

Consumer knowledge and perceptions towards milk fat in Denmark, United Kingdom and United States

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The country of origin is an important factor in influencing consumer's knowledge and perceptions towards foods and purchase behavior (Adina et al., 2015). Also, one important driver for food consumption is related to regulations (Kearney, 2010). For example, regarding dietary fats, Denmark was the first country to regulate the consumption of trans fats (Astrup, 2006) and later this was reflected in UK and US policies. Even though, dairy products are a common part of the diet in DK, UK and US, we hypothesized that their milk consumption is influenced by their knowledge and perception towards milk fat. Consumer surveys related to dietary fats have been focused on general knowledge and perceptions (Diekman and Malcom, 2009; Saulais et al., 2012) in different countries. To our knowledge, there are not cross-country studies that have been done with particular emphasis on consumer knowledge and perceptions towards milk fat. Therefore, the objective of this study was to evaluate milk consumption, and the knowledge and perceptions on milk fat from consumers in Denmark (DK), United States (US) and United Kingdom (UK).

Adult participants answered a web-based survey (SurveyXact) and data was collected online from Dec 2018 to Apr 2019, in DK, US and UK. A total of 694 participants completed the online survey. Most respondents were between 18-39 years old, female, high educated and employed.

Respondents in DK consumed less ($P < 0.05$) whole milk and semi-skimmed milk than in UK and US. More than half of DK respondents stated consuming skimmed milk while less ($P < 0.05$) respondents from UK and US reported this. Almost half of the total respondents reported awareness of saturated fat in milk and this proportion was higher ($P < 0.05$) among UK respondents. *Trans* fat was reported with lowest awareness in DK (9%), UK (8%) and US (4%). Concern about milk fat was higher ($P < 0.05$) in DK than in UK and US, and less ($P < 0.05$) participants in DK related the concept 'healthy' to milk fat than in UK and US. 'Tasty' was related to milk fat by about half of the respondents in all three countries. A higher ($P < 0.05$) proportion of females (45%) were concerned about milk fat than males (36%). Milk fat was perceived as 'healthy or very healthy' by more than 50% of US respondents while this was about one third in DK. 'Nutritional benefits' was the most reported reason for perceiving milk fat healthy by over half of the participants and this was higher ($P < 0.05$) in US compared to DK and UK. Education (e.g. school or University) was the most reported source of information about milk fat used by almost half of the respondents.

Results suggest that consumers in DK are different in their purchase behavior and perception towards milk fat, in particular their preferences for skimmed milk and negative perception towards milk fat, while consumers in UK and US share common characteristics, especially related to consumption of whole milk and positive perception towards milk fat.

References

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