

United States Department of Agriculture

Agricultural Marketing Service

Fruit and Vegetable Division

Fresh Products Branch

# United States Standards for Grades of Cucumbers

Effective March 1, 1958 (Reprinted - January 1997)

#### Grades

51.2220 U.S. Fancy. 51.2221 U.S. Extra No. 1. 51.2222 U.S. No. 1. 51.2223 U.S. No. 1 Small. 51.2224 U.S. No. 1 Large. 51.2225 U.S. No. 2. Unclassified 51.2226 Unclassified. **Tolerances** 51.2227 Tolerances. **Application of Tolerances** 51.2228 Application of tolerances. Definitions 51.2229 Well colored. 51.2230 Well formed. 51.2231 Overgrown. 51.2232 Injury caused by scars. 51.2233 Damage. 51.2234 Diameter. 51.2235 Fairly well colored. 51.2236 Fairly well formed. 51.2237 Moderately colored. 51.2238 Badly deformed. 51.2239 Serious damage. 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:

<sup>&</sup>lt;sup>1</sup>Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act.

**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.)

## Unclassified

## §51.2226 Unclassified.

"Unclassified" consists of cucumbers which have not been classified in accordance with any of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

# 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.

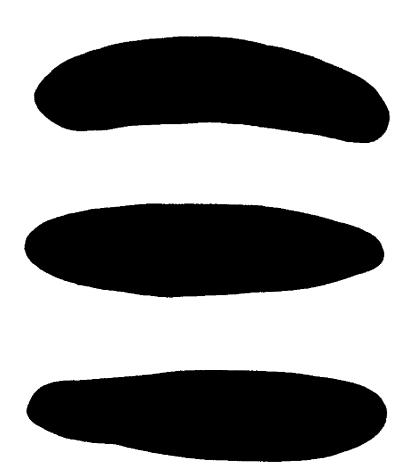
"Badly deformed" means that the cucumber is so badly curved, constricted, tapered or otherwise so badly misshapen that the appearance is seriously affected.

# §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:

(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

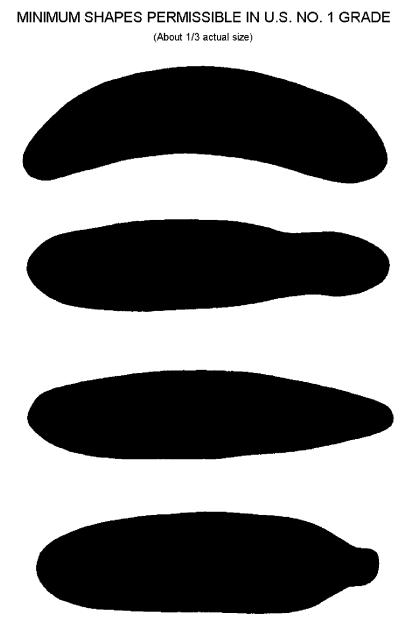
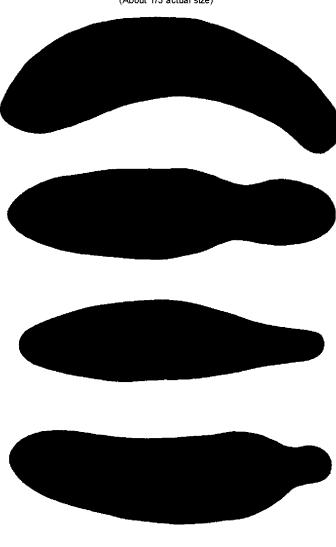


Illustration CUXFR 2



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

Illustration CUXFR 3