Application of reaction times to study consumers’ perception of nutrition labelling

Despite the increasing interest in healthy eating, consumers have been reported to rarely look at nutrition labels when shopping, being lack of attention one of the causes for this phenomenon. The aim of this work was to evaluate the influence of the format of nutrition labels on consumer’ attentional capture.

Sixteen labels for two products (yogurt and pan bread) were created following a four 2-level factors full factorial design. The selected factors were: label background (two different images), type of product (regular vs. low fat or low salt), nutrition information format (panel vs. linear), and traffic light system (present vs. absent). The labels were presented to 114 consumers on a PC screen in random order for each product. Respondents completed 36 trials, including 4 dummy ones, divided in two sessions. First, participants had to decide whether the fat content of each yogurt was medium or low. Next, the same task was repeated for the salt content of pan bread. Finally, consumers had to answer several questions regarding their use of nutrition labelling. Participants’ responses and the elapsed time were recorded using specific software. Data analysis was carried out using analysis of variance and Cochran’s Q test. The percentage of correct classifications ranged from 64% to 91%, not significantly depending on any of the evaluated label characteristics. On the other hand, the variables nutrition information format and traffic light system had a significant effect on response times. Consumers classified the products significantly faster (p<0.05) when nutrition information was presented in panel format and when the traffic light system was present. This indicates that the format of nutrition information has a significant impact on consumers’ attentional capture.

Results indicate that measuring response times could be an interesting approach to study how different packaging characteristics impact consumers’ attentional capture, and particularly how different labelling strategies could help to promote healthier food choices.