water is used in game depots and game establishments both for cleaning and disinfecting. Water itself can carry contaminants and it is therefore important that its quality is appropriate to the operation and that it is used carefully to prevent inadvertent direct or indirect cross contamination.

85. All water used in game depots and game establishments should be potable, except that water that falls outside of the standard for potable water because of physical

and/or chemical characteristics may be used in situations where there is no risk of contamination of either game animal carcases or game meat.

86. In game establishments, there should be an adequate supply of hot potable water at not less than 82ºC, and of warm potable water for hand washing, at all times while dressing of game animal carcases is being undertaken, and when game meat is being deboned or prepared.

87. Sterilisers should be reserved exclusively for cleaning and disinfection of knives, steels, cleavers, saws and other such implements.

88. Soap and detergent dispensers located in areas that are in use should be adequately filled.

89. Hand drying facilities that have been provided should be useable in any area where persons are working with game meat. When this entails the provision of disposable towels, suitable receptacles for used towels should be available and be used.

Process control programmes

The process of game meat production, right from the harvesting of game animals through to the transport of the finally prepared game meat, involves many steps; at each of these steps there can be risk to safety and wholesomeness. To adequately control those risks and protect the consumer requires a systematic approach to the process. A process control programme includes systematic identification of hazards (raw materials, processes, procedures), establishment of target levels and tolerances, monitoring, corrective actions, verification procedures and documentation. The HACCP approach is a valuable tool to this end and efficient process control programmes require a joint approach by industry and the controlling authority.

Both the game meat industry and the controlling authority have important roles in process control. This necessitates a joint approach.

There are advantages in standardisation of process control systems in game meat operations (such as the facilitating of training, the assessment of compliance and the certification of fresh meat) but each programme should be individually designed on a premisesbypremises basis for the particular circumstances in which it is to operate.

90. Each step in the production of game meat should be the subject of an effective process control programme. The process control programme should be designed specifically for the operation concerned and have as its objective the production of safe and hygienic game meat that complies with all the provisions of this Code, as well as any additional requirements prescribed by the controlling authority.

91. The manager of a game depot, game establishment or game animal harvesting operation should be responsible for the development and continuance of the process control program. While the manager may delegate supervision of the process control programme to a properly trained subordinate, overall responsibility should never be delegated. The successful application of a process control programme requires a team approach, and the full commitment and involvement of management and employees.

92. An inspector should monitor the application and results of the process control programme with respect to all matters touching on the safety and hygiene of game meat as well as all matters relating to additional requirements imposed by the controlling authority.

93. The details of measures that comprise the process control programme should be fully documented and reviewed as frequently as necessary to ensure their continued relevance; the inspector with responsibility for monitoring the programme should have unrestricted access to details of the programme, as well as to records of the results of monitoring the process.

Operational hygiene of dressing in a game establishment

There is a particular risk of contamination, both seen and unseen, in the dressing of game animal carcases in a game establishment. This arises because game animals are harvested in the wild, usually part dressed in the field, and often reach the game establishment via a game depot after some delay. Good hygienic practice and good manufacturing practice are therefore particularly important to minimise this risk. Training programmes are an important component in achieving hygienic dressing, even with small work forces; adequate supervision to ensure compliance with operational requirements is particularly important.

94. Dressing of game animal carcases should be carried out in a manner that ensures the production of clean game meat.

95. Once the removal of the hide, skin, pelt or feathers has commenced, game animal carcases should be separated from each other to avoid contact between them and the risk of cross contamination. Separation of game animal carcases should be maintained until they have been examined and passed by an inspector. Carcases should only come into contact with surfaces or equipment essential to handling, dressing and inspection.

96. The following should apply in skinning and associated dressing operations in a game establishment;

(a) game animal carcases should be skinned in a manner that avoids contamination of game meat;

(b) pumping of air or gas between the skin and the carcase to facilitate skinning should only be permitted if it is of such nature and quality that itdoes not contaminate the game meat;

(c) skinned game animal carcases should not normally be washed prior to inspection but this may be allowed subject to the prior approval of an inspector or under circumstances determined by the controlling authority;

(d) game animal carcases that have been eviscerated should not be dehaired or defeathered by immersion scalding;

(e) game animal carcases that are scalded, flamed or similarly treated should be scoured of all bristles, hair, scurf and dirt;

(f) the water in scalding tanks should be changed as frequently as practicable; and

(g) with respect to udders:

(i) lactating or obviously diseased udders should be removed at the earliest appropriate time during dressing; and

(ii) no secretion from, or contents of, udders should be allowed to contaminate the carcase and therefore udders should be removed in such

a manner that teat and udder substance remains intact and milk ducts or sinuses are not opened.

97. With respect to further dressing in a game establishment:

(a) where evisceration is undertaken, it should be undertaken in a hygienic manner;

(b) no paper, cloth, wad, sponge or brush should be used in the washing of any game animal carcase or game carcase;

(c) no game animal carcase, game carcase, game meat or offal should be inflated with air or gas in a way that alters its appearance prior to inspection or causes contamination;

(d) no hide, skin, pelt or feathers should be washed, defleshed or left in any part of a game establishment used for the dressing of game animal carcases or for the preparation or holding of game meat;

(e) all inedible material derived from the dressing of game animal carcases should:

(i) be removed, as soon as the inspection procedure permits, from the dressing area in a manner that avoids contaminating the area or game meat; and

(ii) after removal from the dressing area, if subsequently treated in parts of the game establishment, be treated in areas intended for this purpose in a way that does not risk contamination of game meat;

(f) faecal and other objectionable matter that contaminates game animal carcases should be carefully trimmed off; and

(g) where an inspector considers that the manner in which game animal carcases are being dressed or under which the game carcases or game meat are being handled, prepared or packaged, will adversely affect:

(i) the safety and wholesomeness of the game carcase or game meat;

(ii) the hygiene of production; or

(iii) the efficiency of game meat inspection;

and the manager has not taken effective action to correct the problem, the inspector should have the power to require a reduction in the rate of production or the suspension of operations for the time being in any specified area of the game establishment.

Operational hygiene after dressing

Any operations following dressing and inspection, including deboning and cutting, freezing and storing, also entail a risk of contamination, and a risk of growth of microbial contaminants. Good hygienic practice and good manufacturing practice will minimise this risk. Time, temperature and water activity are all important interacting factors in controlling microbial growth and they need to be controlled in such a way that the growth of microbiological contaminants is limited to non-hazardous levels.

Packaging and wrapping is used to protect game meat from external contamination during handling, storage and transport. It is important that neither the packaging nor wrapping itself, nor the packaging or wrapping procedure, causes contamination of game meat.

98. Game carcases and game meat passed as fit for human consumption should be:

(a) handled, stored or transported in a manner that will protect it from contamination and deterioration;

(b) removed without delay from the dressing area; and

(c) held and handled under conditions that maintain its internal temperature at not higher than 7ºC (or 4ºC in the case of small game animal carcases).

99. Rooms, equipment and utensils set aside for cutting-up, deboning or further preparing game carcases and game meat should be reserved for those purposes and not used for any other purpose.

100. Rooms in which deboning or cutting is in progress should be maintained at a temperature and humidity appropriate to the operation.

101. If game meat is packaged or wrapped:

(a) packaging material should be stored and used in a clean and sanitary manner;

(b) wrapping and packaging should be sufficient for the purpose of protecting the game meat from contamination in the conditions under which it is to be handled, transported and/or stored;

(c) wrapping should be nontoxic and should not leave harmful deposits of any kind on the game meat, or otherwise contaminate it; and

(d) cases or cartons used should be provided with a suitable inner liner or other satisfactory means of protecting game meat, except that the liner or other protection may not be required if individual pieces of game meat, such as cuts, are individually wrapped before packing.

102. Inventory control should be maintained over all frozen game meat and there should be effective monitoring of the freezing and storage process to ensure that time and temperature parameters are met.

103. Where game carcases, parts of game carcases or game meat are placed in a freezing room for freezing, the following provisions should be observed:

(a) game meat that is nor. in cartons should be hung or placed on suitable corrosion resistant trays in a manner permitting adequate circulation of air around the game meat;

(b) cartons that contain game meat should be stacked so as to permit adequate circulation of air around each carton;

(c) game meat that is not in cartons should be held in a manner that precludes drip from one piece of game meat falling on to any other piece; and

(d) care should be taken where game meat is held on trays to avoid contact between the base of any tray and any game meat stored beneath that tray.

104. where game carcases, parts of game carcases or game meat are placed in any freezer store, the following provisions should be observed:

(a) game meat, whether in carcase form or in cartons, should not be stacked directly on the floor and should be positioned so that there is adequate air circulation; and

(b) the freezer store should be operated and maintained at a temperature that will give adequate protection to the game meat.

105. Where game carcases, parts of game carcases or game meat are placed in freezing rooms or frozen storage rooms:

(a) entry to those rooms should be restricted to personnel necessary to carry out operations;

(b) doors of those rooms should not be left open for extended periods and should when possible be closed immediately after use; and

(c) temperatures should be recorded.

operational hygiene of transportation of game meat

Transportation of game meat from a game establishment is an area of particular risk for contamination of game meat from a variety of sources and of increased difficulty in maintaining water activity and temperature parameters that assure safety and wholesomeness. Particular care should be taken during transportation to prevent the growth of microorganisms that might be present.

106. Game meat should only be transported:

(a) in a means of transport that was clean and in good repair before loading and, if necessary, disinfected;

(b) if with other goods, in a way that does not adversely affect the game meat;

(c) if game carcases, sides or quarters, as a hanging load or in a suitable manner on racks or similar equipment, except that if they are adequately wrapped and frozen, they may be carried under other hygienic arrangements;

(d) if unwrapped and unfrozen edible game offal, in suitable closed containers;

(e) so that it does not contact the floor;

(f) in a vehicle or container that prevents the entry of pests and other sources of contamination; and

(g) in a way that prevents unacceptable rises in temperature.

107. Where game meat is accidentally exposed to adverse conditions during transport and its wholesomeness is in doubt it should be examined and evaluated by a veterinary inspector, or by another suitably qualified person who is accountable to a veterinary inspector, before any further step is taken.

SECTION VII - SPECIAL REQUIREMENTS FOR INSPECTION

Facilities and equipment should be provided that allow adequate monitoring and control of game meat hygiene by industry personnel and the controlling authority. All aspects of game meat hygiene should be supervised by an official veterinarian. Each game establishment and its supervising veterinarian should have access to laboratory facilities and analytical procedures to support hygienic practices and process control programmes.

Facilities and equipment

108. Game establishments should be laid out and equipped so as to facilitate proper supervision of game meat hygiene including the performance of game meat inspection.

109. Lighting intensity at all inspection points should not be less than 540 lux.

110. Each game establishment should include amenities for game meat inspection personnel that are commensurate in size with the number of inspectors and that comply with the requirements of subparagraphs (b) to (e) of paragraph 56 of this Code.

111. Suitably equipped office accommodation should be provided for the exclusive use of the game meat inspection service.

112. Laboratory facilities should be readily available for the purpose of game meat inspection and game meat hygiene.

Veterinary supervision of game meat hygiene

113. All game meat hygiene requirements in this Code should be supervised by an official veterinarian (though those requirements prior to the arrival of game animal carcases at a game establishment may be supervised by a separate authority in strict collaboration with the official veterinarian). For every game establishment there should be at least one official veterinarian appointed to supervise hygiene, including game meat inspection.

Laboratory control procedures

114. It is desirable that the management of each game establishment, in its own interest, have access to laboratory services. Analytical procedures used should follow recognized or standard methods in order that the results may be readily interpreted.

SECTION VIII - GAME MEAT INSPECTION

Inspection should be carried out in a systematic manner and should take account of all available information from the field.

Game meat inspection procedures should ensure the absence of all contamination identifiable at inspection and should limit the potential for unseen contamination to as low a level as possible.

Game meat inspection is of necessity limited in scope because no Ante-mortem inspection is possible and, further, because the gastrointestinal tract (and possibly other parts) has usually been discarded in the field. In addition, the different species that may be harvested as game and the various diseases to

which those species are susceptible, add to the challenge of establishing appropriate inspection procedures. During inspection, the inspector correlates any information that may be available from the field with what can be discerned by examining the game animal carcase and those organs that are available. Inspection should be efficient and effective and this implies tailoring procedures to the particular circumstances. To do this properly necessitates formal risk analysis.

115. Information available from the field, whether originating from hunters or elsewhere, should be used in an effective and appropriate manner if optimal inspection is to be achieved. Inspection should be carried out with a full knowledge of all relevant information available pertaining to the game animal carcases, and the game animals from which those carcases were derived, prior to their arrival at the game establishment.

116. No game animal carcase should proceed for dressing until it has been checked by an inspector, or by a suitably qualified employee responsible for this function to an inspector, to determine whether or not it is suitable for dressing for the production of game meat. Game animal carcases found by this check to be unsuitable for this purpose, whether because of deterioration or any other means, should immediately be removed from any room in which carcases awaiting dressing are held and be disposed of as unsuitable for human consumption.

117. Where a lymph node, organ or any carcase tissue is being incised for inspection, the cut surface should be cleanly sliced to present a view that is not distorted. Where an incision is required to be made, it should as far as possible be made in a way that overcomes any risk of contamination, whether to game meat, premises, equipment or personnel.

118. Parts of a game animal carcase required for inspection should be identifiable with the carcase from which they were removed until inspection has been completed.

119. No person should remove from the inspection area of a game establishment any part of any game animal carcase, organ, or any viscera (other than a part, organ or viscera that is not being recovered for human or animal consumption and is not required for inspection) , until the inspector has completed the inspection and a decision has been made.

120. Except with the permission of the inspector, or in accordance with arrangements established by the controlling authority in the case of certain categories of defect, no person in a game establishment should, prior to the inspection of any game animal carcase being completed:

(a) remove any serous membrane or any other part from the carcase;

(b) remove, modify, or obliterate any evidence of disease or defect in the carcase or organ; or

(c) remove any mark or identification from the hide or any other part;

until the inspector has completed the inspection and given a decision.

121. Parts that are to be inspected should be dressed to the extent necessary to facilitate inspection.

122. Any game animal carcase or part thereof suspected of being unfit for human consumption but which requires a more detailed examination before a decision can be made, should be suitably identified and retained, separate from other game meat, under

the control of an inspector. The relevant parts of that game animal carcase should be assembled for further examination. This examination, and any laboratory test or other examination deemed necessary by a veterinary inspector for reaching a final decision, should be undertaken.

123. The method of identification that denotes that a game animal carcase and part thereof have been retained for further inspection should be laid down by the controlling authority.

124. The final responsibility for inspection decisions on fitness for human consumption rests with a veterinary inspector.

SECTION IX - GAME MEAT INSPECTION PROCEDURES

The controlling authority should establish standard procedures to inspect game animal carcases and any individual tissues and organs that are required to be presented for inspection. The procedures should be determined on the basis of the species of animal, the public health risks that might be anticipated and the animal health situation.

The procedures for game meat inspection should be based on current practice and knowledge and the risk analysis approach. Undertaking risk analysis of different game meat inspection procedures is highly desirable and enables the development of procedures that correctly reflect advances in the science of game meat hygiene and what can be known of the health status of the animals to be inspected. The procedures that are most appropriate to any particular line of game animal carcases will vary not only according to species, but also with whatever other information may be available about the wildlife population from which they were harvested. Minimum inspection procedures as set out in the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animals and Meat are a useful commencing point in developing appropriate procedures.

125. Game meat inspection should be carried out in a systematic manner and should ensure that game meat passed for human consumption is safe and wholesome. Inspection procedures should ensure the absence of all contamination identifiable at post-mortem inspection and should limit the potential for unseen contamination to as low a practicable level as possible.

126. The controlling authority should establish for each species of game animal carcase permitted entry to a game establishment the standard procedures required to inspect the available tissues and organs. These procedures should be established on the basis of risk analysis and risk management, with particular emphasis on the animal health status of the region from which harvesting of game animals may be undertaken.

127. An inspector should carry out additional inspection procedures whenever necessary in cases of suspicion of a disease or defect, and be provided with adequate facilities to do so.

128. In the course of inspection the inspector should pay particular attention to:

(a) signs consistent with natural death, death by trapping or of a moribund state at the time of death;

(b) indications of decomposition;

(c) signs of disease transmissible to man or animals;

(d) presence of parasites in the skin or muscular systems;

(e) evidence consistent with poisoning or intoxication from environmental contaminants;

(f) evidence of residues of poisons or pesticides;

(g) injuries or swelling, presence of oedema or fluid, emaciation;

(h) unusual colour or smell or deviation detected by sensory means; and

(i) contamination that cannot be removed by cleaning or trimming.

129. Tissues and organs not intended for human consumption should be inspected in terms of relevance to overall judgements and dispositions for the game animal carcase and other parts. Additional sentinel procedures may be periodically required to check for diseases that may occur unexpectedly in a game animal population that is subject to harvesting for game meat production.

130. Countries should have measures in force in their game meat inspection system to protect the public from trichinosis.

SECTION X - GAME MEAT INSPECTION JUDGEMENTS AND ENFORCEMENT

Judgement of game animal carcases and game meat should ensure that game carcases are, and game meat is, safe and wholesome.

The process of inspection judgement begins with decisions at the time of pre-dressing inspection of game animal carcases in a game establishment, and normally ends with final judgement at the completion of the routine inspection specified by the controlling authority. A judgement is first taken as to whether a game animal carcase is suitable to be dressed for human consumption; an inspector then takes a judgement following dressing and inspection into which of three categories meat from dressed game animal carcases should be placed. It is usual to judge game animal carcases more severely than would be the case of similar carcases in an abattoir because there is limited information available on the pre-harvest health of game animals and usually less organs are available for postmortem inspection. While the whole range of judgements available for abattoir inspection may be available, it is usual to restrict judgements to three categories [7]. These are:

[7] The additional judgement categories available, as detailed in Section VIII of the Code for Ante-mortem and Postmortem Inspection of Slaughter Animals and for Ante-mortem and Postmortem Judgement of Slaughter Animáis and Meat, are:

conditionally approved as fit for human consumption;

meat showing minor" deviations from normal but fit for human consumption; and

approved as fit for human consumption, with distribution restricted to limited areas.

(a) unconditionally safe and wholesome and therefore fit fo rhuman consumption;

(b) totally unfit for human consumption, and therefore requiring to be condemned or otherwise disposed of; if unfit for human consumption, a subsequent decision has to be taken as to whether the game meat can

be recovered for some other purpose such as for animal feeding or whether it needs to be destroyed; and

(c) partially unfit for human consumption, which requires the removal and disposal of abnormal parts, typically wounds, before the remainder can be passed as fit for human consumption.

Judgement is aimed at protecting:

(a) consumers against food borne infection, intoxication, and hazards associated with residues;

(b) food handlers against occupational zoonoses;

(c) livestock against the spread of infections, intoxications and other diseases of socioeconomic importance, in particular notifiable contagious diseases, officially controlled diseases and toxic effects originating from feed or the environment;

(d) companion and other animals that closely associate with humans, and wild fauna, against zoonoses they may transmit to humans; and

(e) consumers (and indirectly the game meat processing industry) against economic damage from game meat of inferior standard or abnormal properties.

131. Consideration should be taken of any infection, disease or defect encountered and an appropriate final judgement made based on all available evidence, such as reports received from hunters, observations made during collection and transport of game animal carcases, findings, made at inspection and the results of any laboratory examinations that may be required.

132. In case of suspicion, and if the initial findings at inspection do not enable the drawing of final conclusions, a provisional decision should be taken or the game animal carcase condemned. A game animal carcase that is awaiting a final judgement should be "retained for further inspection" or "retained pending laboratory examination", and remain under the control of an inspector until further information enables a final judgement to be made. If the necessary further examinations or tests cannot be made, or are not made, and the suspicions cannot be dismissed by any other means, the game animal carcase should be condemned or otherwise judged as consistent with the confirmation of the disease or defect suspected.

133. Game meat that has been conditionally approved as fit for human consumption should remain under the control of a veterinary inspector, or of another person who is accountable to a veterinary inspector, until the required treatment has been applied. The game meat should be condemned or otherwise disposed of if the required treatment is not applied.

134. Judgement should be based on the relevant legislation administered by the controlling authority. While safeguarding human health and animal health, judgements should not impose unnecessary costs on industry.

135. It is important that the individual inspector making judgements is fully supported by legislation and indemnified against the consequences of decisions taken in good faith.

136. The controlling authority should have ultimate responsibility for all decisions concerning all inspection judgements.

137. If the decision of the controlling authority is contested, the national legislation for arbitration should apply. The contesting of a decision should not, however, delay the taking of any action when the controlling authority decides such delay would jeopardise human health or animal health.

Judgement categories

138. The decisions at inspection are classed into the following categories of judgement:

1. Approved as fit for human consumption
2. Totally unfit for human consumption
3. Partially condemned or otherwise disposed of as unfit for human consumption

139. The following should be the general criteria and principles of implementation for the categories of judgement:

CATEGORY 1 - Approved as fit for human consumption

140. When the inspection and any other information available has revealed no evidence of any unacceptable disease or defect and if the dressing operation has been implemented in accordance with hygienic requirements, the game carcase and offals being recovered for edible purposes should be approved as fit for human consumption without any restriction, and as such may enter unrestricted trade, provided no animal health restrictions are otherwise applicable.

CATEGORY 2 - Totally unfit for human consumption

141. The game animal carcase and all offals should be condemned or otherwise disposed of for inedible purposes in one or more of the following circumstances:

(a) they are hazardous to food handlers, consumers, livestock and/or wildlife;

(b) they show signs consistent with natural death, death by trapping or of a moribund state at the time of death;

(c) they show indications of decomposition;

(d) they show extensive injuries or swellings, considerable oedema or fluid, or emaciation;

(e) they contain residues that exceed the established limits;

(f) there are unacceptable deviations, detectable by sensory means, from normal game meat; or

(g) there is contamination that cannot be removed by cleaning or trimming.

142. The disposal and utilization of game animal carcases and parts of game animal carcases judged unfit for human consumption should reliably prevent such game meat from causing a pollution problem, endangering human health or animal health, or illegally reentering the human food chain.

143. Wherever feasible, game meat that is unfit for human consumption may be authorised to be used for animal feeding, provided there are adequate precautions to prevent misuse and to avoid dangers to human health and animal health.

144. In general terms game meat that is unfit for human consumption may be utilized for animal feeding if there is no health hazard involved, and if deviation from the authorized purpose can be reliably prevented.

CATEGORY 3 - Partially condemned or otherwise disposed of as unfit for human consumption

145. Where lesions are localized, affecting only part of the game animal carcase or offals, the affected parts should be removed, and the unaffected parts passed as fit for human consumption (unconditionally and unrestricted, or conditionally, or otherwise as appropriate). The methods for the disposal or utilization of the removed parts should be the same as those applicable under judgement category 2 (totally unfit for human consumption).

SECTION XI - DISPOSITION AND BRANDING

After a decision has been made by an inspector that game meat is fit for human consumption, conditionally fit for human consumption or unfit for human consumption, it is necessary that it be marked in a systematic manner to show the result of inspection. This is to enable control and proper handling/disposal prior to its reaching the consumer as well as to assure consumers of the official guarantee of safety and wholesomeness of game meat.

146. The size, shape, and wording of any brand, as well as the colour and composition of marking ink used for the branding of game meat, should be laid down by the controlling authority. The design of brands for application to game meat should be distinctively different from that applied to meat derived from slaughter animals and should be uniform throughout the country. Consideration should be given at the design stage to the need to achieve legible impressions of brands under working conditions. Only firebrands or brands comprising suitable ink should be applied to the game meat.

147. Game carcases and game offal that as a result of inspection are passed as fit for human consumption without further restrictions should be legibly and appropriately branded.

148. All game animal carcases, parts of carcases, organs and viscera that are found at inspection to be unfit for human consumption should be held securely to the satisfaction of the inspector until they are branded, stained, rendered, denatured or otherwise destroyed, so excluding them from the human food chain.

149. Brands and stamps used to apply the marks of inspection should be kept clean while in use. They should be held under the control of the inspector and used only under an inspector's supervision.

SECTION XII - UTILIZATION OF GAME MEAT INSPECTION FINDINGS

The controlling authority should make game meat inspection findings available to assist other agencies involved in human health, animal health and game animal management. Where possible the controlling authority should take an active role in programmes that assure a safe and wholesome game meat supply and information on zoonotic disease should be provided to the appropriate agencies.

150. The controlling authority should closely collaborate with the authorities responsible for:

(a) game animal management, conservation and/or control;

(b) animal disease control; and

(c) public health;

so that the greatest possible use can be made of game meat inspection findings.

151. Research and surveillance activities should be distinguished from routine game meat inspection and from those laboratory examinations that may be required for the immediate purpose of decision making, and should have no delaying effect upon the normal course of inspection judgement.

152. Notifiable animal disease reported by hunters or detected at inspection should be reported directly to the veterinary authority responsible for animal disease control.

153. The controlling authority should periodically assemble and evaluate statistics relating to game meat inspection findings and of the judgement decisions taken. These statistics should be made available to relevant authorities, for the monitoring of fluctuations in the animal health situation, as reflected by game meat inspection findings.