DRAFT EAST AFRICAN STANDARD

Edible offal — Specification
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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee EASC/TC 004, Meat, poultry, game, eggs and related products.

This second/third/… edition cancels and replaces the first/second/… edition (US nnn-n:yyyy), which has been technically revised.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.
Introduction

A paragraph.

The **introduction** is an optional preliminary element used, if required, to give specific information or commentary about the technical content of the document, and about the reasons prompting its preparation. It shall not contain requirements.

The introduction shall not be numbered unless there is a need to create numbered subdivisions. In this case, it shall be numbered 0, with subclauses being numbered 0.1, 0.2, etc. Any numbered figure, table, displayed formula or footnote shall be numbered normally beginning with 1.
Edible offal — Specification

1 Scope

This draft East African Standard specifies the requirements, sampling and test methods for edible offal intended for human consumption.

2 Normative references

The following 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.

CAC/MRL 2, Maximum Residue Limits for Veterinary Drugs in Food

EAS 38, Labelling of pre-packaged foods

ISO 16649-2, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of beta-glucuronidase-positive Escherichia coli — Part 2: Colony-count technique at 44 degrees C using 5-bromo-4-chloro-3-indolyl beta-D-glucuronide.

ISO 6888-1, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 1: Technique using Baird-Parker agar medium.

ISO 6579-1, Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp.

ISO 11290 – 1, Microbiology of the food chain - Horizontal method for the detection and enumeration of Listeria monocytogenes and other Listeria spp. -- Part 1: Detection method


ISO 17604, Microbiology of food and animal feeding stuffs - carcass sampling

ISO 16654, Microbiology of food and animal feeding stuffs - Horizontal method for the detection of Escherichia coli 0157:H7

CX/RCP 41, Recommended International code for ante-mortem and post-mortem inspection of slaughter animals and for ante-mortem and post-mortem judgement of slaughter animals and meat

ISO 4833-1, Microbiology of the food chain — Horizontal method for the enumeration of microorganisms — Part 1: Colony count at 30 °C by the pour plate technique

AOAC 972.25, Lead in Food — Atomic Absorption Spectrophotometric Method

EAS 955: 2020, Production of packaged meat products - Hygienic requirements

FDEAS 1138:2023 Design and operation of Slaughterhouse – requirements
3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1 meat
all parts of slaughtered animal that are intended for and have been passed as fit for human consumption by the competent authority in the respective Partner State

3.2 Slaughterhouse
establishment licensed by competent authority for slaughter of animals and/or processing into meat products intended for human consumption

3.3 carcass
body of any slaughtered animal after bleeding and dressing (meat act)

3.4 edible offal
Internal organs of slaughtered animal that have been passed as fit for human consumption. In the case of food animals other than poultry, these include red offal, green offal and white offal. In the case of poultry, these include giblets (the heart, gizzard and the liver without the gall bladder) and intestine

3.5 red offal
Internal organs including heart, liver, kidney, spleen, tongue, lungs, pancreas and

3.6 Green offal
Internal organs including the rumen, reticulum, omasum, abomasum, small intestines, large intestines, colon, and gizzards.

3.7 white offal
Internal organs including the brain, spine, bone marrow, testicles and teats

4 Requirements

4.1 General requirements

All animals shall be slaughtered in a hygienically managed slaughterhouse in accordance with FDEAS 1138. The slaughter animal and post mortem inspection of the offal shall be done by a competent authority.

The edible offal shall be:

4.1.1 Obtained from slaughtered healthy animals

4.1.2 Prepared under hygienic conditions as stipulated in CAC/RCP 58/ CAC/RCP 41.
4.1.3 Free from any visible foreign matter (e.g., dirt, wood, plastic, metal particles).
4.1.4 Free from signs of spoilage and objectionable odour
4.1.5 Free from infectious parasites
4.1.6 Intact, taking into account the presentation
4.1.7 Free from blood clots bone dust or bone fragments
4.1.8 Free of contusions having a material impact on the product
4.1.9 Free from freezer-burn
4.1.10 All viscera shall be inspected as they are removed from the carcass or in such a way that they can be traced back or identified with a particular carcass.

4.1.11 Every organ and the associated lymph nodes shall be examined. When any abnormal condition is observed, the organ or gland shall be incised and the incision made in such a manner as to avoid soiling or contaminating, or unnecessarily depreciating the value of any part of the carcass or other organs that may be passed as fit for human consumption.

4.2 Requirements for routine inspection of edible offal of cattle, pig, goats, sheep, buffalo, deer, horses, pigs, ratites, camelids and poultry are given in table 1

<table>
<thead>
<tr>
<th>SN</th>
<th>Organ</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Stomach, intestines and spleen</td>
<td>The outer, and when necessary, the inner, surfaces of the stomach, and intestines shall be inspected. The surface and substance of the spleen shall be inspected, together with the lymph nodes of the stomach and bowels, gastro-splenic and mesenteric) and web (omentum). The spleen shall be inspected for sign of inflammation and incised to determine the colour of the pulp. They shall be free from haemorrhage, cysts and swellings, free from worms.</td>
</tr>
<tr>
<td>ii</td>
<td>Liver</td>
<td>The surfaces and substance of the liver shall be inspected. The gall bladder shall be incised to release bile and removed from the liver by cutting the associated lymph nodes (hepatic) shall also be inspected and the bile ducts incised. They shall be free from haemorrhage, cysts, swellings and free from worms.</td>
</tr>
<tr>
<td>iii</td>
<td>Kidneys</td>
<td>The lymph-nodes of the kidneys (renal) and the adrenal glands shall be inspected before the removal of the kidneys. the kidneys shall be exposed by removing the capsule and the surface, inspected for discoulouration cyst and haemorrhages. The kidneys shall be split by incision and examine for internal lesions.</td>
</tr>
<tr>
<td>iv</td>
<td>Lungs</td>
<td>The lungs shall be palpated and incised at the base. The associated lymph-nodes (bronchial and mediastinal) shall also be inspected and incised. They shall be free from haemorrhage, cysts, swelling, and worms.</td>
</tr>
<tr>
<td>v</td>
<td>Heart</td>
<td>The heart sac (pericardium) shall be opened, and the heart inspected and, incised. It shall be free of abnormal swelling, haemorrhage, free of worms and cysts.</td>
</tr>
<tr>
<td>vi</td>
<td>Poultry offal (liver, heart and gizzard)</td>
<td>The heart shall be free from abnormal swelling, haemorrhage, worms and cysts. Liver shall be free from gal, discolouuration, contaminants and ulcerations and worms. Gizzard shall be clean, shall be free from abnormal swelling, haemorrhage, free from worms and cysts</td>
</tr>
<tr>
<td>vii</td>
<td>Testicles and Penis</td>
<td>The outer surface and the substance of the testicles and penis and the superficial inguinal lymph-nodes shall be inspected routinely if meant for the consumption. They shall be free of abnormal swelling, haemorrhage, free of worms and cysts</td>
</tr>
</tbody>
</table>
Note: 1  The spine, bone marrow and brain are clinically examined in the laboratory and not in the abattoir

2  All the other unmentioned internal and external offal shall be inspected to be of good quality and safety as
guided by table 1 above

5  Storage

5.1  Edible offal shall be chilled at 0 °C to 4 °C before leaving the premises.

5.2  Edible offal may be presented fresh (warm, chilled, frozen). Storage temperatures throughout the
supply chain shall be such as to ensure uniform internal product temperatures as follows;

a)  Chilled: Internal product temperature shall be maintained at −1.5 °C to 4°C at any time following
    the post-slaughter chilling process.

b)  Frozen: Internal product temperature shall be maintained at a temperature below −18 °C at any time
    after freezing and shall not show any sign of deterioration

6  Hygiene requirements

6.1  Edible offal shall be prepared, handled, and stored in accordance with CX/RCP 58 and EAS 39. Offal
preparation shall be done in accordance with EAS 955

6.2 Microbiological Requirements

Edible offal shall comply with the microbiological limits given in Table 2, when tested in accordance with the
methods given therein.

Table 2 — Microbiological limits for Edible offal

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Microorganism</th>
<th>Edible offal</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Heart, liver kidney, spleen, lungs, trachea, testicles, tongue</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stomach, esophagus, gizzard</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Small intestines</td>
<td>Large intestines</td>
</tr>
<tr>
<td>i.</td>
<td><em>Staphylococcus aureus</em></td>
<td>102</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>cfu/g max</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii.</td>
<td><em>Escherichia Coli</em></td>
<td>Absent</td>
<td>Absent</td>
</tr>
<tr>
<td></td>
<td>O157:H7 per 25 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii.</td>
<td><em>Salmonella spp,</em> per 25 g</td>
<td>Absent</td>
<td>Absent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv.</td>
<td><em>Clostridium perfringens</em></td>
<td>Absent</td>
<td>Absent</td>
</tr>
<tr>
<td>v.</td>
<td><em>Listeria monocytogenes,</em> per 25 g</td>
<td>Absent</td>
<td>Absent</td>
</tr>
<tr>
<td>vi.</td>
<td><em>Campylobacter</em> per 25 g</td>
<td>Absent</td>
<td>Absent</td>
</tr>
</tbody>
</table>

All the other unmentioned internal and external offal shall comply with the microbiological limits in table 2 above
7 Food additives

Food additives, if used in edible offal shall comply with Codex Stan 192.

8 Contaminants

8.1 Heavy metals

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

8.2 Pesticide residues

Edible offal shall comply with maximum pesticide residue limits prescribed in Codex Alimentarius Commission

8.3 Veterinary drug residues

Edible offal shall comply with the maximum veterinary drugs residue limits in accordance with CX/MRL 2.

9 Packaging and Labelling

9.1 Packaging

Edible offal shall be packaged in food grade packaging materials that can safeguard the safety, quality, and integrity of the products during storage, transportation, and distribution.

9.2 Labelling

In addition to the labelling requirements of EAS 38 edible offal shall be legibly and labelled with the following information:

a) Name of the product as edible offal
b) Name of the animal from which the offal is derived
c) name of the manufacturer and physical address;
d) net weight in metric units
e) date of production/packaging;
f) best before date;
g) batch or code number;
h) storage conditions;
i) country of origin

10 Sampling

Sampling shall be done in accordance with CAC/GL 50 for general sampling and ISO 17604 for microbiological analysis.
Bibliography
