Consumption of Foods With Lower Nutri-Scores Associated With Higher Mortality

A new study has looked at the link between the nutritional quality of food products and mortality. © Adobe

Consuming food products that rank lower on the nutritional quality score underlying the Nutri-Score logo is associated with higher mortality, according to the European cohort EPIC. These findings, obtained by researchers from Inserm, Inrae, Cnam and Université Sorbonne Paris Nord, in collaboration with researchers from the International Agency for Research on Cancer (WHO/IARC), confirm the relevance of Nutri-Score in the context of public health policy. The study was published on September 17, 2020 in the British Medical Journal (BMJ).

While it is now well established that a diet lower in sugars, saturated fats, salt and energy and higher in fiber, fruit and vegetables is better for health – helping to prevent the risk of chronic conditions, such as cancer or cardiovascular diseases – putting these recommendations into practice remains a major challenge.

With this in mind, the Nutri-Score logo was developed to help consumers choose foods with a better nutritional quality at the point of purchase and to incentivize manufacturers to improve the nutritional quality of their products. Nutri-Score is a front-of-pack label that uses 5 colors and provides information on the nutritional quality of food products: from category A (dark green) indicating higher nutritional quality to category E (dark orange) indicating lower nutritional quality. The colors used by Nutri-Score are attributed on the basis of Food Standards Agency nutrient profiling system, modified version (FSAm-
NPS) scores, which reflect the nutritional profile of foods according to their content (per 100 g) in terms of energy, sugars, saturated fatty acids, sodium, protein, fiber and fruit and vegetables.

A number of studies published in international scientific journals have shown the validity of the FSAm-NPS score in characterizing the nutritional quality of food products as well as the efficacy of Nutri-Score in guiding consumers towards more nutritious choices. In particular, links between the consumption of foods whose FSAm-NPS scores indicate higher nutritional quality (reflected in higher Nutri-Scores) and better health have so far been observed in France (SU.VI.MAX and NutriNet-Santé cohorts), the United Kingdom (Whitehall II and EPIC-Norfolk cohorts) and Spain (SUN cohort).

The aim of the new study published in the BMJ and conducted by the Nutritional Epidemiology Research Team (EREN) at the Epidemiology and Statistics Research Center - Université de Paris (Inserm/Inrae/Cnam/Université Sorbonne Paris Nord) was to look for links between the FSAm-NPS scores of the foods consumed and mortality within a very broad population distributed across 10 European countries. It follows on from a study published in 2018, which was conducted in the same population in relation to cancer risk.

In total, 501,594 participants from the European Prospective Investigation into Cancer and Nutrition (EPIC) cohort were included in the analyses. During the 1992 to 2015 follow-up period, 53,112 participants died of non-accidental causes (including cancer and diseases of the circulatory, respiratory and digestive systems). The researchers show that those participants who consumed on average more foods with FSAm-NPS scores indicating lower nutritional quality (reflected in lower Nutri-Scores), presented higher mortality (total mortality and mortality linked to cancer and diseases of the circulatory, respiratory and digestive systems). Findings which were statistically significant once a large number of sociodemographic and lifestyle characteristics were taken into account.

Nutri-Score was officially adopted in France in 2017 and since then by various other European countries (Belgium, Spain, Germany, Netherlands, Switzerland and Luxembourg). Nevertheless, under current European labeling regulations the inclusion of this logo is optional and as such depends on the willingness of the food manufacturers. Although over 350 companies and brands so far have undertaken to include Nutri-Score on their products, one crucial point remains the necessity, in the near future, for Europe-wide harmonization making it mandatory to implement an effective and useful logo for consumers. This harmonization is envisaged for the year 2022 as part of the Farm to Fork strategy presented in May by the European Commission.

"In this context, our findings, combined with the various other findings available on the subject, help to show not just the capacity of FSAm-NPS and Nutri-Score to characterize the nutritional quality of foods but also the relevance of their use in the context of public health policies aimed at guiding consumers towards healthier food choices in order to prevent chronic diseases," emphasize Inserm researchers Mélanie Deschasaux and Mathilde Touvier, who coordinated the study.

Sources

Title: Association between nutritional profiles of foods underlying Nutri-Score front-of-pack labels and mortality: EPIC cohort study in 10 European countries
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