



Summer Conference 2023, 3-6 July 2023, Nutrition at key stages of the lifecycle

Do foods sold in Portugal meet the international sodium benchmarks? A case-study of a national food retail company

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An excessive salt intake is a risk factor for hypertension and cardiovascular disease, which is a leading cause of death globally⁽¹⁾. Several efforts have been made to revert this trend, including the definition of a global sodium benchmark (SB) for different food categories proposed by the World Health Organization (WHO)⁽²⁾, that establish a maximum content of sodium for each subcategory of products (mg/100g). The aim of this investigation was to compare the sodium content of own brand foods from a Portuguese food retail chain with global benchmarks for different food categories.

From the own brand foods available for sale during 2020 and 2021 of the partner food retail chain, which is a national market leading company, were included in this study the following: bakery and fine pastry products; savory snacks; breakfast cereals; cheese; ready-made prepackaged meals (excluding take-away); butter and other fats; processed meat and fish; processed fruit, vegetables, and legumes; plant-based foods and sauces. The salt content (g) of packaged foods was provided by the food retail company and was converted to sodium (mg). For non-packaged products, sodium was estimated based on food composition tables. Foods were classified into subcategories according to the WHO global sodium benchmarks. Median sodium content and the percentual difference between the median value and the respective benchmark were calculated for each subcategory.

A total of 1031 products from 54 subcategories were analyzed. Almost 60% of food categories had a median sodium content higher than the benchmark. Particularly, from the analyzed food categories (excluding foods used as ingredients), "Canned vegetables and legumes" was the subcategory with the highest median sodium content comparing to the SB (+460%), followed by "Soups (concentrated)" (+307%) and "Pies and pastries" (+136.7%). On the other hand, "Minimally processed breakfast cereals" was the subcategory with the lowest median sodium content comparing to the SB (-96%), followed by "Frozen potatoes and other potato products (ready-to-eat)" (-69%) and "Whole muscle meat products, heat treated (refrigerated products)" (-65%).

The median sodium content per 100 g of most food categories exceeded international benchmarks, proving the existence of a gap between guidelines and reality. This worrying result may open a window of opportunity for food industry to act. Future research should assess a wider variety of brands to draw definitive conclusions about the need of establishing adequate food legislation focusing on the reduction of foods' salt content. A more insightful complementary analysis that addresses the usual consumed portion sizes of each food would be highly valuable to predict the magnitude of the impact of foods' sodium guidelines compliance on the reduction of the burden of cardiovascular diseases.

Acknowledgments

Funding sources: This study was financed through national funding from the Foundation for Science and Technology—FCT (Portuguese Ministry of Science, Technology and Higher Education), under the projects UIDB/04750/2020 and LA/P/0064/2020 2020. Individual PhD grant attributed to Carla Almeida (2020.08208.BD) was funded by FCT and the "Programa Operacional Regional Norte" (NORTE 2020/FSE). The funders had no role in the design, analysis or writing of this paper.

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