

## CONSUMER BEHAVIOR RELATED TO IODINE-RICH FOODS INTAKE IN THE REPUBLIC OF MOLDOVA

Oxana N. Radu<sup>1\*</sup>, Tatiana N. Capcanari<sup>1\*</sup>, Aurica Iv. Chirsanova<sup>1\*</sup>, Eugenia F. Covaliov<sup>1\*</sup>, Violina Ar. Popovici<sup>1\*</sup>

<sup>1</sup>*Faculty of Food Technology, Technical University of Moldova,  
Stefan cel Mare 168 street, Chisinau, Republic of Moldova*

\*Corresponding author: [oxana.radu@sa.utm.md](mailto:oxana.radu@sa.utm.md)

Iodine is one of the vital microelements with high biological activity, 90% of which is provided by the use of products rich in iodine. The problem of iodine deficiency is especially relevant in the Republic of Moldova, in which, according to UNICEF data, at least 85% of the population are at risk of iodine imbalance diseases. The national program for the eradication of iodine deficiency disorders by 2015 was mainly focused on the universal iodine fortification of food salt because of its availability, widespread popularity among the population, and simplified technology of obtaining. However, there is a lot of controversial information about the lack of effectiveness of this strategy. It is known that iodine from salt evaporates during heat treatment and at the slightest breach of storage conditions. Furthermore, according to the latest WHO recommendations, the rate of salt intake should be reduced by two times (from 11 to 5 g per day), which contradicts the need to maintain a constant level of salt intake to replenish iodine deficiency.

One of the solutions to this problem may be to inform the population about iodine-rich foods and their correct use, taking into account the age, gender, citizens residence region and professional activities. According to the data obtained during the population survey in the period January – May 2021, about 67% of respondents use iodized salt in their daily diet, while the prevention program is considered effective if more than 90% of the population consumes iodized salt. The majority of respondents (namely 77.3%) indicated that they were familiar with the problem of iodine deficiency and mostly prefer to consume foods containing iodine (56.5%) or foods fortified with iodine (40.1%) to prevent iodine deficiency diseases. To inform consumers about the content of iodine that they may receive with each product, it is recommended to provide the information on food labels.

**Keywords:** essential mineral, population survey, iodine deficiency, iodized salt

**Acknowledgment:** The research was funded by State Project 20.80009.5107.09 “Improving of food quality and safety through biotechnology and food engineering”, running at Technical University of Moldova.