



**United States
Department of
Agriculture**

**Agricultural
Marketing
Service**

**Livestock
and Seed
Division**

United States Standards for Grades of Veal and Calf Carcasses

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The following is a reprint of the official United States standards for grades of veal and calf carcasses heretofore promulgated by the Secretary of Agriculture under the Agricultural Marketing Act of 1946 (60 Stat. 1087; 7 U.S.C. 1621-1627), as amended and related authority in the annual appropriations acts for the Department of Agriculture. The standards are reprinted with amendments effective October 6, 1980.

Development of the Standards

The official standards for grades of veal and calf carcasses were initially promulgated on July 12, 1928. The standards were amended in October 1940 by changing the grade designation Medium and Common to Commercial and Utility, respectively. Beginning September 18, 1942, pursuant to Amendment 5, Maximum Price Regulation 169 of the Office of Price Administration, the use of the grade specified as Prime was suspended; however, its use was restored as an official grade on December 3, 1946. During that period all veal and calf carcasses that met the specification of the Prime grade were identified with and graded as Choice.

In March 1951, the official standards were amended by combining the Prime and Choice grades and designating them as Prime, renaming the Good grade as Choice and dividing the Commercial grade into two grades and designating that segment included in the top half of the grade as good while retaining the Commercial grade designation for the remaining portion of the grade. The Utility and Cull grade specifications were not changed. This same amendment also provided for reflecting the minimum requirements for each grade, and also clarified the method for differentiating between veal and calf.

A fifth amendment to the official standards in October 1956, changed the grade name commercial to Standard and also made certain changes in the phrasing of the standards designed to facilitate their interpretation.

The official standards for grades of veal and calf carcasses were again revised in January 1972 to better coordinate them with changes that had occurred in the production and marketing of these kinds of meat. In this revision, increased emphasis was placed on the color of the lean in differentiating between veal and calf and the conformation requirements for all grades of veal and calf carcasses were reduced a full grade. Firmness was eliminated as a factor normally used in evaluating quality and the quality requirements for veal also were reduced approximately one-half grade for the Prime grade and approximately one full grade for the Choice, Good, and Standard grades. For calf, however, the reduction in the quality requirements varied from approximately one-half grade for Prime and a full grade for Choice, Good, and Standard for the youngest carcasses included in the calf class to no change in these requirements for the most mature carcasses classed as calf. The Cull grade was eliminated with the result that the Utility grade included all veal and calf carcasses whose characteristics were inferior to those specified as

minimum for the Standard grade.

The “Application of Standards” section also was elaborated to clarify and otherwise facilitate the interpretation of the standards.

In October 1980, the standards and the related regulations for grades of veal and calf carcasses were amended to provide generally for grading only in carcass form, only after the hide is removed, and only in the establishment where hide removal occurs. This amendment was adopted to reduce the variation in grading by limiting the conditions under which grading could be accomplished.

§54.112 Scope.

These standards for grades of veal and calf are written primarily in terms of carcasses. However, they also are applicable to the grading of sides. To simplify the phrasing of the standards, the words “carcass” and “carcasses” are used also to mean “side” or “sides.”

§54.113 Differentiation between veal, calf, and beef carcasses.

Differentiation between veal, calf, and beef carcasses is made primarily on the basis of the color of the lean, although such factors as texture of the lean; character of the fat; color, shape, size, and ossification of the bones and cartilages; and the general contour of the carcass are also given consideration. Typical veal carcasses have a grayish pink color of lean that is very smooth and velvety in texture and they also have a slightly soft, pliable character of fat and marrow, and very red rib bones. By contrast, typical calf carcasses have a grayish red color of lean, a flakier type of fat, and somewhat wider rib bones with less pronounced evidences of red color. Calf carcasses with maximum maturity for their class have lean flesh that is usually not more than moderately red in color, their rib bones usually have a small amount of red and only a slight tendency toward flatness, and such carcasses are not noticeably “spready” or “barrelly” in contour. Such carcasses, when split, have cartilages on the ends of the chine bones that are entirely cartilaginous, there is cartilage in evidence on all vertebrae of the spinal column, and sacral vertebrae show distinct separation. Carcasses with evidences of more advanced maturity than described in this paragraph are classified as beef. Carcasses not classified as beef but whose color of lean is not comparable with their other evidences of maturity shall be classed as veal or calf in accordance with the following:

(a) Carcasses whose indications of maturity other than color of lean are within the veal class but whose color of lean is darker than dark grayish pink shall be classed as calf.

(b) Carcasses whose evidences of maturity other than color of lean are within the range included in the calf class shall be classed as veal provided they have a correspondingly lighter color of lean within the darker one-half of the range of color included in the veal class. For example, a carcass whose evidences of maturity other than color of lean are midway within the range of the calf class shall be classed as veal if its color of lean is not darker than midway within the darker one-half of the range of color included in the veal class.

(c) Carcasses with color of lean within the lighter one-half of the veal class shall be classed as veal provided their other evidences of maturity do not exceed that associated with the juncture of

the calf and beef classes.

§54.114 Classes of veal and calf carcasses.

Class determination is based on the apparent sex condition of the animal at time of slaughter. Hence, there are three classes of veal and calf carcasses -- steers, heifers, and bulls. While recognition may sometimes be given to these different classes on the market, especially calf carcasses from bulls that are approaching beef in maturity, the characteristics of such carcasses are not sufficiently different from those of steers and heifers to warrant the development of separate standards for them. Therefore, the grade standards which follow are equally applicable to all classes of veal and calf carcasses.

§54.115 Application of standards.

(a) Veal and calf carcasses are graded on a composite evaluation of two general grade factors -- conformation and quality. These factors are concerned with the proportions of lean, fat, and bone in the carcass and the quality of the lean.

(b) Conformation is the manner of formation of the carcass. The conformation descriptions included in each of the grade specifications refer to the thickness and fullness of the carcass and its various parts. Conformation is evaluated by averaging the conformation of the various parts of the carcass, considering not only the proportion that each part is of the carcass but also the general value of each part as compared with other parts. Superior conformation implies a high proportion of meat to bone and a high proportion of the weight of the carcass in the more valuable parts. It is reflected in carcasses which are thickly fleshed and full and thick in relation to their length and which have a plump, well-rounded appearance. Inferior conformation implies a low proportion of meat to bone and a low proportion of the weight of the carcass in the more valuable parts. It is reflected in carcasses which are very thinly fleshed, and very narrow in relation to their length, and which have a very angular, thin sunken appearance.

(c) Quality of lean -- in all veal carcasses, all unribbed calf carcasses, and in ribbed calf carcasses in which their degree of marbling is not a consideration -- usually can be evaluated with a high degree of accuracy by giving equal consideration to the following factors, as available:

(1) The amount of feathering (fat intermingled within the lean between the ribs) and (2) the quantity of fat streakings within and upon the inside flank muscles. (In making these evaluations, the amounts of feathering and flank fat streakings are considered in relation to color (veal) and maturity (calf).) In addition, however, consideration also may be given to other factors if, in the opinion of the grader, this will result in a more accurate quality assessment. Examples of such other factors include firmness of the lean, the distribution of feathering, the amount of fat covering over the diaphragm or "skirt", and the amount and character of the external and kidney and pelvic fat. In making these evaluations, feathering and flank fat streakings are categorized in descending order of quantity as follows: Extremely abundant, very abundant, abundant, moderately abundant, slightly abundant, moderate, modest, small, slight, traces, practically none, and none. Figure 1 depicts the quality grade equivalent of various degrees of feathering and flank fat streakings in relation to color of lean (veal) or maturity (calf). From this figure it can be seen,

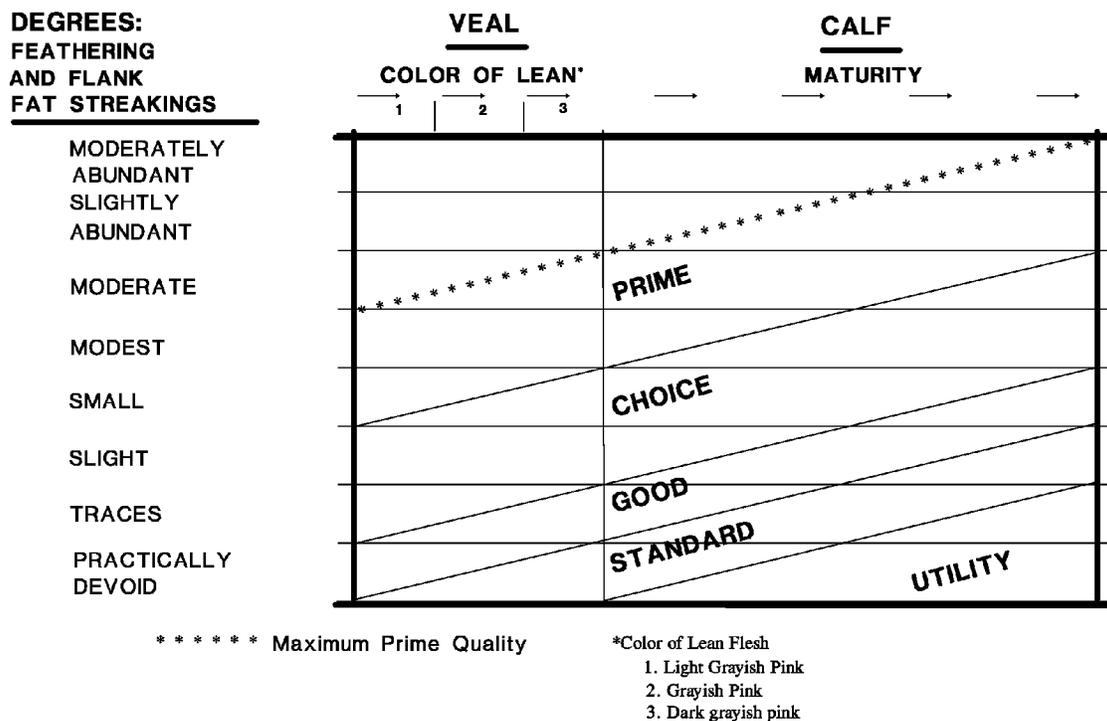
for example, that the degrees of feathering or fat streakings associated with minimum Choice quality for veal increase from minimum traces for carcasses having the lightest color of lean to maximum traces for carcasses with a dark grayish pink color of lean.

(d) The requirements relating to firmness of the lean are described in the specifications for each grade and are based on the following degrees in descending order of firmness; extremely firm, very firm, firm, moderately firm, slightly firm, slightly soft, moderately soft, soft, very soft, and extremely soft. However, no credit is given to additional firmness of lean beyond “maximum slightly firm” in veal or beyond “maximum moderately firm” in calf.

(e) When grading ribbed calf carcasses in which their degree of marbling is a consideration, the quality evaluation of the lean is based entirely on the characteristics of the lean as exposed in a cut surface. The official standards for grades of beef recognize nine different degrees of marbling. In descending order of amount these are as follows: Abundant, moderately abundant, slightly abundant, moderate, modest, small, slight, traces, and practically devoid. Illustrations of the lower limits of eight of these nine degrees are available from the Department of Agriculture. These degrees of marbling and their illustrations also are used to describe and evaluate marbling in calf carcasses. Marbling requirements are included in each of the Prime, Choice, and Good grade specifications.

(f) To facilitate the application of the standards, no credit is given to degrees of feathering, flank fat streakings, or marbling beyond those associated with the quality grade equivalent of “Maximum Prime.” “Maximum Prime” quality is represented by a development of each of these three factors which is two degrees greater than that specified as minimum for Prime.

FIGURE 1. -- QUALITY GRADE EQUIVALENT OF VARIOUS DEGREES OF FEATHERING AND FLANK FAT STREAKINGS IN RELATION TO COLOR OF LEAN (VEAL) OR MATURITY (CALF).



(g) The quality indicating requirements referenced in the standards for each grade are based on their development in properly chilled carcasses and when these relate to a cut surface of the lean, they are based on a cross section of the ribeye muscle between the 12th and 13th ribs.

(h) The final grade of a carcass is based on a composite evaluation of its conformation and quality. Conformation and quality often are not developed to the same degree in a carcass and it is obvious that each grade will include various combinations of development of these two characteristics. Examples of how conformation and quality are combined into the final quality grade are included in each of the grade descriptions. However, the principles governing the compensations of variations in development of quality and conformation are as follows: In each of the grades a superior development of quality is permitted to compensate, without limit, for a deficient development of conformation. In this instance the rate of compensation in all grades is on an equal basis -- a given degree of superior quality compensates for the same degree of deficient conformation. The reverse type of compensation -- a superior development of conformation for an inferior development of quality -- is not permitted in the Prime and Choice grades. In all other grades this type of compensation is permitted but only to the extent of one-third of a grade of deficient quality. The rate of this type of compensation is also on an equal basis -- a given degree of superior conformation compensates for the same degree of deficient quality.

(i) The colors of lean referenced in the standards reflect only the colors as present in normally developed veal and calf carcasses. They are not intended to apply to colors of lean associated with so-called "dark cutting" veal or calf. This condition does not have the same significance in grading as do the darker shades of pink and red associated with advancing maturity. The dark color of the lean associated with "dark cutting" veal or calf is present in varying degrees from that which is barely evident to so-called "black cutters" in which the lean is actually nearly black in color and usually has a "gummy" texture. Dependent upon the degree to which this characteristic is developed, the final grade of carcasses which otherwise would qualify for the Prime, Choice, or Good grades may be reduced as much as one full grade in veal or calf otherwise eligible for the Standard grade, the final grade may be reduced as much as one-half grade. In the Utility grade this condition is not considered.

(j) Carcasses qualifying for any particular grade may vary with respect to their relative development of the various grade factors and there will be carcasses which qualify for a particular grade some of the characteristics of which may be typical of another grade. Because it is impractical to describe the nearly limitless number of such recognizable combinations of characteristics, the standards for each grade describe only a veal or calf carcass which has a relatively similar development of conformation and quality and which also represents the lower limit of each grade.

§54.116 Specifications for official U.S. standards for grades of veal carcasses.

(a) *Prime.* (1) Veal carcasses with minimum Prime grade conformation tend to be moderately wide and thick in relation to their length. They are slightly thick-fleshed and have a slightly plump appearance. Legs are slightly thick and bulging. Loins and backs tend to be moderately full and plump. Shoulders and breasts tend to be moderately thick.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Prime quality for different colors of lean. The lean flesh is slightly firm, regardless of its color.

(3) A development of quality superior to that specified as minimum for the Prime grade may compensate, without limit, for a development of conformation inferior to that specified as minimum for Prime at an equal rate as indicated in the following example. A carcass which has midpoint Prime quality may have conformation equal to the midpoint of the Choice grade and remain eligible for Prime. However, regardless of the extent to which the conformation of a carcass exceeds the minimum of the Prime grade, a carcass must have minimum Prime quality to be eligible for Prime.

(b) *Choice*. (1) Veal carcasses with minimum Choice grade conformation tend to be slightly wide and thick in relation to their length. They tend to be slightly thin-fleshed and have little or no evidence of plumpness. Loins, backs, and legs are slightly thin and nearly flat. Shoulders and breasts tend to be slightly thin.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Choice quality for different colors of lean. The lean flesh is slightly soft regardless of its color.

(3) A development of quality superior to that specified as minimum for the Choice grade may compensate, without limit, for a development of conformation inferior to that specified as minimum for Choice at an equal rate as indicated in the following example: A carcass which has midpoint Choice quality may have conformation equal to the midpoint of the Good grade and remain eligible for Choice. However, regardless of the extent to which the conformation of a carcass exceeds the minimum of the Choice grade, a carcass must have minimum Choice quality to be eligible for Choice.

(c) *Good*. (1) Veal carcasses with minimum Good grade conformation are rangy, angular, and narrow in relation to their length. They are thinly fleshed. Legs are thin and tapering and slightly concave. Loins and back are depressed. Shoulders and breasts are thin.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Good quality for different colors of lean. The lean flesh is moderately soft regardless of its color.

(3) A development of quality superior to that specified as minimum for the Good grade may compensate, without limit, for a development of conformation inferior to that specified as minimum for Good at an equal rate as indicated in the following example: A carcass which has midpoint Good grade quality may have conformation equivalent to the midpoint of the Standard grade and remain eligible for Good. Also, a carcass which has conformation at least one-third grade superior to that specified as minimum for the Good grade may qualify for Good with a development of quality equivalent to the lower limit of the upper third of the Standard grade. Compensation of superior conformation for inferior quality is limited to one-third grade of deficient quality.

(d) *Standard*. (1) Veal carcasses with minimum Standard grade conformation are very rangy and angular and very narrow in relation to their length. They are very thinly fleshed. Legs are very thin and moderately concave. Loins and backs are very depressed. Shoulders and breasts are very thin.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Standard quality for different colors of lean. The lean flesh is soft regardless of its color.

(3) A development of quality superior to that specified as minimum for the Standard grade may compensate, without limit, for a development of conformation inferior to that specified as minimum for Standard at an equal rate as indicated in the following example: A carcass which has midpoint Standard quality may have conformation equal to the midpoint of the Utility grade and remain eligible for Standard. Also, a carcass which has conformation at least one-third grade superior to that specified as minimum for the Standard grade may qualify for Standard with a development of quality equal to the minimum of the upper third of the Utility grade Compensation of superior conformation for inferior quality is limited to one-third grade of deficient quality.

(e) *Utility*. The Utility grade includes those veal carcasses whose characteristics are inferior to those specified as minimum for the Standard grade.

§54.117 Specifications for official United States standards for grades of calf carcasses.

(a) *Prime*. (1) Calf carcasses with minimum Prime grade conformation tend to be moderately wide and thick in relation to their length. They are moderately thick-fleshed and have a moderately plump appearance. Legs tend to be moderately thick and bulging. Loins and backs tend to be moderately full and plump. Shoulders and breasts tend to be moderately thick.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Prime quality. The degree of marbling required for minimum Prime quality increases from minimum practically devoid for the very youngest carcasses classified as calf to a maximum moderate amount for carcasses with maturity at the juncture of the calf and beef classes. The lean flesh is moderately firm regardless of maturity.

(3) A development of quality superior to that specified as minimum for the Prime grade may compensate, without limit, for a development of conformation inferior to that specified as minimum for Prime at an equal rate as indicated in the following example: A carcass which has midpoint Prime quality may have conformation equal to the midpoint of the Choice grade and remain eligible for Prime. However, regardless of the extent to which the conformation of a carcass exceeds the minimum of the Prime grade, a carcass must have minimum Prime quality to be eligible for Prime.

(b) *Choice*. (1) Calf carcasses with minimum Choice grade conformation tend to be slightly wide and thick in relation to their length. They tend to be slightly thick-fleshed and have a slightly plump appearance. Legs are slightly thick but have little evidence of plumpness. Loins and backs are very slightly full and plump. Shoulders and breasts are slightly thick.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Choice quality. The degree of marbling required for minimum Choice quality increases from minimum practically devoid for carcasses at midpoint calf maturity to a maximum slight amount for carcasses with maturity at the juncture of the calf and beef classes. Marbling is not required for Choice quality in carcasses which are less than midpoint calf in maturity. The lean flesh is slightly firm regardless of maturity.

(3) A development of quality superior to that specified as minimum for the Choice grade may

compensate, without limit, for a development of conformation inferior to that specified as minimum for Choice at an equal rate as indicated in the following example: A carcass which has midpoint Choice quality may have conformation equal to the midpoint of the Good grade and remain eligible for Choice. However, regardless of the extent to which the conformation of a carcass exceeds the minimum of the Choice grade, a carcass must have minimum Choice quality to be eligible for Choice.

(c) *Good*. (1) Calf carcasses with minimum Good grade conformation tend to be rangy, angular, and narrow in relation to their length. They tend to be thinly fleshed. Legs are thin and tapering and very slightly concave. Loins and backs are slightly shallow and depressed. Shoulders and breasts are thin.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Good quality. The minimum degree of marbling required for Good quality decreases from typical traces for carcasses with maturity at the juncture of the calf and beef classes to minimum practically devoid for carcasses midway in maturity within the more mature half of the range of maturity included in the calf class. In less mature carcasses, marbling is not required for Good quality. The lean flesh is moderately soft regardless of maturity.

(3) A development of quality superior to that specified as minimum for the Good grade may compensate, without limit, for a development of conformation inferior to that specified as minimum for Good at an equal rate as indicated in the following example: A carcass which has midpoint Good grade quality may have conformation equivalent to the midpoint of the Standard grade and remain eligible for Good. Also, a carcass which has conformation at least one-third grade superior to that specified as minimum for the Good grade may qualify for Good with a development of quality equivalent to the lower limit of the upper third of the Standard grade. Compensation of superior conformation for inferior quality is limited to one-third grade of deficient quality.

(d) *Standard*. (1) Calf carcasses with minimum Standard grade conformation are rangy, angular, and very narrow in relation to their length. They are very thinly fleshed. Legs are very shallow and depressed. Shoulders and breasts are very thin.

(2) Figure 1 in 54.115 depicts the degree of feathering and flank fat streakings associated with minimum Standard quality. The lean flesh is soft regardless of maturity.

(3) A development of quality which is superior to that specified as minimum for the Standard grade may compensate, without limit, for a development of conformation inferior to that specified as minimum for Standard at an equal rate as indicated in the following example: A carcass which has midpoint Standard quality may have conformation equal to the midpoint of the Utility grade and remain eligible for Standard. Also, a carcass which has conformation at least one-third grade superior to that specified for the minimum of the Standard grade may qualify for Standard with a development of quality equal to the lower limit of the upper third of the Utility grade. Compensation of superior conformation for inferior quality is limited to one-third grade of deficient quality.

(e) *Utility*. The Utility grade includes those calf carcasses whose characteristics are inferior to those specified as minimum for the Standard grade.