

# CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

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## STANDARD FOR UNSHELLED PISTACHIO NUTS

CXS 131-1981

Adopted in 1981. Amended in 2022, 2023.

**2022 Amendment**

Following decisions taken at the Forty-fifth Session of the Codex Alimentarius Commission in December 2022, amendments were made in Section 7.2 Labelling of non-retail containers.

**2023 Amendment**

Following decisions taken at the Forty-sixth Session of the Codex Alimentarius Commission in December 2023, the wording in Section 8. Methods of analysis and sampling was amended.

**1. SCOPE**

This standard applies to unshelled pistachios from varieties of *Pistacia vera* L. either in natural or in processed condition and which are offered for direct consumption. It also covers unshelled pistachios which are packed in bulk containers, and which are intended for repacking in consumer size containers.

**2. DESCRIPTION****2.1 Product definition**

Pistachios are the product obtained from mature seeds from the fruit of *Pistacia vera* L. which have been artificially sun-dried and naturally or mechanically opened. The product may be roasted, salted, and/or lime-juice treated.

**2.2 Varietal type**

Varietal types are classified as:

- (a) Long pistachio
- (b) Round pistachio

**2.3 Styles**

The product shall be presented in one of the following styles:

- (a) Raw pistachio
- (b) Roasted pistachio

**2.4 Substyles**

The product may be presented in one or more of the following substyles:

- (a) Salted
- (b) Lime-juice treated

**2.5 Size classification (optional)**

Pistachios may be designated as to size in accordance with the following Table:

Designation	No. of pistachios per 100 grams
Small	over 106
Medium	92 to 106
Large	81 to 91
Very Large	71 to 80
Extra Large	under 71

**3. ESSENTIAL COMPOSITION AND QUALITY FACTORS****3.1 Raw material**

Clean, sound pistachios of a quality suitable for human consumption.

**3.2 Optional ingredients**

- (a) Salt
- (b) Lime-juice

**3.3 Final product****3.3.1 Composition – moisture content**

Maximum moisture content 7 percent m/m.

### 3.3.2 Quality factors – general requirements

- (a) Practically free from mould and mouldy or rancid taste.
- (b) Free from living insects and mites.
- (c) Practically free from foreign matter – anything other than pistachio (kernel, hard shell and pericarp).

### 3.3.3 Definition of defects

- (a) **Closedness (unsplit)** – pistachio shells which are not split open, but contain a fully developed kernel;
- (b) **Emptiness** – the condition of pistachio in which the kernel is not developed;
- (c) **Unripeness (immaturity)** – the condition of pistachio in which the kernel has not developed adequately;
- (d) **Insect damaged fruit** - fruit which is affected by insect damage or containing dead insects, mites, or other pests.
- (e) **Mouldy fruit** - fruit which is affected by mould to a visible extent, or decay.

### 3.3.4 Allowances for defects

The maximum allowances by count for defects as defined in Section 3.3.3 are as follows:

- Category 3.3.3(a) – 5%
- Category 3.3.3(b) – 5%
- Category 3.3.3(c) – 8%
- Category 3.3.3(d) – 4%
- Category 3.3.3(e) – 1%

Total defects (a) to (e) shall not exceed 10%.

## 3.4 Lot acceptance

A lot will be considered as meeting the quality criteria requirements of the standard when:

- (a) there is no evidence of live infestation; and
- (b) the subsamples as taken in accordance with an appropriate sampling plan with an AQL of 6.5, (see relevant Codex texts on methods of analysis and sampling), meet the general requirements for subsections 3.3.1 and 3.3.2 and do not exceed the allowances for the respective defects in subsection 3.3.4.

## 4. FOOD ADDITIVES

No additives are permitted.

## 5. HYGIENE

**5.1** It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the *General Principles of Food Hygiene* (CXC 1-1969),<sup>1</sup> and other codes of practice recommended by the Codex Alimentarius Commission which are relevant to this product.

**5.2** To the extent possible in good manufacturing practice, the product shall be free from objectionable matter.

**5.3** When tested by appropriate methods of sampling and examination, the product:

- shall be free from microorganisms in amounts which may represent a hazard to health;
- shall be free from parasites which may represent a hazard to health; and
- shall not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

## 6. WEIGHTS AND MEASURES

Containers shall be as full as practicable without impairment of quality and shall be consistent with a proper declaration of contents for the product.

## 7. LABELLING

In addition to the requirements of the *General Standard for the Labelling of Pre-packaged Foods* (CXS 1-1985)<sup>2</sup> the following specific provisions apply:

### 7.1 The name of the food

7.1.1 The name of the product as declared on the label shall be "unshelled pistachio", "unshelled pistachio nuts" or "inshell pistachio nuts".

7.1.2 In addition, there shall appear on the label as part of the name or in close proximity to the name the form of presentation as indicated below:

(a) raw

(b) roasted

7.1.3 The name of the product may include the varietal types as "long" or "round", and the substyle as "salted", or "lime-juice treated" and the size designation as "small", "medium", "large", "very large" or "extra large".

### 7.2 Labelling of non-retail containers

The labelling of non-retail containers should be in accordance with the *General Standard for the Labelling of Non-Retail Containers of Foods* (CXS 346-2021).<sup>3</sup>

## 8. METHODS OF ANALYSIS AND SAMPLING

For checking the compliance with this standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999)<sup>4</sup> relevant to the provisions in this standard shall be used.

## NOTES

<sup>1</sup> FAO and WHO. 1969. *General Principles of Food Hygiene*. Codex Alimentarius Code of Practice, No. CXC 1-1969. Codex Alimentarius Commission. Rome.

<sup>2</sup> FAO and WHO. 1985. *General Standard for the Labelling of Pre-packaged Foods*. Codex Alimentarius Standard, No. CXS 1-1985. Codex Alimentarius Commission. Rome.

<sup>3</sup> FAO and WHO. 2021. *General Standard for the Labelling of Non-Retail Containers of Foods*. Codex Alimentarius Standard, No. CXS 346-2021. Codex Alimentarius Commission. Rome.

<sup>4</sup> FAO and WHO. 1999. *Recommended Methods of Analysis and Sampling*. Codex Alimentarius Standard, No. CXS 234-1999. Codex Alimentarius Commission. Rome.