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FOOD CHOICE IN CONTEXT:

The application of experimental choice analysis to investigate sensory and cognitive factors in consumer food choice

> A thesis presented in partial fulfilment of the requirements for the degree of PhD in Food Technology at Massey University

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ABSTRACT

Knowledge about consumer food choices is fundamental to many areas of research and practice. Food choices can only be fully understood by identifying and measuring sensory and cognitive factors from the consumer's perspective and interpreted with reference to the context in which the food is to be used or consumed. Experimental choice analysis is a technique which integrates conjoint analysis with probabilistic discrete choice theories to investigate influences on consumer choices. This technique was applied and evaluated, in conjunction with qualitative research, to investigate consumer choices for yoghurt. Multiple sets of experimentally designed product alternatives were presented to consumers, and the impact of, and interaction between, different product features determined using a multinomial logit model. Choices for five different use contexts were made on the basis of product descriptions only, blind tasted products and the combined product (information plus tasting). Features to be manipulated for labels and products were sweetness and fat content, each at two levels. Label only attributes included statements related to acidophilus and no additives product features. The results demonstrated that consumers' choices, based on the attributes of the product, vary with different intended use contexts. Context-specific interactions were noted between fat content and sweetness. This suggested that consumers do not always assess product features independently or consistently, and interactions should be incorporated in research designs wherever possible. Participants' frequency of use and degree of health concern were incorporated into the model as interactions with attributes and these significantly improved the model over base models. Combined with the results of the qualitative studies, a comprehensive picture of how consumers' use of yoghurt affected their choices was obtained. This approach can provide valuable information for product development decisions and may be a step towards developing more integrated research methodologies for investigating consumer food choices.

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