

How to communicate the healthiness and sustainability of foods to consumers?

Luca Muzzioli^a, Eleonora Poggiogalle^a, Lorenzo M. Donini^a, and Alessandro Pinto^{a,1}

Climate change is undeniably one of the most pressing issues of our time, with accumulating evidence concerning healthy diets and their environmental impact in terms of sustainability (1). Novel findings from this research field raise the parallel need to educate consumers using simple tools that can be applied directly to food packaging. Among the emerging tools, front-of-pack labels (FOPLs) have been designed for the ease of reading to help customers make informed food choices (2–4). However, the question is still open on how the features of food quality, nutritional value, and sustainability can be combined and integrated. A graphical abstract summarizing the various messages conveyed by 12 different food label categories is shown in Fig. 1.

In this light, we read with interest the article by Clark et al. (5), who developed a useful tool for calculating the environmental impact of packaged food without performing lengthy and costly life cycle assessments. The authors then attempted to combine the newly developed environmental score with a nutritional score based on the so-called Nutriscore. Given the numerous retrospective studies on the relationship between the Nutriscore labeling and healthy individual dietary patterns (6, 7), we would have expected low-impact healthy foods to occupy the bottom-left quadrant of the plot when the two variables were combined, while high-impact unhealthy foods occupy the top-right quadrant. Conversely, food categories appear to be distributed in a cloud-like shape, making their

interpretation quite difficult. Because the close relationship between some healthy diets (e.g., the Mediterranean diet) and a low-carbon footprint has been well studied and thoroughly assessed (8), our comment is that figure #4 on page 7 in Clark et al. (5) does not show a definite pattern of relationship because the dietary score is obtained computing foods on a 100-g scale reference. The 100-g scale does not accurately mirror actual consumption in the dietary pattern, which is a product of portion size by frequency. This fact, in our opinion, may not yield conclusive results (9).

In light of these considerations, the purpose of the present letter is to reopen a scientific debate, which was first addressed more than a decade ago by Scarborough et al. (10), in order to develop new methods for communicating information to

Author affiliations: ^aDepartment of Experimental Medicine, Section of Medical Pathophysiology, Food Science, and Endocrinology, Research Unit of Food Science and Human Nutrition, Sapienza University, 00185 Rome, Italy

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¹To whom correspondence may be addressed. Email: alessandro.pinto@uniroma1.it.

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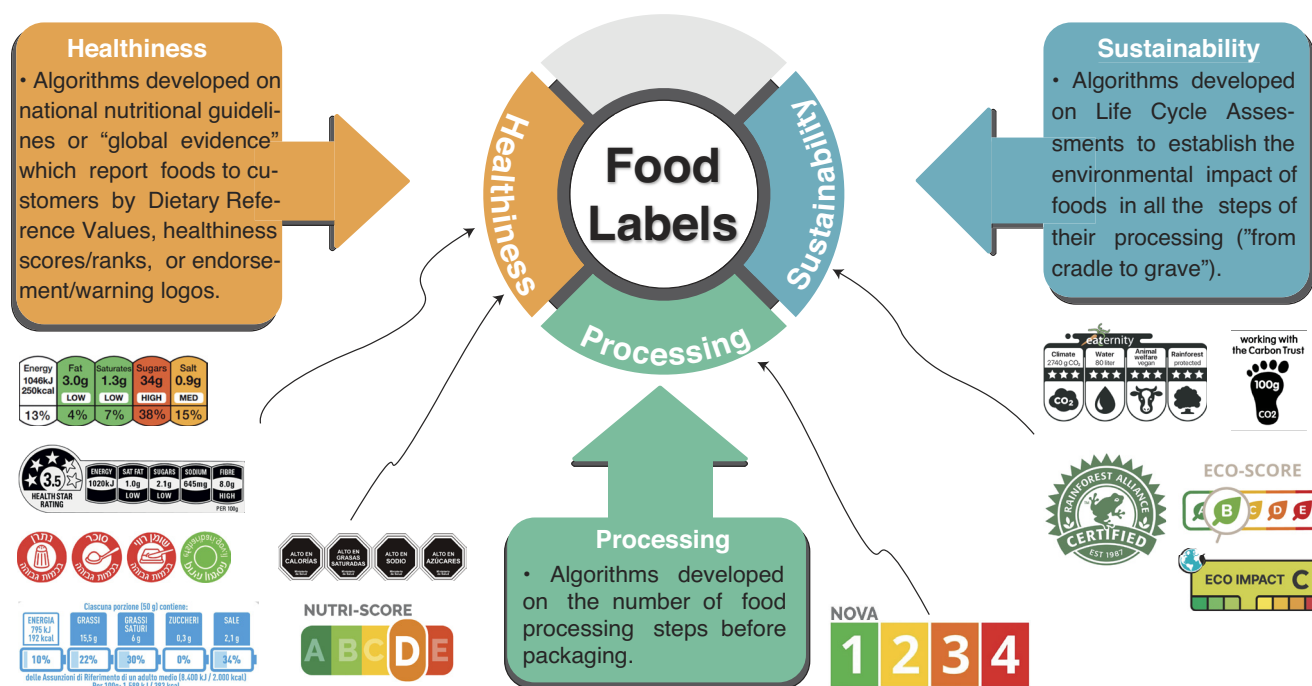


Fig. 1. A graphical abstract summarizing the various messages conveyed by FOPLs and other labels regarding food healthiness, processing, and sustainability.

consumers in a simple, intuitive, and scientific fashion. Future research should focus on understanding whether and how existing FOPLs can convey additional messages; otherwise,

using multiple labels on the package may compromise the intuitiveness and simplicity that are the main points of strengths of those tools.

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