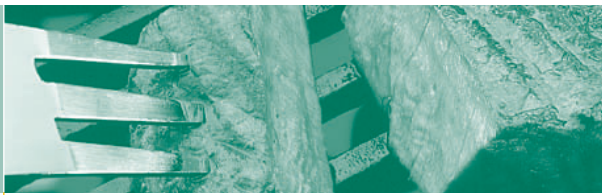


tips & tools

MEAT STANDARDS AUSTRALIA



MSA01

What is MSA?

MSA is a valuable asset to the Australian beef industry, providing opportunities to differentiate product in the market. Unlike existing industry description systems, MSA accurately predicts eating quality for individual beef muscles.

The complex series of factors which result in the eating quality of a beef meal are taken into account in the MSA production and grading process. This solves the long-standing consumer problems of selecting beef and choosing an appropriate cooking method.

Beef purchasing by consumers

The MSA labels provide a consumer guarantee of eating quality at three levels in conjunction with cooking method.



ROAST



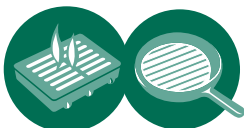
SLOW COOK



STIR-FRY



CORN



GRILL/PAN FRY



SHABU SHABU

This is all the consumer needs to know to purchase and prepare beef with confidence.

Application of the system can provide a dynamic new consumer focus and drive positive change in beef industry trading systems. At retail, description by final cooked result can be linked to price and replace the complex and often misleading system of cut names and quality descriptions now used. Relating MSA grade results to price along the

production chain can encourage and reward production approaches that improve consumer acceptance of beef.

Replacing variable quality with accurate eating quality grades can underpin branded beef programs and provide a basis for improved demand with an associated shift in price and volume.



Key points

- MSA removes the need for consumers to have specialist beef knowledge.
- MSA retail labels advise the correct cooking method for every piece of beef and guarantee the eating quality result.
- MSA product must meet consumer set standards at one of three quality levels: MSA 3 (Tenderness Guaranteed), MSA 4 (Premium Tenderness) or MSA 5 (Supreme Tenderness).
- MSA involves all sectors of the beef production chain, from paddock to plate.
- MSA provides detailed feedback on eating quality to the processor, feedlot and the producer.

How did MSA begin?

MSA began as an industry program in 1996 following detailed consumer research investigating the continuing decline in beef consumption.

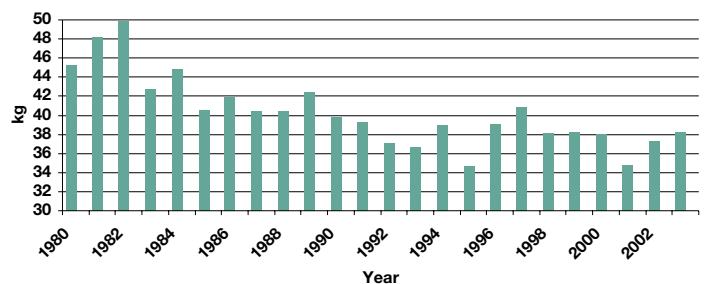


Figure 1: Beef consumption per capita (Source Abare 2004)

The key problems identified in MSA research were a reduced level of cut and cooking knowledge amongst consumers and the degree of quality variation in the beef available. The period of beef decline coincided with growth in competitive products offering greater consistency and less demanding product knowledge. While relative pricing had also changed, consumers stated they would buy more beef, even at higher prices, if it was reliable.

The consumer standard

A total consumer focus has been the foundation of MSA development. The grade target has always been to accurately establish and satisfy consumer set standards. Early MSA research investigated consumer taste parameters to establish the degree of variation between consumers. Grading could not be effective without a reasonable consensus view of eating quality. The findings established that there was very strong agreement on beef eating quality among consumer groups. From this, base protocols were established to utilise consumers in testing the full range of beef produced. The scoring system and boundaries to define grades have been strictly set from analysis of the consumer results unrelated to all production factors.

All MSA beef is graded on the basis of the consumer test score predicted for a particular beef muscle cooked by the nominated method. Further information on consumer testing and grade standards is available in MSA tips & tools *How MSA grades are determined*.

How is the MSA grade established?

The MSA grade is established by calculating the direct and interactive effects of all factors established as affecting eating quality. Over 60,000 consumers have participated in MSA consumer testing providing scores on over 420,000 beef samples from more than 42,000 individual cuts. A very large database contains details of the consumer scores for each cut in conjunction with product information. This includes the animal's breed, sex, age and growth history, detailed processing and chiller assessment data together with the individual cut and muscle, days of ageing and cooking method tested.

Analysis of this data has established a series of factors which, when used in combination, allow the consumer score to be predicted with reasonable accuracy. No single factor is all-important, which is why grades based entirely on breed, dentition, marbling or other single attributes fail to guarantee eating quality. Virtually all steps in the production process have some impact on the eventual consumer result.

The MSA graders collate information provided from the cattle supplier, through the MSA vendor declaration, with abattoir information and chiller assessment detail. The data is entered into a hand held computer that enables a complex statistical calculation to be made estimating the interactive effect of all factors on eating quality. Information

on each carcass is provided to the abattoir and the supplier in MSA feedback.

The program then produces a grade score specific to each muscle for each applicable cooking method, covering ageing periods from five to 30 days. This determines the consumer label to be used. Individual 'butcher labels' can be produced for every cut on each carcass, or carcasses can be grouped into boning room runs. Boning room runs group cuts within grade score ranges to enable accurate carton labelling. The final retail label is applied at the point of sale. Further details on the grade calculation process, the grading procedure and each grading input may be obtained in other MSA tips and tools.

How is MSA integrity maintained?

MSA is a voluntary cooperative program requiring coordination and rewarding best practice across all industry sectors. Those who choose to participate in MSA are licensed, with license conditions requiring detailed audit and total product integrity. A DNA sample is taken from every carcass graded to enable traceback. Producers are registered and provide required information via a vendor declaration. Feedlots, abattoirs, wholesalers and retailers are licensed and incorporate MSA requirements into their quality assurance programs. The MSA graders are professional and perform the grading function on behalf of the industry. Consumer complaints are monitored and product traced back to source.

For more information

Visit www.msagrading.com or contact your nearest MSA grading office or MLA for other tips & tools on the factors that affect eating quality.

Meat Standards Australia grading offices:

Brisbane:	Ph: 07 3620 5200
Wagga Wagga:	Ph: 02 6931 0371
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