

Modelling the impact of different front-of-package nutrition labels on mortality from non-communicable chronic disease

Front-of-pack nutrition labelling has been identified as a potential tool to reduce the burden of diet-related non-communicable diseases. Indeed, evidence suggests that it could “improve the nutritional quality of purchases and has been associated with improved diet quality, which is in turn associated with reduced risk of non-communicable diseases.” Globally, a number of different labelling schemes co-exist and they differ both in their format as well as in the type of information they convey. The objective of this study was to “estimate the potential impact of several different front-of-pack labelling designs on mortality from chronic diseases in the French population using a macro-simulation model.”

Based on previously conducted experimental studies, the study looked at five labels: Nutri-Score, Multiple Traffic Lights, Reference intakes, Health Star Rating system and SENS. Then researchers incorporated the data on the diet behaviours of the French population in general. Based on general diet behaviours of the French population, the researchers calculated how the labels would change calorie and nutritional intake. Overall the front-of-pack nutritional labels were “associated with a decrease in the amount of energy, fat, SFA, and salt, -except for the SENSE label -, and an increase in fibre and vegetable – except for the Multiple Traffic Light label.” Additionally, a significant consumer response was noted for each of the labels. The uniqueness of this study is that it was “the first to assess the direct impact of public health measure such as front-of-pack nutritional labelling on mortality from chronic diseases.” This macro-simulation study therefore highlights the potential benefits of front-of-pack nutritional labelling and its ability to reduce a large number of preventable deaths. Furthermore, it highlighted the superiority of Nutri-Score with regards to reducing mortality from diet-related non-communicable diseases and improving the general nutritional status of populations.

Reference: Egnell, M. et al. Modelling the impact of different front-of-package nutrition labels on mortality from non-communicable chronic disease. *International Journal of Behavioral Nutrition And Physical Activity*. 2019;16(1):56. <https://doi.org/10.1186/s12966-019-0817-2>