United States Consumer Standards for Celery Stalks

Effective March 27, 1949
Reprinted December 13, 2018
This is a reprint of the United States Consumer Standards for Celery Stalks which have been in effect since March 27, 1949 and were updated to modify the format.

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 Consumer Standards for Stalks

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>2</td>
</tr>
<tr>
<td>§51.595 General</td>
<td>2</td>
</tr>
<tr>
<td>Grades</td>
<td>2</td>
</tr>
<tr>
<td>§51.596 U.S. Grade AA</td>
<td>2</td>
</tr>
<tr>
<td>§51.597 U.S. Grade A</td>
<td>2</td>
</tr>
<tr>
<td>§51.598 U.S Grade B</td>
<td>3</td>
</tr>
<tr>
<td>Blanching; Length of Stalks</td>
<td>3</td>
</tr>
<tr>
<td>§51.599 Blanching</td>
<td>3</td>
</tr>
<tr>
<td>§51.600 Length of Stalks</td>
<td>3</td>
</tr>
<tr>
<td>Off-grade</td>
<td>3</td>
</tr>
<tr>
<td>§51.601 Off-Grade celery</td>
<td>3</td>
</tr>
<tr>
<td>Definitions</td>
<td>4</td>
</tr>
<tr>
<td>§51.602 Stalk</td>
<td>4</td>
</tr>
<tr>
<td>§51.603 Similar varietal characteristics</td>
<td>4</td>
</tr>
<tr>
<td>§51.604 Well developed</td>
<td>4</td>
</tr>
<tr>
<td>§51.605 Good heart formation</td>
<td>4</td>
</tr>
<tr>
<td>§51.606 Clean</td>
<td>4</td>
</tr>
<tr>
<td>§51.607 Well trimmed</td>
<td>4</td>
</tr>
<tr>
<td>§51.608 Fairly compact</td>
<td>4</td>
</tr>
<tr>
<td>§51.609 Damage</td>
<td>4</td>
</tr>
<tr>
<td>§51.610 Midrib length</td>
<td>5</td>
</tr>
<tr>
<td>§51.611 Fairly well developed</td>
<td>5</td>
</tr>
<tr>
<td>§51.612 Fairly good heart formation</td>
<td>5</td>
</tr>
<tr>
<td>§51.613 Serious Damage</td>
<td>5</td>
</tr>
</tbody>
</table>
General
§51.595 General.

These standards do not apply to celery hearts.

Grades
§51.596 U.S. Grade AA.

U.S. Grade AA consists of stalks of celery of similar varietal characteristics, which are well developed, and have good heart formation; which are clean, well trimmed, fairly compact, and are free from blackheart, brown stem, decay (except dry type crater rot), doubles, and from damage caused by crater rot, wilting, cutworms, freezing, suckers, growth cracks, hollow crown, pithy branches, seedstems, rust, cracked stem, other diseases, insects or mechanical or other means.

(a) The average midrib length of outer whorl of branches on stalks in this grade shall be not less than 7 inches. (See §§51.599 and 51.600.)

(b) Incident to proper grading and handling other than for average midrib length of branches not more than 5 percent, by count, of the stalks in any lot may fail to meet the requirements of the grade including not more than 1 percent for stalks affected by moist type decay. In addition, not more than 3 percent, by count, of the stalks in any lot may fail to meet the requirements as to average midrib length of the stalks.

§51.597 U.S. Grade A.

U.S. Grade A shall consist of stalks of celery of similar varietal characteristics which are fairly well developed and have fairly good heart formation; which are clean, well trimmed, and not badly spread, and which are free from blackheart, decay (except dry type crater rot), doubles, and from damage caused by crater rot, brown stem, wilting, cutworms, freezing, suckers, growth cracks, hollow crown, pithy branches, seedstems, rust, cracked stem, other diseases, insects, or mechanical or other means.

(a) The average midrib length of the outer whorl of branches on stalks in this grade shall be not less than 5 inches. (See §§51.599 and 51.600.)

(b) Incident to proper grading and handling other than for average midrib length of branches, not more than 5 percent, by count, of the stalks in any lot may fail to meet the requirements of the grade including not more than 1 percent for stalks affected by moist type decay. In addition, not more than 3 percent, by count, of the stalks in any lot may fail to meet the requirements as to average midrib length of the stalks.
§51.598 U.S Grade B.

U.S. Grade B shall consist of stalks of celery of similar varietal characteristics which are fairly well developed, which are clean, well trimmed and free from blackheart, decay (except dry type crater rot), doubles, and from serious damage caused by crater rot, brown stem, wilting, cutworms, freezing, suckers, growth cracks, hollow crown, pithy branches, seedstems, rust, cracked stem, other diseases, insects, or mechanical or other means.

(a) The average midrib length of the outer whorl of branches on stalks in this grade shall be not less than 4 inches. (See §§51.599 and 51.600.)

(b) Incident to proper grading and handling other than for average midrib length of branches, not more than 5 percent, by count, of the stalks in any lot may fail to meet the requirements of this grade including not more than 1 percent for stalks affected by moist type decay. In addition not more than 3 percent, by count, of the stalks in any lot may fail to meet the requirements as to average midrib length of the stalks.

Blanching; Length of Stalks
§51.599 Blanching.

There are no requirements in the grades as to blanching. However, celery stalks may be classed as “green” when they have a medium to dark green appearance, “fairly well blanched” when the midrib portions of the branches on the stalks are generally of a light greenish to creamy white color, or “well blanched” when the midrib portions of the branches on the stalks are generally of a creamy white color. Not more than 5 percent of the stalks in any lot may fail to meet the requirements of any of the above classes.

§51.600 Length of Stalks.

There are no requirements in the grades as to stalk length. However, when the stalk length is specified it shall be determined by measuring the distance from where the main root is cut off, to a point which represents the average length of the longest branches and leaves expressed in terms of the nearest whole inch. Incident to proper sizing, not more than 5 percent, by count, of the stalks in any lot may fail to meet any specified stalk length.

Off-grade
§51.601 Off-Grade celery.

Celery stalks which fail to meet the requirements of the foregoing grades shall be Off-Grade celery stalks.
Definitions

§51.602 Stalk.

“Stalk” means an individual plant.

§51.603 Similar varietal characteristics.

“Similar varietal characteristics” means that the stalks in any container have the same character of growth. For example, celery of Giant Pascal and Golden Self Blanching types must not be mixed.

§51.604 Well developed.

“Well developed” means that the outer branches are of good width in relation to the length of midribs and type of celery.

§51.605 Good heart formation.

“Good heart formation” means that the stalk has a reasonable number of stocky inner heart branches for its size.

§51.606 Clean.

“Clean” means that the stalk is practically free from dirt or other foreign materials. Stalks shall be permitted to have a small amount of dirt on the inside of the branches or in the heart branches which cannot be removed by good commercial methods of washing.

§51.607 Well trimmed.

“Well trimmed” means that the outside coarse and damaged branches have been removed and that the root or roots have been neatly trimmed to a reasonable length for the size of the stalk.

§51.608 Fairly compact.

“Fairly compact” means that the branches are fairly close together on the stalk.

§51.609 Damage.

“Damage” means any injury or defect which materially affects appearance, or edible or shipping quality. 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) Crater rot, when moist, or when occurring on more than 2 branches, or when aggregating more than two thirds of a square inch on the branch or branches.
(b) **Cutworms**, when the worms are present, or when worm injury occurs on the heart branches, or when occurring on the midrib portion of more than two branches, or when aggregating more than one-half of a square inch on the midrib portion of the branch or branches.

(c) **Growth cracks**, when the stalk has more than one branch affected by growth cracks any of which are more than one-half inch long.

(d) **Pithy branches**, when the midribs of more than one branch are pithy. Pithy branches mean those which have a distinctly open texture with air spaces in the central portion.

(e) **Seedstems**, when the stalk has a seedstem the length of which is more than one and one-half times the greatest diameter of the stalk. The greatest diameter of the stalk shall be measured at a point two inches above the point of attachment of the outer branches to the root. The length of the seedstem shall be measured from the point of attachment of the outer branches at the base of the seedstem to the top of the actual seedstem, exclusive of any leaves or leaf stems attached to that top of the seedstem.

(f) **Rust**, when there are more than five hair-like lines of any length on the one or more heart branches, or when there is more than one square inch in the aggregate on the branches other than heart branches.

(g) **Cracked stem**, when there is more than one-half of a square inch in the aggregate on any or all branches.

§51.610 **Midrib length.**

“Midrib length” of a branch means the distance between the point of attachment to the root and the first node.

§51.611 **Fairly well developed.**

“Fairly well developed” means that the outer branches are not spindly or abnormally short and thin.

§51.612 **Fairly good heart formation.**

“Fairly good heart formation” means that the stalk has a moderate number of fairly stocky inner heart branches for its size.

§51.613 **Serious Damage.**

“Serious damage” means any injury or defect which seriously affects the appearance, or edible or shipping quality. 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 serious damage:
(a) **Crater rot**, when moist, or when occurring one more than three branches, or when aggregating more than one square inch on the branch or branches.

(b) **Cutworms**, when the worms are present, or when worm injury occurs on the heart branches, or when occurring on the midrib portion of more than three branches, or when aggregating more than one square inch on the midrib portion of the branch or branches.

(c) **Growth cracks**, when the stalk has more than two branches affected by growth cracks any of which are more than one-half inch long.

(d) **Pithy branches**, when the midribs of more than two branches are pithy. Pithy branches means those which have a distinctly open texture with air spaces in the central portion.

(e) **Seedstems**, when the stalk has a seedstem the length of which is more than three times the greatest diameter of the stalk. The greatest diameter of the stalk shall be measured at a point two inches above the point of attachment of the outer branches to the root. The length of the seedstem shall be measured from the point of attachment of the outer branches at the base of the seedstem to the top of the actual seedstem, exclusive of any leaves or leafstems attached to the top of the seedstem.

(f) **Rust**, when there are more than fifteen hair-like lines of any length on one or more heart branches, or when there are more than one and one-half square inches in the aggregate on branches other than heart branches.

(g) **Cracked stem**, when there is more than one square inch in the aggregate on any or all branches.