The Impact of Artificial Intelligence on Food Nutrition

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Abstract : Nutrition labels are diet-related health policies. They help individuals improve food-choice decisions and reduce intake of calories and unhealthy food elements, like cholesterol. However, many individuals do not pay attention to nutrition labels or fail to appropriately understand them. According to the literature, thinking and cognitive styles can have significant effects on attention to nutrition labels. According to the author's knowledge, the effect of global/local processing on attention to nutrition labels has not been previously studied. Global/local processing encourages individuals to attend to the whole/specific parts of an object and can have a significant impact on people's visual attention. In this study, this effect was examined with an experimental design using the eye-tracking technique. The research hypothesis was that individuals with local processing would pay more attention to nutrition labels, including nutrition tables and traffic lights. An experiment was designed with two conditions: global and local information processing. Forty participants were randomly assigned to either global or local conditions, and their processing style was manipulated accordingly. Results supported the hypothesis for nutrition tables but not for traffic lights.

Keywords : nutrition, public health, SA Harvest, foodeye-tracking, nutrition labelling, global/local information processing, individual differences mobile computing, cloud computing, nutrition label use, nutrition management, barcode scanning

Conference Title : ICFSN 2024 : International Conference on Food Science and Nutrition

Conference Location : New York, United States **Conference Dates :** December 09-10, 2024