



DRAFT EAST AFRICAN STANDARD

Edible chicken eggs in shell— Specification

PUBLIC REVIEW DRAFT

EAST AFRICAN COMMUNITY

PUBLIC REVIEW DRAFT

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East African Community
P.O. Box 1096,
Arusha
Tanzania
Tel: + 255 27 2162100
Fax: + 255 27 2162190
E-mail: eac@eachq.org
Web: www.eac-quality.net

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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*.

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

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1 Scope

This Draft East African Standard specifies requirements, sampling, and test methods for edible chicken eggs in shell intended for human consumption.

2 Normative references

The following referenced documents are indispensable for the application 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.

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

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

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

CAC/GL 50, General Guidelines on Sampling

Codex Stan 193, Codex General Standard for contaminants and toxins in food and feed

CX/MRL 2 maximum residue limits (MRLs) and risk management recommendations (RMRS) for residues of veterinary drugs in foods

3 Terms and definitions

For the purposes 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 discolourations 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

container that can carry up to 30 eggs

3.3

crates/case or box

quantity of 12 trays

3.4

egg

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

edible egg

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**

grouping of eggs into lots having similar characteristics as to colour, weight, size, shape and quality

3.7**egg white or albumen**

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

3.8**fresh egg**

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

3.9**egg yolk**

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

3.10**tolerances**

acceptable proportion of defective eggs in a particular grade

4 Requirements**4.1 General requirements**

The edible chickens' eggs in shall be sound and fit for human consumption and shall not:

- a) Be damaged (cracked or broken);
- b) Have a soiled shell,
- c) Contain visible foreign matter at candling
- d) Have an odour
- e) Have surface moisture
- f) musty or mouldy
- g) have been in an incubator
- h) spoiled
- i) adulterated

4.2 Quality requirements**4.2.1 Internal quality of eggs**

The candling process can be used for examining the internal quality of eggs when required.

4.2.1.1 The eggs shall be free from meat spots, blood spots, diffused blood, foreign substances and abnormalities.

4.2.1.2 Each egg shall have space translucent, or faintly visible, yolk in the center of the egg when viewed through candling apparatus.

4.2.1.3 Each egg shall have a translucent and firm white, and an air space whose depth depends on the grade of the egg

4.3 Storage of eggs

4.3.1 The eggs shall be freshly laid, unsoiled and stored under recommended temperatures and humidity.

4.3.2 Fresh eggs shall be eggs that are of recent production. They shall not have been held in excess of 30 days if kept at a temperature of 15 °C and below and 14 days if kept at a temperature between 15 °C and 25 °C and shall have been handled under temperature and humidity conditions which will maintain their quality

4.4 Grading

The eggs may be classified into categories based on the weight, internal quality and shell color

4.4.1 Weight

Where edible chicken eggs in shell are classified based on weight, the requirements in table 1 shall apply.

Table 1 – Weight classes of edible chicken egg in shell

S/No.	Category	Weight per egg (g)
i)	Extra-large (I)	More than 61
ii)	Large (II)	55 to 61
iii)	Medium (III)	48 to 54
iv)	Small (IV)	41 to 47
v)	Very small (V)	Less than 41

4.4.2 Quality aspects of eggs in shell

Where edible chicken eggs in shell are classified based on quality, the requirements in table 2 shall apply

Table 2— quality aspects of different classes of edible chicken eggs in shell:

Quality factor	Specification for each quality factor		
	A	B	C
Shell	Clean, Unbroken Practically normal	Clean, Unbroken Practically normal	Clean to slightly Stained, Unbroken, May be slightly abnormal
Air cell	0.30 cm or less in depth, Practically regular	0.5 cm or less in depth, Practically regular	1 cm or less in depth May be free/loose bubbly
White	Clear, Clear	Clear, May be reasonably firm	Clear, May be slightly weak
Yolk	Outline slightly defined practically free from defects	Outline may be fairly well defined, Practically free from defects	Outline may be well defined, May be slightly enlarged and flattened, May show definite but not serious

			defects.
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4.4.3 Tolerances

Tolerances for each package shall be as follows:

a) Quality tolerances

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.

i For grade B, the minimum number of grade B shall be 85 %. Grade C can be included but not more than 15 % of the total number of eggs.

ii 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 Contaminants

Edible chicken's egg in shell shall comply with the requirements on maximum limits of contaminants as prescribed in the contaminants and toxins in food and feed as established in Codex Stan 193

6.0 Pesticides and veterinary drugs residues

6.1 Veterinary drug residues

Edible chicken eggs in shell shall have maximum residue limits for veterinary drugs in accordance with CAC/MRL 2

6.2 Pesticide residues

Edible chicken eggs in shell shall have maximum pesticide residues in accordance with the Codex Alimentarius pesticide residues database

7 Sampling

Sampling of edible chicken egg in shell shall be done according to CAC/GL 50

8 Packaging, marking and labelling.

8.1 Packaging

Edible chicken eggs in shell shall be packaged in suitable food-grade containers that will avoid causing any external or internal damage and contamination of the egg.

8.1.2 Edible chicken egg shall be packed with their tapered ends facing down

8.2 Marking and labelling

8.2.1 The container shall be marked and labelled in accordance with EAS 38 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) Best before 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 labelled as “fragile”; and
- g) production system
- h) Colour of the eggs
- i) country of origin

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Bibliography

TZS 2183 Table eggs – Specification

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