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Edible offal — Specification

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Foreword

Uganda National Bureau of Standards (UNBS) is a parastatal under the Ministry of Trade, Industry and Cooperatives established under Cap 327, of the Laws of Uganda, as amended. UNBS is mandated to co-ordinate the elaboration of standards and is

(a) a member of International Organisation for Standardisation (ISO) and

(b) a contact point for the WHO/FAO Codex Alimentarius Commission on Food Standards, and

(c) the National Enquiry Point on TBT Agreement of the World Trade Organisation (WTO).

The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of key stakeholders including government, academia, consumer groups, private sector and other interested parties.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.

The committee responsible for this document is Technical Committee UNBS/TC 2, *[Food and agriculture]*, Subcommittee SC 12, *[meat, poultry and processed products]*.

Edible offal — Specification

1 Scope

This Draft Uganda standard specifies the requirements, method of analysis and sampling for edible offal for human consumption from the cattle, buffalo, sheep, goats, deer, horses, pigs, ratites, camelids and poultry

2 Normative references

The following referenced documents 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.

US 45, *General standard for food additives*

US 734, *Design and operation of abattoirs and slaughterhouses — Requirements*

US 738, *General standard for contaminants and toxins in food and feed (5th Edition)*

US 1659, *Materials in contact with food — Requirements for packaging materials*

US CAC/GL 50, *General guidelines on sampling*

US CAC/RCP 58, *Code of hygienic practice for meat*

US EAS 12, *Potable water — Specification*

US EAS 38, *Labelling of pre-packaged foods — General requirements*

US 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*

US ISO 6579–1, *Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella — Part 1: Detection of Salmonella spp*

US 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*

US ISO 7251, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive Escherichia coli — Most probable number technique*

US ISO 7937, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of Clostridium perfringens — Colony count technique*

US ISO 11290-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes — Part 1: Detection method*

3 Terms and definitions

3.1
Meat
all parts of an animal that are intended for, or have been judged as safe and suitable for human consumption

3.2
Edible offal
parts of the carcass that has 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, legs) including exterior parts such as hooves, hides, head.

3.3
Red edible offal
include heart, liver, kidney, spleen, tongue, lungs, pancrease

3.4
Green edible offal
include the rumen, reticulum, omasum, abomasum, small intestines, large intestines, colon, and gizzards

3.5
White edible offal
include the brain, spine, bone marrow, testicles and mammillary gland

3.6
Tripe
refers to the muscle walls(with the interior mucosal lining removed) of the first three chambers of a ruminant stomach the rumen, reticulum and omasum.

3.7
Condemned
carcasses, parts or organs so marked unfit for human consumption meant to be destroyed or rendered unfit for food purposes

4 Requirements

4.1 General requirements

All animals shall be slaughtered in a hygienically managed slaughter-house in accordance with US 734. The slaughter shall be supervised by a competent authority. The offal thereof shall be subjected to post mortem veterinary inspection as prescribed in the standard US 734. They shall be certified as being sound and free from contagious and infectious diseases and fit for human consumption.

The edible offal shall be;

a) obtained from carcasses that have been slaughtered in a licenced premise.

b) obtained from food producing animals which have been slaughtered according to US 734.

c) prepared under hygienic conditions as stipulated in US CAC/RCP 58.

d) free from signs of spoilage

e) from animals whose post-mortem examination has been conducted under conditions simulating natural light.

f) inspected and analysed using appropriate methods,

g) free from infectious parasites

h) from a specified animal specie

i) Intact, taking into account the presentation

j) free from visible blood clots, or bone dust

k) free from any visible foreign matter (e.g. dirt, wood, plastic, metal particles1)

l) free of offensive odours

m) free of unspecified bones fragments

n) free of contusions having a material impact on the product

o) free from freezer-burn

Note 1: Organs 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 carcasses of cattle and pig, goats, sheep

The Edible offal shall comply with the inspection requirements as given in Table 1

Table 1 — Inspection requirements

SN	Organ	Requirements
i	Stomach, intestines and spleen	The outer, and when necessary the inner, surfaces of the stomach and intestines. The surface and substance of the spleen shall be inspected, together with the lymph nodes of the stomach and bowel, gastro-splenic and mesenteric) and web (omentum). The spleen shall be put where necessary, for the inspection of the substance (pulp). They shall be free from haemorrhage, cysts and swellings, free from worms
ii	Liver	The surfaces and substance of the liver shall be inspected. The associated lymph nodes (hepatic) shall also be inspected and the bile ducts incised where necessary. They shall be free from haemorrhage, cysts and swellings, free from worms.
iii	Kidneys	The lymph-nodes of the kidneys (renal) and the adrenal glands shall be inspected before the removal of the kidneys. Thereafter the kidneys shall be exposed, and the surface inspected and, If necessary, the kidneys shall be split by incision and the substance inspected. They shall be free from swellings, free from kidney stones, free from haemorrhage, free from cysts and any discolourations.
iv	Lungs	The lungs shall be inspected and, if obviously diseased, they shall be incised at the base. The associated lymph-nodes (bronchial and mediastinal) shall also be inspected and, unless. Obviously diseased, shall be incised. They shall be free from haemorrhage, cysts and swellings, free from worms.
v	Heart	The heart sac (pericardium) shall be opened, and the heart inspected and, if necessary, incised. It shall be free of abnormal swelling, haemorrhage, free of worms and cysts.
vi	Poultry offal(liver, heart and gizzard)	Heart shall be free of abnormal swelling, haemorrhage, free of worms and cysts. Liver shall be free from gal, discolouration, contaminants and ulcerations, and worms. Gizzard shall be clean, shall be free of abnormal swelling, haemorrhage, free of

		worms and cysts
vii	Testicles and Penis	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

Note 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

1. Edible offal are relatively perishable and shall be chilled at 4 ºC before leaving the premises.

2. Edible offal may be presented chilled, frozen or deep-frozen. Ambient temperatures throughout the supply chain shall be such as to ensure uniform internal product temperatures as follows;

a) Chilled - Internal product temperature should be maintained at not less than –1.5° C or more than +4° at any time following the post-slaughter chilling process.

b) Frozen - Internal product temperature should be maintained at not exceeding –12° C at any time after freezing.

c) Deep-frozen - Internal product temperature maintained at not exceeding –18° C at any time after freezing

6 Food additives

The food additives used in the Edible offal shall be in accordance with the US 45.

7 Hygiene requirements

Edible offal shall be prepared, handled and stored in accordance US CAC/RCP 58.

Edible offal preparation shall be done in an area separate from the meat carcass and cuts preparation area

7.1 Edible offal shall be cleaned with potable water which is in accordance with US EAS 12.

7.2. Green edible offal may be incised to enable proper/sufficient cleaning

7.3 Edible offal shall be free from fur, blood and visible contamination and trimmed where necessary

7.4 Edible offal shall be handled, stored and transported in a manner which will protect them from contamination and deterioration

7.2 Microbiological limits

Edible offal shall not contain any pathogenic organisms and shall comply with microbiological limits given in Table 2.

Table 2 — Microbiological limits for Edible offal

SN	Micro-organisms					Test method
		Heart, liver kidney, spleen, lungs, trachea, testicles, tongue	Stomach, oesophagus , gizzard	Small intestines	Large intestines	
i	Aerobic colony count – cfu/g Max.	10^6	10^6	10^6	10^8	US ISO 4833
ii	E. coli per MPN/g Max.	10^2	10^3	10^3	10^4	US ISO 7251
iii	Coagulase positive Staphylococcus aureus, cfu/ g Max.	10^3	10^3	10^3	10^4	US ISO 6888-1
iv	Clostridium perfringens/ 25 g	Absent	Absent	Absent	Absent	US ISO 7937
v	Salmonella ssp / 25 g	Absent	Absent	Absent	Absent	US ISO 6579
vi	Listeria monocytogenes/ 25 g	Absent	Absent	Absent	Absent	US ISO 11290-1
vii	Pseudomonas aeruginosa cfu/g	< 10	< 10	< 10	< 10	US ISO 13720

Note 3: All the other unmentioned internal and external offal shall comply with the microbiological limits in table 2 above

8 Contaminants

Edible offal shall comply with the US 738.

8.1 Heavy metals

Edible offal shall not contain heavy metal contaminants in excess of the limits given in Table 3

Table 3 — Heavy metal contaminants limits for offal

SN	Contaminants limits	Maximum limits Ppm	Test method
i	Arsenic (Ar)	0.1	AOAC 986.15 EN14332, 14627
ii	Lead (Pb)	0.5	AOAC 999.10, 999.11, 986.15 EN14082, 14083,14084
iii	Cadmium	0.05	AOAC 986.15, 999.11,973.34 EN 14082,18083,1408
iv	Mercury	0.03	AOAC 971.21

9 Residues of Veterinary Drugs

Edible offal shall comply with the maximum residue limits specified in Codex Alimentarius Commission

10 Pesticide residues

Edible offal shall comply with the maximum residue limits specified in Codex Alimentarius Commission

11 Packaging and labelling

11.1 Packaging

Packaging of edible offal shall be done in food grade packaging materials that protect the product from any physical, microbiological, chemical or any other type of contamination during storage and distribution. This shall be in accordance with US 1659.

11.2 Labelling

In addition to the requirements of US EAS 38, the following labelling requirements shall apply and shall be legibly and indelibly marked;

a) name of the product (Edible offal)

b) name of the animal from which the edible offal is derived

c) name, location and address of manufacturer/processor;

d) net weight, in g or kg;

e) date of production/packaging;

f) expiry date;

g) batch number;

h) storage conditions;

i) country of origin

j) veterinary approval mark

k) Declaration of preservatives used;

12 Sampling

Samples shall be taken in accordance to the provisions of US CAC/GL 50.

Bibliography

[1] KS 2762: 2017, Offal - Specification

[2] UNECE STANDARD FOR EDIBLE MEAT CO-PRODUCTS, 2008 EDITION

Certification marking

Products that conform to Uganda standards may be marked with Uganda National Bureau of Standards (UNBS) Certification Mark shown in the figure below.

The use of the UNBS Certification Mark is governed by the Standards Act, and the Regulations made thereunder. This mark can be used only by those licensed under the certification mark scheme operated by the Uganda National Bureau of Standards and in conjunction with the relevant Uganda Standard. The presence of this mark on a product or in relation to a product is an assurance that the goods comply with the requirements of that standard under a system of supervision, control and testing in accordance with the certification mark scheme of the Uganda National Bureau of Standards. UNBS marked products are continually checked by UNBS for conformity to that standard.

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ICS 67.120.10

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