

TBS/AFDC 22 (5272) P1

# **DRAFT TANZANIA STANDARD**

Table eggs - Specification

TANZANIA BUREAU OF STANDARDS

## Table eggs - Specification

#### 0 FOREWORD (A brief on table eggs)

This Tanzania standard was developed due to rapid increase in demand of table eggs in the Tanzania market. This standard aimed to control the safety and quality of table eggs produced and traded in the country for human consumption.

In the preparation of this Tanzania standard considerable assistance was drawn from PNS/BAFPS 35:2005 *Table egg – Specification* published by the Philippines National Standard Body.

In reporting, the results of a test or analysis made in accordance with this 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).

## 1.0 SCOPE

This Tanzania standard specifies requirements, methods of sampling and test for chicken table eggs.

## 2.0 REFERENCES

For the purpose of this draft 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 34-1 – Animal feeds and feeding stuffs – Sampling and test methods – Part 1: General

TZS 122 – Microbiology of food and animal feeding stuffs – Horizontal method for the detection of Salmonella spp.

TZS 538 - Packaging and labelling of foods.

CAC/RCP 15 - Code of hygienic practice for eggs and egg products

CAC/RCP 1 - General Principles of Food Hygiene

Codex Stan 193 - Codex General Standard for Contaminants and Toxins in Food and Feed.

## 3.0 TERMS AND DEFINITIONS

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

#### 3.1 clean egg

an egg that is free from foreign material and stains or discolorations that are readily visible with only very small specks, cage marks or stains may be considered clean if such specks, cage marks, or stains are not of sufficient number or intensity or cover less than 10% of the shell surface.

## 3.2 tray

a container that can carry up to 30 pieces of eggs.

#### 3.3 crates/case or box

a quantity of 12 trays.

#### 3.4 egg

the oval or spherical body made of thin but rigid calcareous shell laid by birds, which contains yellowish food material, the yolk and the white.

## 3.5 table egg

an egg destined to be sold to the end consumer in its shell and without having received any treatment significantly modifying its properties.

## 3.6 egg grading

the grouping of egg into lots having similar characteristics as to colour, weight and quality.

# 3.7 egg white or albumen

the jelly-like substance surrounding the yolk in the egg of a bird.

## 3.8 fresh egg

an egg is considered fresh when the egg yolk is still intact and the white is still firm.

#### 3.9 good egg

an egg whose shell is unbroken.

#### 3.10 egg yolk

the yellowish spheroidal mass of food material surrounded by the white in the egg of a bird.

## 3.11 tolerances

acceptable proportion of defective eggs in a particular grade.

## **4.0 REQUIREMENTS**

## 4.1 General requirements

Table eggs shall be:

- a) Fresh;
- b) Clean and free from visible cracks;
- c) Practically normal in shape (large end and a taper end); and
- d) Free from foreign odours.

## 4.2 Specific requirements

## 4.2.1 Classification

Chicken eggs shall be grouped into two (2) based on the colour of the shell. Each group shall be described as follows:

- a) Whites: all eggs must be of the standard chalky white tolerating the very light cream tints.
- b) Browns: all eggs must be apparently brown including the dark cream tints and any variation in the shade of brown eggshell.

Each group shall be divided into seven (7) classes based on the weight of each egg in the group (see table 1)

Table 1: Weight classes of table eggs

	O(h)					
S/N	Weight class	Weight range (grams/egg)				
1.	Jumbo	70 and above				
2.	Extra Large	65 – 70				
3.	Large	60 – 65				
4.	Medium	55 – 60				
5.	Small	50 – 55				
6.	Pullets	45 – 50				
7.	Pewee	40 – 45				
8.	Unclassified	< 40				

**4.2.2 Grading**Table eggs shall be graded as Grade AA, A and B (see Table 2). **Table 2: Grading of the table eggs** 

Items	Requirements			
	Grade AA	Grade A	Grade B	
1.Shell -Outer shell	-Free from check - Clean, without stain - Smooth surface, free from ridges or rough areas	The same as grade AA.	- Free from check -Clean or may have slightly stained areaTotal scattered stains shall not be more than 1/16 of the shell surface. Localized stain shall be found less than 1/32 of the shell surface and it shall be loosely attachedThe shell surface may have ridges or rough areas.	
2. Candling 2.1 Shell	-Clean and free from inner cracks	The same as grade AA.	Free from inner cracks	
2.2 Air cell	It shall be in the large end of egg, the height not more than 0.3 cm and it does not move following the twirl.	It shall be in the large end of egg, the height not more than 0.5 cm and it does not move following the twirl.	It shall be in the large end of egg, the height not more than 0.8 cm and it does not move following the twirl.	

**Commented [I1]:** Cross check the referenced standard used to develop this TZS if the weight range is the same. Size or weight class??

2.3 Egg white	Blood spots or meat spots are not present	Blood spots or meat spots are not present	Blood spots or meat spots may be present. *
2.4 Egg Yolk	The yolk outline is slightly defined and floats in the middle of the egg. Blood spots or meat spots are not present.	The yolk outline is fairly well defined and approaches the shell more closely. Blood spots or meat spots are not present	The yolk outline is plainly visible and approaches the shell closely. Blood spots or meat spots may be present. *
3. Broken-out	It is round and	It is round and of bulging	The yolk is flattened. Blood
egg	of bulging shape located	shape. Blood spots or meat	spots and meat spots may be present. *
3.1 Egg yolk	shape located in the middle of the thick egg white. Blood spots or meat spots are not present.	spots are not present.	be present.
3.2 Egg white	The thick white liquid is firm and round. The thin white is not enlarged. Blood spots or meat spots are not present	The same as grade AA. The thick white is reasonably firm.	The thick egg white and the thin egg white are not firm, being weak and watery, enlarged and watery, enlarged and flattened. Blood spots and meat spots may be present. *

**Note:** \* The aggregating blood spots and meat spots that may be present and shall not be more than 0.3 cm in diameter.

## 4.2.3 Tolerances

Tolerances for each package shall be as follows:

# a) Quality tolerances

- For grade AA, the minimum number of grade AA shall be 85%. Grade A can be included but not more than 15% of the total number of eggs.
- For grade A, the minimum number of grade A shall be 85%. Grade B can be included but not more than 15% of the total number of eggs.
- For grade B, only the eggs conforming to the requirement for eggs of grade B are allowed.

## b) Size tolerances

Eggs of all sizes may include the immediate smaller size not more than 3.4% of the total number of eggs.

c) Eggs of all grades and sizes shall be free from check except for the one caused by transportation but shall not be more than 5% of the total number of eggs.

## **5.0 CONTAMINANTS**

Table eggs shall comply with the requirements on maximum limits as prescribed in the Contaminants and Toxins in Food and Feed as established in Codex Stan 193 and the requirements for maximum residue limits for pesticides and veterinary drugs established by the Codex <a href="state:state

## **6.0 HYGIENE**

- **6.1** Table eggs shall be prepared under strict hygienic conditions according to CAC/RCP 15 1976 and CAC/RCP 1 (see clause 2).
- **6.2** When tested, table eggs shall not contain Salmonella in 25 g of sample according to TZS 122.

## 7.0 SAMPLING AND TESTS

## 7.1 Sampling

Sampling of table eggs for testing shall be done according to TZS 34-1 (see clause 2).

#### 7.2 Tests

Testing of this product shall be done according to test methods prescribed in Tables 1 and 2.

# 8.0 PACKAGING, MARKING AND LABELLING

#### 8.1 Packaging

- **8.1.1** In addition to the packaging requirements prescribed in TZS 538 (see clause 2), table eggs shall be packed in cartons or suitable containers that will avoid causing any external or internal damage and contamination of the table eggs.
- **8.1.2** Table eggs shall be packed either in cartons or in cases with their tapered ends facing down.
- **8.1.3 Carton** packaging material shall be new, standard plastic tray or paper cartons molded to suit the size of grade, each holding 6, 12 or 30 eggs.
- **8.1.4 Cases** packaging containing thirty dozens or more table eggs packed in wooden or fiberboard boxes.

# 8.2 Marking and labelling

- **8.2.1** The container shall be marked and labeled in accordance with TZS 538 (see clause 2). In addition, each container of chicken eggs shall be legibly and indelibly marked with the following information:
  - a) Name and grade of the product;
  - b) Date of production;
  - c) Expiry date;
  - d) Number of eggs in a package or its net weight in g or kg
  - e) Name and address of producer, importer and distributor;

- f) Instruction for storage and transportation. The packages shall be labeled as "fragile".
- **8.2.2** The language on the label shall be "Kiswahili" or Kiswahili and English. Additional language may be used depending on the designated market.
- 8.3 The container may also be marked with TBS Certification 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.