

Title:

Attentional capture and understanding of front-of-pack nutrition labels: Insights from visual search and eye-tracking

Authors & affiliations:

Lucía Antúnez¹, Gastón Ares^{1,2}, Ana Giménez^{1,2}, Alejandro Maiche²

*(1) Departamento de Ciencia y Tecnología de Alimentos, Facultad de Química.
(2) Centro de Investigación Básica en Psicología (CIBPsi), Facultad de Psicología
Universidad de la República, Uruguay
luchiantun@hotmail.com*

Abstract: (Your abstract must use **Normal style** and must fit in this box. Your abstract should be no longer than 300 words. The box will 'expand' over 2 pages as you add text/diagrams into it.)

The addition of nutritional information to food labels is one of the approaches that has been implemented to encourage people to make healthier food choices. However, several studies have demonstrated that conventional nutrition labelling is difficult to find and understand, even for health-motivated consumers. Front-of-pack nutrition labels have been incorporated to rapidly catch consumer attention and facilitate the comprehension of nutritional information. In this context, the aim of the present work was to study, by means of visual search and eye-tracking, the attentional capture and understanding of different kinds of front-of-pack nutrition labels.

Four labels were evaluated: traffic light system, monochromatic traffic light system, GDA system and colour-coded GDA. Two separate studies were carried out. In the first study attentional capture was evaluated by means of visual search technique. Ten people, previously trained in the methodology, evaluated sets of three, five and eight mayonnaise labels and indicated if any label was low in fat. In the second study, consumer understanding of nutritional information on mayonnaise labels was evaluated. Fifty three consumers were asked to answer a set of questions about the nutritional content of the labels while their movements were recorded using an eye-tracker.

Response times were significantly higher for front-of-pack signposts without colour code, suggesting that colour increased attentional capture. Besides, traffic light system was the scheme with the lowest response times. Results of the eye-tracking study showed a lower percentage of incorrect answers (34% vs 42%) for signposts in which nutrient level was indicated using a phrase. Consumers made more and longer fixations and more visits on labels in which nutrition information was presented under GDA system compared to traffic light system. These results showed that traffic light system was more efficient than GDA in increasing attentional capture and consumer understanding of nutritional information.