



Economic and Social Council

Distr.: General
30 August 2024

Original: English

Economic Commission for Europe

Steering Committee on Trade Capacity and Standards

Working Party on Agricultural Quality Standards

Seventy-ninth session

Geneva, 11–13(a.m.) November 2024

Item 5 of the provisional agenda

Specialized Section on Standardization of Dry and Dried Produce

Revised standard for inshell walnuts

Submitted by the secretariat

Summary

The following document is submitted to the Working Party for adoption as the revised United Nations Economic Commission for Europe (UNECE) standard DDP-01 concerning the marketing and commercial quality control of inshell walnuts.

The document is based on the document ECE/TRADE/C/WP.7/2014/20 and integrates modifications agreed during the seventy-first session of the Specialized Section on Standardization of Dry and Dried Produce (GE.2) in 2024 as reflected in ECE/CTCS/WP.7/GE.2/2024/10.



UNECE standard DDP-01 concerning the marketing and commercial quality control of inshell walnuts

I. Definition of produce

This standard applies to inshell walnuts free from outer husks, of varieties (cultivars) grown from *Juglans regia* L., intended for direct consumption or for food when intended to be mixed with other products for direct consumption without further processing.

This standard does not apply to inshell walnuts that are processed by salting, sugaring, flavouring or roasting, or for industrial processing.

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements of inshell walnuts after preparation and packaging.

However, if applied at stages following export or dispatch, the holder/seller shall be responsible for observing the requirements of the standard. The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard.

A. Minimum requirements¹

In all classes, subject to the special provisions for each class and the tolerances allowed, the inshell walnuts must display the following characteristics observed by the naked eye or corrected 20/20 vision² when appropriate:

(a) The shell must be:

- intact; however, broken shells when that area from which a portion of the shell is missing in aggregate is greater than the area of a circle one-fourth inch (6 mm) in diameter, or when the two halves of the shell have become completely broken apart and separated from each other are considered defects
- clean; practically free of any visible foreign matter, including residues of adhering husk and dirt affecting in aggregate more than 10 per cent of the total surface area
- free from blemishes, areas of discoloration or spread stains in pronounced contrast with the rest of the shell affecting in aggregate no more than 25 per cent of the surface of the shell

(b) The kernel must be:

- free from rancidity
- sufficiently developed: Shrunken or shrivelled kernels which are extremely flat and wrinkled, or with desiccated [dehydrated], dried out or tough portions affecting more than 25 per cent of the kernel and empty shells, are to be excluded.
- sufficiently mature for fresh walnuts; i.e. it must be possible to peel off the skin of the kernel easily and the internal central partition must be turning brown
- free from blemishes, areas of discoloration or spread stains in pronounced contrast with the rest of the kernel affecting in aggregate no more than 25 per cent of the surface of the kernel except for sun burnt kernels provided the taste is not affected

¹ Definitions of terms and defects are listed in Annex III of the Standard Layout – Recommended terms and definitions of defects for standards of dry (inshell nuts and nut kernels) and dried produce <https://unece.org/trade/wp7/DDP-Standards>.

² Loupe, binocular or other magnifying equipment should not be used when assessing defects.

(c) The whole produce (shell and kernel) must be:

- sound; produce affected by rotting or deterioration such as to make the produce unfit for human consumption is excluded
- free from mould filaments
- free from living pests, whatever their stage of development
- free from damage caused by pests, including the presence of dead insects and/or mites, their debris or excreta
- free of abnormal external moisture
- free of foreign smell and/or taste.

The shells may be washed and bleached provided that the treatment applied does not affect the quality of the kernels.

The condition of the inshell walnuts must be such as to enable them:

- to withstand transportation and handling
- to arrive in satisfactory condition at the place of destination.

B. Moisture content³

The fresh inshell walnuts shall have a natural moisture content of at least 20.0 per cent.

The dry inshell walnuts shall have a moisture content not exceeding 12.0 per cent for the whole nut or 8.0 per cent for the kernel.

C. Classification

In accordance with the defects allowed in section “IV. Provisions concerning tolerances”, inshell walnuts are classified into the following classes:

“Extra” Class, Class I and Class II.

The defects allowed must not affect the general appearance of the produce as regards quality, keeping quality and presentation in the package.

III. Provisions concerning sizing

Sizing is mandatory for “Extra” Class and Class I and optional for Class II.

The minimum size is 26 mm for “Extra” Class and Class I and 24 mm for Class II.

When sized, size is determined by:

- screening, i.e. minimum diameter in mm measured by a round sieve, or
- size range, i.e. minimum and maximum diameter in mm which must not exceed 2 mm of difference. However, for oblong varieties having a height of at least 1.25 times of the equatorial section, the maximum size range shall not exceed 3 mm.

IV. Provisions concerning tolerances

At all marketing stages, tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the minimum requirements of the class indicated.

³ The moisture content is determined by Method 1 and/or 2 in Annex I of the Standard Layout for UNECE Standards on Dry and Dried Produce. The laboratory reference method shall be used in cases of dispute.

<i>Defects allowed</i>	<i>Tolerances allowed</i>		
	<i>per cent of defective inshell walnuts by number or weight (with regard to the total inshell weight basis)</i>		
	<i>“Extra”</i>	<i>Class I</i>	<i>Class II</i>
(a) Tolerances for defects affecting the external appearances of the shell such as shells with adhering husk/hull, dirt and blemishes, open, broken or damaged shells	7	10	15
Mouldy affecting fresh walnuts (external) only	5	5	5
(b) Tolerances for the edible part not satisfying the minimum requirements (by count, based on a 100 nut sample)*:	8	10	15
of which no more than:			
Mouldy	3	4	6
Not sufficiently developed, shrunken or shrivelled kernels **	8	10	15
Rancid or damaged by pests, rotten or deteriorated	3	6	8
Living Pests	0	0	0
(c) Size tolerances (if sized)			
For inshell walnuts not conforming to the provisions concerning sizing and the size indicated in total	10	10	10
(d) Tolerances for other defects:			
Extraneous matter (of organic origin) such as loose shells, shell fragments, fragments of hull, leaves dust (by weight)	2	3	4
of which no more than:			
Foreign matter (of inorganic origin) such as stones metal, and glass (by weight)	0.25	1	2
Inshell walnuts belonging to varieties or commercial types other than that indicated	10	10	10

* In Turkey, tolerances for the edible part not satisfying the minimum requirements are determined by weight.

** In the calculation of tolerances, whatever the class, two half-empty walnuts or four quarter-empty walnuts are counted as one empty walnut.

V. Provisions concerning presentation

A. Uniformity

The contents of each package⁴ must be uniform and contain only inshell walnuts of the same origin, quality, crop year, size (if sized) and variety or commercial type (if indicated).

The visible part of the contents of the package must be representative of its entire contents.

B. Packaging

Inshell walnuts must be packed in such a way as to protect the produce properly.

The materials used inside the package must be clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or

⁴ The term “packages” is defined in Annex III of the Standard Layout for UNECE Standards on Dry and Dried Produce.

stamps bearing trade specifications, is allowed, provided the printing or labelling has been done with non-toxic ink or glue.

Packages must be practically free of all foreign and extraneous matter in accordance with the table of tolerances in section “IV. Provisions concerning tolerances”.

VI. Provisions concerning marking

Each package⁵ must bear the following particulars in letters grouped on the same side, legibly and indelibly marked and visible from the outside:

A. Identification

Packer and/or dispatcher: Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority⁶ if a country applying such a system is listed in the UNECE Code Mark Registry.

B. Nature of produce

- “Walnuts” or “Dry walnuts”; or
- “Fresh walnuts” or equivalent denomination
- Name of the variety or commercial types (optional).

C. Origin of produce

- Country of origin⁷ and, optionally, district where grown, or national, regional or local place name.

D. Commercial specifications

- Class
- Size (if sized); expressed by:
 - The minimum diameter followed by the words “and above” or equivalent denomination“; or
 - The minimum and maximum diameters
- Crop year (optional)
- “Best before” followed by the date (optional)
- "Store in a cool place", or “preservation very limited, store in a cool place”, for fresh walnuts.

⁵ These marking provisions do not apply to sales packages presented in packages.

⁶ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in cases where a code mark is used, the reference “packer and/or dispatcher” (or equivalent abbreviations) must be indicated in close connection with the code mark, and the code mark should be preceded with the ISO 3166 alpha country code of the recognizing country, if not the country of origin.

⁷ The full or a commonly used name should be indicated.

E. Official control mark (optional)

Adopted 1970 (as UNECE Standard for Unshelled Walnuts)

Last revised 2024

Aligned with the Standard Layout 2022
