



Meat Standards Australia (MSA)

Describing beef in consumer terms



Sustainable Beef Quality for Europe workshop
Milan, Oct 1st, 2015

Rod Polkinghorne, OAM



Declining Consumption

WHY

- Variable quality
- Impossible to see quality
- Lack of consumer confidence
- Consumer found purchasing meat complex & confusing

ALL BEEF INDUSTRY REVENUE COMES FROM THE CONSUMER

The Consumer:

- Is not going to learn to cook
- Is not going to learn about cuts

To Succeed Beef Must Be:

- Simple to buy
- Pan ready and simple to cook
- Bullet Proof

a contemporary consumer product

A Vision for Beef

A contemporary consumer product that delivers:

- **A clear cooked meal performance promise**
- **100% reliable**
- **Performance levels matched to occasion**
- **Clear, simple offer requiring no specialist consumer knowledge**

This is not delivered by most beef description and grading systems

Simple Concise Consumer Communication

Choose the right fuel for your vehicle
Quality Guarantee – All Caltex fuels exceed strict industry standards

PETROL ENGINES

Vortex Premium
DESIGNED TO CLEAN

98
OCTANE

- Premium unleaded, octane enriched fuel
- Cleans your engine while you drive
- Helps maximise power and performance
- For all petrol engines

Vortex Premium
DESIGNED TO CLEAN

95
OCTANE

- Premium unleaded fuel
- Cleans your engine while you drive
- For petrol engines

ULP **91**
OCTANE

- Regular unleaded fuel
- For most petrol engines*

*Check with your car manufacturer's recommendations.

DIESEL ENGINES

Vortex Premium fuels

DIESEL

- Premium diesel fuel
- Cleans your engine while you drive
- Helps maximise power and performance

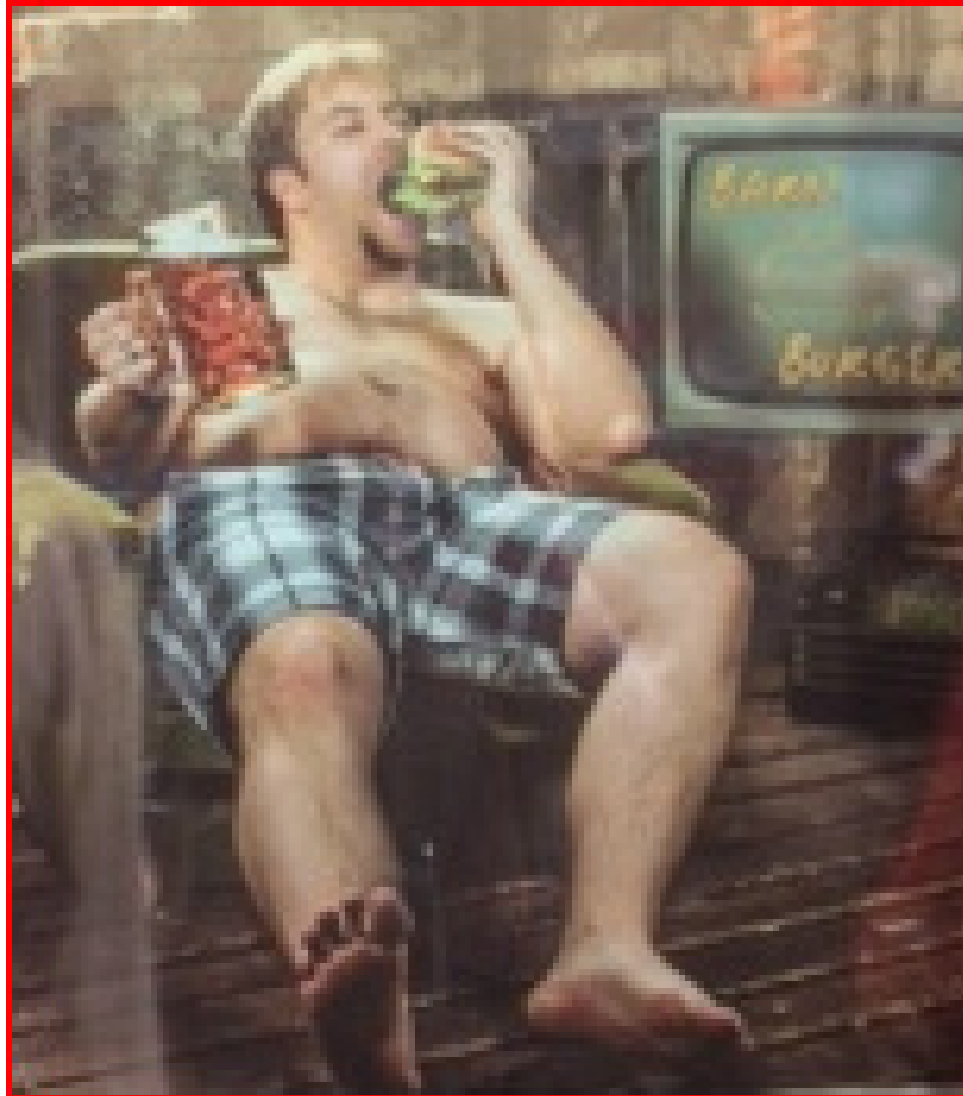


MSA R&D PRINCIPLES

- Define consumer sensory response
 - To date, 80,000 consumers tested
 - Set grades from consumer results
- Test full range of product
 - cattle types, cuts, cooking styles, aging
- Develop a consumer grading model
- Provide simple purchasing information
- Guarantee the result



A powerful research apparatus!



Consumer Testing



Consumer Testing Protocols - COOKING

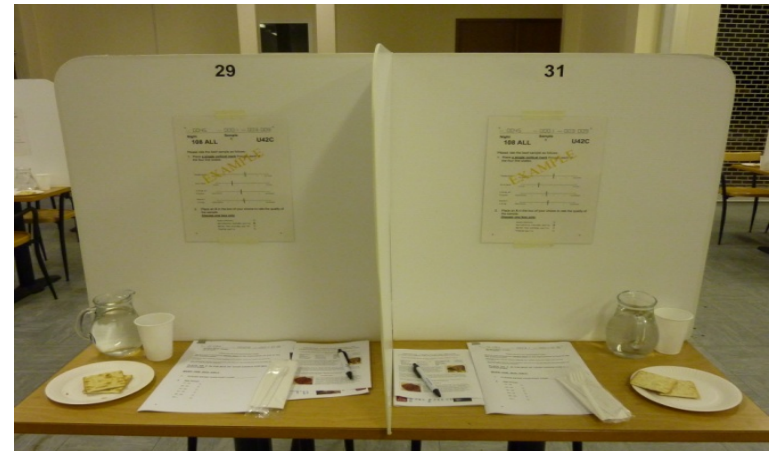


Consumer Testing Protocols - SERVING

Latin Square Presentation

Common First Sample

1	2	3	4	5	6
2	4	1	6	3	5
3	1	5	2	6	4
4	6	2	5	1	3
5	3	6	1	4	2
6	5	4	3	2	1



10 consumers taste every sample

7 samples, 6 diverse products from good to bad

CONSUMER TASTE TESTS - SCORECARD

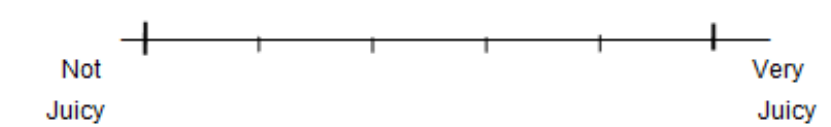


PRODUCT:

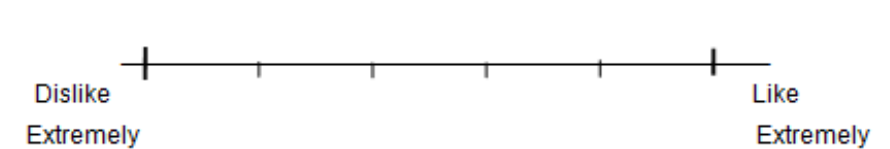
Tenderness



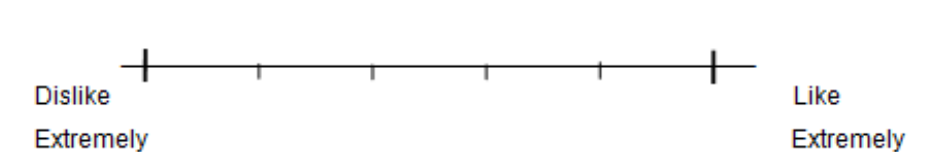
Juiciness



Liking of flavour



Overall Liking



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

Choose **one** only (you must make a choice).

Unsatisfactory ☐

Good everyday quality ☐

Better than everyday quality ☐

Premium quality ☐

The MQ4 score = Consumer Satisfaction

Tenderness

0.3

+

Juiciness

0.1

+

Like flavour

0.3

+

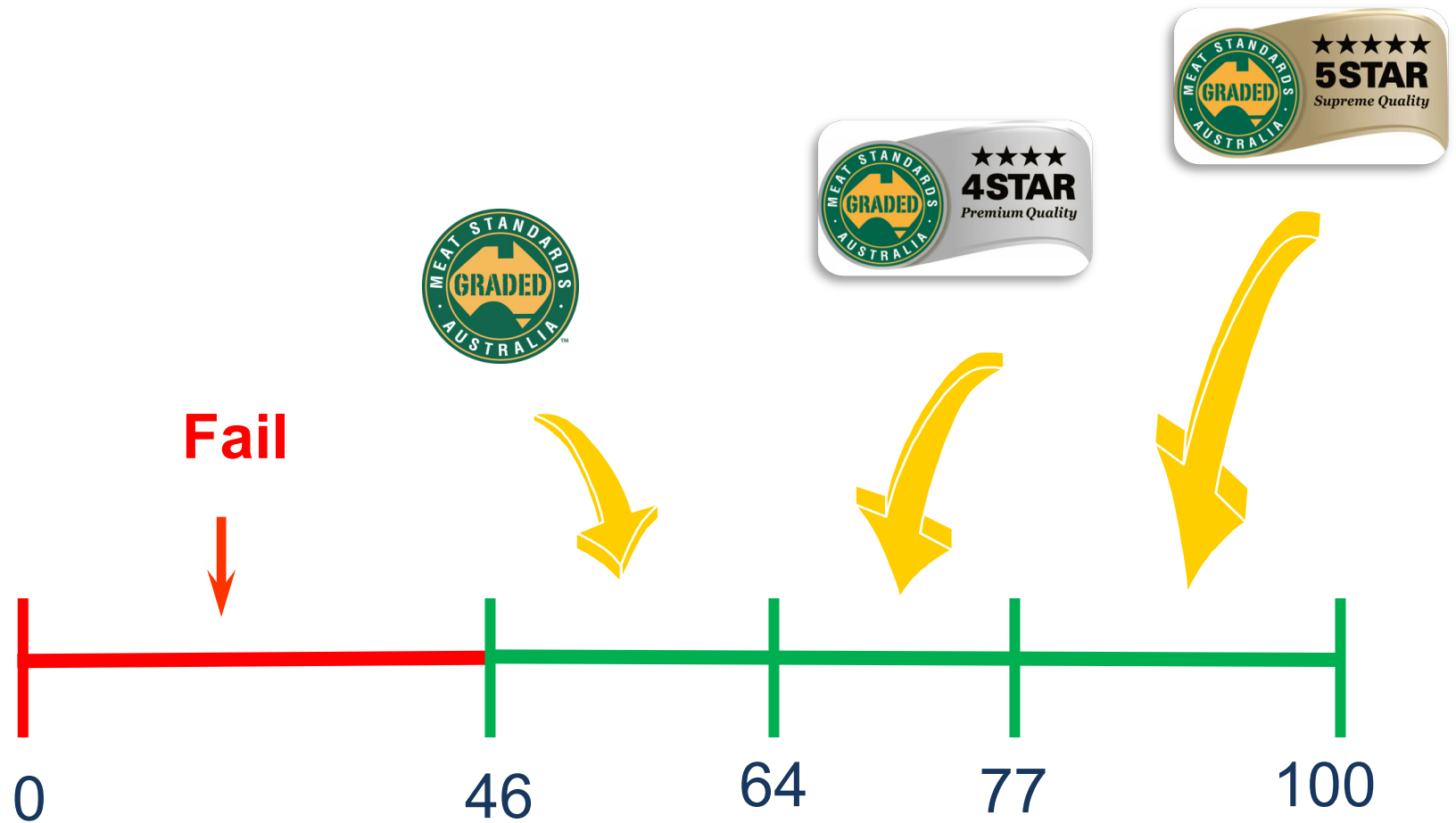
Overall liking

0.3



MQ4 score

CONSUMERS IDENTIFY GRADES



Eating Quality Outcome

People Do Know their Beef when they Eat it



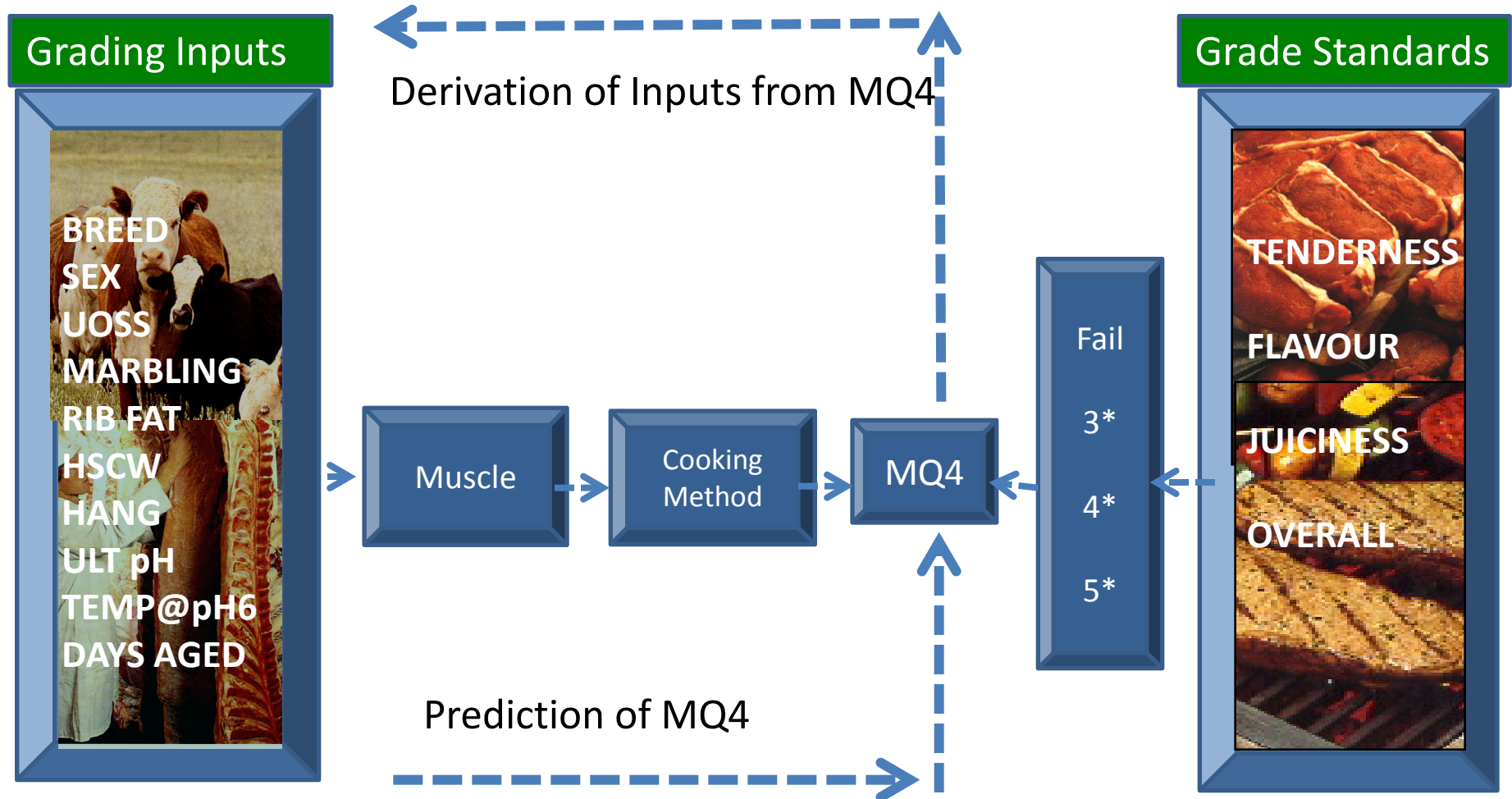
- and no wonder they were confused! -

Premium

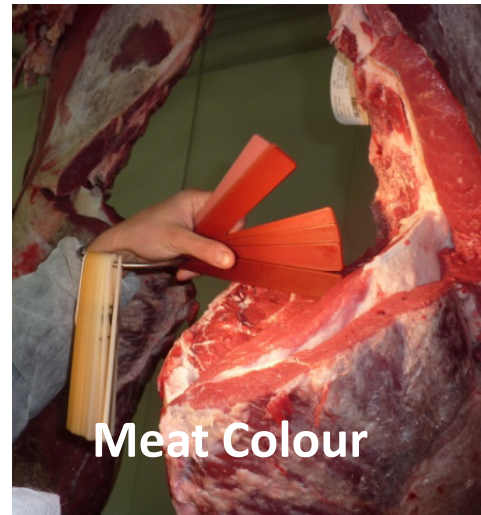
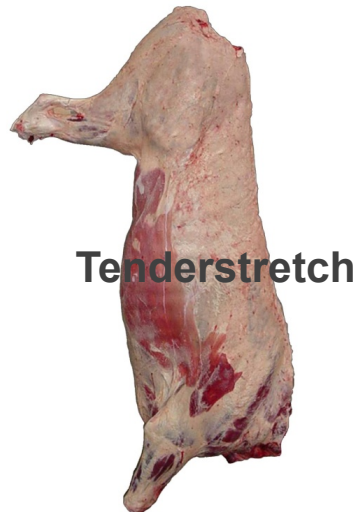
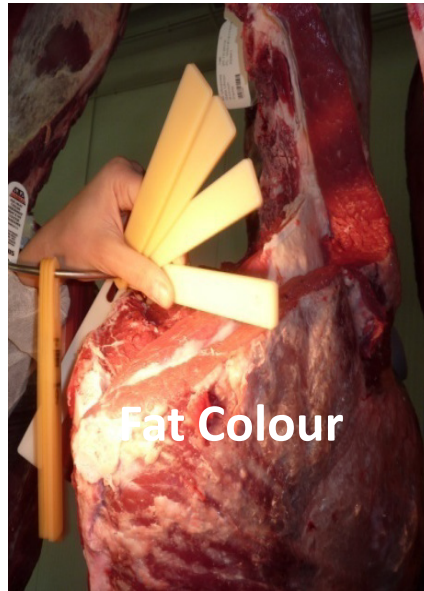
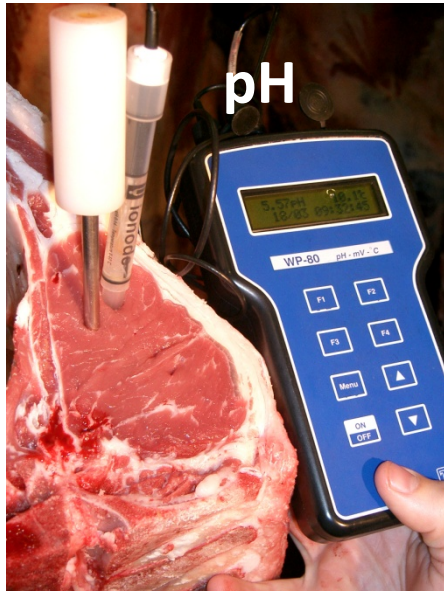
Fail

Good everyday quality

Model development process



Collection of Data used for Model Development



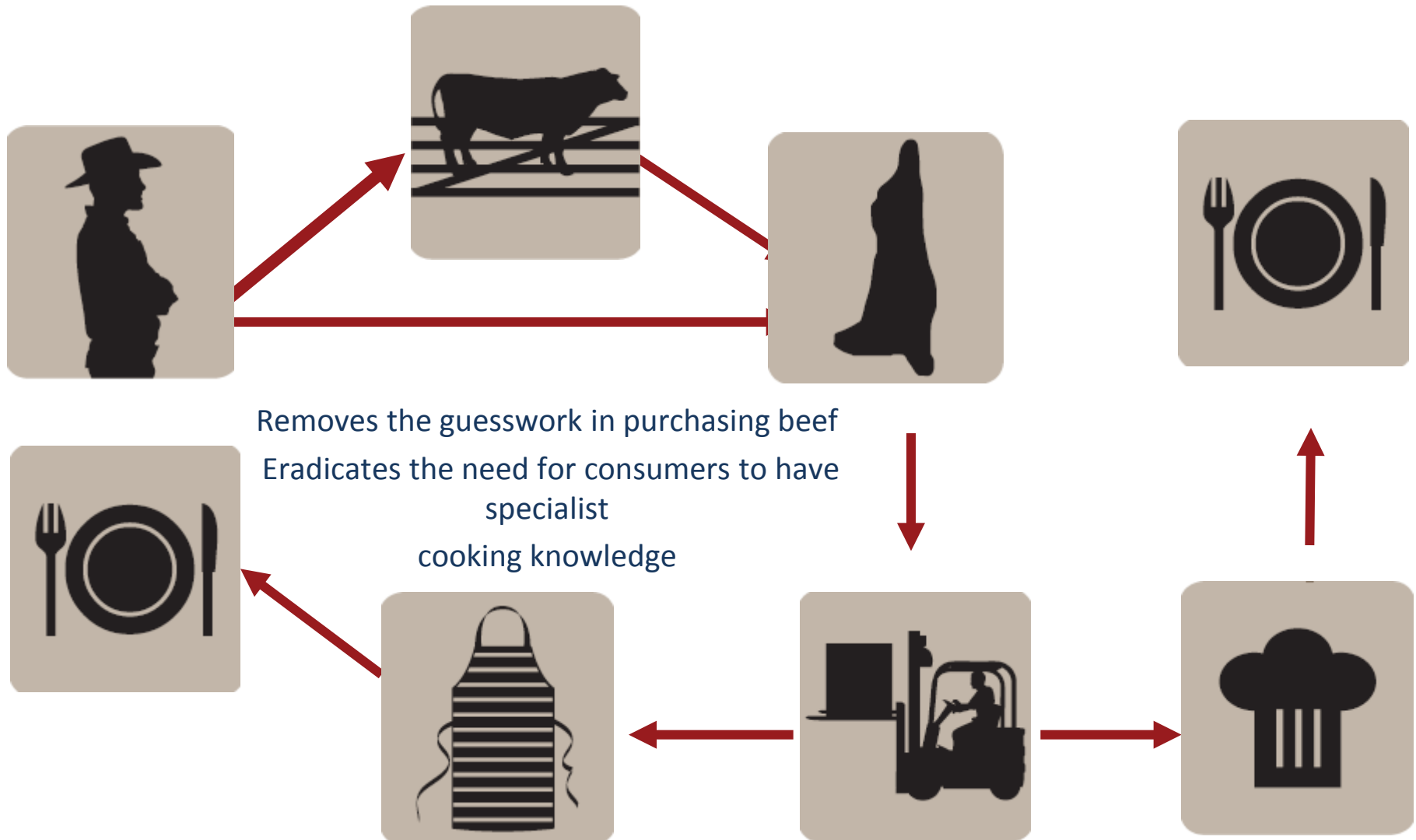
Current MSA consumer grading model

Description	Format	Name	Input	?
Estimated % Bos Indicus	% or X if doubt	EPBI	0	
Animal Sex Type	M/F	Sex	m	
Hormone Growth Promolent	Y or ? / N	HGP	n	5
MilkFedVealer	Y/N	MFV	n	35
SaleYard	Y/N	SIYrd	n	5
				35
Rinse/Flush	Y/N	RnFI	n	7
Hot Std Carcase Weight	Weight in Kg	HSCW	320	
HangMethod	AT/TS/TL/TC/TX	Hang	TX	
Hump Height	mm	Hump	40	
Ossification USDA	USDA measure	uoss	130	21
Marbling USDA	USDA measure	umb	400	21
RibFat	mm	RbFt	4	28
Ultimate pH	5	UpH	5.6	
Loin Temp at Grade	Metered Temp C	Utmp	5	
				14
Days of Ageing from Kill	Days Aged	Age	21	

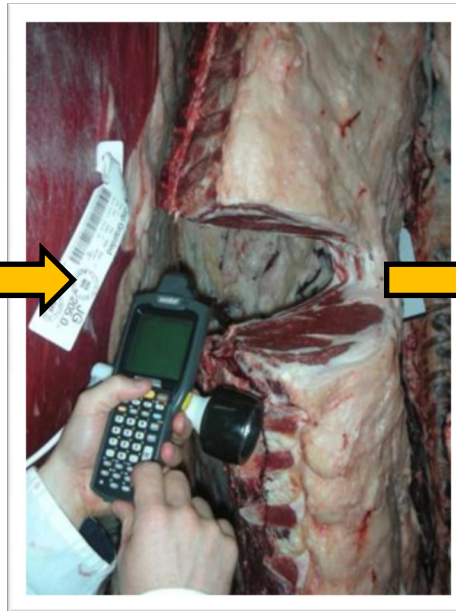
5 Day aged AT hung for Producer
MSA INDEX 65.95

cut	muscle	GRL	RST	SFR	TSL	YAK	SSB	SC2
spinalis	SPNo81	84	74	83	79	85		
tenderloin	TDRo34	85		79				
tenderloin	TDRo62	79	78	81	75	71	67	
tenderloin	TDGo62	80						
cube roll	CUBo45	73	73	73	73	74		
striploin	STAO45	74	75	76	73	76	67	
striploin	STPO45	69	69	72	68	70	62	
oyster blade	OYSO36	66	63	69	70	70		
blade	BLDO95			46	51			
blade	BLDO96	59	63	65	65	67	53	65
chucktender	CTRo85		54	57	62			65
rump	RMP131	63	72	71	74	69	61	67
rump	RMP231	66	75	74	73	77		
rump	RMP005	68	73	76	77	79		
rump	RMP032			75	77			
rump	RMP087		63	68	68			66
knuckle	KNUO66	56	69	64	68	66		57
knuckle	KNUO98			64	69			67
knuckle	KNUO99	46	57	54	61	57		62
knuckle	KNU100			70	74	72		65
outside flat	OUTO05	52	51	55	65	66	52	67
outside flat	OUTO29			69	76			70
eye round	EYE075	52	55	53	55	57		56
topside	TOP001	52		63	65	70		62
topside	TOP033	46		62	68	68		69
topside	TOP073	47	55	55	65	65	57	64
chuck	CHKO68			51	56			68
chuck	CHKO74	63	60	65	70	62		75
chuck	CHKO78	58	61	62	65	61	48	73
chuck	CHKO81			64	67	63		78
chuck	CHKO82			55	59			
thin-flank	TFL051			66				66
thin-flank	TFL052			75	67			72
thin-flank	TFL064			69	66			68
rib-blade	RIBO41			53				
brisket	BRI056			46	60	56		63
brisket	BRI057			44	51	51		67
shin	FQshin							68
shin	HQshin							72
intercostal	INTO37			60				

Paddock to plate system



MSA APPLICATION



MSA eligible cattle and sheep are processed at MSA licensed abattoirs

Carcases are graded by an MSA-accredited grader with an eating quality score assigned to each cut.

Cuts with the same eating quality are packed together. Eating quality outcomes specified on the carton label

End users of product have confidence that consumers will be satisfied

MSA PARTICIPANTS



Producers

37,600

Processors

52

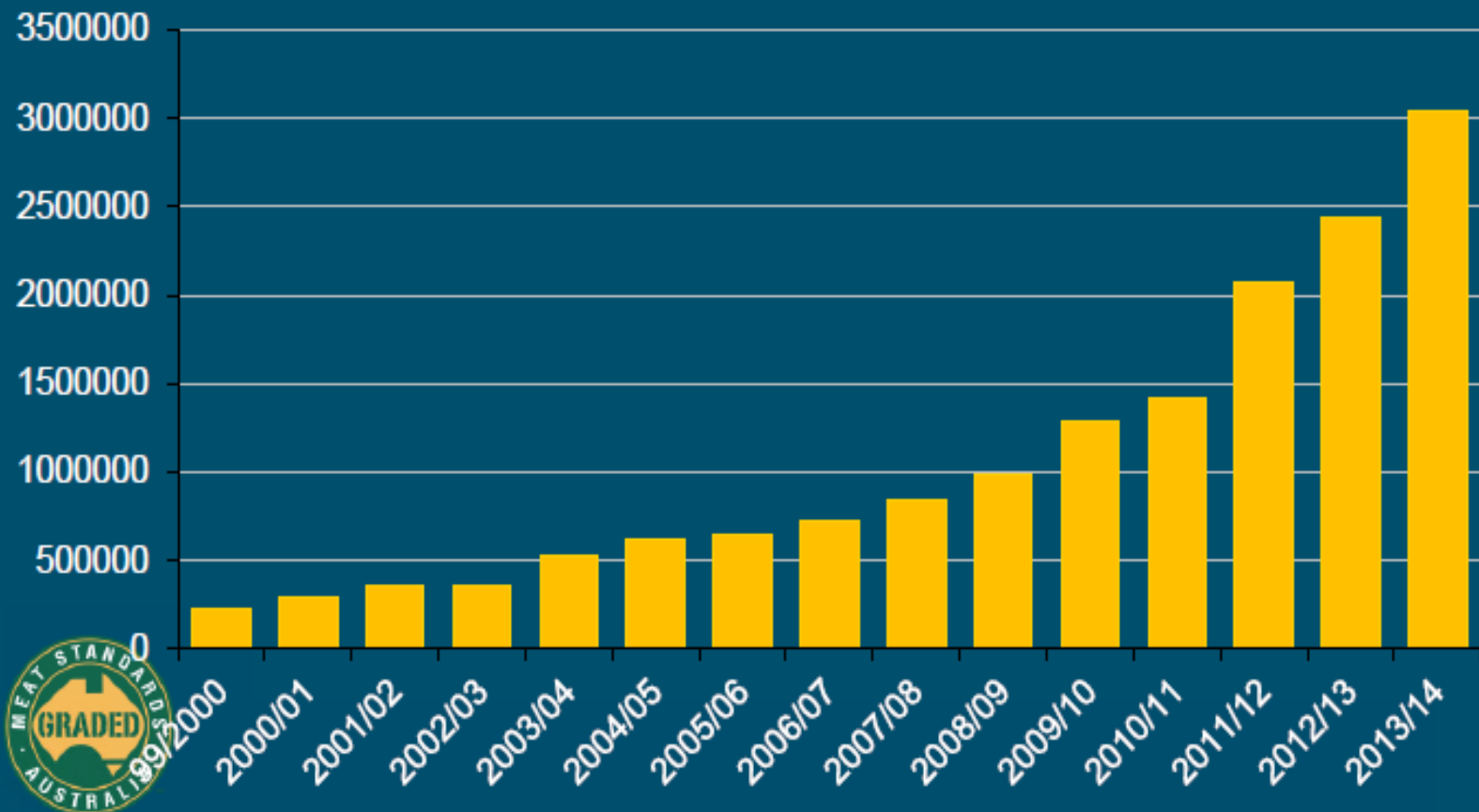
Brands

108

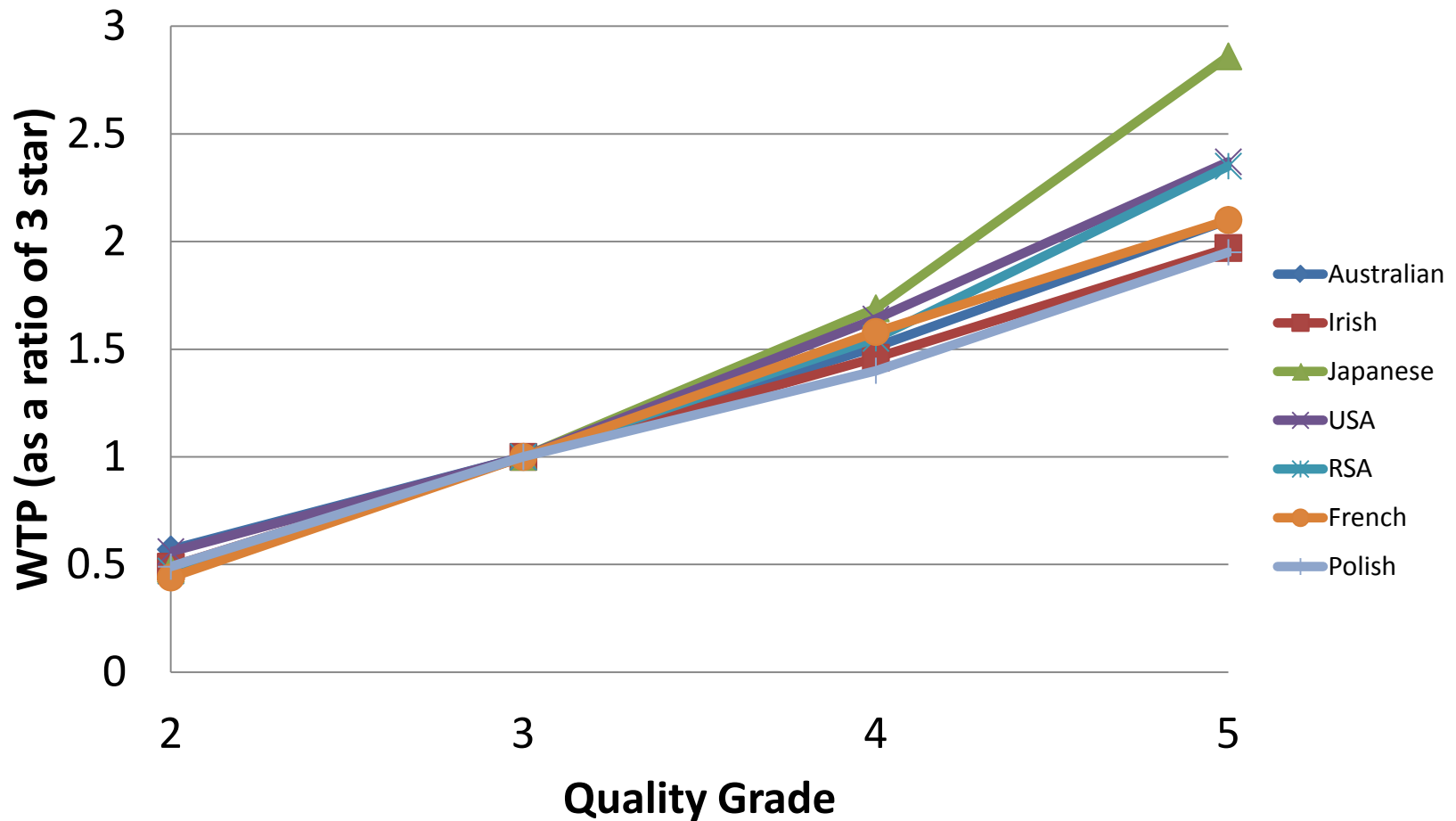
Figures as of 30 June 2014

More cattle than ever before

Over 3 million cattle graded in 2013/14



Will consumers pay for quality?





YES!



- The MSA system is voluntary so usage relates directly to commercial value.
- 225,000 carcasses graded in 1999/2000.
- 1,420,000 graded in 2010/11.
- Program value estimated as \$523m to 2010/11 with annual value of \$77m (*Griffith and Thompson, 2012*).
- 3,127,000 head graded in 2014/15.
- Annual value now estimated to exceed \$250m/year.
- MSA premium distribution around 40% to farmer.