Barbara Vad Andersen PhD Thesis, 2015

Sensory factors in food satisfaction.

An understanding of the satisfaction term and a measurement of factors involved in sensory- and food satisfaction.

ABSTRACT

Satisfaction is suggested as a holistic response variable when measuring consumers' hedonic food appreciation. However, "satisfaction" is a relatively new term within sensory science research. Thus, knowledge is needed about how to interpret the term, and about which factors that influence consumers' degree of intake related food satisfaction. The main purposes of this PhD project were:

- 1) to contribute with a theoretical understanding of "food satisfaction" to be used prospectively within sensory science research
- 2) to develop a method measuring: consumers' degree of intake related satisfaction and factors influencing food satisfaction
- 3) to use the method in case studies

Definitions of "satisfaction" which previously had been used within sensory science were analysed according to three factors; type of response, focus in the response and timing of the response. The analysis showed that "satisfaction" could be regarded an affective response to food. The focus of the response varied between definitions. In addition to focus on the intake experience, the food was evaluated based on intake induced physical- and psychological well-being related sensations, and the context in which the food was eaten. The timing of the response varied between definitions. One definition did not imply when to measure satisfaction, others implied that satisfaction could be measured after intake. The analysis of the satisfaction terms was employed to develop working definitions of satisfaction which should be used prospectively in the PhD project; a definition of "sensory satisfaction" and a definition of "food satisfaction". In "sensory satisfaction" focus was on the foods sensory properties. The definition of "food satisfaction" could be regarded "broader" in the sense that a holistic approach was used. The food was evaluated with focus on the context in which it was consumed, and intake related physical- and psychological sensations.

Focus group interviews were used to initiate the study of factors influencing food satisfaction among consumers. Results from the focus group studies showed that factors within the categories "product", "person" and "context" influenced consumers' degree of "food satisfaction". Further, a temporal perspective was indicated, regarding when each factor was relevant for food satisfaction. Some factors were present before intake, whereas others became relevant during- and after intake. The results from the focus group interviews formed the basis of the development of a set of questionnaires; to be answered by consumers before-, during- and after food intake. The development of questionnaires were further based on: the work on analysing the satisfaction terms and a model of factors affecting food choice and behaviour, developed by Jos Mojet. In addition to measure consumers degree of "sensory-" and "food satisfaction" the questionnaires were used to measure factors influencing "food satisfaction". The questionnaires were developed so that they could be applied on a broad range of foods. The set of questionnaires were used in three product cases; a consumer study on creamy chicken soups, a consumer study on yoghurt with/mueslis, conducted in a lab context and a natural context respectively, and a consumer study on cherry-apple fruit drinks. The study on creamy chicken soups utilised the original set of questionnaires. For the study on yoghurt with/mueslis, an extra iii