

# tips & tools

MSAS1

MEAT STANDARDS AUSTRALIA

## What is MSA sheepmeat?

Meat Standards Australia (MSA) is a valuable asset to the Australian sheepmeat industry, providing opportunities to differentiate products in the market. MSA sheepmeat is a supply chain management program designed to improve the eating quality of all sheepmeat categories (lamb, hogget and mutton).

A complex series of factors, which all affect the eating quality of sheepmeat are taken into account during the production process. This solves the long-standing consumer problem of selecting sheepmeat and choosing an appropriate cooking method.

In 1997, an Australia-wide audit of retail lamb showed that 20% of loins were unacceptably tough.

Today consumers expect quality – attributes such as flavour, juiciness, tenderness and overall liking should not fall below a minimum value.

In 2000, Meat & Livestock Australia (MLA), with the support of research partners and the industry, designed a Sheepmeat Eating Quality (SMEQ) research program to define best practice procedures through the identification of critical control points for eating quality. This research covered all aspects of the supply chain on behalf of producers, processors, retailers and foodservice operators. The results provided tools to monitor and improve product quality and match customer requirements in a practical and cost-effective way.

### Consumer research

A total consumer focus has been the foundation of SMEQ research and development. The target has been to accurately establish and satisfy consumer-set standards. Since 2000, more than 90,000 consumer taste tests of sheepmeat products, involving 9,000 cuts of meat and 15,000 consumers have been conducted.

The tests required consumers to score samples based on tenderness, flavour, juiciness and overall liking on a 1 to 100 point scale. Consumers also scored products into eating quality grades as either unsatisfactory, good every day or better than every day eating quality.

### Key points

- MSA sheepmeat involves all sectors of the production supply chain, from farm to plate, to manage the critical control points that impact on eating quality.
- MSA sheepmeat standards are created from the analysis of 90,000 consumer test results, combining tenderness, juiciness, flavour and overall liking scores.
- MSA sheepmeat labels advise the correct cooking method for every cut of sheepmeat and assures an eating quality result.

### Reducing variability

Sheepmeat production in Australia is comprised of a variety of breeds raised under variable climatic conditions. While sheep have remarkable biological mechanisms to cope with and minimise the effects of drought, flood, heat, cold, and fly strike, the risk of compromised and variable eating quality is always present.

Variables throughout the supply chain include:

- stress caused by mustering and the time between mustering and slaughter
- processing procedures such as slaughtering and chilling
- conditions under which sheepmeat is stored and displayed to customers.

By understanding and controlling these factors through the identification of eating quality critical control points, and the translation of these control points into practical steps, the industry has the potential to improve average eating quality and reduce variability.

Reduced variability and a more consistent and improved eating quality in sheepmeat products will result in increasingly effective competition with other protein products. This does not mean that all sheepmeat will end up the same. Rather, different products – lamb loins, hogget legs, mutton racks – can achieve their optimum



quality and individually contribute to increased industry returns.

Furthermore, suppliers can make more informed choices about where to position their product for consumer satisfaction, risk, price and quality.

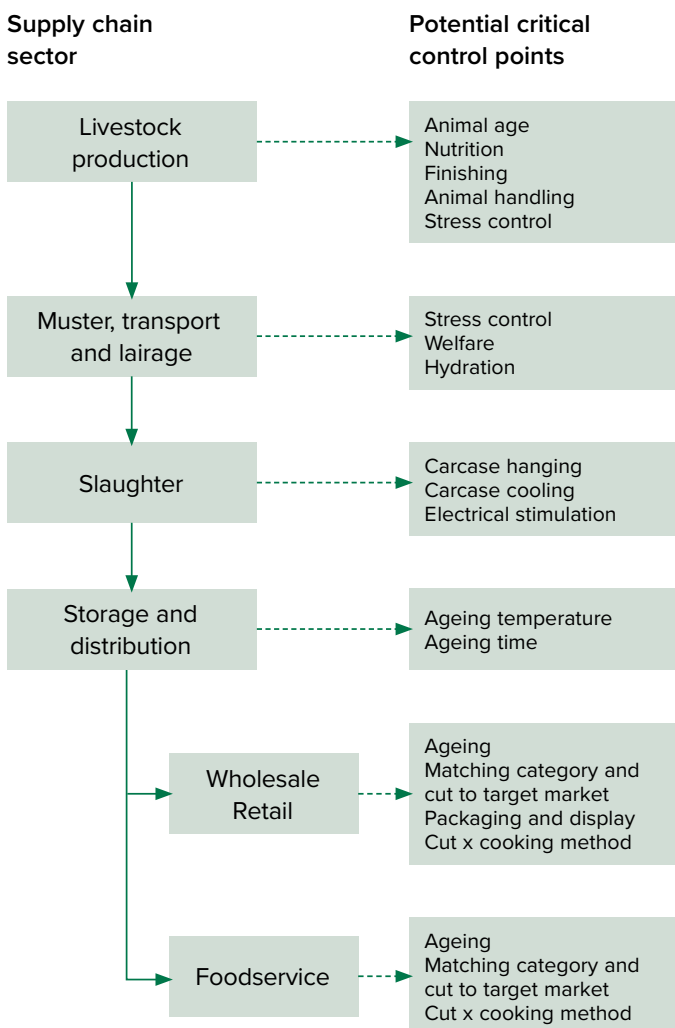
## Sheepmeat eating quality critical control points

Research was based on identifying where critical control points occur in the supply chain (see figure 1) and where they impact on eating quality outcomes. By minimising the impact in these areas, improvement in eating quality of sheepmeat products is achieved.

Industry participants should benchmark their own processes against the critical control points to determine whether their current practices could improve to meet the eating quality needs of customers.

MSA licensed participants of the MSA program are required to measure and monitor some of these factors such as pH.

Figure 1: Potential critical control points for eating quality.



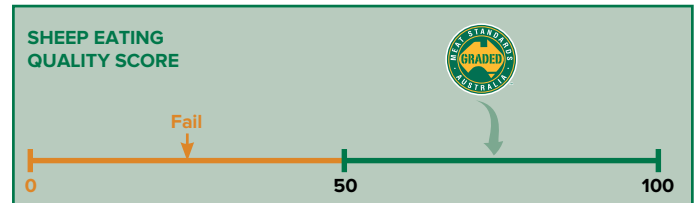
## How is the MSA score calculated?

The MSA score, out of 100, is calculated by adding a percentage of the individual consumer scores for each sensory component as follows:

Tenderness	20%
Juiciness	10%
Flavour	30%
Overall liking	40%

These percentages have been established from statistical analysis of consumer taste test results.

When a resulting eating quality score is 50 or above, the cut can be labelled and sold as MSA, providing a minimum of 5 days ageing is met prior to selling to consumers.



## Purchasing MSA sheepmeat

The carton label provides trade (wholesaler, retail and food service) with MSA eating quality information including recommended cooking methods and ageing requirements. This is all the consumer or enterprise needs to know to purchase and prepare sheepmeat products with confidence.



## For more information

Visit [www.mla.com.au/msa](http://www.mla.com.au/msa) or contact MSA 1800 111 672.



Level 1, 40 Mount Street  
North Sydney NSW 2059  
Ph: +61 2 9463 9333  
Fax: +61 2 9463 9393  
[www.mla.com.au](http://www.mla.com.au)

Released: July 2019  
ISBN: 1 74036 391 4  
© Meat & Livestock Australia  
ABN 39 081 678 364

MLA makes no representation as to the accuracy of any information or advice contained in this document and excludes all liability, whether in contract, tort (including negligence or breach of statutory duty) or otherwise as a result of reliance by any person on such information or advice.