

## Animal welfare labels more important than novel healthier meat labels? (#420)

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### Introduction

The agriculture sector and food industry are developing ways to improve the healthiness of meat, to counteract some of the presumed negative factors. The nutrient composition of meat itself can be modified by changes in feeding practices or by genetic strategies. Selective breeding can change total carcass fat percentage and fatty acid profiles (Kelly et al., 2012). Improvements in composition or processing may be marketed as an innovation, but the success of innovations relies on consumer interest. Not all consumers are willing to pay more for a healthier meat product, even if they have a positive attitude towards it (Tobin et al. 2014). It can thus be important to investigate consumer interest in and acceptance of healthier meat innovations, to help producers, food industry and policy makers make decisions about which strategy for improving the healthiness of meat is most suitable.

A survey was conducted to investigate to what extent Norwegian consumers were interested in having healthier meat available for purchase and consumption, with a focus on red meat. The study focused on attitudes and motivations of consumers to consume healthier meat in relation to their personal attributes and other factors/variables that influence their decision process.

### Methods

This study included: 1) two focus groups (semi-structured group discussions) where 5 or 8 consumers were present. The consumers shared their opinions about healthiness of meat in general, choice of meat and the role of meat in a healthy diet with particular focus on beef meat, and the need for healthier beef meat. Important themes and topics from the focus groups were included in an online survey with 500 consumers to get a more representative overview of opinions of and attitudes towards meat in general, and towards healthier beef meat in particular.

The online survey was conducted through a market research company (Faktum Markedsanalyse), securing a representative sample from the Norwegian population (18-65 years). Vegetarians and vegans were excluded from participation in the survey that was carried out in 2016. However, the survey group could contain consumers prone to becoming vegetarians as, based on sales from 2017, vegetarian and vegan foods were the most rapidly increasing food category in Norway (Mæland, 2018).

### Results

Unsurprisingly, taste (30%) and price (18%) were the most mentioned determining factors for choosing what meat to buy. Animal welfare was men-

tioned as the determining factor by 11% of the participants. Animal welfare was important to Norwegian consumers: 82% of respondents said that it is important/very important that production animals were well taken care of. Animal welfare was also linked to healthy meat: the main factors used to choose healthy meat were animal welfare, additives, antibiotics and salt and fat content (total model:  $P < 0.001$ , Figure 1). When asked which variables were important when choosing healthy meat, animal welfare was mentioned as important by 60% of consumers (Figure 1). When asked what information consumers would like to see on meat labels (Figure 2), animal welfare was also ranked as highly important.

Meat from farms with a focus on animal welfare was considered as healthier by 17% of consumers. In addition, meat from such farms was deemed of better quality (41%), more sustainable (29%) and it was ethically correct to buy meat from such farms (53%). The Food Control Authorities in Norway published their first open annual report on animal welfare violations in 2015. However, already then, the media and individuals were eager to get information about animal welfare. Late 2018, some approved animal welfare labels criteria became available through collaboration with Dyreveralliansen (En: Animal welfare alliance) for chicken and beef meat, but Norway currently does not have widely adopted national welfare labels such as those used in UK, Germany and the Netherlands. Presently, no evaluation of the new animal welfare label has been carried out.

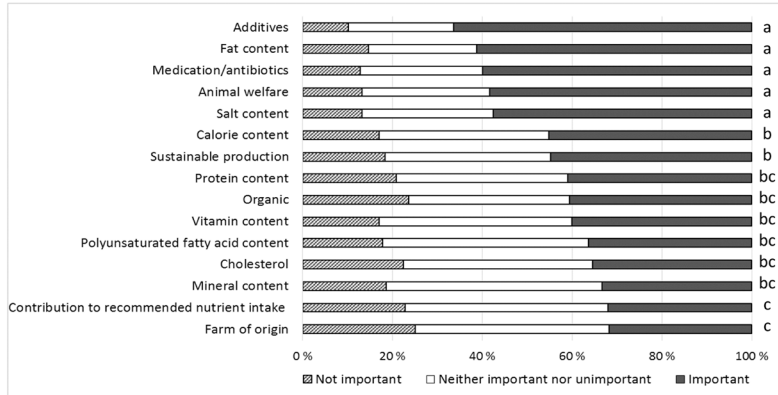
### Conclusion

Norwegian consumers gave high priority to Animal Welfare, linked animal welfare to healthiness of meat, and wanted welfare labels. No novel health label seemed to be able to compete with this request.

### References

- Kelly, M.J., Tume, R.K., Newman, S. & Thompson, J.M. 2012. Genetic variation in fatty acid composition of subcutaneous fat in cattle. *Animal Production Science*. 53, 129-133.
- Mæland, K. Kraftig økning i vegetar-salget. *Nettavisen* 10.10.18 At <https://www.nettavisen.no>
- Tobin, B.D., O'Sullivan, M.G., Hamill, R. & Kerry J.P. 2014. European consumer attitudes on the associated health benefits of neutraceutical-containing processed meats using Co-enzyme Q10 as a sample functional ingredient. *Meat Science*. 97, 207-213.

## Notes



**Figure 2.** Importance of various information types being present on meat product labels. Different letters indicate significant differences in a post-hoc Fisher's test.

**Figure 1 and 2**

Two units to accompany the abstract

**Notes**