United States Standards for Grades of Cucumbers

Effective September 6, 2016
Corrected and Reprinted January 23, 2018
This issue of the United States Standards for Grades of Cucumbers (81 FR 51297) supersedes the previous issue which has been in effect since March 1, 1958. This reprint of the United States Standards for Grades of Cucumbers which have been in effect since September 6, 2016 and was corrected and reprinted January 23, 2018 to include minimum shape illustrations.

Voluntary U.S. grade standards are issued under the authority of the Agricultural Marketing Act of 1946, which provides for the development of official U.S. grades to designate different levels of quality. These grade standards are available for use by producers, suppliers, buyers, and consumers. As in the case of other standards for grades of fresh and processed fruits, vegetables, and specialty crops these standards are designed to facilitate orderly marketing by providing a convenient basis for buying and selling, for establishing quality control programs, and for determining loan values.

The U.S. grade standards and inspection instructions for all fresh and processed fruits, vegetables, and specialty crops are available on the internet and upon request at the address below. These documents provide detailed interpretations of the grade standards and provide step-by-step procedures for grading the product.

Grade standards are issued by the U.S. Department of Agriculture (USDA) after careful consideration of all data and views submitted during rulemaking. The Department welcomes suggestions for improving the standards in future revisions. Comments may be submitted to, and copies of standards and inspection instructions obtained from:

Director, Specialty Crops Inspection Division
Specialty Crops Program,
USDA, Agricultural Marketing Service
1400 Independence Avenue, SW, STOP 0240
Washington, D.C. 20250


Note: Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or with applicable State laws and regulations.

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## United States Standards for Grades of Cucumbers

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Grades

§51.2220 U.S. Fancy.

“U.S. Fancy” consists of cucumbers which are well colored, well formed, not overgrown, and which are fresh, firm, and free from decay, sunscald, and from injury caused by scars and from damage caused by yellowing, sunburn, dirt or other foreign material, freezing, mosaic or other disease, insects, cuts, bruises, mechanical or other means. (See §51.2227.)

(a) The maximum diameter of each cucumber shall be not more than 2-3/8 inches and the length of each cucumber shall be not less than 6 inches. (See §51.2227.)

§51.2221 U.S. Extra No. 1.

“U.S. Extra No. 1” consists of a combination of U.S. Fancy and U.S. No. 1 cucumbers: Provided, That at least 50 percent of the cucumbers in the lot shall meet the requirements of the U.S. Fancy grade and the remainder shall meet the requirements of the U.S. No. 1 grade. (See §51.2227.)

(a) The maximum diameter of each cucumber shall be not more than 2-3/8 inches and the length of each cucumber shall be not less than 6 inches. (See §51.2227.)

§51.2222 U.S. No. 1.

“U.S. No. 1” consists of cucumbers which are fairly well colored, fairly well formed, not overgrown, and which are fresh, firm, and free from decay, sunscald and from damage caused by scars, yellowing, sunburn, dirt or other foreign materials, freezing, mosaic or other disease, insects, cuts, bruises, mechanical or other means. (See §51.2227.)

(a) Unless otherwise specified, the maximum diameter of each cucumber shall be not more than 2-3/8 inches and the length of each cucumber shall be not less than 6 inches. (See §51.2227.)

§51.2223 U.S. No. 1 Small.

“U.S. No. 1 Small” consists of cucumbers which meet all requirements for the U.S. No. 1 grade except for size. (See §51.2227.)

(a) The diameter of each cucumber shall be not less than 1-1/2 inches or more than 2 inches. There are no requirements for length. (See §51.2227.)
§51.2224  U.S. No. 1 Large.

“U.S. No. 1 Large” consists of cucumbers which meet all requirements for the U.S. No. 1 grade except for size. (See §51.2227.)

(a)  The minimum diameter of each cucumber shall be not less than 2-1/4 inches and, unless otherwise specified, the length of each cucumber shall be not less than 6 inches. There are no maximum diameter and length requirements. (See §51.2227.)

§51.2225  U.S. No. 2.

“U.S. No. 2” consists of cucumbers which are moderately colored, not badly deformed, not overgrown, and which are fresh, firm, free from decay and free from damage caused by freezing, sunscald, cuts and from serious damage caused by scars, yellowing, sunburn, dirt or other foreign material, mosaic or other disease, insects, bruises, mechanical or other means. (See §51.2227.)

(a)  Unless otherwise specified, the maximum diameter of each cucumber shall be not more than 2-3/8 inches and the length of each cucumber shall be not less than 5 inches. (See §51.2227.)

Reserved

§51.2226  Reserved.

Tolerances

§51.2227  Tolerances.

(a)  In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, shall be permitted:

(1)  For defects. 10 percent for cucumbers in any lot which fail to meet the requirements of the grade, including therein not more than 1 percent for decay; and,

(2)  For off-size. 10 percent for cucumbers in any lot which fail to meet the length and diameter requirements, including therein not more than 5 percent for cucumbers which fail to meet the requirements for minimum diameter, and not more than 5 percent for cucumbers which fail to meet the requirements for maximum diameter.

(b)  When applying the foregoing tolerances to the U. S. Extra No. 1 grade, individual containers shall have not more than 10 percent less than the percentage of U. S. Fancy cucumbers required: Provided, That the entire lot averages within the required percentage. (See §51.2228.)
Application of Tolerances
§51.2228 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations: Provided, That the averages for the entire lot are within the tolerances specified for the grade:

(1) For a tolerance of 10 percent or more, individual packages in any lot shall have not more than one and one-half times the tolerance specified, except that when the package contains 15 specimens or less, individual packages shall have not more than double the tolerance specified; and,

(2) For a tolerance of less than 10 percent, individual packages in any lot shall have not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in any package.

Definitions
§51.2229 Well colored.

“Well colored” means that not less than three-fourths of the surface of the cucumber is of a medium green or darker color, and that at least a light green color extends to the blossom end on one side of the cucumber.

§51.2230 Well formed.

“Well formed” means that the cucumber is practically straight and not more than very slightly constricted or more than moderately tapered or pointed.

§51.2231 Overgrown.

“Overgrown” means that the cucumber has developed beyond the best stage for slicing. It usually yields to slight pressure of the thumb. The seeds may be tough and fibrous, and the pulp in the seed cavity is usually watery or jelly-like. In more advanced cases, pithy streaks may be found in the flesh of the cucumber.

§51.2232 Injury caused by scars.

“Injury caused by scars” means scars which aggregate more than the area of a circle three-eighths inch in diameter on a cucumber 6 inches in length, or correspondingly greater areas of scars on larger cucumbers.

§51.2233 Damage.

“Damage”, unless otherwise specifically defined in this section, means any defect which materially affects the appearance, or the edible or shipping quality of the
cucumber. Any one of the following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) **Scars** when aggregating more than the area of a circle five-eighths inch in diameter on a cucumber 6 inches in length, or correspondingly smaller or greater areas of scars on smaller or larger cucumbers, respectively;

(b) **Cuts** which are fresh and more than slight; and,

(c) **Bruises** when materially affecting the appearance of the cucumber, or when sack imprints affect an aggregate area greater than that of a circle 2 1/4 inches in diameter.

§51.2234 Diameter.

“Diameter” means the greatest dimension of the cucumber measured at right angles to the longitudinal axis, exclusive of “warts”.

§51.2235 Fairly well colored.

“Fairly well colored” means that not less than two-thirds of the surface of the cucumber is of a medium green or darker color, and that at least a light green color extends to within one-half inch of the blossom end on one side of the cucumber.

§51.2236 Fairly well formed.

“Fairly well formed” means that the cucumber may be moderately curved but not deeply constricted, not extremely tapered or pointed and not otherwise misshapen.

§51.2237 Moderately colored.

“Moderately colored” means that at least one-half of the surface of the cucumber is of a light green or darker color.

§51.2238 Badly deformed.

“Badly deformed” means that the cucumber is so badly curved, constricted, tapered or otherwise so badly misshapen that the appearance is seriously affected.

§51.2239 Serious damage.

“Serious damage”, unless otherwise specifically defined in this section, means any defect which seriously affects the appearance, or the edible or shipping quality of the cucumber. The following defects, or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:
damage:

(a) **Scars** when aggregating more than the area of a circle 1 inch in diameter on a cucumber 6 inches in length, or correspondingly smaller or greater areas of scars on smaller or larger cucumbers, respectively; and,

(b) **Bruises** when seriously affecting the appearance of the cucumber, or when sack imprints affect more than one-third of the surface of the cucumber.
MINIMUM SHAPES PERMISSIBLE IN U.S. FANCY GRADE

(About 1/3 actual size)

Illustration CUXFR 1
MINIMUM SHAPES PERMISSIBLE IN U.S. NO. 1 GRADE

(About 1/3 actual size)

Illustration CUXFR 2
MINIMUM SHAPES PERMISSIBLE IN U.S. NO. 2 GRADE
(About 1/3 actual size)

Illustration CUXFR 3