Consumer attitudes towards processed organic food

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Food processing is important for food safety, shelf-life extension, improved digestibility, nutrient bioavailability, increased sensory quality, and other benefits provided by our current food system (Van Boekel et al. 2010; Heldman 2011). Although, organic food is subject to many regulations, only limited regulations and standards have been established for the processing of organic food on the European Level. So far, the European Council regulation on Organic Agriculture EC 834/2007 only prohibits ionizing radiation, the use of substances and technologies 'that might be misleading regarding the true nature of the product' (EC 834/2007 2007: 7), or 'reconstitute properties that are lost in the processing and storage of organic food' (EC 834/2007 2007: 8). In order to develop a Code of Practice for organic processing methods, it is inevitable to examine consumer attitudes on food processing in general and organic food processing in specific.

Organic food is often related to the concept of careful food processing (Kahl et al. 2014). But neither for careful food processing a clearly defined concept has been developed yet (Nielsen 2004). Beck et al. (2006) state that careful processing, freshness, and healthy nutrition are important to organic consumers. Additionally, organic consumers seem to prefer traditional processing methods (Hemmerling et al. 2016) and perceive new processing technologies as unnatural (Asioli et al. 2019; Cavaliere and Ventura 2018). Last, the level of knowledge and information about food processing technologies impacts consumer attitude towards these (Cavaliere and Ventura 2018).

The aim of the thesis is to examine consumer attitude towards processed food in general and organic processed food in specific. Therefore, first, it is examined if consumers are aware of processing methods and what role processing plays in consumers' food purchase behavior. Second, it is assessed how consumers evaluate processing methods with respect to processing strength and how processing information affects consumers' food purchase behavior. Third, a concept about consumer attitude to careful food processing in terms of four product quality attributes (minerals, vitamins, taste, and environmental impact) is developed. Forth, consumer

expectations to the food processing of organic food are assessed. Last, it will be examined whether consumer preferences and acceptance concerning processing methods differ among different consumer groups, for example between heavy and seldom organic consumers.

A questionnaire was developed and distributed online to examine consumer attitudes to processed organic food. In total, 600 people in Germany and 687 people in Switzerland answered the questionnaire. To examine the effect of different levels of information about food processing technologies on consumers' attitude to these technologies, people were randomly split into two treatment groups. One group received technical information about three processing methods of milk. The other group received the same information plus information about the effect of the processing methods on the nutrient and vitamin content of milk and their effects on the taste of milk. The data of the quantitative survey is analyzed with SPSS Statistics.

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