

Perception vs. reality: society's views of cattle production (with a focus on welfare)

Amy Jackson

PhD student, School of Veterinary Science and Medicine, University of Nottingham
Director, Oxtale Specialist Communications





SAY NO TO THE
factory
SUPER DAIRY

70,000+ signatures on online petition

14,000 objections to local council

158 MPs sign Early Day Motion

8,000 visits to Nocton Dairies information website

“We were looking for a cause to raise our profile with our UK supporters. Nocton appeared out of nowhere and fitted everything we stood against. **We were completely opportunist.**”

“Right or wrong, the suggestion was clear: Cows would be incarcerated like prisoners.”

Millions crushed and producer

New technology to change

Jane Dalton | @JournJane | The
10 comments



Chickens would outnumber humans in Welsh village by almost thirty to one if 'mega-farm' goes ahead

But 25,000 people have objected to the 'chicken prison' plans which would see 64,000 hens call Kilgetty in Pembrokeshire their home



Britain's taste for

Start typing

Share



WOOD
HORROR STORY





| Welfare principles | Welfare criteria |
|-----------------------|--|
| Good feeding | 1 Absence of prolonged hunger |
| | 2 Absence of prolonged thirst |
| Good housing | 3 Comfort around resting |
| | 4 Thermal comfort |
| | 5 Ease of movement |
| Good health | 6 Absence of injuries |
| | 7 Absence of disease |
| | 8 Absence of pain induced by management procedures |
| Appropriate behaviour | 9 Expression of social behaviours |
| | 10 Expression of other behaviours |
| | 11 Good human-animal relationship |
| | 12 Positive emotional state |

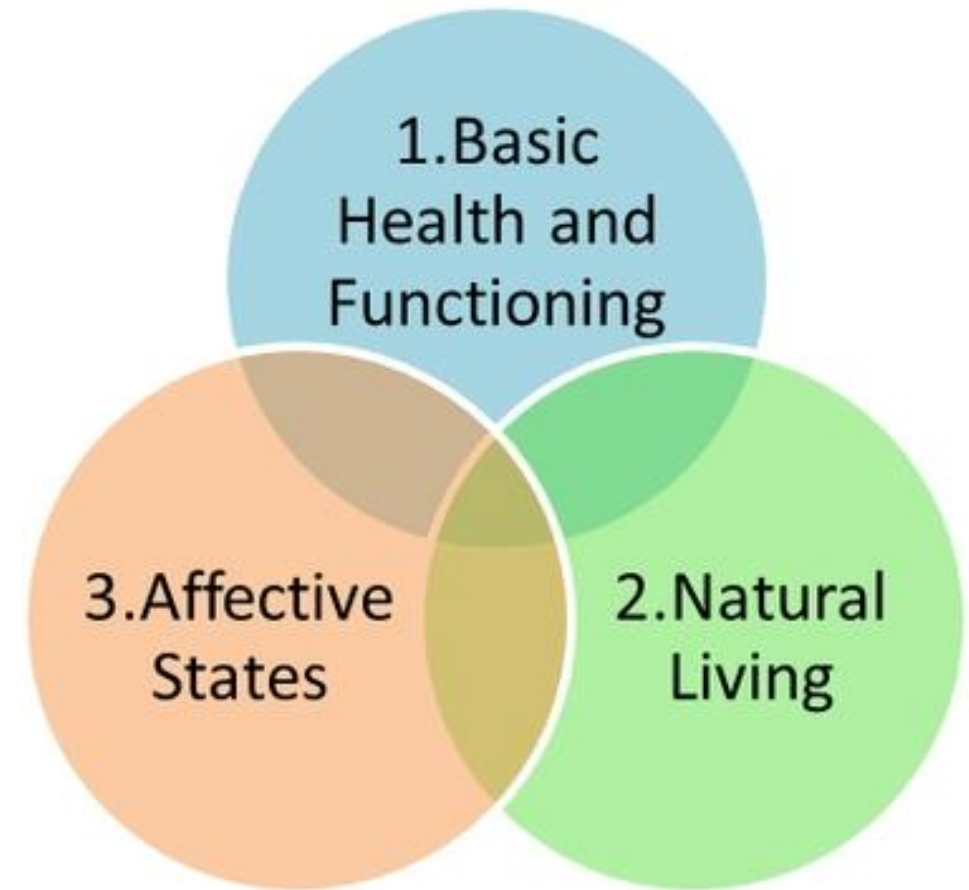
iii

| Number of item | Animal type | Item description | Instruction to assessor | Reason to include or disregard; welfare relevance, problems | Mean score | Range |
|----------------|-------------|---|--|---|------------|-------|
| 18 | All | Grazing and exercise Regular access to grazing (year round, during summer, every day, once a week) | Ask farmer about strategy for grazing. | Pasture is the natural habitat for cattle. Grazing thus increases animal welfare. | 3.6 | (1-5) |

Quality-of-life concerns

Social critics, ethicists and others have expressed three different – but overlapping – types of quality-of-life concerns:

- (1) functioning well
- (2) natural life
- (3) free from negative states & experiencing normal pleasures



Redrawn from Fraser et al., 1997 in von Keyserlingk et al., 2009. Invited review: The welfare of dairy cattle—Key concepts and the role of science. Journal of Dairy Science.

What do people want...?

De Greef et al (2006) summarised the different views of key actors towards farm animal welfare as:

- Farmers focus on **regular care** based on habit and good intentions
- Scientists focus on **biological parameters**
- Animal protection organisations combine **animal nature** and **maximal care**
- The public focuses on **icons** like space, straw and outdoor access

Other studies on public views...

Broad concepts such as 'naturalness' or natural behaviors

Lusk and Briggeman, 2009; Bazzani et al., 2016

Outdoor access

Lusk et al., 2007; Mulder and Zomer, 2017

Reduced stocking density

Liljenstolpe, 2005; Vanhonacker et al., 2008

Improved bedding or flooring

Hall and Sandilands, 2007; Krystallis et al., 2009

Plenty of space or freedom to roam

Ellis et al., 2009

Access to pasture

Von Keyserlingk and Weary, 2016

Public perceptions and cultural values around
how we house and manage dairy cows.



| “This milk...” | Attribute type | | | | | | | | |
|--|----------------|---------|-------|-------------|--------------------|---------------|----------|-----------------------|----------------------|
| | Outdoor access | Grazing | Space | Naturalness | Behaviourally rich | Individuality | Good H&W | Technology/automation | Other milk attribute |
| comes from farms local to your area | | | | | | | | | + |
| is from cows managed indoors that can walk into open outdoor yards at any time | + | - | + | | + | | | | |
| is from cows that choose their own timetable and habitat, inside and out | + | | | | + | | | | |
| tastes better than other cows’ milk | | | | | | | | | + |
| comes from cows that graze outdoors most of the year * | + | + | + | + | + | | | | |
| is from farms where the farmer knows each cow’s individual history and character | | | | | | + | | - | |
| has a lower carbon footprint than other milk and plant-based alternatives | | | | | | | | | + |
| comes from cows that graze outdoors for at least a couple of months each year * | + | + | + | + | + | | | | |
| comes from farms where cows roam freely when indoors | - | - | + | - | | | | | |
| is from cows fed a diet designed to meet their individual nutritional needs | | | | - | | + | + | + | |
| is from farms that prioritise the comfort of their cows above everything | | | | | | | + | | |
| is from farms ranked top in the UK for health & welfare | | | | | | | + | | |
| guarantees a fair price to the farmer | | | | | | | | | + |
| comes from small farms where just the family manages the cows | | | | | | + | | - | |
| comes from cows that keep their calves beside them for several months | | | | + | + | | | | |
| is from farms which use the latest technology and automation | | | | - | | | + | + | |
| is from cows given brushes and toys so they can express their natural curiosity | | | | - | + | | | | |

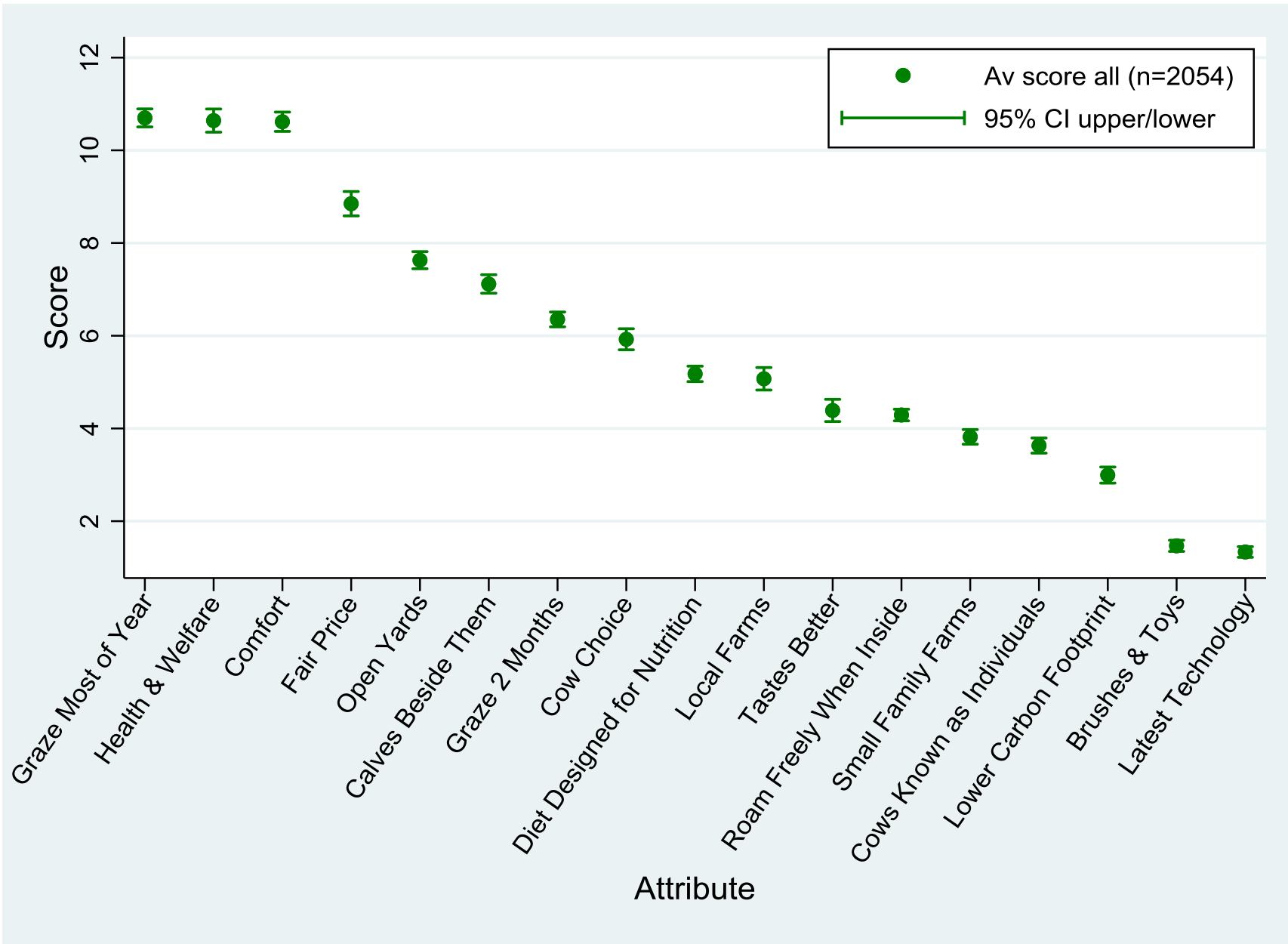
Best worst scaling

In the grocery shop, more information than usual has been provided about the different types of cows' milk on display. This has been supplied by a trusted food assurance scheme.

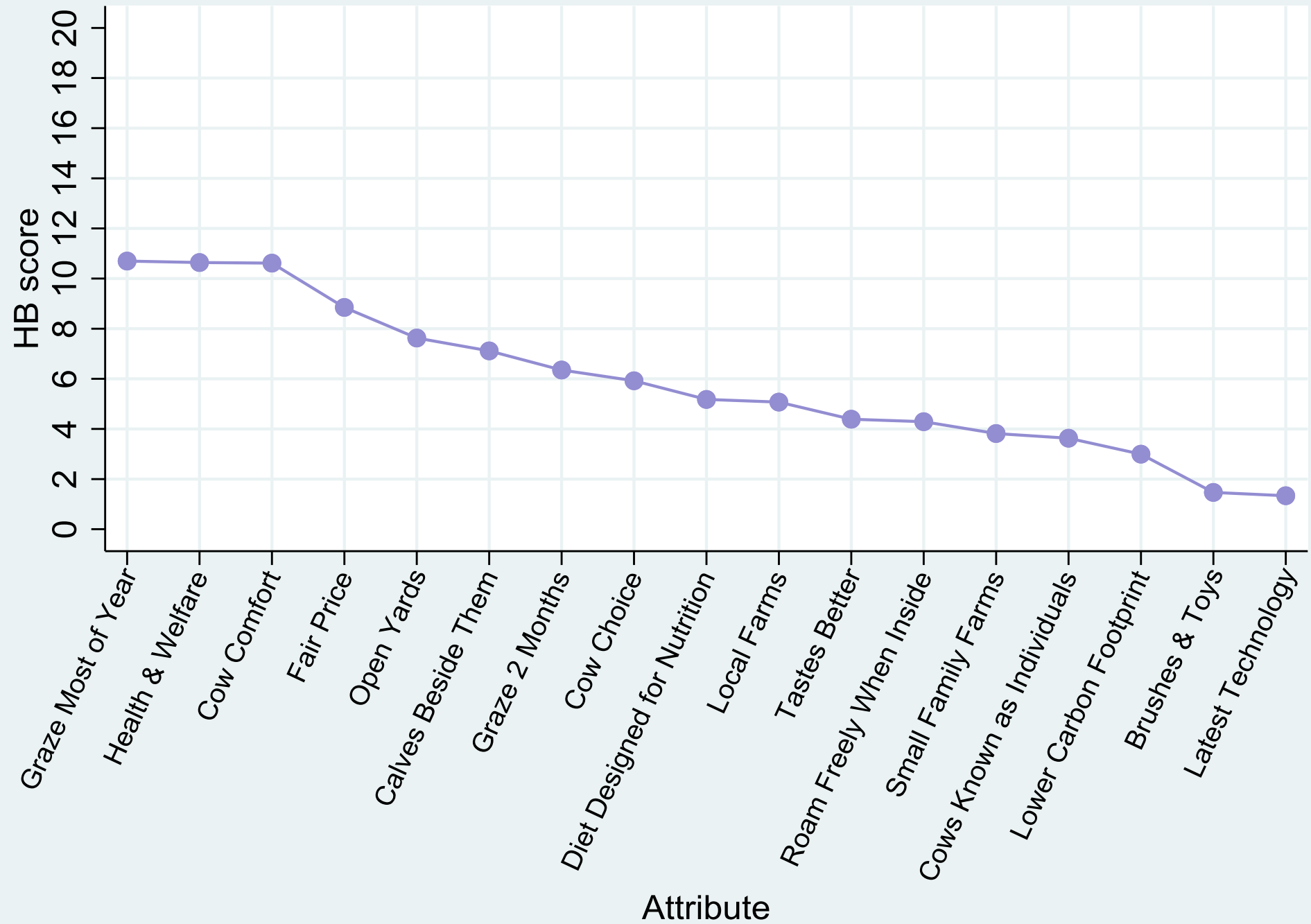
Irrespective of whether you intend to buy any milk today or not, which feature is the MOST important and LEAST important TO YOU from those listed below, if price is not an issue?

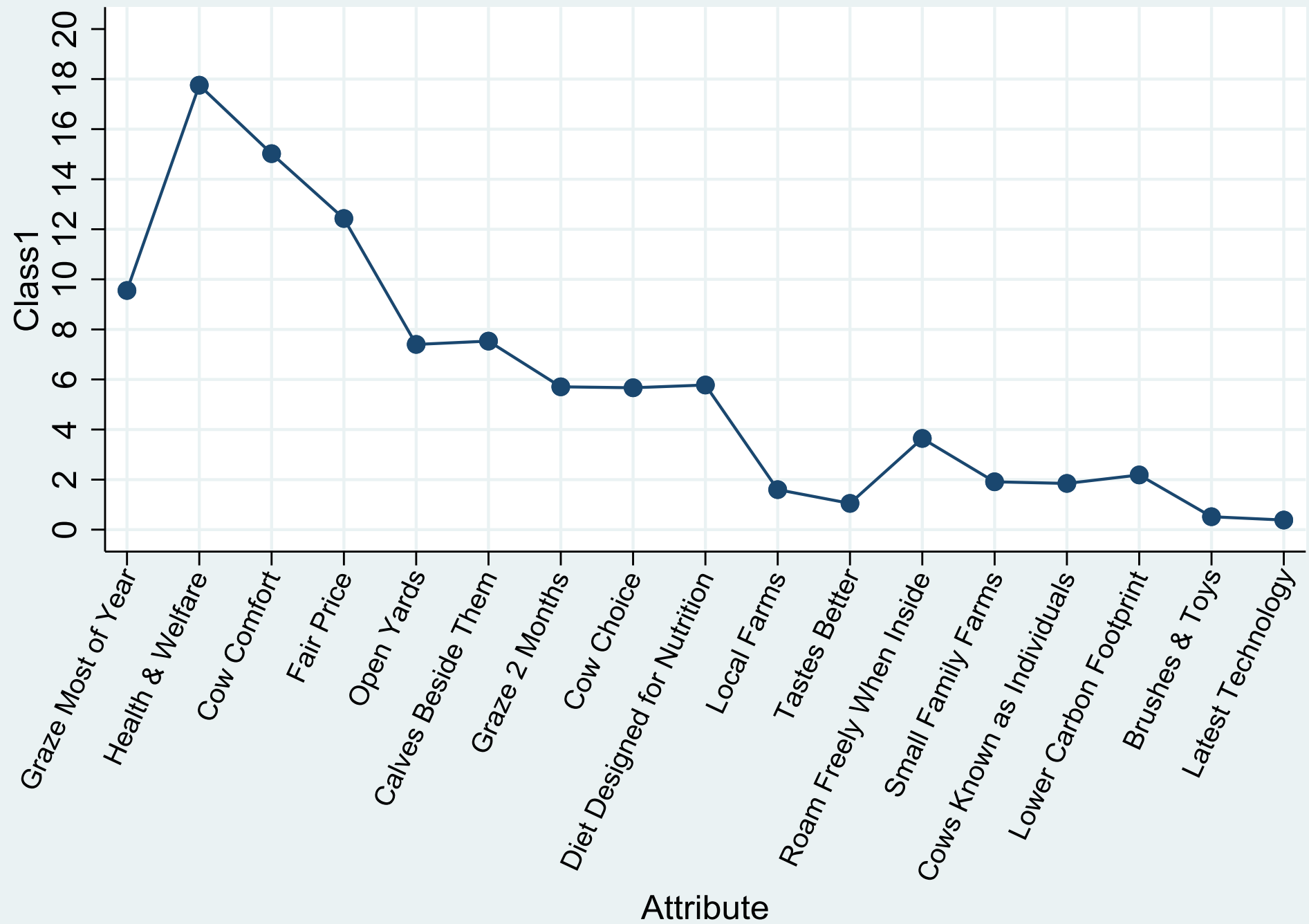
(1 of 12)

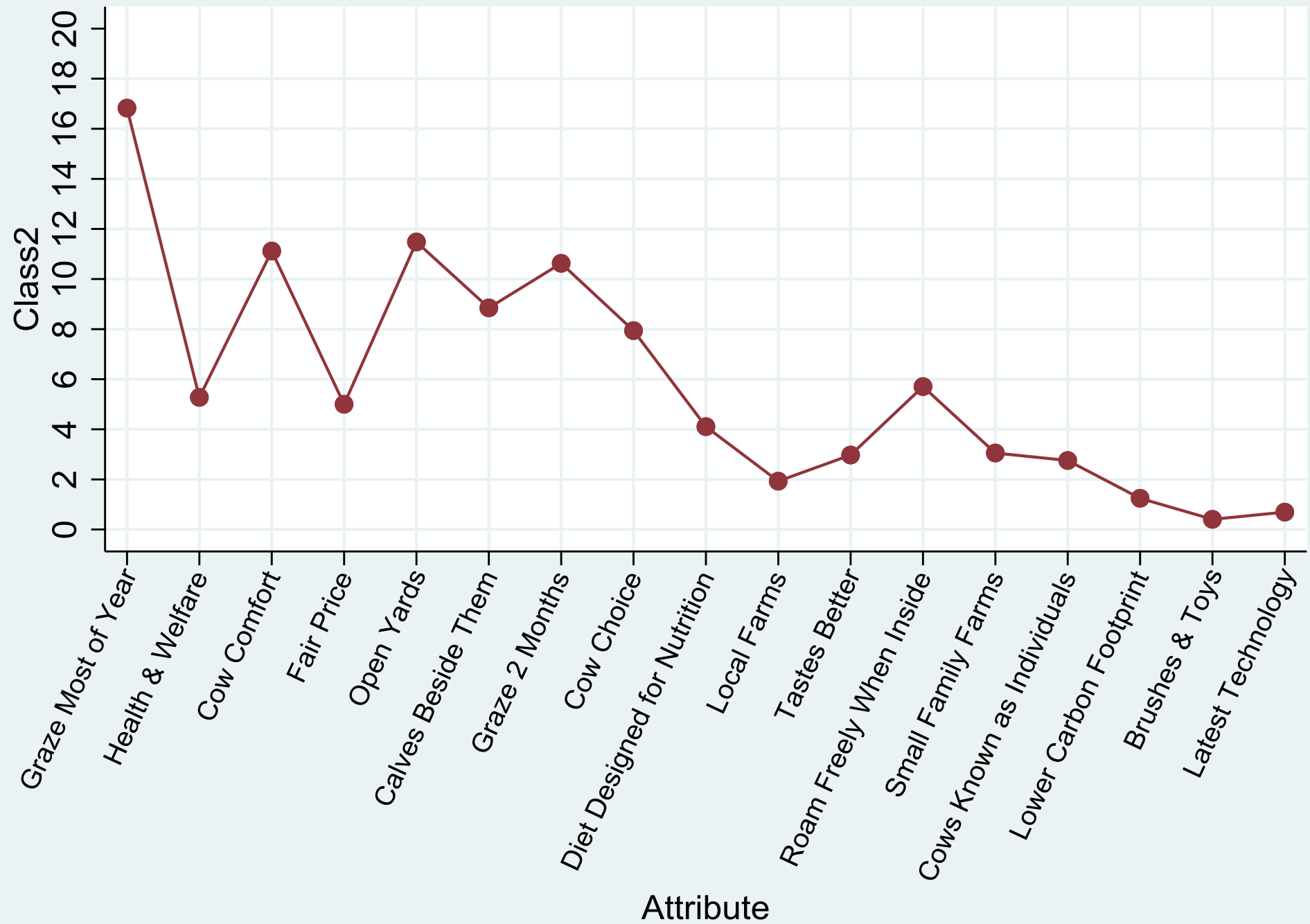
| Most Important | Least Important | "This milk..." |
|----------------------------------|----------------------------------|---|
| <input type="radio"/> | <input type="radio"/> | comes from cows that keep their calves beside them for several months |
| <input checked="" type="radio"/> | <input type="radio"/> | is from cows that can walk outside into open yards at any time, even though they live indoors |
| <input type="radio"/> | <input type="radio"/> | has a lower carbon footprint than other milk and plant-based alternatives |
| <input type="radio"/> | <input checked="" type="radio"/> | comes from farms local to your area |
| <input type="radio"/> | <input type="radio"/> | is from farms which use the latest technology and automation |

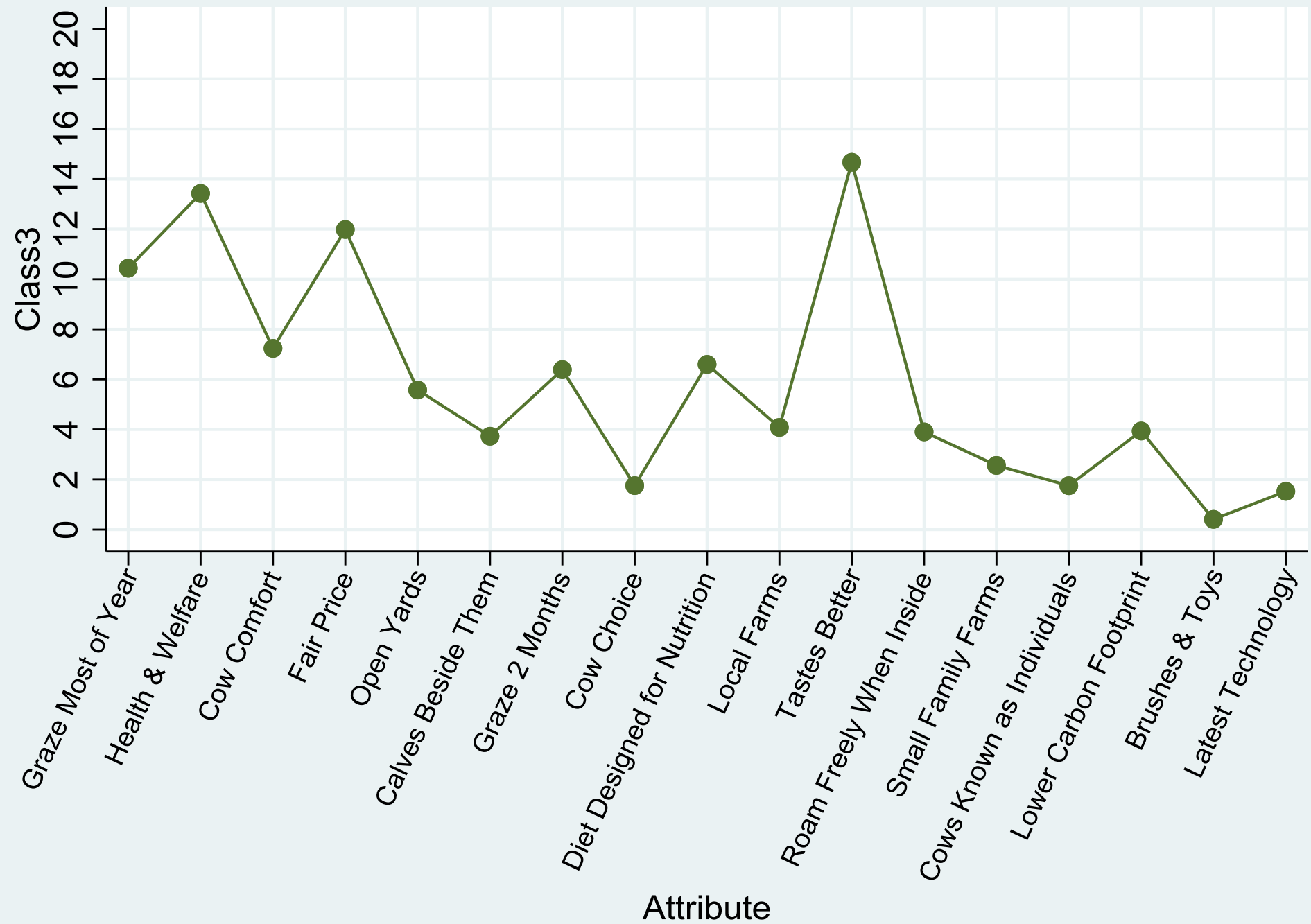


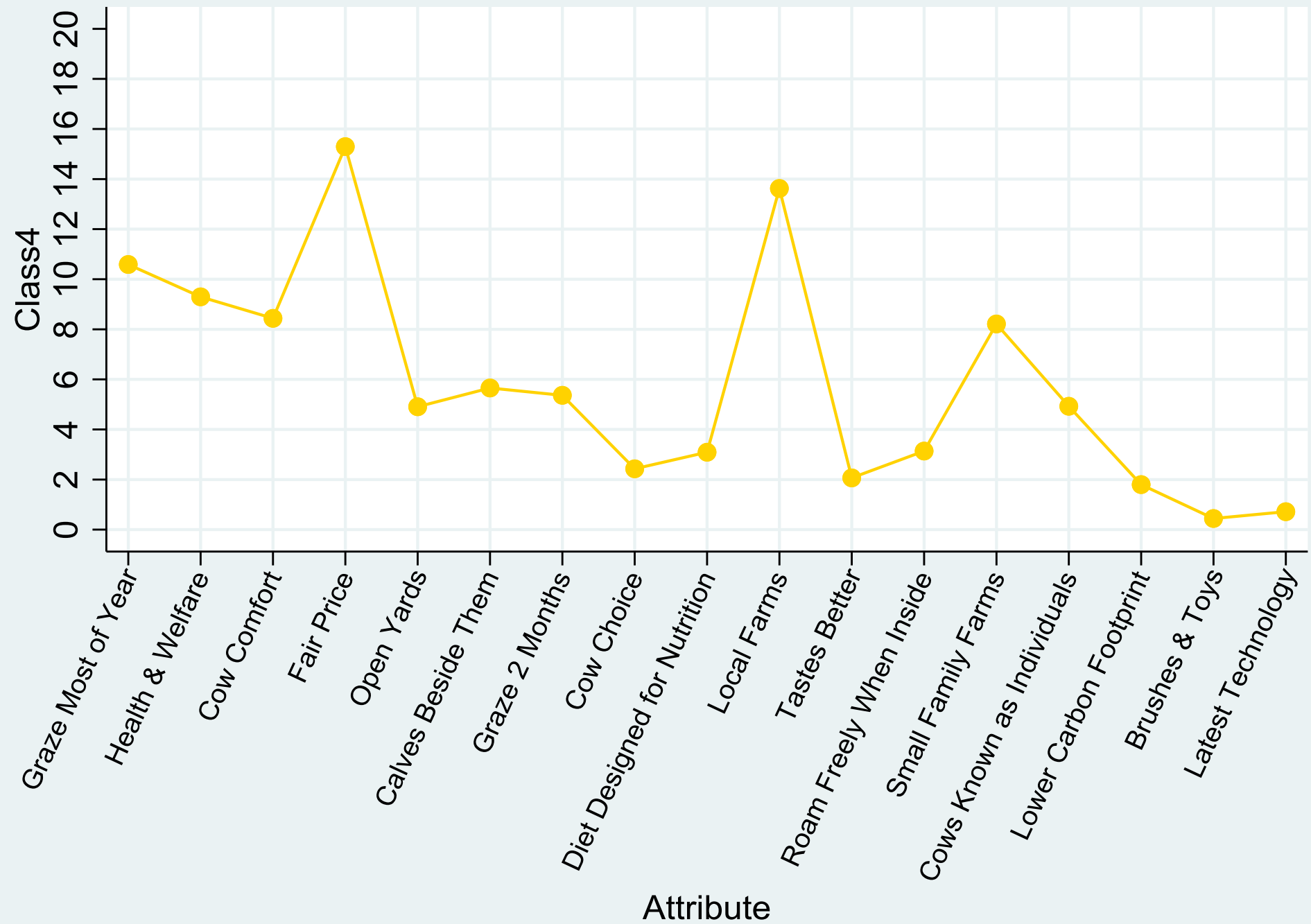
- Hierarchical Bayesian analysis gives average ranked and scaled scores for whole sample, adding to 100
- Weighting given for times scored best or worst
- Importance expressed relative to other attributes
- Top 3 equally ranked – grazing, health & welfare, and cow comfort
- Technology, brushes/toys and carbon footprint least important relative to others

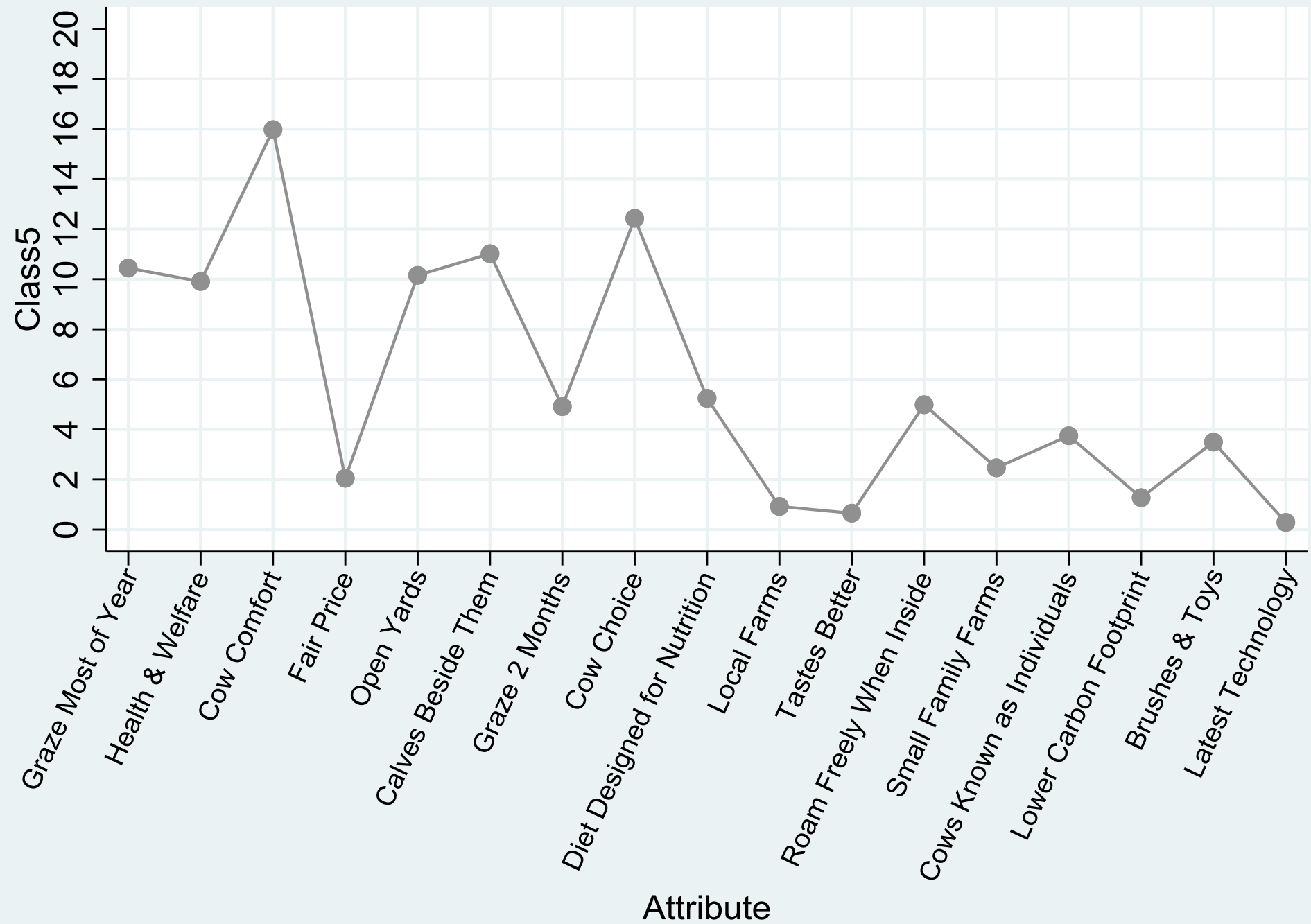


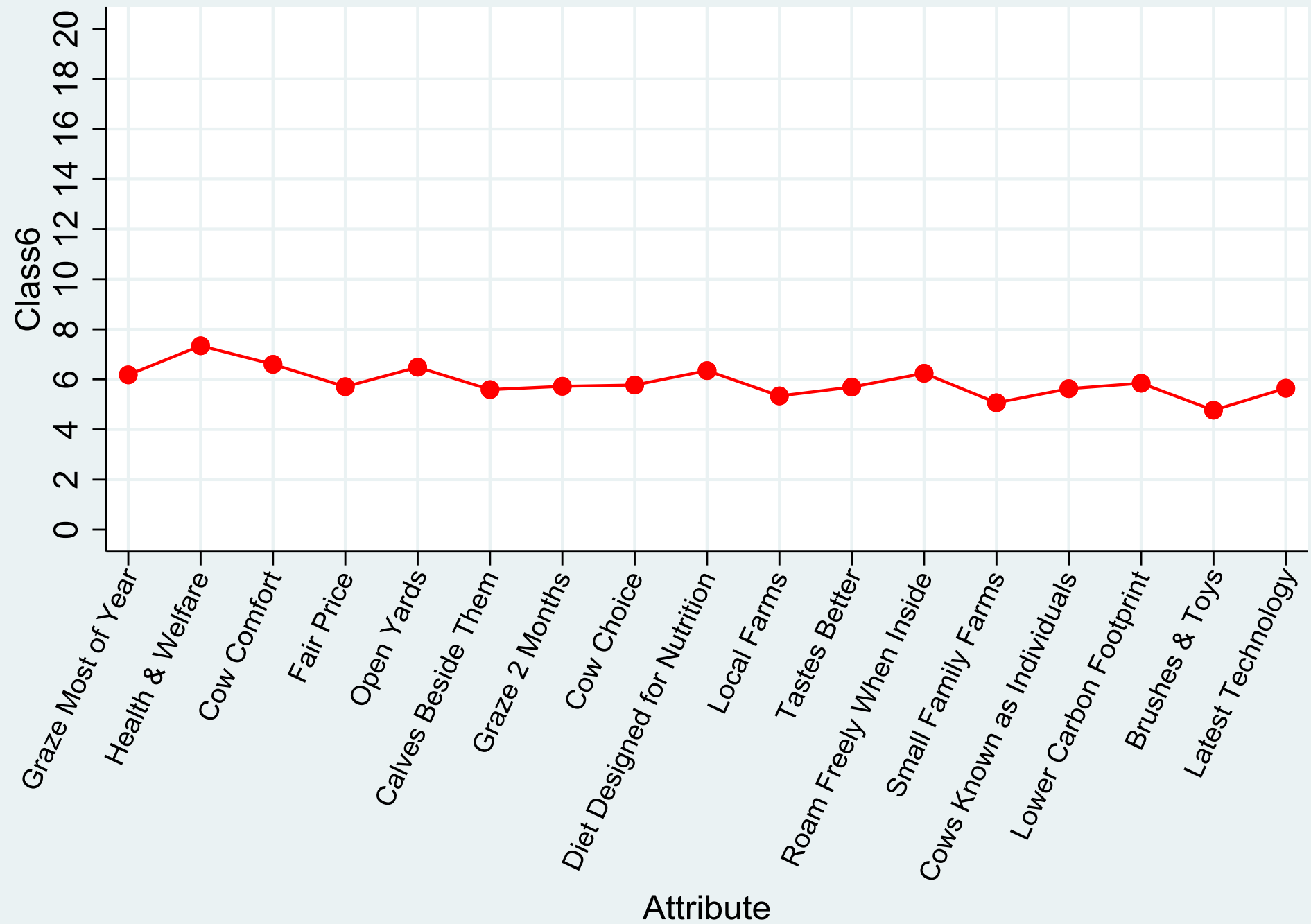


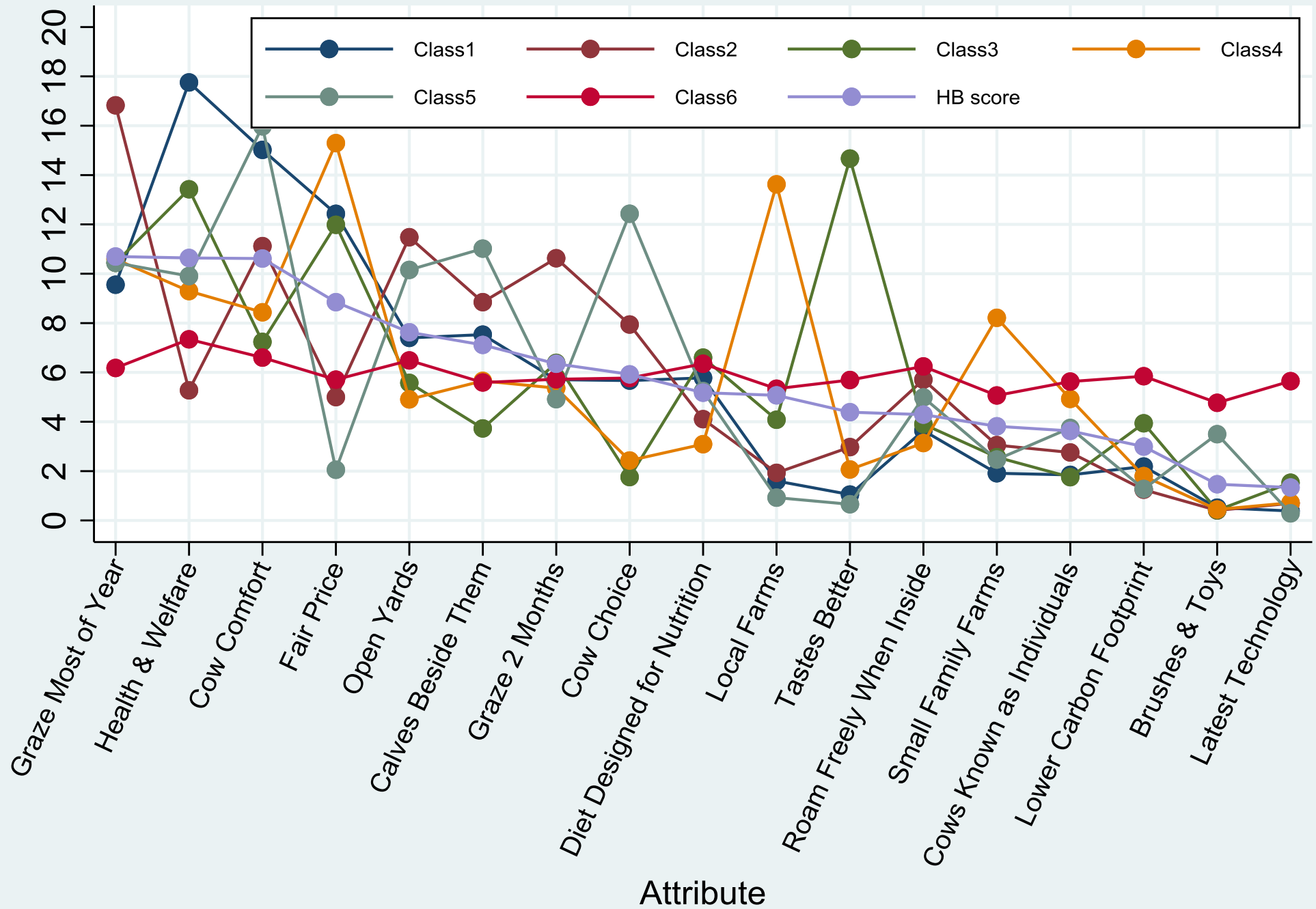












Welfare (18.3%)



Most educated

Highly 'universal' – a better place for cows and farmers

Eats most things, drinks cows' milk

Many have visited farms

Grazing (15.6%)



Most urban
Older
More traditional
Many haven't visited farms

Taste (15.2%)



Male

Not 'animal' people

High knowledge of dairy farming

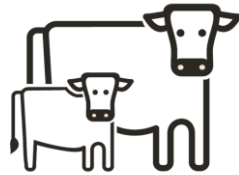
High achievers

Farm Price (18.9%)



Oldest, most rural, and biggest consumers of milk
Most traditional, and 'prioritisers' of family farms
Very likely to have visited farms
Strong knowledge of dairy farming

Cow Comfort (14.8%)



Most vegans/vegetarians

Female, youngest, least university-educated

Believes in a cow's mind, wants cows to stay with calves

Likely to have pets – but unlikely to have visited farms

No preference (15.2%)

?

Young, male & urban

Lowest knowledge ...yet self-rated the highest!

Less likely to drink milk ('dairy free' not vegan)

Least universal & highest achieving

Key conclusions

- Significant heterogeneity in sample, and therefore population?
- Preferences driven by:
 - different **understandings** of the words used
 - different **values** and **motivations**
 - **familiarity** and **knowledge**

Next steps

- What is meant and understood by 'grazing', 'health and welfare' and 'cow comfort', and how do they link/interact with each other?
- What role does 'naturalness' play
- 60 qualitative interviews of a subsection of the survey sample
 - Half rural, half urban
 - Different ages and geographical locations
 - Use three scenarios – traditional housed in winter/grazing in summer; fully housed; fully grazed.

“If only people understood”

“All we have to do is educate them”

Knowledge deficit model

This belief has two aspects.

1. Public scepticism is caused primarily by a **lack of adequate knowledge....**
2. By providing sufficient information to overcome this lack of knowledge — or 'knowledge deficit' — **the public will change its mind** and decide that what emerges is 'good'.

Adapted from SciDev.net June 2005. The case for a 'deficit model' of science communication.
www.scidev.net/global/communication/editorials/the-case-for-a-deficit-model-of-science-communic.html

Engaging (but not “educating”) the public

Education campaigns are **unlikely to improve acceptance**

Reducing ignorance **should** bring public opinion into line with expert opinion....

...but this view ignores the fact that non-experts **assess risk differently** from experts.

Informing the public may be effective in improving attitudes but it may in fact **increase opposition** to established practices.

For some people, it may uncover aspects of the production system they ignored and that **contradict their expectations**.

Hötzel, M. J. 2016. Letter to the editor: Engaging (but not “educating”) the public in technology developments may contribute to a socially sustainable dairy industry. Journal of Dairy Science.

USFRA approach



USFRA strategy was based on survey-led research:

- Anything deemed '**not natural**' is a threat
- Using **science does not help**
- Re animal welfare, **people simply want to know animals aren't being abused**
- Messages need to move from:
 - **the present to the future**
 - **facts to storytelling and narrative.**
- **Continual improvement** must be conveyed

Conclusion 1

What the public wants/expects IS relevant and important

- Their 'truth' is valid
- Feeling good about choices is important at a time of strong vegan competition
- Lack of familiarity has played a role & we are complicit
- Cruelty stories just undermine confidence
- People are different – can we meet their different objectives?

Conclusion 2

We must also do what's scientifically best for the animals

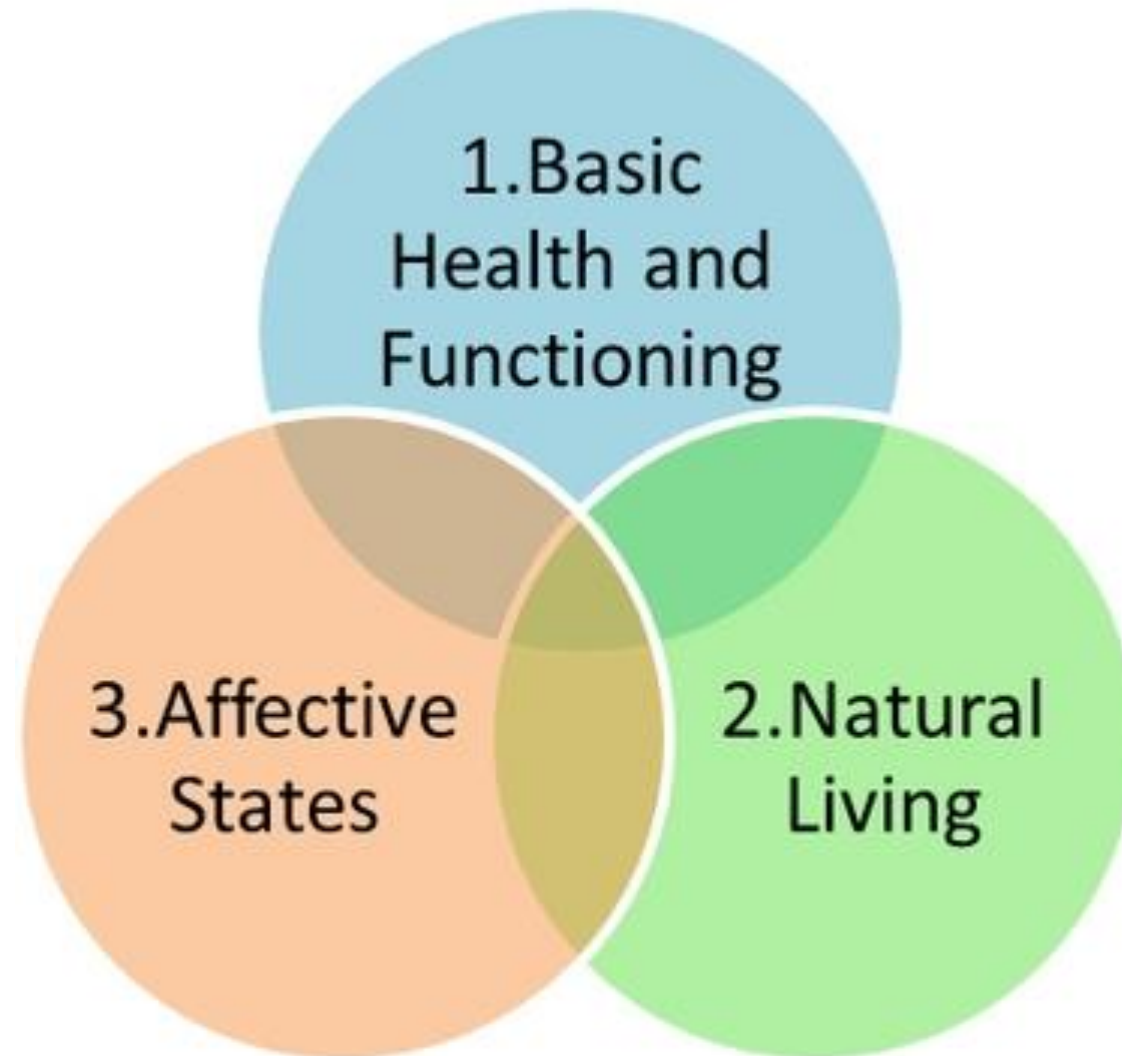
- Real welfare is scientific, mostly measurable, complicated, difficult to communicate
- We have a duty of care to animals that must not be compromised
- Must be careful when using this as a defence or justification
- But we must find better ways of communicating this, e.g. labels, use of simple icons

Conclusion 3

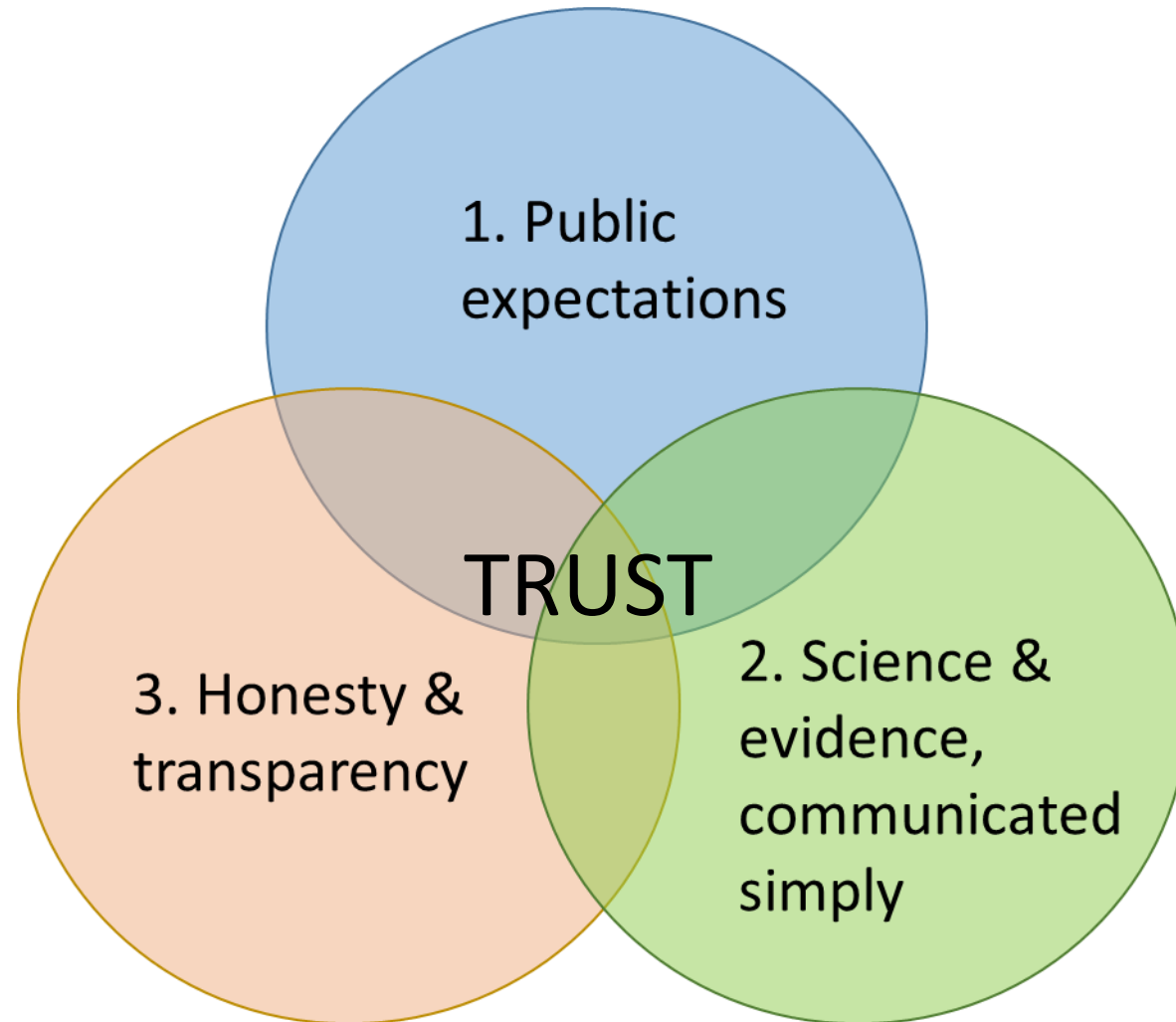
An honest dialogue is needed

- Transparency is tough but rewarding – share the challenges as well as successes
- Being accountable and taking action is more important than perfection
- Engagement not education

Delivering cow welfare in the 21st Century



Communicating cow welfare in 21st Century



Thank you!

Questions?

