

AN INITIATIVE OF
Making More From Sheep



The Right Lamb - Every time

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Government of South Australia

SARDI



SOUTH AUSTRALIAN RESEARCH AND DEVELOPMENT INSTITUTE

EVENT PARTNERS:



EVENT SUPPORTERS:



STATE PRIMARY INDUSTRY AGENCIES

Summary

- Key drivers for lamb industry into future
- Our future drivers - Lean Meat Yield and Eating Quality = Consumers
- Strategic lamb production using ASBV's
- Optimising carcass compliance using MSA guidelines



Current situation

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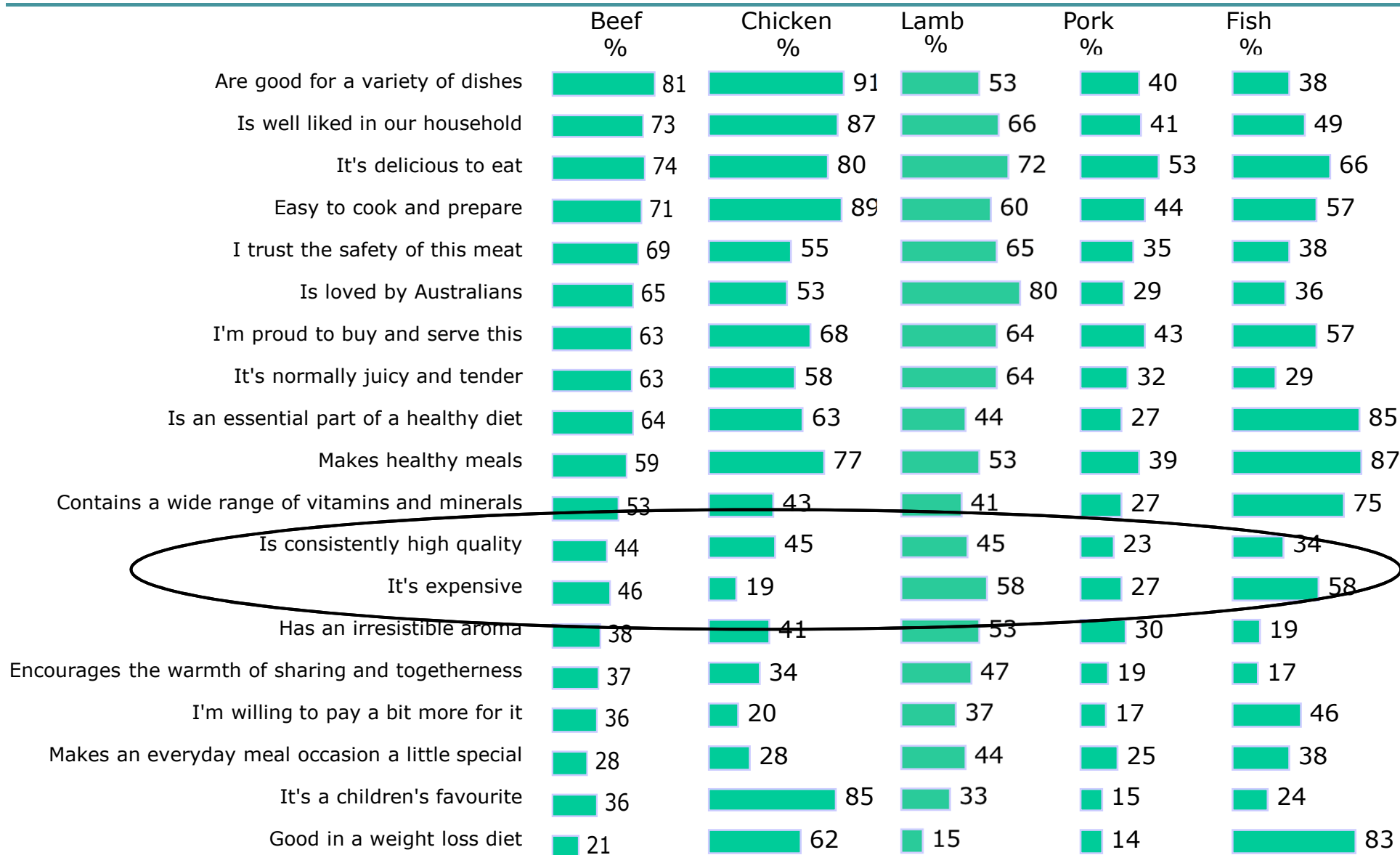


- National & international sheep flocks are at 100-year low
- Supply will build steadily (seasons permitting)
- Export demand holding
- Domestic demand rising
- Lamb prices at record levels
- Can lamb producers afford to become complacent?

Image – Mums (families)

Sheep

AWI Australian Wool Innovation Limited



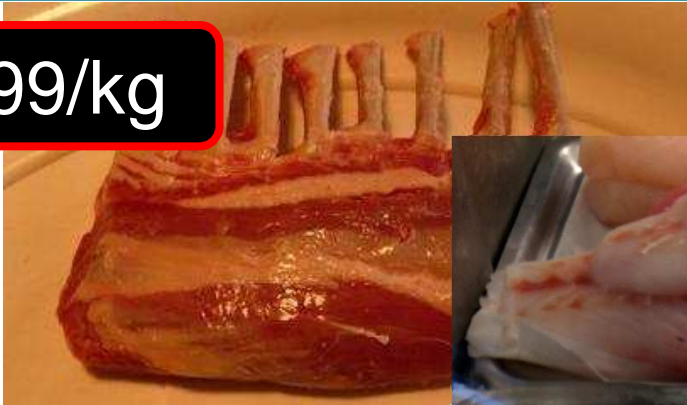
Lamb 'lean' is expensive

From Sheep

cwi AUSTRALIAN WOOL
Innovation Limited



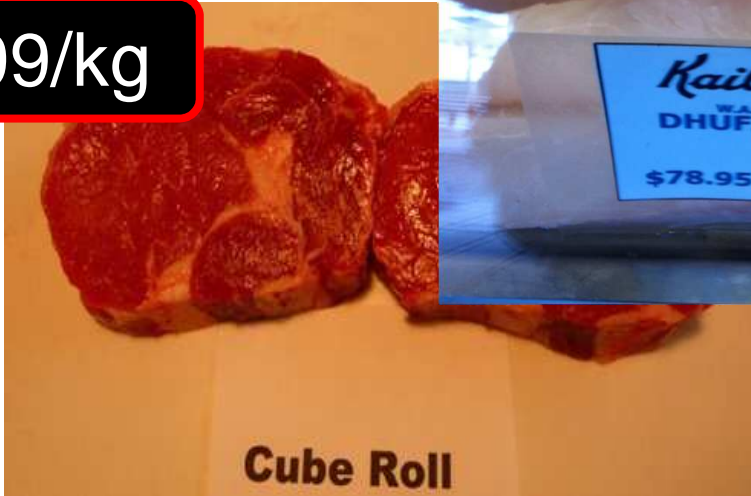
\$39.99/kg



\$59.33/kg



\$39.99/kg



Cube Roll



\$39.99/kg



Tenderloin

BUT !

can be up to \$100 for lean !

\$37/kg (44% fat trim)

\$66.70/kg (36% bone)

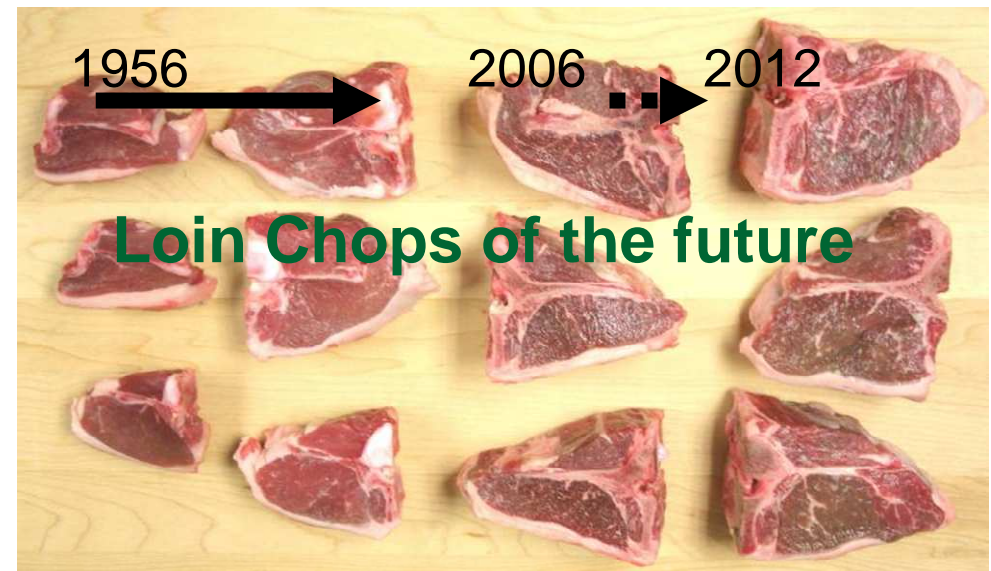


Consumers

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- They know its expensive !
- Australians love the flavour of lamb (80%) & delicious to eat (72%)
- Quality - tenderness/juiciness (64%) = beef
- Health/fatness score improved but still below beef
- Viewed as a little old fashioned
- **90%** consumer trim 'salvage' fat before or after cooking



Now more than ever we must **KEEP**
focusing on the consumer



To deliver the “right lamb every time” it must

- Meet consumer requirements
 - Price, value for \$\$\$
 - Good eating experience
- Be profitable for all players in the game
 - Producers
 - Processers

How do you do deliver the — right lamb every time?

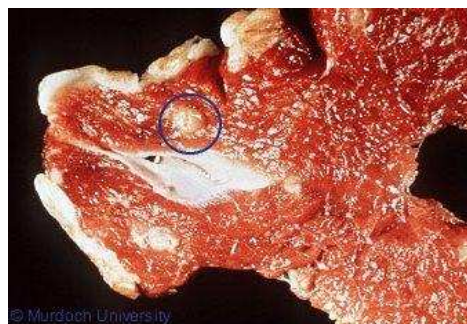
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Prevent defects (seeds, disease, dirty lambs)



Deliver what the customer wants – hit specifications

Lean meat yield (weight, fat & muscle)

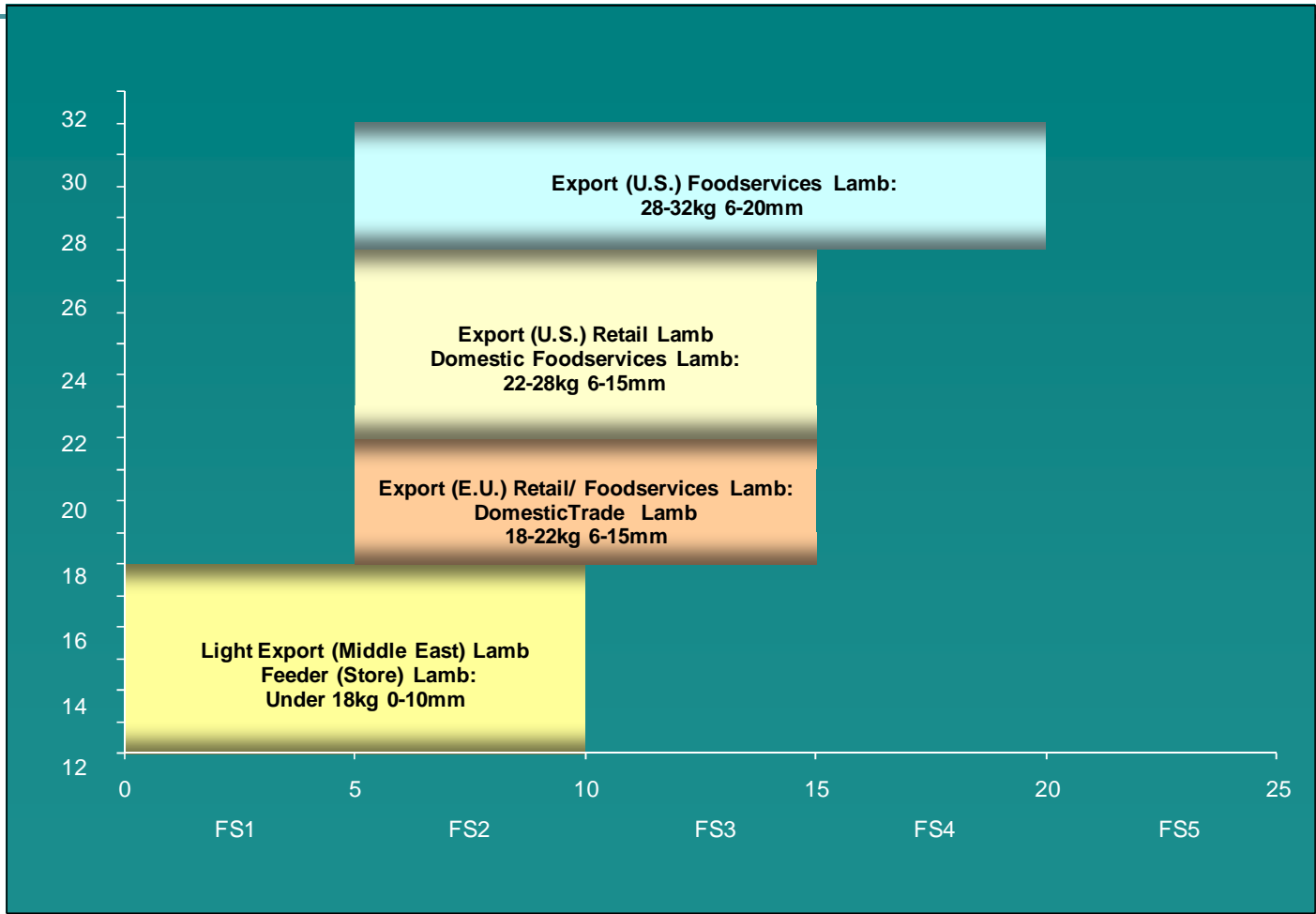
Eating quality

Valuable source of nutrients for humans



Sheep CRC

The Right Lamb – Definitions??



28+ kg

22+ kg

18-22kg

15-18kg



Lean meat yield – Less fat!



Score 4

Carcase Wt 23.0 kg

GR 20.0 mm

Saleable Meat Yield
47.2%

900g more fat



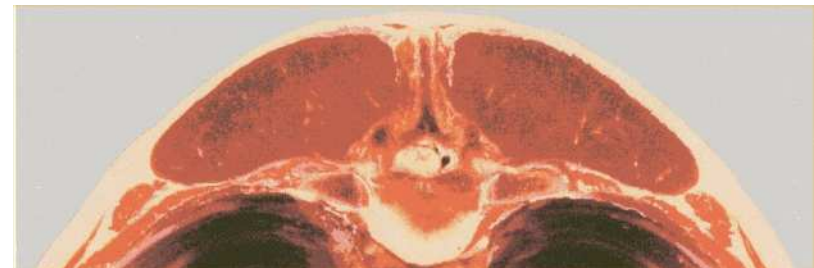
Score 2

Carcase Wt 23.0 kg

GR 10.0 mm

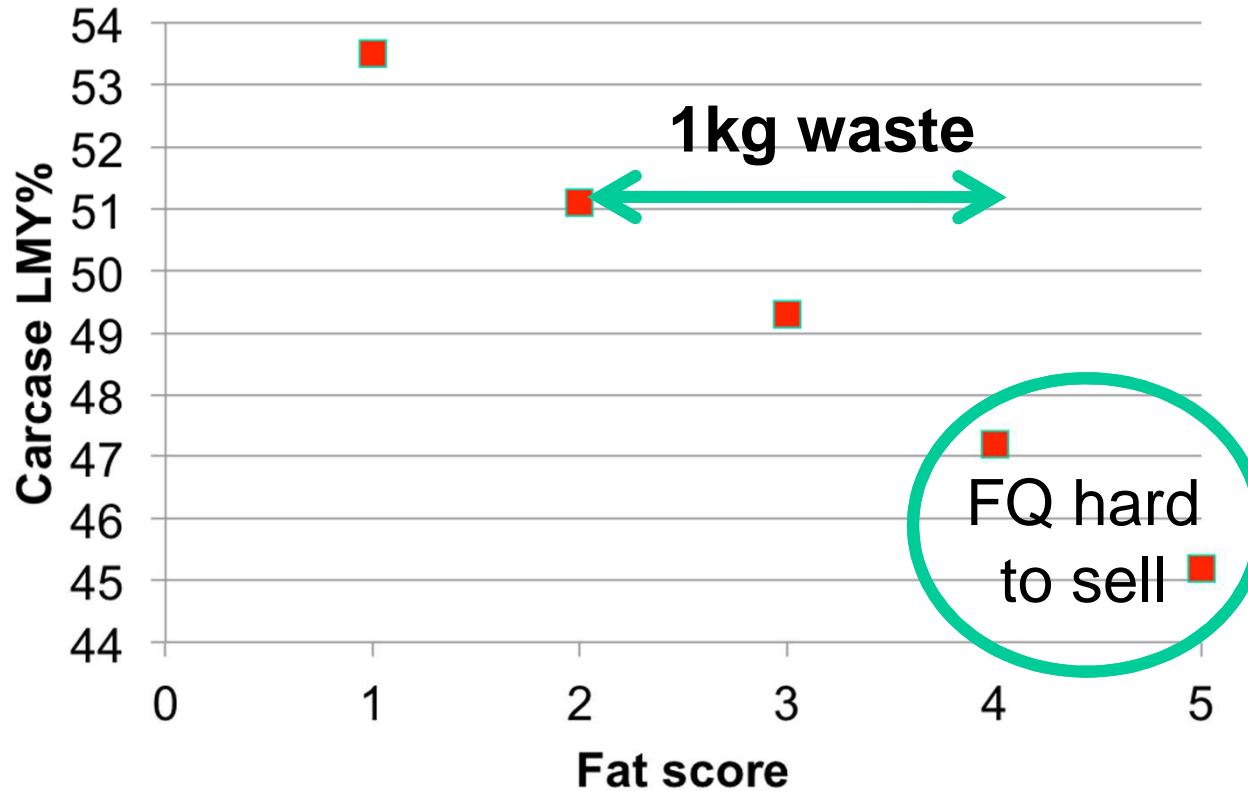
Saleable Meat Yield
51.1%

900g more meat



Ave 2% drop in LMY for every increase in FS

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Maximise profits

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- **Lean meat yield affects value and efficiency**
- **Consumer**
 - Wants value for \$\$\$
- **Processor**
 - Paying meat price for fat (may change!!!)
 - Less meat to sell
 - Extra cost of trim = labour, disposal
- **Very important for farm profitability**
 - Score 2 to 4 =extra 40kg of feed
 - Grow muscle not fat



More meat, less fat = Increase lean meat yield

Lean meat yield genetics

Breeding values (ASBV's)



Key terminal sire traits for LMY

om Sheep



- Growth (WWT, PWWT)
- Reduced fat depth (PFAT)
- Eye muscle depth (PEMD)

Heritable
Money for you plus supply chain
Doing their job ?



SHEEP GENETICS AUSTRALIA



Genetically elite turnoff quicker!

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2000 crossbred ewes joined to terminal sires
% of lambs 43kg plus at 16 Weeks

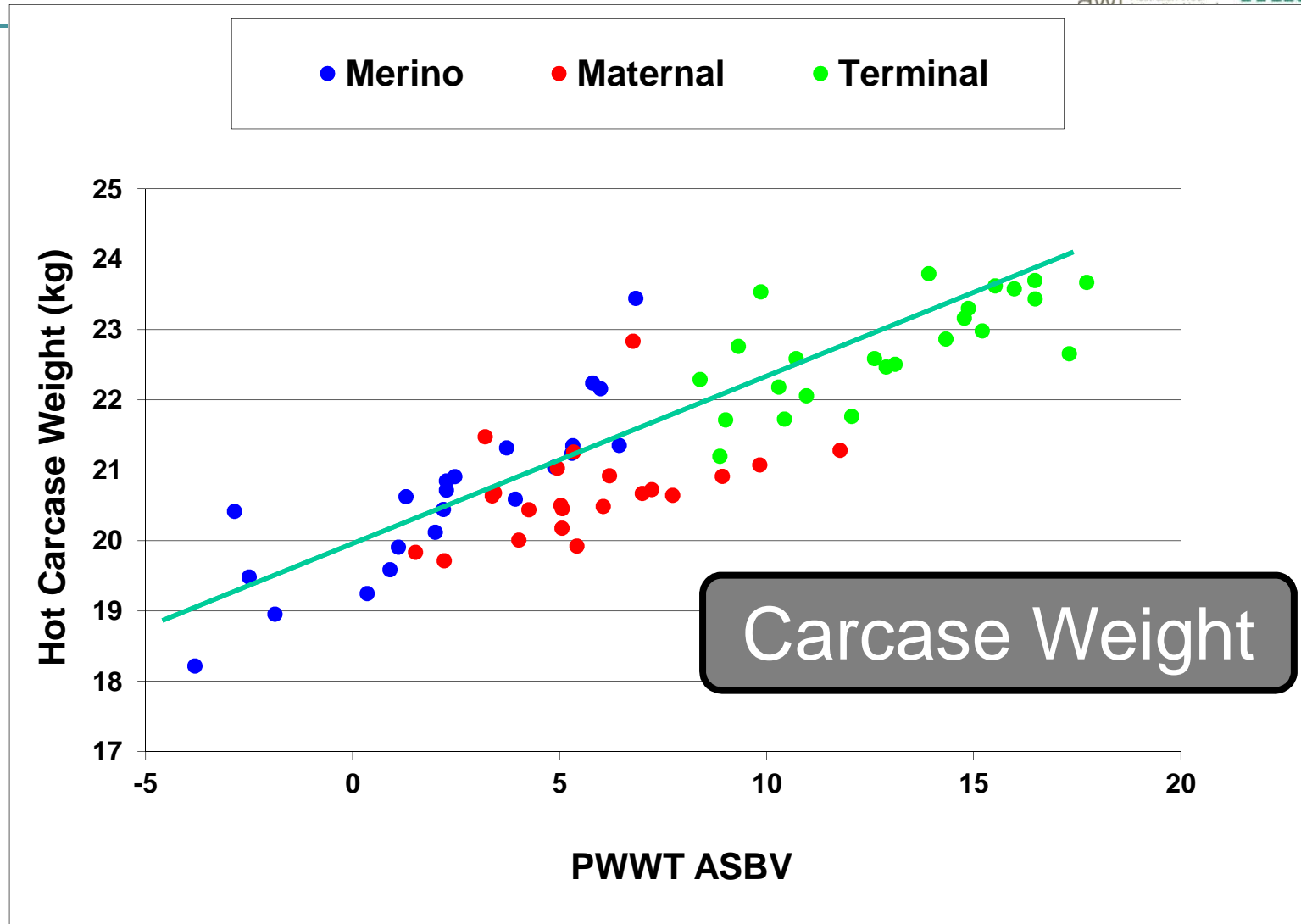
Sire Group	Av. PWT ASBV	43kg +
High PWT	8.9	46.6%
Mid PWT	4.4	18.0%
Low PWT	1.6	11.6%

Source: Sheep CRC & NSW DPI



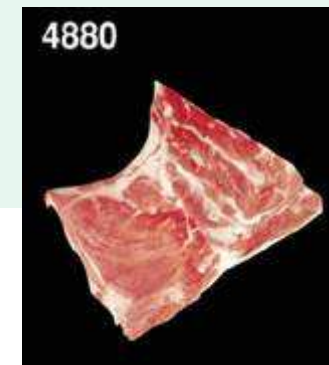
Weight BV (PWWT)

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Muscle & Fat Breeding of sires affect lean meat yield of their progeny

ASBV	Carcase measurement	Difference between high and low sires
PFAT	GR tissue (Fat score)	5mm (1 Fat Score)
PEMD	Eye of short loin weight	100g



Strategic lamb meat production

- Decide on target market at ram selection
- Plan finishing phase before lambing
- Assess market options at lamb weaning
- Weigh & fat score
- Get processor/supply chain feedback !!!!!!

MSA lamb - current

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- Meat Standards Australia (MSA)
- Consumer focused model to underpin the eating quality of lamb
- Guidelines manage factors that influence eating quality
- It is a simple 'in/out' system with 'rules' for
 - Producers
 - Processors
 - Retailers



Requirements of an MSA producer

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MEAT & LIVESTOCK AUSTRALIA

- Lambs on registered property for ≥ 14 days
- Fat score ≥ 2
- Off shears ≥ 2 weeks
- Recommended growth rates ≥ 100 & 150 g/d for Xbred & Merino
- Processed within 48 hours of dispatch (includes MSA licensed saleyards)
- NVD with MSA registration number with the consignment



Further Information

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‘Tips and Tools’ MSA Sheepmeat Information provided in your registration bags



**Meat Standards Australia
sheepmeat information kit**



Intramuscular fat (IMF)

- IMF influences flavour
 - Flavour is a key driver for lamb
- Ideal- 4-6%
 - Average Xbred lamb is 4.2%
- 3 → 6% IMF
 - Small breed/large within breed effects



So we are OK but 'bumping' toward the bottom end

How can we manage IMF

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- GR depth— increases IMF
 - But little benefit after 15mm (score 3)
- ASBV PFAT
 - Decreases IMF
- Moderate heritability
 - Breeding value for IMF% is under development



(Note: results shown for 22.5kg HSCW)

Eating quality - tenderness

- Tenderness (shear force)
 - Moderate heritability
- Consumer testing
 - Sire variation in consumer testing of eating quality

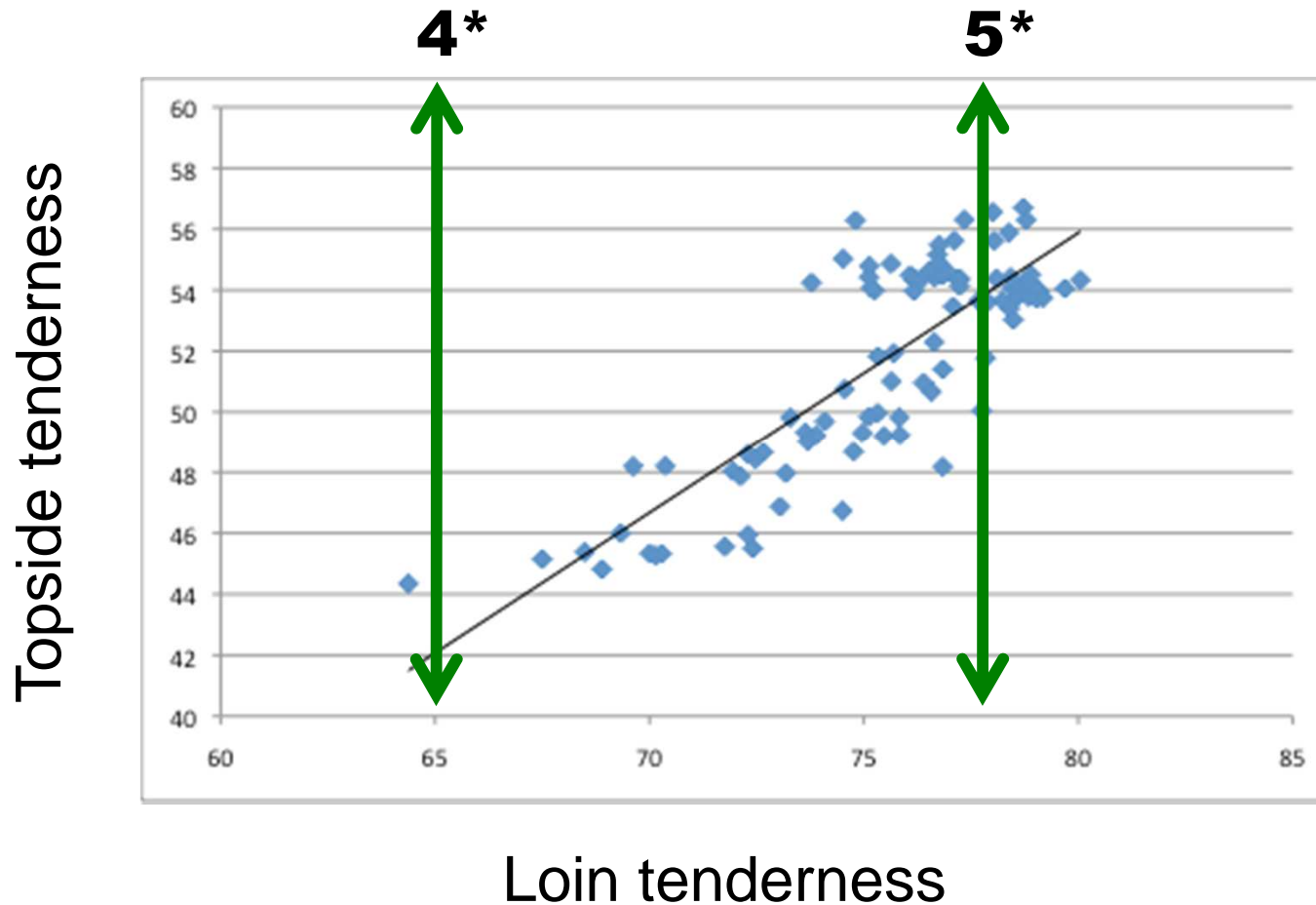
MSA ratings

- 2* unsatisfactory
- 3* good every day
- 4* better than every day
- 5* premium



Sire variation – consumer tenderness

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Pannier, Pethick, Pearce et al. , EAAP, 2011 - 97 sires, 745 lambs, 2 cuts per lamb

Correlations - genetic

- IMF ↑ tenderness (high, +0.8) ✓
- LMY ↓ IMF (high, -0.5) ✗
- LMY ↓ tenderness (moderate, -0.4) ✗

Really confirms the importance of the research
LMY = lean meat yield; IMF = intramuscular fat

MSA Mark II

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- Still not possible to ‘grade’ every lamb carcass (i.e. to get a marble score)
- So the cheapest and simplest option is to use genetics to underpin the eating quality
- This could be used on a ‘mob’ basis



The plan is to evolve an MSA Mark II

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- Evolve a new MSA lamb model
- Incorporating new Sheep CRC genetic information
- Manage yield and eating quality

- In other words future EQ claims will in part relate to the sires used



Who is involved?



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Not enough registered producers !



How to become MSA registered?



Complete MSA producer registration form
OR
Register online with LPA Details
(Free)

MEAT STANDARDS AUSTRALIA PRODUCER REGISTRATION FORM



MSA Registration Number

(Office Use Only)

To register as a participant in the Meat Standards Australia (MSA) Program complete the following information in full. MSA registration enquiries - call 1800 111 672 (MSA). This form also provides the opportunity to register as a member of Meat & Livestock Australia (MLA). MLA member registration enquiries - free call 1800 675 717.

Step 1 Write your name/s

If your enterprise is owned **only** by you enter your name. If your enterprise is owned by a partnership state your name and the names of your partners. If your enterprise is owned by a company, go to step 2. If you have a trading name write that name at step 2.

..... (first name) (last name)
..... (first name) (last name)
..... (first name) (last name)
..... (first name) (last name)

Step 2 Write your company/trading name/s

If your enterprise is owned by one or more companies (eg Pty Ltd) each company should be registered. Write your company name/s and/or trading name/s below.

The Right Lamb Every Time

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- Markets good, sheep supply an ongoing issue
 - Lamb needs to be fantastic at the current prices
- Attention to detail required despite high prices
 - Understand market specifications, use carcass feedback to benchmark and improve performance *-speak regularly with your processor*
 - Weigh and fat score lambs during finishing and prior to sale
- Increase Lean Meat Yield
 - will assist in improving enterprise productivity; and
 - it will contribute to increased national output and value.
 - Use rams with ASBVS for: muscle ++, fat –
- Provide consumers with the best eating experience
 - Purchase seedstock with the best combination of ASBVs for your production system and targeted market
 - Become MSA accredited

Sign posts

- MMfS – Module 3: Market Focused Lamb and Sheepmeat Production
- Sheep CRC website
- MLA Tip n Tools
- Sheep Genetics, MSA Workshops



The screenshot shows the website for 'Making More From Sheep' Module 3. At the top, the title 'Making More From Sheep' is written in a cursive font. To the right are the logos for 'awi Australian Wool Innovation Limited' and 'mla MEAT & LIVESTOCK AUSTRALIA'. Below the title is a navigation bar with links for 'Home', 'Modules', 'Download', 'Order a Copy', and 'Contact Us'. A search bar with a 'FIND' button is also present. The main heading is 'MODULE 3: Market Focused Lamb and Sheepmeat Production'. Below this is a section titled 'What does this module do for you?' with a blue background. To the right of this text is a photograph of several lamb carcasses hanging in a processing facility. Below the photograph, a paragraph of text explains the module's purpose: 'This module is designed to assist sheep producers to deliver quality assured lamb and sheepmeat to target market specifications. It integrates technical aspects of the production system with the marketing process to enable you to:'

Questions...

