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Animal casing — Specification

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Kenya Industrial Research and Development Institute

National Public Health Laboratory

Government Chemist's Department

Farmer's Choice (K) Ltd.

University of Nairobi — Department of Food Science, Nutrition and Technology

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Animal casing — Specification

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Foreword

This Kenya Standard was prepared by the [Meat and Poultry products] Technical Committee under the guidance of the Standards Projects Committee, and it is in accordance with the procedures of the Kenya Bureau of Standards

Animal casings are generally obtained from the intestines of sheep, goats, cattle and hogs, and are mainly used in the production of sausages and also for non-edible purposes, such as surgical sutures, guts for sports goods and strings for musical instruments. The process of manufacture of animal casings has been included in this standard as a guide (see Annex A). In view of the common trade practice, the term 'sheep casings' has been used in the standard to include goat casings also.

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.

In the preparation of this standard, the following sources were consulted extensively:

IS 1981:1978(R2000), *Specification for animal casing*.

Acknowledgement is hereby made for the assistance derived from these sources.

Animal casing — Specification

1 Scope

This Kenya Standard specifies the requirements and the methods of sampling and test for animal casings derived from approved and gazette food animals.

2 Normative references

The following referenced documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- I. CAC/RCP 1, *Recommended international code of practice — General principles of food hygiene*
- II. KS CODEX 192
- III. KS 2761, *Meat Hygiene — Code of practice*
- IV. EAS 12, *Drinking (potable water) — Specification*
- V. EAS 35, *Edible salt — Specification*
- VI. EAS 38, *Labelling of prepackaged foods — Specification*
- VII. EAS 39, *Hygiene in the food and drink manufacturing industry — Code of practice*
- VIII. ISO 4831, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of coliforms — Most probable number technique*
- X. ISO 4832, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coliforms — Colony-count technique*
- XII. ISO 4833, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of microorganisms — Colony-count technique at 30 degrees C*
- XIV. ISO 6579, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp.*
- XVI. ISO 7251, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive Escherichia coli — Most probable number technique.*

- XVII. *ISO 21527-1, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of yeasts and moulds — Part 1: Colony count technique in products with water activity greater than 0.95*
- XVIII. *ISO 21527-2, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of yeasts and moulds — Part 2: Colony count technique in products with water activity less than or equal to 0.95*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

abattoir

an approved premise processing animals for the production of meat for human consumption

3.2

black node

black node usually caused by the residue of the ingesta or slime left behind in the casing

3.3

cattle

includes bull, cow, ox, heifer, calf, steer, bullock and buffalo

3.4

animal casing

Includes the following:

- a) Fat end — the terminal end of the large intestine measuring about 1.5 m in length from the anus.
- b) Middle — Remaining part of the large intestine.
- c) Bung — Caecal part of the intestine.
- d) Runner — Small intestine.
- e) Urinary Bladder.
- f) Gullet or oesophagus.

3.5

sheep casing

shall also include goat casing

3.6

cicatrix

scar of healed-up wound

3.7

contamination

the presence of objectional matter, including substances or microorganisms, that make meat unwholesome.

3.8

runner

Emptied intestines not processed beyond loosening of the submucosal layer from the surrounding layers of intestinal tissue

3.9

green runners

the runners after stripping of ingesta

3.10

natural casings

the sub-mucosal layer of intestines obtained from green runners after cleaning and placing in a preservative

3.11

nodule

small rounded structure

3.12

3.13

potable

water quality that is consistent with standards for drinking water in compliance with EAS 12

3.14

salt burn

areas of discolouration generally caused by: (a) the entry of air-into tin containers in which the casings are packed, and/or (b) by the use of poor quality salt

d) is free from defects recognized as unsafe to consumers; and

e) is produced under adequate hygiene control.

3.15 Types

The casings shall be of the following types:

a) Sheep casing ;

- b) Cattle casing (dried cattle casing and salted cattle casing);
- c) Hog casing; and
- d) Dry ready-to-wet casings of sheep, goats and cattle.
- e) Casings from approved animals.

4.0 Raw material requirements

4.1.1 Animal casing

4.1.1.1 The animal casing shall be derived from healthy food animals slaughtered in a hygienically managed slaughterhouse complying with CAC/RCP 58, KS EAS 39 and KS 2761.

4.1.1.2 The animal casing from which the product is prepared shall be of a quality suitable for human consumption and shall comply to the KS 2308.

4.2 Quality requirements

- a) The casings shall be of uniform natural colour and shall be free from defects like holes, blisters, lacerations, nodules and cicatrices.
- b) The casing wall shall be free from any parasitic infestation and from cicatrix.
- c) The casings shall be free from domestics, black nodes, slime, mucus and dung.
- d) The casings shall be free from moulds or fungus infestation.
- e) The casings shall be free from salt burns and rust.

5.3 Food additives

Only approved food preservatives shall be used and shall comply with KS Codex stan 192. When common salt is used, it shall comply with the requirements of EAS 35.

5 Hygiene

5.2 animal casings shall comply with the microbiological limits given in Table 1 when tested in accordance with the test methods specified therein.

Table 1 — Microbiological limits for animal casing

S/N	Micro-organism	Limit	Test method
I.	<i>Escherichia coli</i> O157:H7 per 25 g	Absent	ISO 16654
II.	<i>Staphylococcus aureus</i> , cfu/g, max.	10 ²	ISO 6888-1
III.	<i>Salmonella spp</i> per 25 g	Absent	ISO 6579-1
IV.	<i>Listeria monocytogenes</i> per 25 g	Absent	ISO 11290-1
V.	<i>Campylobacteria</i> per 25 g	Absent	ISO 10272-1

6 Pesticides and veterinary drug residues

6.1 Veterinary drug residues

Animal casing shall comply with the maximum veterinary drug residue limits specified in CX/MRL 2.

6.2 Pesticide residues

Animal casing shall comply with the maximum pesticide residue limits set by Codex Alimentarius Commission.

7 Heavy metal contaminants

Animal casing shall not contain Lead (Pb) in amounts exceeding 0.1 mg/kg, when tested in accordance with AOAC 972.25.

8 Meat identification

Identification of animal species from which the animal casing was derived shall be done in accordance with ISO/TS 20224.

9 Packaging

9.1 animal casing shall be packaged in food grade materials that protect the product from any physical, microbiological, chemical or any other type of contamination during handling, storage and distribution.

10 Labelling

In addition to the requirements given in EAS 38, the product shall be legibly and indelibly labelled with the following information:

- a) name of the product;
- c) allergens declaration;
- d) name, location and address of manufacturer;
- e) net weight, in metric units;
- f) declaration as “natural animal casing” product;
- g) species of animal from which the meat has been obtained;
- h) date of production/manufacture;
- j) best before date;
- k) batch number;
- l) instructions for use (shall inform the end-user to cook the product for recommended period of time before consumption);
- m) storage instructions; and
- n) country of origin.

11 Sampling

Sampling shall be carried out in accordance with CAC/GL 50. For microbial analysis samples, sampling shall be carried out in accordance with ISO/TS 17728.