

Ever Wonder What Quality Grade Is?

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Carcass data terminology pops up frequently when discussing beef production. A couple of questions come to mind right away: What do all the terms mean? And how much carcass data do we really need?

For most producers changes in management and genetics made within a herd are not made through analysis of individual animals at harvesting. Many producers still rely on pen averages or published research results of cattle similar in type and breed to their own cattle to initiate change. One would be hard pressed to say the industry hasn't survived with such strategies, but still individual herds need to keep in mind the end product they produce.

The end product, generally assessed by quality and yield grade, is sorted to meet different markets, each with an appropriate price based on demand. So, what are these two big numbers, quality and yield grade?

For today, let's focus on the former. Quality grade is an attempt to measure, or put into some objective term, the assumed eating characteristics of the retail meat products when the carcass is broken down during processing. Those carcasses grading "prime" would be considered the product with the greatest summation of eating qualities related to palatability (i.e., tenderness, juiciness and flavor). Those carcasses grading the "canner" would simply have the least desirable eating experience. Generally, a grilled steak from a "canner" carcass would be very difficult to eat.

The order of beef quality grades, from the most desirable eating experience to the least, would be prime, choice, select, standard, commercial, utility, cutter and canner. In addition, typical slaughter cattle carcasses are broken down into several classes of beef carcasses, including steer, bullock, heifer, cow and bull. There are additional classes for slaughter veal and calves.

All eight quality grades are only available for steer and heifer carcasses. Bullock quality grades only include prime, choice, select, standard and utility. Cow quality grades include all grades except prime. Bulls are not eligible for quality grades.

Being a slaughter cattle buyer means being able to mentally estimate what carcass grades a particular set of cattle will produce, quickly estimate the carcass value, extrapolate a live price and bid the cattle. Generally, cattle producers pay considerable attention to slaughter steer value and forget the same principles are working for slaughter heifers and cows.

The actual determination of quality grade depends on the maturity or age of the cattle based on the condition of the bone and color of the lean ribeye, as well as the degree of intra-muscular fat present in the ribeye. In conversation with graders, the terms of A,B,C, D and E bone will be overheard, as well as marbling scores of slightly abundant, moderate, modest, small, slight, traces and practically devoid.

Bone grades are an indicator of maturity. With high prices and demand for beef, the A bone is in the news a lot today, since A bone cattle are estimated to be 9 to 30 months of age, while B bone cattle are estimated at 30 to 42 months of age. A and B bone are the only bone eligible for prime, choice, select and standard beef carcasses. Keep in mind, a cow that is just over 3 years of age, could have B bone.

Steer carcasses with A bone and slightly abundant marbling are prime. Too much space is needed to discuss all the quality grades of beef, but rest assured, as the cattle get older and marbling gets less, the grade goes down. In general, the younger the cattle and the more marbling present equates to the greater chance the eating experience will be good, without the addition of several generations of home recipes.

May you find all your ear tags.

Your comments are always welcome at www.BeefTalk.com. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to www.CHAPS2000.com on the Internet. In correspondence about this column, refer to BT0171.

USDA Beef Grading Chart

Relationship between marbling, maturity and carcass quality grade¹

Degrees of Marbling	Maturity ²				
	A ³ 9 to 30 months	B 30 to 42 months	C 42 to 72 months	D 72 to 96 months	E more than 96 months
Slightly abundant	PRIME				
Moderate	CHOICE		COMMERCIAL		
Modest	CHOICE				
Small	CHOICE				
Slight	SELECT		UTILITY		
Traces					
Practically devoid	STANDARD			CUTTER	

1. Assumes that firmness of lean is comparably developed with the degrees of marbling and that the carcass is not a "dark cutter."
 2. Maturity increases from left to right (A through E).
 3. The A maturity portion of the Figure is the only portion applicable to bullock carcasses.