

# **DRAFT TANZANIA STANDARD**

Minced meat products – Specification – Part 2: Chicken meat for burger, kebab, meat ball and meat loaf

**TANZANIA BUREAU OF STANDARDS** 

# Minced meat products – Specification – Part 2: Chicken meat for burger, kebab, meat ball and meat loaf

#### **0 FOREWORDS**

Chicken meat for burger, kebab, meat ball and meat loaf are minced meat which has had foodstuffs, seasonings or additives added to it.

This draft Tanzania standard has been prepared to ensure that chicken meat for burger; kebab, meat ball and meat loaf manufactured or imported in the country meet the safety and quality requirements intended for human consumption.

In the preparation of this Tanzania standard assistance was drawn from TZS 2188:2020 Dressed poultry — Specification published by the Tanzania Bureau of Standards.

In reporting the results of a test or analysis made in accordance with this Tanzania Standard, if the final value observed or calculated is to be rounded off, it shall be done in accordance with TZS 4 (see clause 2).

## 1 Scope

This draft Tanzania standard prescribes the requirements, sampling and test methods for chicken meat intended for -making chicken burger, kebab, meat ball and meat loaf.

#### 2 NORMATIVE REFERENCES

For the purpose of this finalized Tanzania standard, the following references shall apply. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

TZS 4, Rounding off numerical values.

TZS 109, Food processing units - Code of hygiene.

TZS 118 / ISO 4833, Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of microorganisms – Colony-count technique at 30 °C.

TZS 122/ISO 6579-1, Microbiology of food and feeding staffs – Horizontal method for detection of *Salmonella spp*.

TZS 123/ISO 7937, Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of *Clostridium perfringens* – Colony-count technique.

TZS 125 – 1/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 – Amendment 1: Inclusion of precision data

TZS 459, Code of hygiene for poultry processing.

TZS 538, Labelling of pre-packaged foods — General requirements

TZS 730/ISO 7251, Microbiology of food and feeding-stuffs – Horizontal method for the detection and enumeration of presumptive *Escherichia Coli* – Most Probable Number Technique

TZS 852-1/ISO 11290-1, Microbiology of food and animal feeding stuffs – Horizontal method for the detection and enumeration of Listeria monocytogenes – Part 1 – Detection method

TZS 1761/ISO 1443 Meat and meat products – Determination of total fat content ISO 17604 Microbiology of the food chain – Carcass sampling for microbiology analysis ISO 10272-1:2006 Microbiology of food and animal feeding stuffs – Horizontal method for detection and enumeration of *Campylobacter spp.* – Part 1: Detection method Codex Stan 193 – Codex general standard for contaminants and toxins in food and feed.

TZS 2841/ISO 2917, Meat and meat products – measurement of pH – preference

TZS 183:2016 Fresh meat in retail – Code of hygiene

#### 3 Terms and definitions

For the purpose of this standard, the following terms and definitions shall apply:

#### 3.1 Carcass

The body of a chicken after dressing

## 3.2 chicken meat

dressed chicken, cuts thereof and edible offal that have been approved for human consumption.

#### 3.3 Fillet

round, elongated fusiform chicken meat that attaches to each side of the keel bone (sternum).

# 3.4 minced chicken meat for burger, kebab, meat ball and meat loaf

Meat which has been reduced into fragments/particles and has had foodstuffs, seasonings or additives added to it.

#### 3.5 Freezer-burn

a burning or browning damaged caused by dehydration or oxidation due to air reaching the uncovered meat in a freezer.

## 4 Requirements

## 4.1 General requirements

#### 4.1.1 Raw materials

- Chicken meat and cuts shall be derived from healthy chicken slaughtered and processed in approved facilities that shall comply with the requirements specified in TZS 459
- Chicken and carcasses thereof shall be subjected to ante-mortem and meat inspection, respectively and shall be approved as being wholesome, sound and free from contagious and infectious diseases and fit for human consumption.
- Chicken meat shall be clean, firm and have uniform natural colours and free from discoloration or any slimy appearance.
- Chicken meat shall be free from objectionable odours, fecal contamination, freezer-burn\* and foreign matters which may be harmful to consumers.

## 4.1.2 Chicken meat for burger, kebab, meat ball and meat loaf shall be;

- coarse mixture.
- of characteristic aroma and taste.

# 4.1.3 Storage and transportation

- All packed products shall be kept in cold storage (chilled (1 4 °C) frozen below -18 °C.)
- Storage time shall not exceed 12 months for frozen products at -18 °C.
- Vehicle(s) for chicken meat for burger, kebab, meat ball and meat loaf transport shall be equipped with cooling unit in the storage area at all time.

## 4.2 Ingredients

- Spices and condiments complying with TZS 457
- Portable water complying with TZS 789
- Binder and extender
- Permitted additive as per Codex Stan 192

## 4.3 Specific requirements

Product shall comply with specific requirements stipulated in the Table 1.

## **Table 1: Specific Requirements**

S/N	Characteristics	Requirements	Method of tests
1	Acid insoluble ash	1.5	TZS 34-1

	%m/m, max		
2	Fat contents %, max	30	TZS 1761

# 5 Hygiene

- **5.1** Product shall be produced, processed, packed, stored, transported and handled under good hygienic conditions according to TZS 459 and TZS 109 to prevent contamination that may be harmful to consumer.
- **5.2** Product shall be free from pathogenic organisms and shall comply with the microbiological limits provided in Table 2 when determined by the methods shown alongside the Table.

Table 2: Microbiological limits for Chicken meat for burger, kebab, meat ball and meat loaf

S/N	Characteristics	limits	Test methods
1	Total plate count, cfu/g,	1 x 10 <sup>5</sup>	TZS 118
	max.		
2	Escherichia coli, cfu/g,	$1 \times 10^2$	TZS 730-2
	max		
3	Escherichia coli 0157:H7 per	absent	TZS 730-3
	25 g		
4	Staphylococcus aureus,	1 x 10 <sup>3</sup>	TZS 125-1
	cfu/g, max		
5	Salmonella spp per 25 g	absent	TZS 122,
6	Clostridium perfringens	absent	TZS 123
	per 25 g		
7	Campylobacter spp, per	absent	ISO 10272-1
	25 g		
8	Listeria monocytogenes	absent	TZS 852-1
	per 25 g		

## **6 Contaminants**

# 6.1 Heavy metal

Product shall not contain heavy metal in excess than limits specified in Codex Stan 193 and Table 3;

Table 3: Maximum limits of heavy metals for chicken meat for burger, kebab, meat ball and meat loaf

S/N	Heavy metals	Maximum limits	Test method
		ppm	

I	Arsenic (As)	0.1	TZS 76
li	Lead (Pb)	0.1	TZS 268
iii	Cadmium (Cd)	0.03	AOAC 973:34
lv	Mercury (Hg)	0.01	AOAC 971: 21

## 6.2 Pesticides and veterinary drug residues

The Maximum Residual Limits (MRLs) for pesticides and veterinary drug residues in product shall be as prescribed by CAC/MRLs.

# 7 Sampling and method of tests

## 7.1 Sampling

For the purpose of this standard sampling of product shall be done in accordance with ISO 17604.

#### 7.2 Method of test

Samples of product shall be tested to ascertain conformity of the product to the requirements of each specification by the methods described in the respective standards provided under Table 1, 2 and 3 of this standard.

# 8 Packaging, marking and labeling

## 8.1 Packing

- Product shall be packed in clean permitted food grade materials. The package shall be sealed tightly and shall not be exposed to direct sunlight or rain.
- All packaging materials shall be durable during transportation. The materials shall not be torn or broken when keeping in low temperature and shall prevent product from absorbing objectionable odors from the environment.

# 8.2 Marking and labeling

The container shall be marked and labeled in accordance with TZS 538. In addition, each container of product shall be legibly and indelibly marked with the following information:

- a) Name of the product shall be chicken meat for burger/kebab/meat ball/meat loaf;
- b) Name and address of the manufacturer/packer;
- c) Batch or code number;
- d) Net weight;

- e) Date of production;
- f) Expiry date;
- g) Storage conditions;
- h) Country of origin;
- i) List of ingredients in ascending order.
- 8.3 The container may also be marked with TBS Certification Quality Mark.
  NOTE The TBS Standards Mark of Quality may be used by the manufacturers only under license from TBS. Particulars of conditions under which the licenses are granted may be obtained from TBS.