

## **Grading Feeder Cattle**

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For many the standard language used to describe groups of feeder cattle may seem like a foreign language, however, the feeder calf grading system provides a common language between buyers and sellers of feeder cattle. The standards were most recently updated in October of 2000 to reflect changes since the guidelines were released in 1979 to the U.S. cowherd. In addition these grades also provide a common language that is used in USDA cattle market reports.

Feeder calf grades are based on frame size and muscle thickness, which correspond to an anticipated slaughter weight. These 2 characteristics are critical genetic factors which affect calf value. Frame size is tied very closely to finished weight, and is a genetically inherited trait that is not greatly affected by normal management practices. It is expected that under typical feeding and management conditions, large frame animals will require longer time on feed to reach the choice grade than a small framed animal, and that large framed cattle will weigh more at the same quality grade. The muscle thickness score is related to lean and fat composition of the carcass, with thick muscled animals (lower muscling score) expected to produce more lean meat.

There are 12 possible combinations of feeder calf grades from the 3 frame size grades and 4 muscle grades. Often these combinations of grades are reported using an abbreviated format. For example, an L1 refers to an animal with a large frame and number 1 muscle thickness. Muscle scores are often reported as No. 1 or No. 2. In addition to the standard grades, an Inferior category exists for unthrifty cattle. These unthrifty cattle may have issues related to disease, mismanagement, parasites, or simply poor nutrition. Double muscled cattle are also included in this inferior grade as they simply do not produce enough marbling to reach the choice grade.

Frame size should be determined in relation to a calf's age, with appearance generally used to estimate age of cattle of unknown origin. As cattle grow older, several telltale signs portray age; ears decrease in size relative to a calf's head, muzzle becomes wider, head become longer related to its width, and the tail is longer with a more prominent switch.

Since fat can alter the perceived amount of muscle a calf appears to have, muscle thickness should be appraised at a constant fatness, when cattle are slightly thin. If a calf has more external fat cover, the muscle score should be determined as if he possessed a slightly thin fat cover.

### **Frame Size Standards (Table 1):**

**Large Frame (L):** 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 (approximately 0.50 inch fat at twelfth rib) until their live weights exceed 1250 pounds and 1150 pounds, respectively.

**Medium Frame (M):** 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 (approximately 0.50 inch fat at twelfth rib) at live weights of 1100 to 1250 pounds and 1000 to 1150 pounds, respectively.

Small Frame (S): 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 (approximately 0.50 inch fat at twelfth rib) at live weights of less than 1100 pounds and 1000 pounds, respectively.

Table 1. Expected weight of cattle at Choice Quality Grade of cattle of differing frame sizes

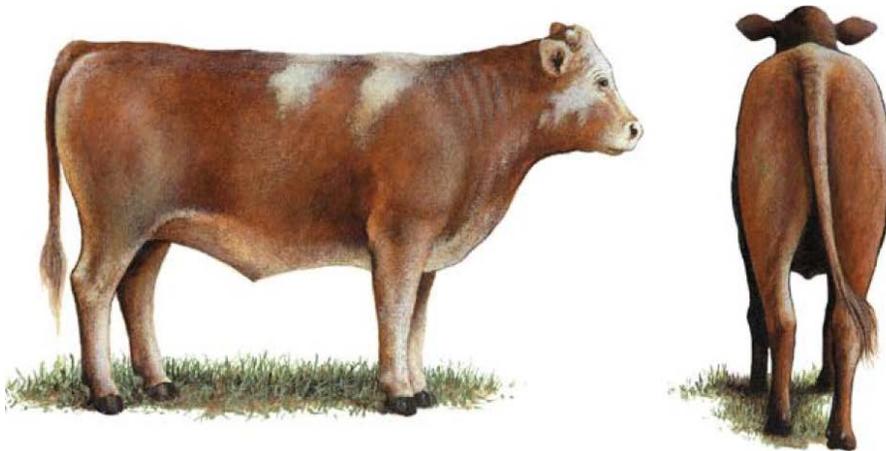
Frame	Expected Weight at Choice Grade	
	Steers	Heifers
Large	1250 lbs	1150 lbs
Medium	1100 lbs	1000 lbs
Small	<1100 lbs	<1000 lbs

**Muscle Thickness Standards:**

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.



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.



**No. 2**

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.



**No. 3**

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. This grade is typically made up of dairy cross cattle.



**No. 4**

The USDA Feeder Cattle Grading System is a great tool for producers to understand. Not only does it provide buyers and sellers with a common language to describe cattle that may be sight unseen, but it also offers cow-calf or stocker producers a method to evaluate a group of calves and estimate their future performance. Feeder calf grades are the standard by which livestock market reports are based. These grades also allow for better sorting of cattle into more uniform groups for finishing. This tool can allow producers at the start of the beef production chain to evaluate their breeding and management programs to more closely match the market they are trying to fit.

For more information about beef cattle production, contact an office of the Mississippi State University Extension Service, and visit [msucares.com/livestock/beef](http://msucares.com/livestock/beef).

#### References:

U.S. Standards for Grades of Feeder Cattle.

<http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3066980>