United States
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Program

United States Standards for Grades of Feeder Cattle

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The following is a reprint of the Official United States Standards for the Grades of Feeder Cattle 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 appropriation acts for the Department of Agriculture. The standards are reprinted with amendments effective October 1, 2000.

§53.202 Classes of slaughter and feeder cattle.

The classes of slaughter and feeder cattle are steers, bullocks, bulls, heifers, and cows. Definitions of the respective classes are as follows:

(a) *Steer.* A steer is a male bovine castrated when young and which has not begun to develop the secondary physical characteristics of a bull.

(b) *Bullock.* A bullock is a young (under approximately 24 months of age) male bovine (castrated or uncastrated) that has developed or begun to develop the secondary physical characteristics of a bull.

(c) *Bull.* A bull is a mature (approximately 24 months of age or older) uncastrated, male bovine. However, for the purpose of these standards, any mature, castrated, male bovine which has developed or begun to develop the secondary physical characteristics of an uncastrated male also will be considered a bull.

(d) *Cow.* A cow is a female bovine that has developed through reproduction or with age, the relatively prominent hips, large middle, and other physical characteristics typical of mature females.

(e) *Heifer.* A heifer is an immature female bovine that has not developed the physical characteristics typical of cows.

§53.208 Feeder cattle grades.

(a) *Grade Factors.* (1) These standards apply only to cattle that have not reached the age of 36 months, except these grades may be used to describe stock cows for market reporting purposes.

(2) The grade of feeder cattle is determined by evaluating three general value-determining characteristics -- frame size, thickness, and thriftiness.

(3) Frame size refers to the animal's skeletal size -- its height and body length -- in relation to its age. Thus, frame size evaluations are directly related to differences in mature size. At the same age, large frame cattle will be taller at the withers and the hips and longer bodied than small frame cattle.

(4) Thickness in feeder cattle refers to the development of the muscle system in relation to skeletal size. In feeder cattle of the same age and frame size variations in thickness are due to differences in bone structure, muscling, and degree of fatness. For purposes of these standards, thickness is evaluated, assuming a constant degree of fatness -- slightly thin. Thicker feeder cattle will have a higher ratio of muscle to bone when fed to the same degree of fatness and will have a higher yield grade.

(5) Thriftiness refers to the apparent health of an animal and to its ability to grow and fatten normally. In these standards unthrifty animals are those which are not expected to perform normally in their present state. This may be due to such factors as disease, parasitism, severe emaciation, or any condition that must be corrected before they could be expected to perform normally. Unthrifty feeder cattle may have any combination of thickness and frame size.

(b) *Grades.* (1) The grades of feeder cattle that have been determined to be thrifty include three separate groupings for different frame sizes -- Large Frame, Medium Frame, and Small Frame and four separate groups for thickness -- No. 1, No. 2, No. 3, and No. 4. The twelve resultant grades are as follows: Large Frame, No. 1; Large Frame, No. 2; Large Frame, No. 3; Large Frame, No. 4; Medium Frame, No. 1; Medium Frame, No. 2; Medium Frame, No. 3; Medium Frame, No. 4; Small Frame, No. 1; Small Frame, No. 2; Small Frame, No. 3; Small Frame, No. 4.

(2) The U.S. Inferior grade shall apply to all feeder cattle that have been determined to be unthrifty. Additionally, "double-muscled" (muscular hypertrophy) cattle are graded Inferior because they cannot be expected to deposit intramuscular fat (marbling) normally.

§53.209 Application of standards for grades of feeder cattle.

(a) *General Principles.* (1) For the grades of feeder cattle, separate evaluations are made for thriftiness, frame size, and thickness. Each of these factors are very important to feeder cattle buyers and individually affect how cattle will perform in the feedlot. Additionally, variations in frame size and thickness have separate effects on the ultimate carcasses that are produced.

(2) Variations in frame size among feeder cattle primarily affect the composition of their gain in weight. The gain in weight of a large framed feeder animal of a given degree of thickness normally will consist of more muscle and bone -- but less fat -- than a smaller framed animal. Indirectly, therefore, at a given weight and thickness, large framed animals will have a lesser degree of fatness than smaller framed animals and will also have carcasses with higher yield grades -- but lower quality grades. This means that if animals are fed to produce the same quality grades -- Choice, for example -- large framed cattle of a given thickness must be fed to heavier weights than cattle of the same thickness but which are smaller framed. In each of the frame size specifications, guidelines are given relative to the live weights at which steers and heifers may each be expected to produce carcasses with the degree of finish normally associated with the Choice grade (approximately 0.50 inch).

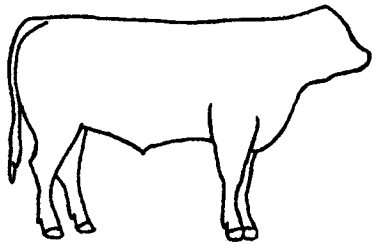
(3) Variations in thickness are reflected in differences in ribeye area and, therefore, relate primarily to the ultimate yield grade of the carcass that a feeder animal will produce. When marketed at a given weight, a thick animal of a given frame size will normally produce a higher yield grading carcass than an animal of the same frame size that is narrow throughout. This results from the fact that the thick animal, at a given weight, will have both a larger ribeye and a lesser degree of fatness. If cattle are fed to produce carcasses of the same quality grade -- Choice, for example -- thick feeders of a given frame size must normally be fed to slightly heavier weights than cattle of the same frame size which are not as thick.

(4) The frame size portion of the grade is determined by an evaluation of an animal's skeletal size in relation to its age. Since age is such an important factor in determining frame size, careful consideration must be given to its evaluation. For example, two feeder cattle from the same environment with the same height and body length but which differed substantially in age would obviously not be the same frame size. By the same token, at a given age, a taller, longer bodied feeder animal will be larger framed than a short bodied animal that is not as tall. As feeder cattle mature, their heads appear to increase in relation to the size of their body; their ears decrease in size in relation to the size of their heads; the muzzle becomes proportionately wider; the head becomes longer in relation to its width; the feet become larger in relation to the size of the bone; and the tail increases in length and exhibits a more prominent switch. In evaluating feeder cattle for frame size, it must be remembered that breeds differ in the general range of their frame size and that since these standards apply to all breeds, this variation in frame among breeds must be taken in account. For example, in these standards, the largest framed cattle in a breed of small mature size -- and the smallest framed cattle in a breed of large mature size -- might both be considered as Medium in frame size.

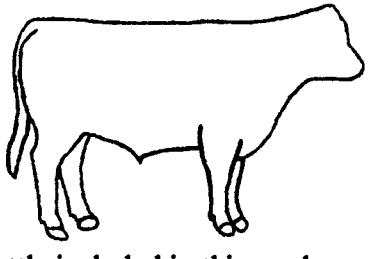
(5) The thickness portion of the grade is determined by appraising the development of the muscular system in relation to the development of the skeletal system. Three of the four thickness grades include detailed descriptions of the thickness and fullness of the feeder cattle in the various parts due to differences in bone structure and muscling. However, since the appearance of these parts may be influenced to a considerable extent by variations in fatness, the descriptions are based on animals that have a slightly thin covering of fat. When evaluating the thickness of animals which have either a greater or lesser degree of fatness than that on which the standards are based, proper allowances must be made for the effect of these differences on the appearance of the various parts. In making such allowances, it must be remembered that cattle deposit fat at a relatively faster rate over the loin and back and in the flank, cod or udder, twist, and brisket than they do through the rear quarter, forearm, and gaskin. Therefore, as cattle increase in fatness, these former parts appear progressively fuller, thicker, and more distended in relation to the thickness through the rear quarter and to the fullness of the forearm and gaskin. Since relatively little fat is deposited over these latter parts, their appearance is affected relatively little by variations in fatness. In evaluating the thickness of feeder cattle, it is important to properly evaluate the thickness in all parts of the animal. However, since variations in fatness make it especially difficult to precisely evaluate the thickness and fullness of muscling in the loin and back, major emphasis should be placed on the development of muscling in the rear quarter, forearm, and gaskin as an indicator of overall thickness. Unless proper allowance is made for variations in fatness, animals carrying considerable finish may appear to have greater thickness throughout than actually is the case, whereas those which are in very thin condition may be inherently thicker than their appearance might indicate.

§53.210 Specifications for official United States standards for grades of thrifty feeder cattle (frame size).

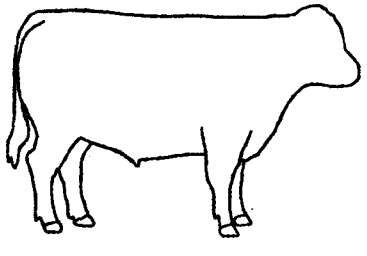
(a) *Large Frame (L).* Feeder cattle which possess typical minimum qualifications for this grade are thrifty, have large frames, and are tall and long bodied for their age. Steers and heifers would not be expected to produce U.S. Choice carcasses (about 0.50 inch fat at twelfth rib) until their live weights exceed 1250 pounds and 1150 pounds, respectively.



(b) *Medium Frame (M).* Feeder cattle which possess typical minimum qualifications for this grade are thrifty, have slightly large frames, and are slightly tall and slightly long bodied for their age. Steers and heifers would be expected to produce U.S. Choice carcasses (about 0.50 inch fat at twelfth rib) at live weights of 1100 to 1250 pounds and 1000 to 1150 pounds, respectively.

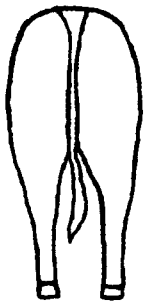


(c) *Small Frame (S).* Feeder cattle included in this grade are thrifty, have small frames, and are shorter bodied and not as tall as specified as the minimum for the Medium Frame grade. Steers and heifers would be expected to produce U.S. Choice carcasses (about 0.50 inch fat at twelfth rib) at live weights of less than 1100 pounds and 1000 pounds, respectively.

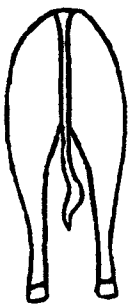


§53.211 Specifications for official U.S. standards for grades of thrifty feeder cattle (thickness).

(a) *No. 1.* Feeder cattle which possess minimum qualifications for this grade usually display predominate beef breeding. They must be thrifty and moderately thick throughout. They are moderately thick and full in the forearm and gaskin, showing a rounded appearance through the back and loin with moderate width between the legs, both front and rear. Cattle show this thickness with a slightly thin covering of fat; however, cattle eligible for this grade may carry varying degrees of fat.



(b) *No. 2.* Feeder cattle which possess minimum qualifications for this grade usually show a high proportion of beef breeding and slight dairy breeding may be detected. They must be thrifty and tend to be slightly thick throughout. They tend to be slightly thick and full in the forearm and gaskin, showing a rounded appearance through the back and loin with slight width between the legs, both front and rear. Cattle show this thickness with a slightly thin covering of fat; however, cattle eligible for this grade may carry varying degrees of fat.



(c) *No. 3.* Feeder cattle which possess minimum qualifications for this grade are thrifty and thin through the forequarter and the middle part of the rounds. The forearm and gaskin are thin and the back and loin have a sunken appearance. The legs are set close together, both front and rear. Cattle show this narrowness with a slightly thin covering of fat; however, cattle eligible for this grade may carry varying degrees of fat.

(d) *No. 4.* Feeder cattle included in this grade are thrifty animals which have less thickness than the minimum requirements specified for the No. 3 grade.

§53.212 Specifications for official U.S. standards for the grade of unthrifty feeder cattle.

(a) *Inferior.* This grade includes those feeder cattle which are not expected to perform normally in their present state and those that are "double-muscled." Cattle in this grade may have any combination of thickness and frame size.