Demand for Animal Welfare and Ethical Attributes in Meat: What do consumers really value?

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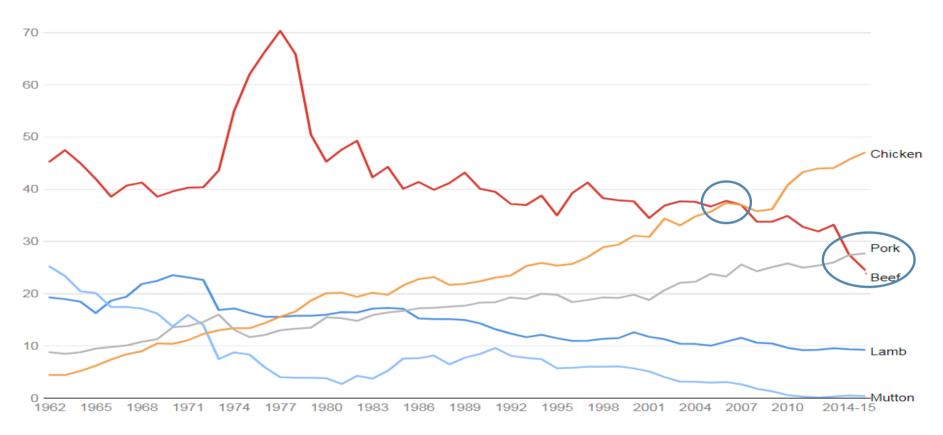
Animal Production 2018, Wagga Wagga

Monday 2 July

Background

- Increasing demand for information
 - Production and process attributes (Credence attributes)
 - Ethically sourced food (organic, free range, certified humane, grass-fed, environmental impact)
- Changing meat consumption
 - Declined 3% from 2009-2014 (Euromonitor Intl.)
 - Average Australian consumed 92.5kg meat in 2015
 - \sim 10% of Australians were vegetarian or vegan in 2013 (Roy Morgan 2014)
 - 15% increase in # of vegetarian from 2012, on the back of a 20% increase in vegetarianism from 2009 to 2013 (Roy Morgan 2014)

Meat consumption in Australia (kilos, per capita, by type) 1962-2016



Beef, mutton and lamb were once the most commonly consumed meats in Australia. Now, chicken is by far the most widely consumed meat, followed by pork.

https://theconversation.com/three-charts-on-australias-declining-taste-for-beef-and-growing-appetite-for-chicken-78100

Source: Wong et al and ABARES Get the data

Front-of-Package Labelling Cues



'Back-of-Package' Information



Growth in Labelling Cues: "Credence Attributes"



Growth in Labelling Cues: "Credence Attributes"



Why do we study demand for credence attributes?

- Production and process attributes in food that can't be verified by the consumer through visual inspection or experience
- Credence attributes are used as cues for:
 - Quality
 - Healthfulness
 - Nutrition
 - Safety
 - Impact on environment
 - Impact on animals, people etc.

2015 & 2017 Australian Meat Studies

- Nationally representative
 - Roy Morgan meat buyer data
- Food shopper
- Purchase meat at least monthly
- Sample quotas, Age
 - Gender
 - Location (States/Territories & City vs. Country)
- Also stratified by:
 - Education level
 - Respondent income
 - Employment

- 1. Screening questions
- 2. Meat behaviour
- 3. Awareness and use of meat product labelling
- 4. Choice experiment
- 5. Perception of credence claims
- 6. Concerns about meat
- 7. Knowledge of livestock management practices
- 8. Experience with livestock
- Attitudes towards meat production and farm animal welfare
- 10. Socio-demographics

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Meat Cuts

Beef	Chic	ken	Po	ork	Laı	mb
Preferred Mince Beef Steak	Breast	Thigh Fillets	Leg Roast	Loin Chops		Loin Chops



Meat Attributes & Levels

Credence claims

Production	Farm Animal welfare status	Organic	Other	Other	Price per
method		status	claims	claims	kg
Beef & Lamb: Pasture-raised Chicken & Pork: Free Range	Certified	Certified	Antibiotic	No Added	4 levels
	Humane	Organic	Free	Hormones	per meat
Conventional	None	None	None	None	cut

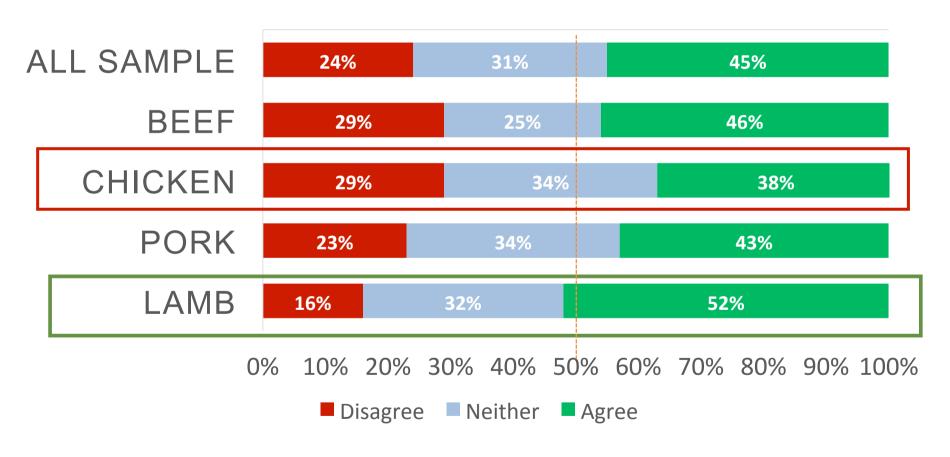
Imagine you are shopping for fresh BEEF to be prepared and consumed at home for a typical main meal.

Please consider the following 4 options which <u>vary only by the factors shown in the table</u>.

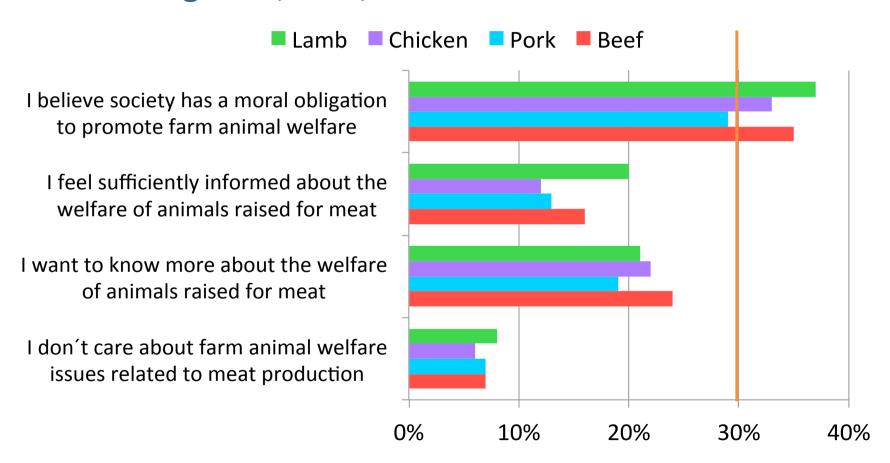
Select the option that you would be most likely to choose.

	Option A	Option B	Option C	Option D	Option E
Cut	Mince	Your Preferred Beef Steak (Scotch or Porterhouse)	Your Preferred Beef Steak (Scotch or Porterhouse)	Mince	
Price	\$10.79/kg	\$39.99/kg	\$19.99/kg	\$13.49/kg	
Production Method	Pasture-raised	Conventional	Conventional	Pasture-raised	I would
Organic Status	Certified Organic	Certified Organic			not purchase any of these
Farm Animal Welfare Status		Certified Humane	Certified Humane		products
Other Claims		Antibiotic Free	Antibiotic Free		
Other Claims	No Added Hormones		No Added Hormones		
I would choose	•	•	•	•	•

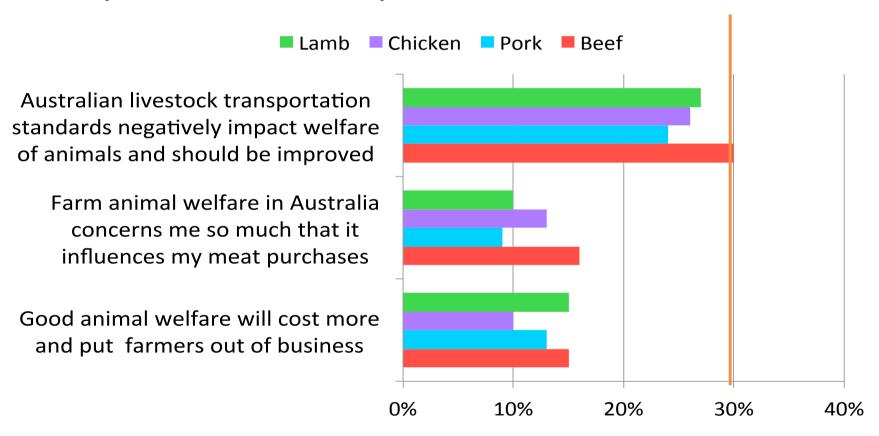
"The welfare of cattle/chickens/pigs/sheep used to produce meat is as good as can be expected" (n=1205, 2017)



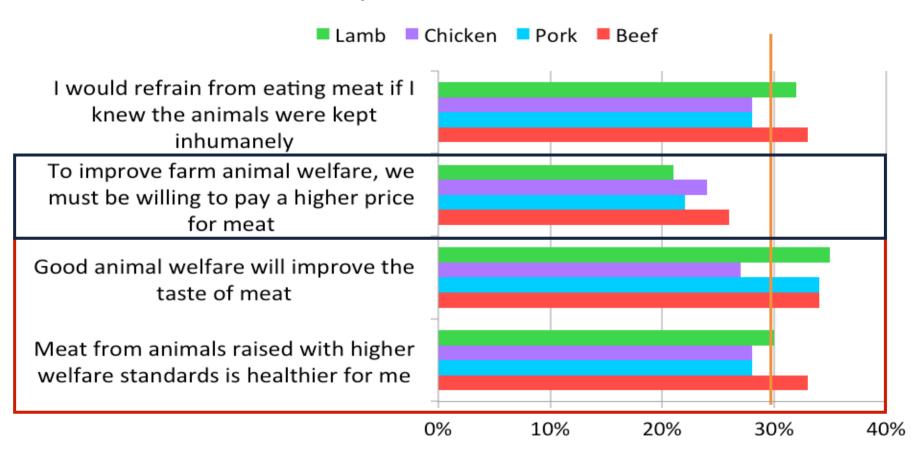
Animal welfare attitudes (% agree /strongly agree, 2017): "Moral obligation, care, uninformed"



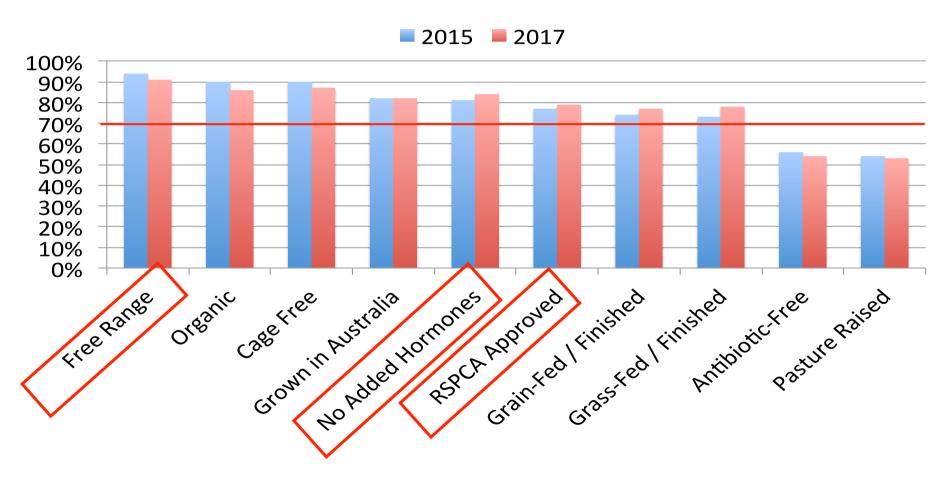
Animal welfare attitudes (% agree /strongly agree, 2017): "Transport concerns? Impact on behaviour?"



Animal welfare attitudes (% agree /strongly agree, 2017): "Animal welfare has personal benefits..."



Consumer Awareness of Claims in Meat, 2015 vs 2017

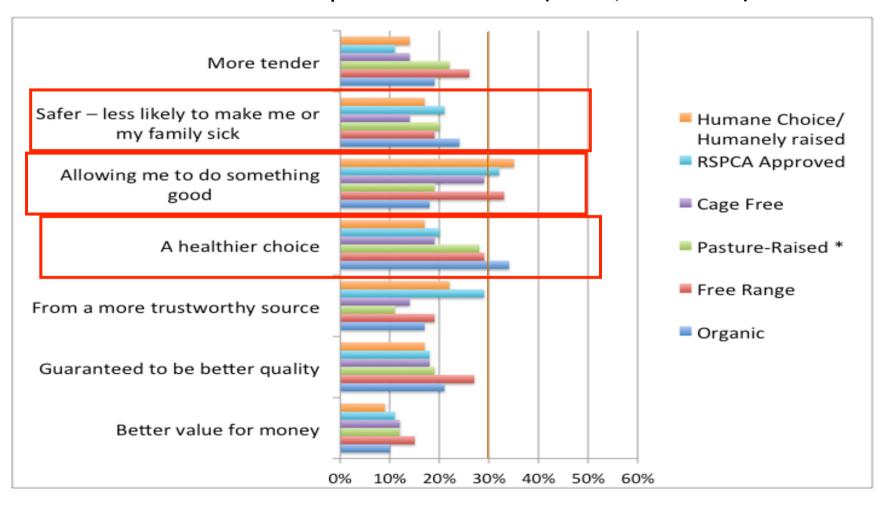


Growth in Awareness of Animal Welfare Claims? 2015-2017

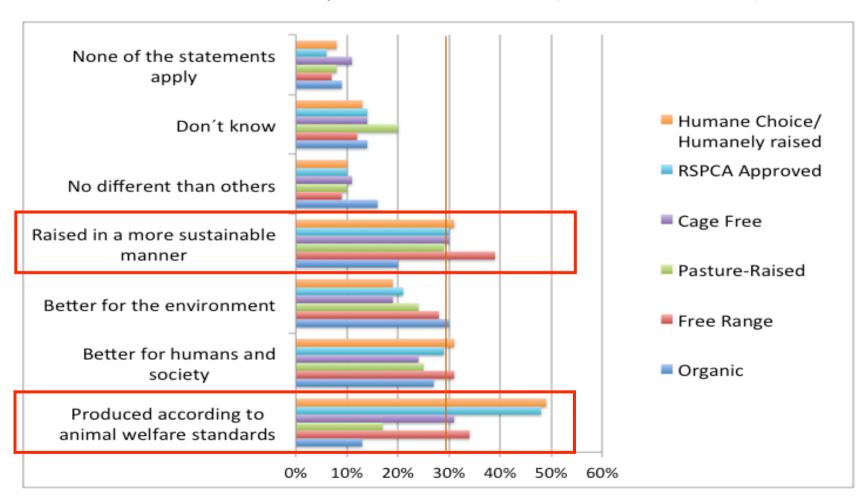
Claim	2015	2017
Product of Australia	91%	90%
THE ADMINISTRATION OF THE PROPERTY OF THE PROP	94%	91%
STANDA STANDA STANDA STANDA	52%	53%
	60%	60%
Australian Certified Organic	42%	54%
ACCREDITED FREE RANCE FREE RANGE GOO RECEIVE CONTROLLED IN	33%	31%

Claim	2015	2017
AUSTRALIAN FREE RANGE PORK	31%	48%
NASAA CERTIFIED ORGANIC	13%	19%
Australian Grassfed Weats	13%	24%
CERTIFIED PASTUREFED	7%	16%
CERTIFIED HUMANE RAISED & HANDLED	9%	14%
Humane Choice TRUE FILE NAME	8%	13%
LIVESTOCK WELFARE CULTURE SYSTEM	6%	11%

Australian Consumer Perceptions of Claims (2017, n = 1205)



Australian Consumer Perceptions of Claims (2017, n = 1205)



Are there significant preferences for credence claims across meat types?

I would not purchase any of these products

- 8.5% of respondents selected a 'no choice' option
- 3% always selected 'no choice' option
- Main reason for selecting 'no choice' option was high cost of meat options

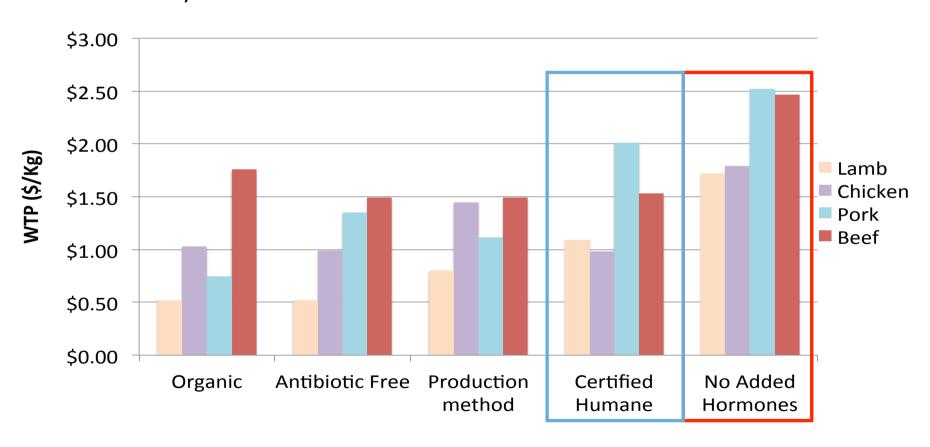
	Coefficient	St error		
Randomised variables				
Price	-0.304***	0.015		
Meat Cut	0.441***	0.118		
Production Method	0.504***	0.052		
Certified Organic	0.405***	0.058		
Certified Humane	0.508***	0.054		
Antibiotic Free	0.420***	0.056		
No Added Hormones	0.776***	0.059		
Distribution of randomised v	ariables			
Price	0.529***	0.034		
Meat Cut	2.621***	0.136		
Production Method	0.508***	0.121		
Certified Organic	0.728***	0.099		
Certified Humane	0.406***	0.153		
Antibiotic Free	0.548***	0.134		
No Added Hormones	0.647***	0.123		
Non randomised variables				
ASC	13.200***	1.501		
Chicken	3.261***	1.243		
Pork	0.229	1.218		
Lamb	0.917	1.154		
SigmaE01	8.089***	0.923		

Willingness to Pay for Credence Attributes

	WTP (95%CI)
Free Range/Pasture Fed	\$1.66 (1.29 – 2.03)
Certified Organic	\$1.33 (0.94 – 1.69)
Certified Humane	\$1.67 (1.30 – 2.07)
Antibiotic Free	\$1.38 (1.02 – 1.73)
No Added Hormones	\$2.55 (2.12 – 3.03)

No Added Hormones > all other claims (P<0.01)

Willingness to pay differs by meat type (2015, n = 1009)



Consumers have heterogeneous preferences / values for credence attributes

 Drivers of preference differences are difficult to determine using socio-demographics



Certified Humane

Less likely to select than females



No Added Hormones

Less likely to select than younger respondents



Certified Organic

More likely to select than lower income

3 Unique Segments: Class 1 (24%)

Credence motivated

- Somewhat sensitive to price and cut
- High premium for all credence attributes
 - 1. No added hormones (*)
 - 2. Free Range
 - 3. Organic (*)
 - 4. Humane production
 - 5. Antibiotic Free (*)
- Highest % of consumers perceive benefits of credence cue,
 - particularly benefits such as taste, safety, health
- Most knowledgeable, concerned, and previously purchased credencedifferentiated products
- City dwellers

3 Unique Segments: Class 2 (32%)

Animal Welfare & Cut important, Price insensitive

- Cut drives the purchase decision, followed by animal welfare
- High premiums (WTP) for
 - 1. Humane production (*)
 - 2. Free Range
 - 3. No added hormones
- Discount organic
- Higher than average % of consumers perceive benefits

3 Unique Segments: Class 3 (44%)

Price sensitive skeptics

- Price drives purchase decision
- Lower than average premiums (WTP) for
 - 1. No added hormones
 - 2. Humane production
- Low % perceive benefits from credence attributes





I would choose...



I would not purchase any of these products

Key Messages (1)

- Consumers generally care about animal welfare
- BUT... They assume that industry is doing the "right" thing
- But, 'average' consumer not willing to pay for "animal welfare guarantees"
- Exceptions, are those who are
 - "welfare concerned," i.e. generally 'socially concerned'.
 - perceive animal welfare claims to improve safety, healthfulness, taste (i.e. private benefits)

Key Messages (2)

- Growing confusion about claims
 - Cynicism
 - Misperceptions and information asymmetry are significant issues
- Credibility is crucial to maintain any "value" in credence attributes
- Standards for claims and certifications are needed for "credence"



Thank you!

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