

## The future of environmental sustainability labelling on food products



If each of us were to consider the food we had for lunch, we can probably estimate whether it was relatively healthy (eg, did we go hungry, or did it add to the variety of our diet or our consumption of five fruits and vegetables a day?). How easy is to make a similar judgement on whether our lunch contributed to a sustainable diet? For example, the carbon emissions associated with a simple sandwich can more than double depending on the filling, where it is made, the packaging used, and many more factors.<sup>1</sup> Drawing on experiences of nutrition labelling on food products, we consider whether sustainability labelling can provide a practical route to encourage sustainable food choices, sustainable market changes, and a move towards sustainable and healthy food systems.

Sustainability labelling on food products is most commonly associated with social and ecological certification schemes (eg, US Department of Agriculture Organic Seal, Fairtrade mark, Friend of the Sea).<sup>2</sup> More recently, an increasing number of labels have emerged that estimate the effect of a product on one or more environmental factors, such as carbon footprinting as a marker of greenhouse gas emissions or climate change.<sup>3</sup> Research suggests that there is a demand for these different types of sustainability labels; yet, it is uncertain whether these labels will affect people's everyday selections and purchases of food.<sup>4</sup>

Price, taste, brand, appearance, product familiarity, and habits remain dominant reasons for food choices; however, over 20 years of research indicates that nutrition labelling can drive healthy food choices and incentivise product reformulation.<sup>5</sup> In 2019, a meta-analysis<sup>5</sup> investigated the effect of nutrition labels on food products and menus (including a variety of nutrient content labels, claims, logos, or indices, such as warning labels and traffic light labels). The authors concluded that labels had a small effect that can reduce total energy and fat consumption, increase vegetable intake, and positively effect industry reformulation for sodium and trans fat content.<sup>5</sup> Further research is ongoing regarding whether these effects follow a social gradient and compound diet-related health inequalities (eg, regarding reformulated so-called

healthier products, which are added to a range at a higher price point or available only in higher income countries; and regarding the numeracy skills that are required to interpret health indicating labels).<sup>6</sup>

Food labelling has become part of the food system infrastructure, and yet there are challenges with governing this sector. Voluntary recommendations and mandatory regulations are used to facilitate international and national trade (eg, country of origin requirements by the UN Food and Agriculture Organisation and WHO Codex Alimentarius food labelling standards) and to signify quality assurance, safety, and traceability standards (eg, declaration of trans fatty acids content). Ensuring compliance with regulations requires considerable resources from those responsible for governing the food system. The European Food Safety Authority (EFSA) has been harmonising and adapting food labelling regulation since 2006 to keep pace with a proliferation of food labels in the market. EFSA now requires a portfolio of evidence from each manufacturer to authorise the use of a health or nutrient claim on their food product. This strategy exists to preserve fair competition within the food industry and to monitor the validity of claims to protect the public from being misled. Producing and reviewing these portfolios has taken considerable resources for both EFSA and the food industry. It is worthwhile to consider whether existing regulations and regulatory resources are sufficient to monitor sustainability claims if they were to become more widespread.

Trust and transparency in any labelling scheme is essential for it to be meaningful and motivate change in individuals or industries. There has been confusion surrounding the use of the term organic on food products. These products can be ascribed what is known as a health halo. This health association with organic produce is probably more associated with the values placed on organic production practices than with the food itself, as there has been limited evidence to date suggesting a superior nutritional quality of organic products. The use of certification schemes can encourage transparent standards, but this benefit is less clear with schemes (eg, Fair Trade) that have been brought in-house, when products are self-certified

rather than part of an independent certification scheme. It is difficult to discern the sustainability of a product at the point of purchase and maintaining the trust and transparency of different sustainability indices or metrics across inconsistent product categories will be paramount to ensuring accountability for food fraud or the use of exploitative marketing techniques.<sup>7</sup>

A major challenge with sustainability labelling of food products is the complexity of the sustainability concept itself, as well as the food system within which it operates. Sustainability is multifaceted and sustainable food systems represent not only environmental factors (ecology), but are also sensitive to the health of the population today and in the future (nutrition, food security), and society as a whole (ethics and social welfare). Food systems themselves are also dynamic and complex, involving a multitude of changeable and inter-related activities, actors, and infrastructure from the production to the consumption and recycling or disposal of food. At every point there can be multiple environmental effects related to biodiversity, greenhouse gas emissions (eg, carbon dioxide, methane), and the use of land, water, or other resources (eg, nitrogen or phosphorous management). All these factors complicate the ability to create a metric or index that can trace a product as it journeys through the food system to assess its environmental, health, or social impacts.

Creating food systems that provide healthy food to everyone today and in future generations without exploiting human or planetary resources is one of the greatest challenges of this century. The development and use of sustainability labelling has the potential to play a role in moving towards sustainable and healthy food systems and a sustainable future, as outlined in the aims of the UN Sustainable Development Goals. The reach of food labelling is considerable and could increase public awareness of how food is produced and consumed. Nutrient labelling remains a popular public health intervention, with mandatory nutrition labelling in at least 50 countries worldwide while highly processed and packaged foods make an ever greater contribution to the global diet (eg, in a sample of 16 countries, more than 85% of packaged food carried a nutrient label, health or nutrition claim, or a health or nutrition marketing claim).<sup>8,9</sup>

Experiences with nutrition labelling provide various reasons to be cautious about the rise in sustainability

labelling. First, sustainability labelling is unlikely to be a panacea for behaviour change in consumers. Instead, it can target small incremental changes in different levels and actors in the food system, within both individuals and organisations. Second, there is the potential for confusion with sustainability concepts, which can be exploited for commercial or political use, particularly where competing interests are present. The media and public attention on climate change and the rise in sustainability labelling of food products provide an opportunity to develop food system analytics and sustainability metrics. Using these metrics, actors within the food system will be better equipped to communicate the nuances and evaluate the risks and trade-offs of system-wide interventions, and ultimately contribute to the evolution of sustainable and healthy food systems.

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