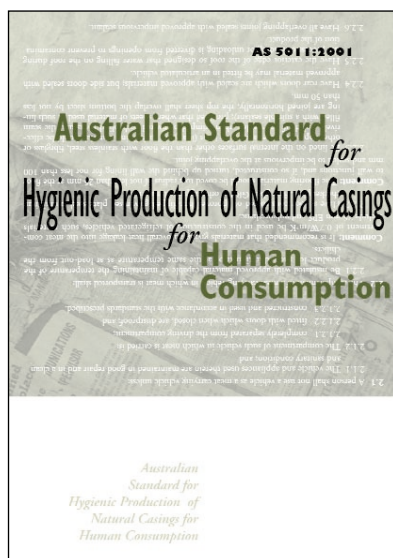


Australian Standard for the Hygienic Production of Natural Casings for Human Consumption

SCARM Report 68



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AS 5011:2001

Australian Standard for
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SCARM Report No. 68

National Library of Australia Cataloguing-in-Publication

Agriculture and Resource Management Council of Australia and New Zealand

Australian Standard for Hygienic Production of Natural Casings for Human Consumption.

ISBN 0 643 06368 4 (paperback)

ISBN 0 643 06917 8 (on-line)

1. Meat Industry and trade – Standards – Australia. 2. Meat inspection – Australia.
- I. Title. (Series: SCARM Report; no. 68; AS 5011:2001)

664.90021894

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First published 2001 paperback

First published on-line 2002

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To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards' users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine *The Australian Standard*, which subscribing members receive, and which gives details of new publications, new editions and of withdrawn Standards.

Suggestions for improvements to this Standard, should be addressed to:

ARMCANZ Secretariat
Department of Primary Industries and Energy
GPO Box 858
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AGRICULTURE AND RESOURCE MANAGEMENT COUNCIL OF AUSTRALIA AND NEW ZEALAND

The Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) consists of the Australian Federal, State/Territory and New Zealand Ministers responsible for agriculture, soil, water (both rural and urban) and rural adjustment policy issues.

The objective of the Council is to develop integrated and sustainable agricultural and land and water management policies, strategies and practices for the benefit of the Australian community.

The Council is supported by a permanent Standing Committee, the Standing Committee on Agriculture and Resource Management (SCARM). Membership of Standing Committee comprises relevant Departmental Heads/CEOs of Commonwealth/State/Territory and New Zealand agencies as well as representatives of the CSIRO and the Bureau of Meteorology.

PREFACE

The Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) comprises the Australian Federal, State and Territory, and New Zealand Ministers responsible for agriculture, soil, water and rural adjustment policy issues.

In March 1995 the Ministerial Council determined that aspects of all existing national meat industry codes relevant to human health would be mandated by amendment of legislation in all States and Territories.

This decision was given effect by appointment of a Steering Group comprising Chairmen and Chief Executives of State and Territory meat hygiene authorities, the Australian Quarantine and Inspection Service, meat industry organisations, food safety technical advisers and the Australia New Zealand Food Authority.

The Steering Group commenced a fundamental review of existing Codes of Hygienic Practice to express mandatory national standards in outcome terms. The new Australian Standards provided for the implementation of quality assurance programs consistent with the AS/NZS ISO 9000 (1994) series. Process control shall be achieved through the application of Hazard Analysis Critical Control Point (HACCP) methodology as defined by the Codex Alimentarius Commission and will allow flexibility in techniques and facilities provided that standards relating to wholesomeness and safety have been met.

"The responsibility for production of safe and wholesome meat should be shared by industry and the controlling authority. The use of the HACCP approach and quality assurance systems reinforces this joint responsibility. The controlling authority will supervise and audit these arrangements to ensure compliance with requirements." (Codex Alimentarius Vol. 10 (1 1994))

This Standard is written in substantial compliance and consistency with *Codex Alimentarius* Volume 10. Minor technical variations reflect accepted Australian terminology or commercial industry practice, but with quality standards and performance criteria equivalent to those in the *Codex*.

Where an operator proposes a technique substantially different from those detailed in this Australian Standard the assessment of equivalence shall be determined by the ARMCANZ Meat Standards Committee. This Committee will establish the methodology for determining the equivalence of benchmarks or standards. The proposer of the alternative technique shall supply sufficient supporting information to validate the procedure to the relevant Controlling Authority who will advise the ARMCANZ Committee on Meat Industry Standards. The submission must include a HACCP plan which ensures that equivalence is maintained. Where the ARMCANZ Meat Standards Committee cannot reach agreement on the approval of an alternative technique the final decision shall be made by the Ministerial Council (ARMCANZ).

This publication has been approved as an Australian Standard. Other Standards in the series are:
Australian Standard for the Construction of Premises Processing Animals for Human Consumption (SCARM Report Number 55) AS4462:1997
Australian Standard for the Construction of Premises Processing Meat for Human Consumption (SCARM Report Number 53) AS4460:1997
Australian Standard for the Hygienic Production of Crocodile Meat for Human Consumption (SCARM Report Number 67) AS4467:1997
Australian Standard for the Hygienic Production of Game Meat for Human Consumption (SCARM Report Number 57) AS4464:1997
Australian Standard for the Hygienic Production of Meat for Human Consumption (2nd Edition) (SCARM Report Number 54) AS4461:1997

Australian Standard for the Hygienic Production of Natural Casings for Human Consumption (SCARM Report Number 68) AS5011:2001

Australian Standard for the Construction of Premises and the Hygienic Production of Poultry Meat for Human Consumption (2nd Edition)(SCARM Report Number 75) AS4465:2001

Australian Standard for the Hygienic Production of Rabbit Meat for Human Consumption (SCARM Report Number 59) AS4466:1997

Australian Standard for the Hygienic Production of Ratite (Emu/Ostrich) Meat for Human Consumption (SCARM Report Number 71) AS5010:2001

Australian Standard for the Transportation of Meat for Human Consumption (SCARM Report Number 56) AS4463:1997

1 SCOPE

This Australian Standard contains the minimum requirements for the preparation and processing of natural casings derived from the intestines of sheep, pigs, goats and cattle.

For the purpose of this Standard, the word 'shall' has been used to clearly indicate that the requirements are mandatory. Where 'should' is used requirements are considered not to be mandatory but strongly recommended.

2 INTRODUCTION

- 2.1 Runners shall be processed according to this Standard. An approved company Hazard Analysis Critical Control Point (HACCP) based quality assurance program to augment this Standard shall be implemented.
- 2.2 Runners shall only be obtained from healthy animals slaughtered in abattoirs.
- 2.3 Evisceration techniques shall minimise spillage of gut contents and any spillage shall be promptly washed off.
- 2.4 Runners should only be collected after postmortem inspection has been completed.
- 2.5 Runners shall not be obtained from grossly contaminated intestines.
- 2.6 Runners shall be collected, handled and stored in sealed containers separate from edible meat until further processing renders them suitable for human consumption.
- 2.7 The method used for processing runners shall ensure that the green runners have been handled in a manner which protects them from contamination and deterioration.
- 2.8 Containers of runners leaving abattoirs or processing premises shall be labelled in accordance with State requirements and, when relevant, details of the preservatives used.
- 2.9 Where required, consignments of runners should be accompanied by a fully completed meat transfer certificate/public health certificate.

3 DEFINITIONS

In this Standard, the meaning of the words and phrases set down below apply throughout the Standard, unless the context otherwise requires.

Abattoir	A premises processing animals for the production of meat for human consumption.
Contamination	The presence of objectional matter, including substances or micro-organisms, that make meat unwholesome.
Green runners	The runners after stripping of ingesta.
Natural casings	Are the sub-mucosal layer of intestines obtained from green runners after cleaning and placing in a preservative.
Potable	Means a water quality that is consistent with standards for drinking water in the respective State or Territory and is consistent with the standards detailed in the NH&MRC <i>Guidelines for Drinking Water Quality in Australia</i> (1987).
Runner	Emptied intestines not processed beyond loosening of the submucosal layer from the surrounding layers of intestinal tissue.
Sanitise	Apply approved chemical and/or physical agents or processes to minimise the risk of contamination of meat by micro-organisms.
Sterilise	In relation to equipment or utensils used in the handling of natural casings, cleaned and immersed in water heated to 82°C or warmer until sterilisation is effected, or treated by other effective means. For the purpose of this Standard it means 'make commercially sterile'.
Wholesome	Means: (a) will not cause food-borne infection or intoxication when properly handled and prepared for its intended use; and (b) does not contain chemical residues in excess of established limits; and (c) is free from obvious physical contamination; and (d) is free from defects recognised as unsafe to consumers; and (e) is produced under adequate hygiene control.

4 CONSTRUCTION AND EQUIPMENT

OUTCOME REQUIRED

Construction and equipment facilitates hygienic processing of natural casings and prevents or eliminates contamination.

- 4.1 Facilities used for the manufacture of natural casings shall be constructed and equipped in accordance with the *Australian Standard for Construction of Premises Processing Meat for Human Consumption*.

5 PROCESSING OF INTESTINES INTO GREEN RUNNERS

OUTCOME REQUIRED

Consistent, routine processing, storage and transportation procedures that minimise or eliminate risk of contamination of natural casings.

- 5.1 Treatment of intestines for processing into green runners shall be commenced immediately after evisceration.
- 5.2 Runners shall be removed from the crown fat by pulling, either by hand or machine. Ingesta contents may be stripped from the runners by hand or machine. Runners shall be stripped directly into clean wash tubs or trolleys containing cold potable running water which is constantly renewed. Water temperature should be 5°C or colder.
- 5.3 Stripped crowns shall be removed from the runner rooms promptly, with or without the bung (caecum) attached. Bungs shall be washed to remove visible contamination.
- 5.4 Operatives shall wash their hands and equipment as often as necessary to maintain hygienic conditions. The stripping room shall be kept clean.
- 5.5 Containers used to store runners shall be durable, sealed and maintained in a hygienic condition.
- 5.6 Green runners shall be chilled to a temperature of 5°C or colder with a minimum of delay after collection unless, as part of the collection process, they are preserved with an approved food preservative.

6 PROCESSING GREEN RUNNERS INTO CASINGS

OUTCOME REQUIRED

Hygiene controls are in place to prevent physical and microbiological contamination of product.

- 6.1 Equipment used for processing shall be maintained in a clean and sanitised condition.
- 6.2 Green runners shall be cleaned so that all ingesta and mucosa are removed.
- 6.3 Green runners shall be placed into clean tanks containing potable water until further processing. Approved additives may be placed in the soak tanks to assist in preserving or softening runners during the cleaning process.

7 TREATMENT OF NATURAL CASINGS

OUTCOME REQUIRED

Controls are used to ensure product is maintained in a wholesome condition.

- 7.1 Preservation of natural casings shall be achieved by using approved preservatives.
- 7.2 Finished casings shall be stored under hygienic conditions in clean, sanitised containers with close fitting lids.

8 TRANSPORTATION OF GREEN RUNNERS

OUTCOME REQUIRED

Controls are in place to ensure public health is not jeopardised.

- 8.1 Runners shall be transported in durable, sealed containers. Containers shall be maintained in a clean and hygienic condition.
- 8.2 Runners shall be chilled to a temperature of 5°C or colder before transport and maintained at that temperature during transport. A refrigerated vehicle shall be used if this temperature cannot otherwise be maintained.

9 TRANSPORTATION OF NATURAL CASINGS

OUTCOME REQUIRED

Transportation is conducted in a manner that does not jeopardise the wholesomeness of the product.

- 9.1 Natural casings shall be transported in sealed, durable containers, which are maintained in a clean and hygienic condition.
- 9.2 Natural casings shall be transported in a vehicle that is maintained in a clean and hygienic condition.
- 9.3 Natural casings shall be transported at a temperature which ensures the integrity of the product is maintained.

10 REFERENCES

Codex Alimentarius Vol. 10 1994. Code of Hygienic Practice for Fresh Meat.

Standing Committee on Agriculture and Resource Management (1997). *A Guide to the Implementation and Auditing of HACCP* (1997). SCARM Report No. 60, CSIRO Publishing, Melbourne.