

MDPI

Abstract

## Reformulation of Food Products on the Italian Market within the OnFoods Project: The EFFORT Study †

Daniela Martini <sup>1,\*</sup>, Massimiliano Tucci <sup>1</sup>, Cristian Del Bo' <sup>1</sup>, Daniele Del Rio <sup>2</sup> and Patrizia Riso <sup>1</sup>

- Division of Human Nutrition, Department of Food, Environmental and Nutritional Sciences (DeFENS), University of Milan, 20133 Milan, Italy
- <sup>2</sup> Human Nutrition Unit, Department of Food and Drug, University of Parma, 43124 Parma, Italy
- \* Correspondence: daniela.martini@unimi.it
- † Presented at the 14th European Nutrition Conference FENS 2023, Belgrade, Serbia, 14–17 November 2023.

Abstract: Sodium, sugar and saturated fat (SFA) intake in the Italian population is still higher compared to the dietary recommendations, while fiber intake is far below, especially in specific target groups. An inadequate intake of these components is associated with an increased risk of non-communicable diseases. In many developed countries, including Italy, a significant proportion of sodium, sugar and SFA in the diet comes from packaged foods added by manufacturers, while fiber content is often low also in products belonging to food groups naturally rich in fiber such as cereal-based foods. Thus, an effective strategy to reduce the intake of sodium, sugar and SFA and to increase fiber intake could be the reformulation of foods that are frequently consumed by the Italian population and therefore contribute to most of the intake of these components. Within the OnFoods project, funded under the National Recovery and Resilience Plan, the collaborative research initiative EFFORT has been developed, with the intention of investigating the impact of food reformulation on nutrient intake. The project will consist of various operational steps: (i) Identification of the main categories of products contributing to salt, SFA, sugar and fiber intake in the Italian population by considering the actual food consumption; (ii) Quantification of salt, SFA, sugar and fiber content in food products currently on the Italian market; (iii) Reformulation of food products to reduce salt, SFA and sugar content and increase fiber content; (iv) Evaluation of the potential impact of the inclusion of reformulated food products on nutrient intake in the Italian population based on actual food consumption data. The project will enable us to simulate the practical benefits in terms of diet quality achieved through the reformulation of several food categories. For instance, a first pilot study has shown that the only reformulation of shortbread biscuits may reduce the sugar intake by up to 1.65 g/day. The collaboration with food companies will be pivotal to increase the availability and analysis of data from the Italian market and to optimize the use of results in order to design accessible, affordable and acceptable new food products with implemented nutritional quality.

Keywords: food reformulation; nutrient intake; food labeling; nutrients; nutritional quality

**Author Contributions:** Conceptualization, D.M. and P.R.; methodology, D.M., M.T. and C.D.B.; formal analysis, D.M. and M.T.; investigation, D.M., M.T. and C.D.B.; data curation, D.M.; writing—original draft preparation, D.M. and M.T.; writing—review and editing, P.R., C.D.B. and D.D.R.; supervision, P.R. and D.M.; funding acquisition, P.R. and D.D.R. All authors have read and agreed to the published version of the manuscript.

**Funding:** The study was funded under the National Recovery and Resilience Plan (NRRP), Mission 4 Component 2 Investment 1.3—Call for proposals No. 341 of 15 March 2022 of Italian Ministry of University and Research funded by the European Union—NextGenerationEU, Award Number: Project code PE00000003, Concession Decree No. 1550 of 11 October 2022 adopted by the Italian Ministry of University and Research, CUP D93C22000890001, Project title "ON Foods—Research and innovation network on food and nutrition Sustainability, Safety and Security—Working ON Foods".



Citation: Martini, D.; Tucci, M.; Del Bo', C.; Del Rio, D.; Riso, P. Reformulation of Food Products on the Italian Market within the OnFoods Project: The EFFORT Study. *Proceedings* **2023**, *91*, 262. https://doi.org/10.3390/proceedings2023091262

Academic Editors: Sladjana Sobajic and Philip Calder

Published: 5 February 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Proceedings **2023**, 91, 262

Institutional Review Board Statement: Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.