

Extended Abstract

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| Paper/Poster Title | Consumer preference for naturalness - A new way to differentiate grass-fed dairy products |
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Abstract prepared for presentation at the 98th Annual Conference of The Agricultural Economics Society will be held at The University of Edinburgh, UK, 18th - 20th March 2024.

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| Abstract | <i>200 words max</i> |
| <p>Some grass-fed dairy companies consider naturalness to be an attractive attribute that makes grass-fed milk stand out from other products. However, grass-fed labels are not easily identified by consumers, as there are different standards for grass-fed labels in different countries and all dairy products on the market are widely labelled as "Natural". This study analyses the sub-dimensional attributes (functional information, process information, imagery information) of grass-fed milk, investigates consumers' willingness to pay for them, and discovers what can be done to differentiate grass-fed milk from other milks. We also explore whether preference for naturalness influences consumers' valuations of different types of elements. Respondents report higher premiums for process information and functional information. Specifically, those with high natural preferences state higher premiums for pasture grazing, while those with low natural preferences state higher premiums for functional improvement. All respondents stated the lowest premiums for imagery information, indicating that despite dairy products often being labelled as "Natural", consumers don't necessarily perceive this as a major factor influencing their decisions.</p> | |
| Keywords | Grass fed, consumers, preference for naturalness, pasture grazing |
| JEL Code | Q130 Agricultural Markets and Marketing; Cooperatives; Agribusiness |
| Introduction | <i>100 – 250 words</i> |
| <p>Consumers often consider grass-fed dairy as being more natural compared to conventional dairy. However, although the term 'grass-fed' is widely used on product labels and company websites (Moscovici Joubran, Pierce et al. 2021, McGuinness, McCabe et al. 2022), there are diverse definitions and criteria across different countries and even among various companies within the same country (Moscovici Joubran, Pierce et al. 2021). For example, countries such as Ireland and New Zealand with a temperate climate, use a 'grass-fed' claim that establishes not only a minimum standard for the quantity of grass in the diet of dairy cows but also for how long cows spend outside grazing, as shown in Table 1. In America, while there is a clear requirement for the amount of grass in the diet, there is no specification for the minimum duration of pasture grazing (USDA-FSIS 2019).</p> <p>In this study, we identified the different levels of naturalness for grass-fed labels due to diversified grass-fed standards across different countries and regions. We also</p> | |

investigated consumers' preference for more natural products and verified the premium potentials for grass-fed dairy with higher level of naturalness. It is a loss for countries and companies with higher grass-fed standard not to claim the potential premium. But the ability to claim premium relies on product differentiation and being able to communicate the perceived advantages to consumers accordingly.

Methodology

100 – 250 words

We conduct choice experiments with consumers to elicit their preferences for different grass-fed milk-related information. Stated preferences data of Chinese consumers are used for this study. Liquid milk is used as the product to be study, since liquid milk consumption accounts for 90% of dairy consumption by Chinese consumers. Our objectives are twofold: 1) provide new empirical evidence of consumer preferences for grass-fed milk 2) Investigating the moderating effect of consumer preferences for naturalness as a possible explanation for differential information preferences for grass-fed milk.

Results

100 – 250 words

This paper finds positive consumer preferences for three categories of information related to the naturalness of grass-fed milk. However, the valuation of grass-fed milk by consumers varies depending on the specific category of information. Our results indicate that for the order of category importance, the process information is more important than the functional information and imagery information. We observed a differential moderating effects of preferences for naturalness on grass-fed attributes, which provide a useful lens for understanding grass-fed milk consumption. For all the attributes except functional improvement, when interact with preference for naturalness, they exhibit an enhancing effect. These results are important because for the target consumers who prefer for naturalness, promoting grass-fed milk should stress on the natural functional improvement rather than artificial enhancement.

Discussion and Conclusion

100 – 250 words

Our results found that when consumers buy a food product that is perceived to be natural (grass-fed milk), their primary interest lies in its beneficial nutrients and traditional production methods. Since dairy food suppliers face intense market competition, it is easy to overuse these information when promoting competitive milk products. The use of nutritional benefits and production method information can appeal to consumers, as these kinds of information can influence consumer evaluations of the product and stimulate purchases by reinforcing attitudes towards products associated with naturalness. Therefore, public authorities may consider



monitoring the use of such information, such as specifying the proportions of grazed pasture in the diet.

Our findings suggest that compared to healthy, tasty and sustainable imagery, natural imagery is the most attractive product images for consumers. Policymakers should guide and educate consumers that the "Natural" label does not necessarily imply health benefits or specific production methods that consumers might associate with "Natural" label foods. To align natural expectations for grass fed dairy with production realities, it may be preferable to move towards a labeling of natural scores such as Food Naturalness Index (FNI) rather than simply "Natural" label.