MSA – Past, Present and Future

Dr Jane Weatherley – General Manager, Livestock Productivity
Overview

• About MLA
• MSA – In the beginning
• MSA – the past five years
• The latest developments:
  - Optimisation
  - MSA Beef Index
  - My MSA
• Future of MSA
About MLA

Working in collaboration with the Australian Government and the wider red meat industry, MLA invests in initiatives that contribute to **producer profitability**, **sustainability** and **global competitiveness**.

MLA invests in **Research, Development & Adoption** and **Marketing**.
MLA membership

Sheep only (9,484)*
Sheep/prime lambs (18,480)*
Goats (2,408)*
Grassfed cattle (42,227)*
Grainfed cattle (5,426)*

TOTAL MEMBERS 49,892

* Includes members with mixed enterprises
An independent assessment of MLA’s research, development and marketing programs from 2010-11 to 2014-15 concluded:

<table>
<thead>
<tr>
<th>Program</th>
<th>Return on Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining and improving market access programs</td>
<td>$14.80</td>
</tr>
<tr>
<td>Increasing productivity programs</td>
<td>$4.50</td>
</tr>
<tr>
<td>Growing demand programs</td>
<td>$5.20</td>
</tr>
<tr>
<td>Industry integrity and sustainability programs</td>
<td>$3.80</td>
</tr>
<tr>
<td>All programs</td>
<td>$6.20</td>
</tr>
</tbody>
</table>

Every $1 invested by MLA in all programs yields $6.20 in current and future returns.
Survey Results

Survey results indicated:

• 38% of consumers had difficulty buying beef to the quality they desire.
• 57% had difficulty predicting tenderness of raw beef product.
• 81% believed price was a poor indicator of beef quality.
• More than 90% perceived fat to equal poor quality.

However the same consumers said they would buy more beef and pay more for it if satisfaction could be guaranteed.
Consumer Taste Tests

• The MSA program is based on over 100,000 consumer taste tests and almost 700,000 samples.
• 8 cooking methods tested
• Consumer testing has been carried out in 9 countries
• Largest consumer product testing program in the world
**Consumer Score Card**

**PRODUCT:**

- **Tenderness**
  - Not Tender
  - Very Tender

- **Juiciness**
  - Not Juicy
  - Very Juicy

- **Liking of flavour**
  - Dislike Extremely
  - Like Extremely

- **Overall Liking**
  - Dislike Extremely
  - Like Extremely

Please tick one of the following to rate the quality of the beef sample you have just eaten:

- Unsatisfactory
- Good everyday quality
- Better than everyday quality
- Premium quality
## Consumer Taste Tests

<table>
<thead>
<tr>
<th></th>
<th>Beef</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenderness</td>
<td>30%</td>
</tr>
<tr>
<td>Juiciness</td>
<td>10%</td>
</tr>
<tr>
<td>Flavour</td>
<td>30%</td>
</tr>
<tr>
<td>Overall liking</td>
<td>30%</td>
</tr>
</tbody>
</table>
Consumers identified grades

0  46  64  77  100

Fail

- GRADED
  - 4STAR
    - Premium Quality
  - 5STAR
    - Supreme Quality
MSA – the last five years
Return on Eating Quality Investment – 5 years

2010-2015 MLA Eating Quality Program - MSA

**Industry Impact**: $679 m

**Expenditure**: $54 m

**Benefit cost ratio**: 12.5:1

- Increased numbers of cattle graded to over 1/3 of adult cattle slaughter to 3.22 million hd graded and lamb to 7 million hd
- Increased processor and end user adoption to 54 processors
- Increased premiums paid to producers – doubled for grassfed beef producers to $0.33/kg HSCW
- Improved consumer satisfaction with eating quality of red meat
3.1 million cattle graded in 2015-16
- Increased share of national adult slaughter from 34% (14/15) to 38% (15/16).
- 43 MSA licensed beef processors
Beef compliance

92.7% compliance in 16/17

- High pH – accounted for 72% of ungrades
- Dark meat colour accounted for 80% of ungrades
- Inadequate fat coverage accounted for 20% of ungrades
Producer premiums – young cattle

- Premiums increased from $0.15/kg HSCW in 10/11 to $0.24/kg HSCW in 15/16.
- Price differentials for young cattle result in an additional $87m ($66/head) delivered back to the farm gate.

**OTH premiums**

Premiums come from NLRS comparing MSA YG to non-MSA YG on a weighted average.
## Current Participation

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producers</td>
<td>45,217</td>
</tr>
<tr>
<td>Processors</td>
<td>54</td>
</tr>
<tr>
<td>Brands</td>
<td>140</td>
</tr>
<tr>
<td>End users</td>
<td>3743</td>
</tr>
</tbody>
</table>

Figures as of 30 June 2016
MSA Latest Developments
MSA optimisation

• New customised carcase sorting version of the model implemented during 2014-15

• Benefits in amount of product harvested and reduced days ageing

All MSA processors currently MSA grading have now implemented the optimisation model
MSA Index

Financial Year Index Percentage Distribution Breakdown

- 2010/11
- 2011/12
- 2012/13
- 2013/14
- 2014/15

Percentage of Carcasses

MSA Index

Percentage

Year

35 40 45 50 55 60 65 70 75
MSA Index

- Average MSA index for 2014-15 was 57.61
- Increase of 0.84 points from 2013-14 – this is a significant increase in eating quality
### Impact of making changes

<table>
<thead>
<tr>
<th>Carcase Input or Measure</th>
<th>Size of effect on the MSA Index (units)</th>
<th>Relative Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGP Status</td>
<td>-5</td>
<td>Very High</td>
</tr>
<tr>
<td>Milk-fed Vealer</td>
<td>4</td>
<td>Very High</td>
</tr>
<tr>
<td>Saleyard</td>
<td>-5</td>
<td>Very High</td>
</tr>
<tr>
<td>MSA Marbling</td>
<td>0.15</td>
<td>High</td>
</tr>
<tr>
<td>Hump Height</td>
<td>-0.7</td>
<td>High</td>
</tr>
<tr>
<td>Tropical Breed Content</td>
<td>Between 0 and -6.3</td>
<td>Very High</td>
</tr>
<tr>
<td>Ossification</td>
<td>0.6</td>
<td>High</td>
</tr>
<tr>
<td>Rib Fat</td>
<td>0.1</td>
<td>Medium</td>
</tr>
<tr>
<td>Hot Standard Carcase Weight</td>
<td>0.01</td>
<td>Low</td>
</tr>
<tr>
<td>Gender</td>
<td>0.3</td>
<td>Low</td>
</tr>
</tbody>
</table>
myMSA – producer feedback
Future of MSA
Where in the world does our beef go?

70% of total beef production left our shores in 2015
Total Beef export value in 2015 was $9 billion ($15 billion Total Value)

1. Australia 647,000 cwt
2. USA 415,000 swt
3. Japan 293,780 swt
4. Korea 160,000 swt
5. China 124,586 swt
6. Indonesia 53,140 swt
7. Taiwan 36,419 swt
8. Philippines 34,352 swt
9. Canada 32,972 swt
10. Saudi Arabia 32,213 swt
# FTA beef tariff elimination / reduction

<table>
<thead>
<tr>
<th>Market</th>
<th>Tariff before FTA</th>
<th>Tariff 2015</th>
<th>Tariff 2016</th>
<th>Final tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>40%</td>
<td>34.6%</td>
<td>32.0%</td>
<td>0% (2028)</td>
</tr>
<tr>
<td>Japan</td>
<td>38.5%</td>
<td>28.5%</td>
<td>27.5%</td>
<td>19.5% (JAEPA: 2034)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9% (TPP)</td>
</tr>
<tr>
<td>China</td>
<td>12%</td>
<td>10.8%</td>
<td>9.6%</td>
<td>0% (9 years time)</td>
</tr>
</tbody>
</table>
MSA in international markets
MSA Beef five year strategic priorities

- Increased adoption of MSA grading to predict the eating quality of all eligible Australian cattle
- Utilisation of MSA science to describe ‘fit for purpose’ for all MSA cuts, allowing for greater carcase utilisation
- Empowerment of brand owners to drive the success of MSA
- Help to lead the development of a global consumer sensory testing protocols and international standards for eating quality language description
- Identify on-farm practices that increase eating quality and improve producer compliance to both MSA and company specifications

- **2020 target** – increase MSA Index by 2 points
In summary

• MSA has come a long way

• MSA is going from strength to strength with greater science and sophistication across the value chain

• MSA strategic priorities will see continued growth, particularly in international markets….but Australia:

  • Wants to further enhance our international collaborative efforts

  • Share our standards and language to create a international language platform & continue to fully support the EQ working group
Thank you
Influencing beef eating quality