

Visual attention to probiotic milk labels: Application of eye-tracking and change detection

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Functional foods are one of the most dynamic and innovative categories in the food industry. Food choice is a complex process affected by numerous factors. Labels can largely influence consumers' purchase decisions of functional foods by providing key information, generating expectations and attracting consumers' attention in the point of sale. Therefore, a deeper understanding of motives underlying consumers' willingness to purchase functional foods is necessary. In this context, the aim of the present work was to study consumers' attention to functional food labels, and particularly to evaluate differences between regular and functional products, using probiotic milk as case study. Four labels were designed considering two types of product (regular milk vs. probiotic milk) and two label backgrounds (Background A: to elicit associations related to milk and nature, while Background B: to generate expectations of health and wellbeing). Sixty consumers were asked to look at food labels, while their eye movements were recorded using an eye-tracker, and to complete a word association task. Then, they had to complete eight flicker change detection tasks, involving four different changes on key aspects of the labels (brand, type of product, type of microorganism and health claim), for each label background. Visual processing of the labels was not largely affected by type of product and label design. The areas of the labels with the highest attentional capture were brand, nutritional information, type of product and a recommendation on product consumption for specific consumer segments. Health claims were not comprehensively processed, probably due to the high information density of this area. Besides, consumers' health-related associations were generated by graphic design and not by the functional aspect of the products, suggesting that graphic design should be regarded as a strategy to generate health-related associations in consumers. Recommendations for the design of functional food labels are discussed.