

# CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

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## STANDARD FOR DATES

CXS 143-1985

Adopted in 1985. Amended in 2019.

**2023 Editorial correction**

An editorial correction was made to Section 3.3 (b) to read "*Recommended Methods of Analysis and Sampling (CXS 234-1999)*<sup>1</sup>" instead of "Codex Alimentarius Volume 13".

## 1. SCOPE

This standard applies to commercially prepared whole dates in pitted or unpitted styles packed ready for direct consumption. It does not apply to other forms such as pieces or mashed dates or dates intended for industrial purposes.

## 2. DESCRIPTION

### 2.1 Product definition

Dates are the product prepared from sound fruit of the date tree (*Phoenix dactylifera* L.), which is:

- (a) harvested at the appropriate stage of maturity;
- (b) sorted and cleaned to remove defective fruit and extraneous material;
- (c) may be pitted and capped;
- (d) may be dried or hydrated to adjust moisture content;
- (e) may be washed and/or pasteurized; and
- (f) packaged in suitable containers to assure preservation and protection of the product.

### 2.2 Varietal types

Varietal types are classified as:

- (a) **Cane sugar varieties** (containing mainly sucrose) such as Daglat Nuur (Deglet Noor) and Daglat Beidha (Deglet Beidha).
- (b) **Invert sugar varieties** (containing mainly invert sugar glucose, and fructose) such as Barhi (Barhee), Saiidi (Saidy), Khadhraawi (Khadrawy), Hallaawi (Halawy), Zahdi (Zahidi), and Sayir (Sayer).

### 2.3 Styles

Styles may be classified as:

- (a) unpitted; and
- (b) pitted.

### 2.4 Substyles

Substyles are as follows:

- (a) **Pressed** – dates which are compressed into layers using mechanical force.
- (b) **Unpressed or loose** – dates which are free-flowing or packaged without mechanical force or compression.
- (c) **Clusters** – dates with the main bunch stem attached.

### 2.5 Size classification (optional)

Dates may be designated as to size names in accordance with the following charts:

#### (a) Unpitted dates

Size	No. of dates in 500 g
Small	More than 100
Medium	80 to 100
Large	less than 80

#### (b) Pitted dates

Size	No. of dates in 500 g
Small	More than 110
Medium	90 to 110
Large	less than 90

### 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 Composition

##### 3.1.1 *Optional ingredients*

Glucose syrup, sugars, flour, vegetable oils.

#### 3.2 Quality factors

##### 3.2.1 *General requirements*

Dates shall be prepared from such fruit and under such practices that the finished product shall possess a characteristic colour and flavour for the variety and type, be of proper stage of ripeness, be free of live insects and insect eggs and mites and meet the following additional requirements:

(a) <b>Moisture content</b>	<b>Maximum</b>
Cane sugar varieties	26%
Daglat Nuur	30% (not processed in accordance with 2.1(d)(e))
Invert sugar varieties	30%
(b) <b>Size (minimum)</b>	
Unpitted dates	- 4.75 grammes
Pitted dates	- 4.0 grammes
(c) <b>Pits (stones)</b> <b>(in pitted style)</b>	- Not more than two pits or 4 pieces of pit per 100 dates
(d) <b>Mineral impurities</b>	- Not more than 1 g/kg

##### 3.2.2 *Definition of defects*

(a) <b>Blemishes</b>	- Scars, discolouration, sunburn, dark spots, blacknose or similar abnormalities in surface appearance affecting an aggregate area greater than that of a circle 7 mm in diameter.
(b) <b>Damaged</b>	- (Unpitted dates only) – dates affected by mashing and/or tearing of the flesh exposing the pit or to such an extent that it significantly detracts from the visual appearance of the date.
(c) <b>Unripe dates</b>	- Dates which may be light in weight, light in colour, have shrivelled or little flesh or a decidedly rubbery texture.
(d) <b>Unpollinated dates</b>	- Dates not pollinated as evidenced by thin flesh, immature characteristics and no pit in unpitted dates.
(e) <b>Dirt</b>	- Dates having embedded organic or inorganic material similar to dirt or sand in character and affecting an aggregate area greater than that of a circle 3 mm in diameter.
(f) <b>Insects and mites</b>	- Dates damaged by insects or mites or contaminated by <b>damage and contamination</b> , the presence of dead insects or mites, fragments of insects or mites or their excreta.
(g) <b>Scouring</b>	- Breakdown of the sugars into alcohol and acetic acid by yeasts and bacteria.
(h) <b>Mould</b>	- Presence of mould filaments visible to the naked eye.
(i) <b>Decay</b>	- Dates that are in a state of decomposition and very objectionable in appearance.

### 3.2.3 Allowance for defects

The maximum allowances for the defects defined in 3.2.2 shall be:

- a total of 7 percent by count of dates with defect (a);
- a total of 6 percent by count of dates with defects (b), (c) and (d);
- a total of 6 percent by count of dates with defects (e) and (f); and
- a total of 1 percent by count of dates with defects (g), (h) and (i).

### 3.3 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 subsample, as taken in conformity with subsamples for examination and testing in *Recommended Methods of Analysis and Sampling* (CXS 234-1999)<sup>1</sup>, meets the general requirements of subsection 3.2.1 and does not exceed the allowances for the respective defects in subsections 3.2.2 and 3.2.3, except that, with respect to size requirements, 5 percent by count (5 dates out of 100) may weigh less than the specified minimum.

## 4. FOOD ADDITIVES

### Maximum level

- |     |          |   |   |
|-----|----------|---|---|
| 4.1 | Glycerol | ) | In accordance with good manufacturing practices (GMPs) (see also Section 3.1.1) |
| 4.2 | Sorbitol | ) |   |

## 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>2</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 GMPs, 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>3</sup> the following specific provisions apply:

### 7.1 The name of the food

- 7.1.1 The name of the product shall be "Dates" or "Dates coated with Glucose Syrup".
- 7.1.2 The style shall be indicated as "pitted" or "unpitted", as is applicable.
- 7.1.3 The name of the product may include the name of the varietal type, such as "Hallawi", "Saher", "Khadhrawi", "Daglat", "Noor", "Barhee", or others, the substyle as "pressed" or "unpressed", and the size designation as "small", "medium" or "large".

## 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>1</sup> relevant to the provisions in this standard shall be used.

## 8.1 Special provisions for sampling of dates

### 8.1.1 Gross sample

Select at random not less than two individual packages per each 1 000 kg portion of the lot. From each individual package draw a sample of 300 g and in any case sufficient to obtain a gross sample of not less than 3 000 g. Use the gross sample for checking carefully for live infestation and general cleanliness of the product prior to its examination for compliance with other provisions of the standard.

### 8.1.2 Subsamples for examination and testing

Mix the gross sample well and take small quantities at random from many different places as follows:

For moisture test	- 500 grammes
For pits (in pitted style)	- 100 dates
For specified defects and size requirements	- 100 dates

## NOTES

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<sup>1</sup> FAO and WHO. 1999. *Recommended Methods of Analysis and Sampling*. Codex Alimentarius Standard, No. CXS 234-1999. Codex Alimentarius Commission. Rome.

<sup>2</sup> FAO and WHO. 1969. *General Principles of Food Hygiene*. Codex Alimentarius Code of Practice, No. CXC 1-1969. Codex Alimentarius Commission. Rome.

<sup>3</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.