## Date labeling, consumer education and food waste reduction

## Murray Davis MLA Regional Manager – Greater China





# **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.



# The red meat & livestock industry plays a key role in Australia's

# A\$81.7 billion red meat & livestock industry turnover in 2022-23

## Industry turnover by sub-sector (2022-23)



- Beef cattle farming 31%
- Sheep farming 12%
- Feedlots 8%
- Processing 32%
- Wholesaling 6%
- Retailing 11%

Source: EY, IBISWorld, ABS

Source: State of the Industry Report, 2024. 2022-23 was the latest data available for the report.

**418,921** people employed in the red meat & livestock industry in 2022-23

## **Red meat export volume by state of production (2022-23)**



Source: EY, IBISWorld, ABS

- New South Wales 22%
- Victoria 26%
- Queensland 37%
- South Australia 5%
- Western Australia 7%
- Tasmania 3%
- Northern Territory 0%
- Australian Capital Territory 0%





# Australia is a small beef producer but plays a big role in global exports



Source: FAOSTAT, 2023 – latest data, India's statistics include buffalo meat

Source: Trade Data Monitor (TDM, MAT November 2024, India's statistics include buffalo meat











# Australia's combined red meat global exports in 2024



Source: DAFF, TDM, 2024. T = tonnes swt. Red meat here includes beef, sheepmeat, goatmeat and offal.

North America

601,731 t A\$6.4b

> Total Global Exports 2.2 million tonnes swt A\$20b+





## **Consumer understanding of "sustainability" in the food category has evolved** significantly over time and varied by region, with food waste reduction now a significant element globally

## **Pre-2000s**

Early Stages: Focus on Organic and Natural Foods

Developed markets: organic, natural and whole foods

Emerging markets: less prevalent as a concept

2000s-2010s **Environmental Awareness** 

Europe: carbon footprints, deforestation and **biodiversity**, fair trade

North America: sustainable agriculture, humane treatment of animals,

reducing waste

Emerging markets: food safety and food security, localism in food systems, biodiversity and **pollution** 



Icons source: Flaticon

# Rise of **Ethical Consumption and**

## Late 2010s–Present Holistic Understanding and **Climate Impact**

Europe: carbon footprint of food, food miles, plant-based diets, reducing plastic waste and circular economies

North America: **regenerative** agriculture, carbon-

neutral food products, reducing **food Waste** and alternative proteins.

Emerging markets: public health, food security, and reducing food waste, sustainable fishing, aquaculture and **responsible** water usage













## While reducing food waste is not among THE top urgent sustainability issues for consumers, but is still significant and one the red meat industry is expected to address

## Global consumers: sustainability issues very important\* to me



Lack of clean, safe water Air pollution Poor sanitation leading to illness Water pollution Animal cruelty Ocean and micro plastic pollution Poverty and hunger Lack of access to healthcare Carbon, greenhouse gas emissions Use of hormones, antibiotics in animals Overuse of pesticides, fertilisers Inhumane processing of animals Deforestation, illegal logging Animal welfare Lack of access to education Lack of access to affordable, clean energy Loss of biodiversity on land and in oceans Animal testing Over-consumption and waste of food etc Over-packaging, non-recyclable packaging Overuse of water for farming

Mass migration / immigration

Source: MLA Global Consumer Tracker, 2023. \*"Very important" = T2B % agree score = 1-2 on a 7-point scale, List of 22 PTOMPTED attributes. Target consumers in 11 countries: US, UAE, Saudi Arabia, China Mainland, Hong Kong, Korea, Japan, Indonesia, Malaysia, Thailand, Indonesia (not Australia).

59 56



global consumers agree "over-consumption and waste of food" is a very important sustainability issue



say it's very important for the **red meat** industry to take action on "over-consumption and waste of food"





# MLA leads a Sustainable Approach to Food Waste & Packaging

- > supply chain food loss waste mapping & interventions
- develops tools and calculators to support industry to manage shelf life
- > validates performance of novel sustainable packaging formats
- Explores value adding opportunities to gain greater utilisation of the carcase
- collaborates with End Food Waste CRC to review consumer behaviour on food waste
- > remains informed on global legislative packaging changes
- Meat Standards Australia program –the eating quality of MSA beef and lamb requires standards to be maintained from paddock-to-plate





## **Meat Standards Australia**

## 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 to assure the eating quality result
- > MSA product must meet consumer set standards at one of three quality levels
- $\succ$  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









Practices of meat consumption and cold storage in Australian households Consumer fridge behaviour and waste reduction of red meat

## Final Project Report

Project code V.MFS.0456

FFW CRC Document FFW CRC Publication 2023 40

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FIGHT FOOD WASTE **Cooperative Research Centre** READER - TRUMPAGE - DATABLE





## **Consumer Behaviour Studies**

Collaborative research with Food Waste CRCs :

> to understand householder practices related to red meat purchasing, cold storage, consumption, and wastage to determine how meat waste occurs and could be reduced within the home

# **Putting a freeze** on food waste

eat is one of the main household food items wasted in Australia, with one-third of total food waste attributed to consumer practices and refrigerator performance - presenting an opportunity for industry to understand how to reduce it.







## **Consumer Awareness of Food Waste**



The food service industry is moving towards smaller servings with higher quality.

"we know that the eight per cent of the carcase is going to sell – sirloin, scotch fillet, tenderloin, and rump. It's how we work with the other 92 per cent to promote balanced meals, variety, and interest for the customer."



**MLA Healthy Meals** 

Scroll

Insights-led practical resources for health professionals

Sam Burke: Corporate Chef and Food Service Business Development Manager

## www.mlahealthymeals.com.au

access to free brochures and fact sheets to communicate practical information about healthy eating and reducing food waste in-line with Australian Dietary Guidelines.









MEAT SUPPLY CHAIN WASTE MAPPING AND INTERVENTIONS -PHASE 1



### MAKING AUSTRALIAN COUNTRY CHOICE CIRCULAR



# **Meat Food Loss Supply Chain** Mapping

Collaborative research with End Food Waste CRC:

 $\succ$  most significant loss reductions come from collaborative supply chain solutions that target loss reduction in refrigerated transport and distribution.

 $\succ$  needs greater supply chain harmonisation, transparency, communication, and collaboration between supply chain stages and actors.









- $\succ$  aims to increase distribution of rescued red meat to the food relief sector.
- > 1/3 Australians are experiencing moderate to severe food insecurity and half of these report reducing protein intake - one of the least attainable food categories for relief sector
- > Analysis will be conducted of potential to reduce meat waste and increase redirection for food relief
- > Findings will provide research directions for scoping solutions that will increase supply to food relief programs of good quality, nutritious, culturally and life-stage appropriate red meat choices.



# **Current MLA Project: Meat Recovery for Food Relief**







## **Shelf-Life Tools – Industry Support**



## MLA's shelf-life tool is accessed by our global network of partners.

- MLA's Shelf-Life calculator used to predict the remaining shelf life of Vacuum-Packed beef and lamb primals for export and various retail-ready products.
- MLA Shelf-Life predictive modelling based on
  - pack format
  - Storage temperature
  - microbial load at time of packing
- providing data that can assist with decisions on product movement, quality assurance, and reducing waste.









Understanding the significance of the cold chain and accessing data that illustrates temperature impact of a shipment assists with determining the remaining shelf life of beef and lamb.

 $\succ$  As a rule of thumb, every 1° Celsius increase will reduce the shelf life by 30%.



Days before noticeable loss of quality

## **Shelf-Life Tools – Market Access Expansion**

## Analysis – Gulf Cooperation Council's shelf-life limit for chilled vacuum-packed red meat

Through the collection, dissemination of scientific data and advocacy on behalf of the industry, in some MENA economies, shelf-life restrictions were eased for chilled, vacuum**packed** beef and sheep meat.



## Longer shelf-life:

- = more product sent by sea rather than air,
- = product on the shelf more regularly,
- = less product unsold at expiry date / food waste.

70 days to 120 days for beef

70 days to 1 90 days for sheepmeat



= more time for product to be sold after entering the economy





# MLA Red Meat Packaging Stewardship Program



- packaging regulatory requirements
- Maintenance of product integrity, shelf life and food safety along the value chain

Explore supply chain developments

• Engage stakeholders along the value chain, from producers and manufacturers to brands and retailers

• Inform Australian producers, processors and value adders of changing domestic and international

• Foster innovation and circularity, for a more sustainable future for Australian red meat production



## For further information:

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