



United States
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Service

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Vegetable
Division

Processed
Products
Branch

United States Standards for Grades of Canned Dried Beans, Canned Pork and Beans, Canned Baked Beans

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This is the third issue of the United States Standards for Grades of Canned Dried Beans, revised by setting apart standards for grades of canned dried beans, canned pork and beans, and canned baked beans as separate standards. This revision of the standards was published in the Federal Register of August 2, 1976 (41 FR 32222) to become effective September 1, 1976.

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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, the grade standards are for the voluntary use of producers, suppliers, buyers, and consumers. As in the case of other standards for grades of processed fruits and vegetable, 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.

These standards will also serve as a basis for the inspection and grading of this commodity by the Federal inspection service, which is also provided under the Agricultural Marketing Act of 1946. This service, available for inspection and grading of other processed products as well, is offered to interested parties, upon application, on a fee-for-service basis.

These standards are issued by the Department after careful consideration of all data and views submitted, and the Department welcomes suggestions which might aid in improving the standards in future revisions. Comments may be submitted to, and copies of standards obtained from:

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Authority: Agricultural Marketing Act of 1946, Secs. 203, 205, 60 Stat. 1087, as amended, 1090, as amended (7 U.S.C. 1622, 1624).

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.

§52.411 Product description.

Canned dried beans is the product prepared from dry mature beans or peas used for canning; but not including soybeans, sweet peas, or early peas. Any safe and suitable ingredients permissible under the provisions of the Federal Food, Drug, and Cosmetic Act may be used. The product is prepared by washing, soaking, blanching, cooking, or other processing. It is packed in hermetically sealed containers and sufficiently processed by heat to assure preservation.

§52.412 Types.

- (a) **White beans.**
- (b) **Lima beans.**
- (c) **Redbeans.**
- (d) **Pinto beans.**
- (e) **Pink beans.**
- (f) **Garbanzos or chick-peas.**
- (g) **Black beans.**
- (h) **Yelloweye beans.**
- (i) **Black-eye peas or field peas (Southern peas).**
- (j) **Mixed beans (two or more varietal types of beans in any proportions).**
- (k) **Beans of other colors or types (except soybeans, sweet peas, and early peas).**

§52.413 Styles.

- (a) **In tomato sauce** means packed with tomato pulp or a similar tomato product and any other safe and suitable ingredient (s). The sauce may be highly seasoned.
- (b) **In sweetened sauce** means packed with nutritive carbohydrate sweetening ingredient(s) and any other safe and suitable ingredient(s). The sauce may be highly seasoned.

- (c) **In brine** means packed in brine and any other safe and suitable ingredient(s).

§52.414 Grades.

- (a) **U.S. Grade A** is the quality of canned dried beans that has the following attributes:

- (1) Practically similar varietal characteristics (except **mixed** type);
- (2) At least a reasonably good consistency for the styles of **in tomato sauce** and in sweetened sauce;
- (3) Practically free from defects;
- (4) Good character;
- (5) Good flavor;
- (6) Scores at least 17 points for color; and
- (7) Totals not less than 90 points when scored in accordance with the scoring system outlined in this subpart.

- (b) **U.S. Grade B** is the quality of canned dried beans that has at least the following attributes:

- (1) Reasonably similar varietal characteristics (except **mixed** type);
- (2) Reasonably good consistency for the styles of **in tomato sauce** and **in sweetened sauce**;
- (3) Reasonably free from defects;
- (4) Reasonably good character;
- (5) Reasonably good flavor;
- (6) Reasonably good color; and
- (7) Totals not less than 80 points when scored in accordance with the scoring system outlined in this subpart.

- (c) **Substandard** is the quality of canned dried beans that fails to meet the requirements of U. S. Grade B.

§52.415 Sample unit size.

Compliance with requirements for factors of quality is based on a sample unit consisting of the entire contents of one container, irrespective of container size.

§52.416 Determining the grade.

- (a) **General.** The grade of canned dried beans is determined by considering, in addition to the requirements of the respective grade, the following factors:

(1) **Factors not rated by score points;**

- (i) Similar varietal characteristics;
- (ii) Consistency; and
- (iii) Flavor.

- (2) **Factors rated by score points.** The relative importance of each factor is expressed numerically on the scale of 100. The maximum number of points that may be given each factor is:

Factors	Points
Color	20
Absence of defects	40
Character	<u>40</u>
Total	100

(b) **Definitions.**

(1) Similar varietal characteristics:

- (i) **Contrasting varieties** means dried beans of the same type or of other types that are of a noticeably different color, size, or shape from the dried beans of the predominating variety (such as red beans with white beans);

- (ii) **Varieties that blend** means dried beans of same type or of other types that are similar in color, size or shape to the dried beans of the predominating variety (such as pea beans with small white beans);
- (iii) **Practically similar varietal characteristics** means that the beans are practically alike in size, shape, color, general characteristics, and that there may be present not more than 0.5 percent, by weight, of contrasting varieties; and not more than 5 percent, by weight, of varieties that blend (not applicable to **mixed** type); and
- (iv) **Reasonably similar varietal characteristics** means that the bean are reasonably alike in size, shape, color, general characteristics, and that there may be present not more than 1 percent, by weight, of contrasting varieties; and not more than 10 percent, by weight, of varieties that blend (not applicable to **mixed** type).

(2) **Consistency:**

- (i) **Reasonably good consistency** means that the sauce is reasonably smooth and may be slightly grainy or slightly lumpy. The product may have a thick consistency but is practically free from **matting** and when emptied on a flat surface may have practically no separation of liquid; or, the product may have a thin consistency with separation of liquid, but it shall not be watery (not applicable to **in brine** style). **Matting** means compaction to the extent that the beans cannot be removed from the container without causing damage or excessive mushiness.

(3) **Flavor:**

- (i) **Good flavor** means that the product has a good normal flavor and odor, characteristic of the style of pack, and is free from objectionable flavors and objectionable odors of any kind; and
- (ii) **Reasonably good flavor** means that the product may be lacking in good flavor and odor, but is characteristic of the style of pack, and is free from objectionable flavors and objectionable odors of any kind.

§52.417 Determining the rating of the factors which are scored.

The essential variations within each factor which is scored are so described that the value is determined for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, **18 to 20 points** means 18, 19, or 20 points).

§52.418 Color.

- (a) **Good color** means that the beans have a color that is bright and reasonably uniform, typical of the type; and that the sauce or brine has a color typical of the style of pack. Canned dried beans that have a good color may be given a score of 18 to 20 points.
- (b) **Reasonably good color** means that the beans have a color that is fairly uniform, typical of the type; may be dull but not off-color; and that the sauce or brine has a color typical of the style of pack. Canned dried beans that have a reasonably good color may be given a score of 16 to 17 points. Canned dried beans that score 16 points for color shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a partial limiting rule).
- (c) **Substandard.** Canned dried beans that fail to meet the requirements of Grade B may be given a score of 0 to 15 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.419 Absence of defects.

- (a) **General.** The factor of absence of defects refers to the degree of freedom from extraneous vegetable material, loose skin, broken and mashed beans, and blemished beans; or any other defects that may affect the appearance or eating quality of the product.
- (b) **Definitions:**
 - (1) **Loose skin** means skin or portions of a skin which have become separated wholly from the cotyledons;
 - (2) **Broken** means a cotyledon or portions of a cotyledon which have become separated; or a bean or portions of a bean with the skin or portions of the skin missing;

- (3) **Mashed** means a bean that is crushed or flattened to the extent that the appearance is seriously affected;
 - (4) **Blemished** means a bean that is affected or damaged by any means to the extent that its appearance or eating quality is adversely affected;
 - (1) Slightly;
 - (ii) Materially;
 - (iii) Seriously; and
 - (5) **Extraneous vegetable material** means vegetable material common to the bean plant or other plants that is harmless upon eating and includes, but is not limited to, peas, lentils, cereal grains, and corn.
- (c) **Practically free from defects** means that the canned dried beans comply with the allowances in Table I. Canned dried beans that are practically free from defects may be given a score of 36 to 40 points.
- (d) **Reasonably free from defects** means that the canned dried beans comply with the allowances in Table II. Canned dried beans that are reasonably free from defects may be given a score of 32 to 35 points shall not be graded above **U.S. Grade B**, regardless of the total score for the product (this is a limiting rule).
- (e) **Substandard.** Canned dried beans that fail to meet the allowances for Grade B may be given a score of 0 to 31 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

TABLE I - ALLOWANCES FOR DEFECTS IN CANNED DRIED BEANS
U.S. GRADE A

Defects	Maximum amount of defects permitted	
	Sample unit	Sample average
	Percent of net weight	
Loose skin, broken, and mashed	5	
Total blemished (slightly, materially, and seriously)	3	
Materially blemished	2	
Seriously blemished	1	
Extraneous vegetable material . .	No limit	1 piece per 80 oz. net weight.

TABLE II - ALLOWANCES FOR DEFECTS IN CANNED DRIED BEANS
U.S. GRADE B

Defects	Maximum amount of defects permitted	
	Sample unit	Sample average
	Percent of net weight	
Loose skin, broken, and mashed	10	
Total blemished (slightly, materially, and seriously)	6	
Materially blemished	4	
Seriously blemished	2	
Extraneous vegetable material . . .	No limit	1 piece per 20 oz. net weight.

§52.420 Character.

- (a) **General.** The factor of character refers to the degree of freedom from hard beans, mushy beans, beans with tough skins; and the overall texture of the product.
- (b) **Good character** means that the beans have a good, typical texture, that may be slightly soft or slightly firm; and that the skins are tender. Canned dried beans that have that the skins are tender. Canned dried beans that have a good character may be given a score of 36 to 40 points.
- (c) **Reasonably good character** means that the beans have a reasonably good, typical texture, that the beans may be firm or soft and that the presence of hard or mushy beans does not materially affect the eating quality; and that the skins may be slightly tough. Canned dried beans that have a reasonably good character may be given a score of 32 to 35 points and shall not be graded above U. S. Grade B, regardless of the total score for the product (this is a limiting rule).
- (d) **Substandard.** Canned dried beans that fail to meet the requirements of grade B may be given a score of 0 to 31 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.421 Determining the grade of a lot.

The grade of a lot of canned dried beans covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (7 CFR 52.1 through 52.83).

United States Standards for Canned Dried Beans
Corrected January 2006

§52.422 Score sheet for canned dried beans.

Container size			
Container code or identification			
Label			
Net weight			
Vacuum			
Type			
Style			
Factors	Score Point		
Color	20	"A" "B" "Sstd"	18-20 16-17 <u>2/</u> 0-15 <u>1/</u>
Absence of defects	40	"A" "B" "Sstd"	36-40 32-35 <u>1/</u> 0-31 <u>1/</u>
Character	40	"A" "B" "Sstd"	36-40 32-35 <u>1/</u> 0-31 <u>1/</u>
Total score	<u>100</u>		
Consistency			<u>3/</u>
Flavor			
Similar varietal characteristics			<u>4/</u>
Grade			

- 1/ Indicates limiting rule.
2/ Indicates partial limiting rule.
3/ Not applicable for the style of **in brine**.
4/ Not applicable for **mixed** type.

United States Standards for Grades of Canned Pork and Beans

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Authority:	Agricultural Marketing Act of 1946, Secs. 203, 205, 60 Stat. 1087, as amended, 1090, as amended (7 U.S.C. 1622, 1624).

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.

§52.6441 Product description.

Canned pork and beans (canned dried white beans with pork) is the product prepared from dry mature white beans of the species *Phaseolus vulgaris* L., with pork or pork fat; and with a packing medium or sauce consisting of water, tomato products, and any other safe and suitable ingredients permissible under the provisions of the Federal Food, Drug, and Cosmetic Act. The product is prepared by washing, soaking, blanching, cooking, or other processing. It is packed in hermetically sealed containers and sufficiently processed by heat to assure preservation.

§52.6442 Types.

- (a) **Pea beans (known also as Navy beans).**
- (b) **Small white beans.**
- (c) **Flat small white beans.**
- (d) **Great northern beans.**
- (e) **Other types of white beans (except white lima beans).**

§52.6443 Grades.

- (a) **U.S. Grade A** is the quality of canned pork and beans that has the following attributes:
 - (1) Practically similar varietal characteristics;
 - (2) At least a reasonably good consistency;
 - (3) Practically free from defects;
 - (4) Good character;
 - (5) Good flavor;
 - (6) Good color; and
 - (7) Totals not less than 90 points when scored in accordance with the scoring system outlined in this subpart.
- (b) **U.S. Grade B** is the quality of canned pork and beans that has at least the following attributes:

- (1) Reasonably similar varietal characteristics;
- (2) Reasonably good consistency;
- (3) Reasonably free from defects;
- (4) Reasonably good character;
- (5) Reasonably good flavor;
- (6) Reasonably good color; and
- (7) Total not less than 80 points when scoring in accordance with the scoring system outlined in this subpart.

(c) **Substandard** is the quality of canned pork and beans that fails to meet the requirements of U.S. Grade B.

§52.6444 Sample unit size.

Compliance with requirement for factors of quality is based on a sample unit consisting of the entire contents of one container, irrespective of container size.

§52.6445 Determining the grade.

(a) **General.** The grade of canned pork and beans is determined by considering, in addition to the requirements of the respective grade, the following factor:

(1) **Factors not rated by score points;**

- (i) Similar varietal characteristics;
- (ii) Color; and
- (iii) Flavor.

(2) **Factors rated by score points.** The relative importance of each factor is expressed numerically on the scale of 100. The maximum number of points that may be given each factor is:

Factors	Points
Consistency	20
Absence of defects	40
Character	40
Total	100

(b) Definitions.

(1) Similar varietal characteristics:

- (i) **Contrasting varieties** means varieties of dried beans other than those specified in §52.6442 (such as red beans);

- (ii) **Varieties that blend** means one or more of the varieties of dried beans specified in §52.6442 other than the predominating variety of white beans (such as pea beans with small white beans);
- (iii) **Practically similar varietal characteristics** means that the beans are practically alike in size, shape, color, general characteristics, and not more than 0.5 percent, by weight, of contrasting varieties; and not more than 5 percent, by weight, of varieties that blend; and
- (iv) **Reasonably similar varietal characteristics** means that the beans are reasonably alike in size, shape, color, general characteristics, and that there may be present not more than 1 percent, by weight, of contrasting varieties and not more than 10 percent, by weight, of varieties that blend.

(2) **Color.**

- (i) **Good color** means that the beans have a color that is bright, typical and reasonably uniform; and that the sauce is reasonably bright and has the distinguishing color characteristics of the addition of tomato products; and
- (ii) **Reasonably good color** means that the beans have a color that is fairly uniform, that may be slightly dull but not off-color; and that the sauce may be lacking in the distinguishing color characteristics of the addition of tomato products.

(3) **Flavor.**

- (i) **Good flavor** means that the product has a good, characteristic flavor and odor, and is free from objectionable odors of any kind; and that the flavor of the sauce is rich, distinct and characteristic of the ingredients including but not limited to tomato products; and

- (ii) **Reasonably good flavor** means that the product may be lacking in good flavor and odor, but is free from objectionable flavors and objectionable odors of any kind; and that the flavor of the sauce may be weak.

§52.6446 Determining the rating of the factors which are scored.

The essential variations within each factor which is scored are so described that the value is determined for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, **18 to 20 points** means 18, 19, or 20 points).

§52.6447 Consistency.

- (a) **Matting** means compaction to the extent that the beans cannot be removed from the container without causing damage or excessive mushiness.
- (b) **Good consistency** means that the sauce is smooth and is neither grainy nor lumpy; the product is practically free from **matting**; and when emptied on a flat surface forms a slightly mounded mass of beans and sauce with not more than a slight separation of liquid. Canned pork and beans that have a good consistency may be given a score of 18 to 20 points.
- (c) **Reasonably good consistency** means that the sauce is reasonably smooth and may be slightly grainy or slightly lumpy; the product may have a thick consistency but is reasonably free from **matting** and when emptied on a flat surface may have practically no separation of liquid; or, the product may have a thin consistency with separation of liquid, but it shall not be watery. Canned pork and beans that have a reasonably good consistency may be given a score of 16 or 17 points.
- (d) **Substandard.** Canned pork and beans that fail to meet the requirements of grade B may be given a score of 0 to 15 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.6448 Absence of defects.

- (a) **General.** The factor of absence of defects refers to the degree of freedom from extraneous vegetable material, loose skin, broken and mashed beans, and blemished beans; or any other defects that may affect the appearance or eating quality of the product.
- (b) **Definitions.**

- (1) **Loose skin** means a skin or portions of a skin which have become separated wholly from the cotyledons;
 - (2) **Broken** means a cotyledon or portions of a cotyledon which have become separated; or a bean or portions of a bean with the skin or portions of the skin missing;
 - (3) **Mashed** means a bean that is crushed or flattened to the extent that the appearance is seriously affected;
 - (4) **Blemished** means a bean that is affected or damaged by any means to the extent that its appearance or eating quality is adversely affected:
 - (i) Slightly;
 - (ii) Materially;
 - (iii) Seriously; and
 - (5) **Extraneous vegetable material** means vegetable material common to the bean plant or other plants that is harmless upon eating and includes, but is not limited to, peas, lentils, field peas, cereal grains, and corn.
- (c) **Practically free from defects** means that the canned pork and beans comply with the allowances in Table I. Canned pork and beans that are practically free from defects may be given a score of 36 to 40 points.
- (d) **Reasonably free from defects** means that the canned pork and beans comply with the allowances in Table II. Canned pork and beans that are reasonably free from defects may be given a score of 32 to 35 points and shall not be graded above **U.S. Grade B**, regardless of the total score for the product (this is a limiting rule).
- (e) **Substandard.** Canned pork and beans that fail to meet the allowances for grade B may be given a score of 0 to 31 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

TABLE I - ALLOWANCES FOR DEFECTS IN CANNED PORK AND BEANS
U.S. GRADE A

Defects	Maximum amount of defects permitted	
	Sample unit	Sample average
	Percent of net weight	
Loose skin, broken, and mashed	5	
Total blemished (slightly, materially, and seriously)	3	
Materially blemished	2	
Seriously blemished	1	
Extraneous vegetable material	No limit	1 piece per 80 oz. net weight

TABLE II - ALLOWANCES FOR DEFECTS IN CANNED PORK AND BEANS
U.S. GRADE B

Defects	Maximum amount of defects permitted	
	Sample unit	Sample average
	Percent of net weight	
Loose skin, broken, and mashed	10	
Total blemished (slightly, materially, and seriously)	6	
Materially blemished	4	
Seriously blemished	2	
Extraneous vegetable material	No limit	1 piece per 20 oz. net weight

§52.6449 Character.

- (a) General.** The factor of character refers to the degree of freedom from hard beans, mushy beans, beans with tough skins, and from granulation; and to the overall palatability and texture of the beans.
- (b) Good character** means that the beans have a good, typical texture that may be slightly granular or slightly firm; and that the skins are tender. Canned pork and beans that have a good character may be given a score of 36 to 40 points.
- (c) Reasonably good character** means that the beans have a reasonably good, typical texture, that the beans may be firm or soft and that the presence of hard and mushy beans does not materially affect the eating quality; that the skins may be slightly tough; and that the beans may be granular or mealy. Canned pork and beans that have a reasonably good character may be given a score of 32 to 35 points and shall not be graded above **U.S. Grade B**, regardless of the total score for the product (this is a limiting rule).
- (d) Substandard.** Canned pork and beans that fail to meet the requirements of grade B may be given a score of 0 to 31 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.6450 Determining the grade of a lot.

The grade of a lot of canned pork and beans covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (7 CFR 52.1 to 52.83).

§52.6451 Score sheet for canned pork and beans.

Size of container			
Container mark or identification			
Label			
Net weight			
Vacuum			
Type			
Factors		Score points	
Consistency	20	"A"	18-20
		"B"	16-17
		"SStd"	0-15 <u>1/</u>
Absence of defects	40	"A"	36-40
		"B"	32-35 <u>1/</u>
		"SStd"	0-31 <u>1/</u>
Character	40	"A"	36-40
		"B"	32-35 <u>1/</u>
		"SStd"	0-31 <u>1/</u>
Total score		100	
Color			
Flavor			
Similar varietal characteristics			
Grade			

1/ Indicates limiting rule.

United States Standards for Grades of Canned Baked Beans

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Authority: Agricultural Marketing Act of 1946, Secs. 203, 205, 60 Stat. 1087, as amended, 1090, as amended (7 U.S.C. 1622, 1624).	

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.

§52.6461 Product description.

Canned baked beans is the product prepared from dry mature beans used for canning; but not including soybeans. Any safe and suitable ingredients permissible under the provisions of the Federal Food, Drug, and Cosmetic Act may be used. The product is prepared by washing, soaking, and baking by the application of dry heat in open or loosely covered containers in a closed oven at atmospheric pressure for sufficient prolonged time to produce a typical texture and flavor. It is packed in hermetically sealed containers and sufficiently processed by heat to assure preservation.

§52.6462 Types.

- (a) **White beans.**
- (b) **Red kidney beans.**
- (c) **Yelloweye beans (including soldier beans).**
- (d) **Beans of other colors or types suitable for baking (except soybeans).**

§52.6463 Styles.

- (a) **In brown sugar, molasses, or New England sauce** means packed with nutritive carbohydrate sweetening ingredient(s) and any other safe and suitable ingredient(s).
- (b) **In tomato sauce** means packed with tomato pulp or a similar tomato product and any other safe and suitable ingredient (s).

§52.6464 Grades.

- (a) **U.S. Grade A** is the quality of canned baked beans that has the following attributes:
 - (1) Practically similar varietal characteristics;
 - (2) Scores at least 17 points for consistency;
 - (3) Practically free from defects;
 - (4) Scores at least 17 points for character;
 - (5) Scores at least 17 points for flavor;

- (6) Scores at least 13 points for color; and
 - (7) Totals not less than 90 points when scored in accordance with the scoring system outlined in this subpart.
- (b) **U.S. Grade B** is the quality of canned baked beans that has at least the following attributes:
- (1) Reasonably similar varietal characteristics;
 - (2) Reasonably good consistency;
 - (3) Reasonably free from defects;
 - (4) Reasonably good character;
 - (5) Reasonably good flavor;
 - (6) Reasonably good color; and
 - (7) Totals not less than 80 points when scored in accordance with the scoring system outlined in this subpart.
- (c) **Substandard** is the quality of canned baked beans that fails to meet the requirements of U. S. Grade B.

§52.6465 Sample unit size.

Compliance with requirements for factors of quality is based on a sample unit consisting of the entire contents of one container, irrespective of container size.

§52.6466 Determining the grade.

- (a) **General.** The grade of canned baked beans is determined by considering, in addition to the requirements of the respective grade, the following factors:
- (1) **Factors not rated by score points;**
 - (i) Similar varietal characteristics;
 - (2) **Factors rated by score points.** The relative importance of each factor is expressed numerically on the scale of 100. The maximum number of points that may be given each factor is:

Factors	Points
Color	15
Consistency	20
Flavor	20
Character	20
Absence of defects	<u>25</u>
Total	100

(b) Definitions.

(1) Similar varietal characteristics:

- (i) Contrasting varieties** means dried beans of the same type or of other types that are of a noticeably different color, size, or shape from the dried beans of the predominating variety (such as red beans with white beans);
- (ii) Varieties that blend** means dried beans of same type or of other types that are similar in color, size or shape to the dried beans of the predominating variety (such as pea beans with small white beans);
- (iii) Practically similar varietal characteristics** means that the beans are practically alike in size, shape, color, general characteristics, and that there may be present not more than 0.5 percent, by weight, of contrasting varieties; and not more than 5 percent, by weight, of varieties that blend; and
- (iv) Reasonably similar varietal characteristics** means that the beans are reasonably alike in size, shape, color, general characteristics, and that there may be present not more than 1 percent, by weight, of contrasting varieties; and not more than 10 percent, by weight, of varieties that blend.

§52.6467 Determining the rating of the factors which are scored.

The essential variations within each factor which is scored are so described that the value is determined for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, **18 to 20 points** means 18, 19, or 20 points).

§52.6468 Color.

- (a) **Good color** means that the baked beans have a uniform, typical of the baked variety and style of pack. Canned baked beans that have a good color may ne give a score of 14 or 15 points.
- (b) **Reasonably good color** means that the beans have a reasonably uniform color typical of the baked variety and style of pack. Canned baked beans that have a reasonably good color may be give a score of 12 or 13 points. Canned baked beans that score 12 points for color shall not be graded above **U.S. Grade B**, regardless of the total score for the product (this is a partial limiting rule).
- (c) **Substandard.** Canned baked beans that fail to meet the requirements of Grade B may be given a score of 0 to 11 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.6469 Consistency.

- (a) **General.** The factor of consistency is determined two minutes after the product, without prior stirring or shaking, is emptied on a dry flat surface.
- (b) **Good consistency** means that the product shall form a well - rounded mound when emptied from the container and that the sauce shall be of such quantity and character that it clings to the beans with not more than a reasonable separation from the mound. Canned baked beans that have a good consistency may be given a score of 18 to 20 points.
- (c) **Reasonably good consistency** means that the product shall form a mound that may tend to take shape of container with little leveling or may level itself substantially with fairly large amount of sauce separation from the beans. Canned baked beans that have a reasonably good consistency may be given s score of 16 or 17 points. Canned baked beans that score 16 points for consistency shall not be graded above **U. S. Grade B**, regardless of the total score for the product (this is a limiting rule).
- (d) **Substandard.** Canned baked beans that fail to meet the requirements of grade B may be given a score of 0 to 15 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.6470 Flavor.

- (a) **Good flavor** means that the product has a good baked bean flavor and odor which is characteristic of the variety of bean and style of pack with all flavor components in proper balance. The product is free from objectionable flavors and objectionable odors. Canned baked beans that have a good flavor may be given a score of 18 to 20 points.
- (b) **Reasonably good flavor** means that the product has a reasonably good baked bean flavor and odor which is characteristic of the variety of bean and style of pack with all flavor components in reasonable balance. The product is free from objectionable flavors and objectionable odors. Canned baked beans that have a reasonably good flavor may be given a score of 16 or 17 points. Canned baked beans that score 16 points for flavor shall not be graded above **U.S. Grade B**, regardless of the total score for the product (this is a partial limiting rule).
- (c) **Substandard.** Canned baked beans that fail to meet the requirements of grade B may be given a score of 0 to 15 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.6471 Character.

- (a) **General.** The factor of character refers to the degree of freedom from hard beans, mushy beans, beans with tough skins; and the overall texture of the product.
- (b) **Good character** means that the baked beans have a good typical texture, that may be slightly soft or slightly firm; and that the skins are tender. Canned baked beans that have a good character may be given a score of 18 to 20 points.
- (c) **Reasonably good character** means that the baked beans have a reasonably good typical texture, that may be soft but not hard or mushy; and that the skins may be slightly tough. Canned baked beans that have a reasonably good character may be given a score of 16 or 17 points. Canned baked beans that score 16 points for character shall not be grade above **U. S. Grade B**, regardless of the total score for the product (this is a partial limiting rule).
- (d) **Substandard.** Canned baked beans that fail to meet the requirements of grade B may be given a score of 0 to 15 points and a shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.6472 Absence of defects.

- (a) **General.** The factor of absence of defects refers to the degree of freedom from extraneous vegetable material, loose skin, broken and mashed beans, and blemished beans; or any other defects that may affect the appearance or eating quality of the product.
- (b) **Definitions:**
 - (1) **Loose skin** means skin or portions of a skin which have become separated wholly from the cotyledons;
 - (2) **Broken** means a cotyledon or portions of a cotyledon which have become separated; or a bean or portions of a bean with the skin or portions of the skin missing;
 - (3) **Mashed** means a bean that is crushed or flattened to the extent that the appearance is seriously affected;
 - (4) **Blemished** means a bean that is affected or damaged by any means to the extent that its appearance or eating quality is adversely affected;
 - (i) Slightly;
 - (ii) Materially;
 - (iii) Seriously; and
 - (5) **Extraneous vegetable material** means vegetable material common to the bean plant or other plants that is harmless upon eating and includes, but is not limited to, peas, lentils, cereal grains, and corn.
- (c) **Practically free from defects** means that the canned baked beans comply with the allowances in Table I. Canned baked beans that are practically free from defects may be given a score of 22 to 25 points.
- (d) **Reasonably free from defects** means that the canned baked beans comply with the allowances in Table II. Canned baked beans that are reasonably free from defects may be given a score of 20 or 21 points and shall not be graded above **U.S. Grade B**, regardless of the total score for the product (this is a limiting rule).
- (e) **Substandard.** Canned baked beans that fail to meet the allowances for Grade B may be given a score of 0 to 19 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

TABLE I - ALLOWANCES IN CANNED BAKED BEANS
U.S. GRADE A

Defects	Maximum amount of defects permitted		
	Sample unit		Sample average
Percent of net weight			
	Type (a)	Types (b), (c), (d)	
Loose skin, broken, and mashed	10	20	
Total blemished (slightly, materially, and seriously)	9	3	
Materially blemished	2	2	
Seriously blemished	1	1	
Extraneous vegetable material	No limit	No limit	1 piece per 80 ounces net weight

TABLE II - ALLOWANCES IN CANNED BAKED BEANS
U.S. GRADE B

Defects	Maximum amount of defects permitted		
	Sample unit		Sample average
Percent of net weight			
	Type (a)	Types (b), (c), (d)	
Loose skin, broken, and mashed	20	35	
Total blemished (slightly, materially, and seriously)	6	6	
Materially blemished	4	4	
Seriously blemished	2	2	
Extraneous vegetable material	No limit	No limit	1 piece per 20 ounces net weight

§52.6473 Determining the grade of a lot.

The grade of a lot of canned baked beans covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruit and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (7 CFR 52.1 through 52.83).

§52.6474 Score sheet for canned baked beans.

Size of container			
Container code or identification			
Label			
Net weight			
Vacuum			
Type			
Style			
Factors		Score points	
Color	15	"A" "B" "SStd"	14-15 12-13 <u>1/</u> 0-11 <u>2/</u>
Consistency	20	"A" "B" "SStd"	18-20 16-17 <u>1/</u> 0-15 <u>2/</u>
Flavor	20	"A" "B" "SStd"	18-20 16-17 <u>1/</u> 0-15 <u>2/</u>
Character	20	"A" "B" "SStd"	18-20 16-17 <u>1/</u> 0-15 <u>2/</u>
Absence of defects	25	"A" "B" "SStd"	22-25 20-21 <u>2/</u> 0-19 <u>2/</u>
Total score	100		
Similar varietal characteristics			
Grade			

1/ Indicates partial limiting rule.

2/ Indicates limiting rule.

Effective date. These standards shall become effective September 1, 1976.

Dated: July 28, 1976

Irving W. Thomas
Acting Administrator
Agricultural Marketing Service