



ROCKHAMPTON 7-12 MAY

BEEF AUSTRALIA 2012



ANZ NATIONAL BEEF CARCASS COMPETITION SCHEDULE

HOW TO IMPROVE YOUR SCORE WHEN SELECTING, PREPARING AND PRESENTING COMPETITION CATTLE

When preparing cattle for a competition, remember that high scores come from three main factors:

1. Meeting the weight, fat, sex and dentition specifications of the class
2. High yield of saleable meat - optimum fat cover and heavy muscling
3. High eating quality - young and well nourished animals, not stressed, with marbling as a bonus.

An "average" young animal will achieve a high score if it is fed well throughout its life and particularly in the final six weeks, it is not excessively stressed in the 24 hours before slaughter and it meets the correct weight and fat specifications. Very high scores are possible by optimising these features and increasing saleable meat yield.

The feedback from your score sheet provides a great deal of information and can identify areas for future improvement.

1. Meeting market specifications

Key indicators are - HSCW; sex; dentition; P8 fat depth; meat colour and fat colour.

Meeting the carcass weight/fat target is the key starting point for achieving a high score. Achieving a weight and fat target is a complex combination of management and animal factors - frame size, muscling, genetics and nutrition. Heavily muscled or large framed cattle require a higher level of nutritional input and possibly for a longer time period to put on the same fat cover.

Optimal meat colour comes from cattle that are younger, have experienced high levels of nutrition and low pre-slaughter stress (see meat quality).

Ideal fat colour (firm and white) results from feeding a grain-based ration. Young, grass-fed cattle produce a creamy-white fat colour, which is highly acceptable for most markets. Deeper yellow fat is undesirable and comes with older, grass-fed cattle. Some feeds can change the characteristics of fat, for example, large amounts of lupins can produce fat that is soft and greasy.

2. Improving saleable meat yield

Key indicators are - Eye-muscle area (EMA) and rib fat depth.

"Saleable meat yield" is the weight of saleable primal cuts plus trimmings as a percentage of carcass weight. It is not to be confused with dressing percentage which is the ratio of carcass weight to final live weight. High yielding carcasses are heavily muscled with optimum fat depth.

Among cattle meeting market specifications and minimum quality requirements for grading, the greatest potential to improve your score is by increasing saleable meat yield.

- Ensure fat depth is within the optimum specifications. This will maximize your saleable meat yield points with the particular animal. Overfat carcasses require more trimming, resulting in lower saleable meat yield
- After subcutaneous fat depth is optimised, to increase EMA points, and therefore saleable meat yield, a more muscular animal needs to be selected. Consider these points to increase saleable meat yield:
 - Crossbreed, using high-yielding sire breeds
 - Select bulls for moderate frame and heavy muscling, either visually or with help from BREEDPLAN EBV's for higher yield and EMA
 - Heavily muscled cattle occur in most breeds, not only in large European genotypes
 - More muscular cattle usually put on less fat, especially if they are large framed, however, they may need more feed or longer preparation time to reach the target fat depth
 - Females from heavily muscled bulls are just as functional for breeding, as long as you avoid the extremes.



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3. Improving eating quality

Key indicators are pH, ossification score, tropical breed content, hump height, marbling and meat colour.

The above key indicators along with other factors such as carcass hanging method and meat ageing combine to produce the final eating quality score. As some factors interact with others, it is not possible to allocate points independently to each factor.

A score of zero in this section means the carcass failed to meet one or more of the minimum requirements for MSA grading. This does not mean the beef has no value, but does mean its value has been severely downgraded against the industry's minimum quality benchmark.

- If a score of zero was recorded in the MSA eating quality section, use the individual feedback assessments to identify the reason. It may be a pHu over 5.7, meat colour over score 3, a rib fat depth less than 3 mm or inadequate fat distribution. Any of these factors will result in a complete loss of meat quality points, and should be given highest priority for correction in the future. Some management factors to consider are:

- High pHu or dark meat colour are signs of pre-slaughter stress and low energy reserves at slaughter. Ensure as a minimum that nutritional inputs are kept at a high level in the two weeks prior to slaughter, that the animal has a quiet temperament, that there is minimum handling prior to consignment and that the transit time between farm and slaughter is minimised
- Inadequate rib fat or fat distribution - ensure a high level of nutritional input with sufficient energy is available and consider maintaining a longer period at that level of nutrition prior to slaughter.
- Once the carcass has met minimum grading requirements, factors to maximize eating quality score are:
 - Ensure optimum pHu (5.3-5.7) and meat colour (1b to 3) by building up and maintaining energy reserves prior to slaughter (good nutrition, minimum stress, avoid mixing with strange cattle, minimal handling, and a minimum transit time from farm to slaughter)
 - Sound on-farm management of genetics, nutrition and weight gain

- Minimise or optimise the use of hormonal growth promotants (HGPs) where possible
- Increase marbling by using proven genetics (BREEDPLAN EBVs and GeneStar Marbling)
- Ensure optimum whole of life growth, without setbacks
- Aim for a subcutaneous fat cover near the top of the optimum range
- Aim for lower ossification score by faster growth for age.

For further details on the MSA grading system:

Meat Standards Australia -
www.mla.com.au/msa including MSA Tips and Tools

Beef CRC -
www.beef.crc.org.au