

Mercury exposure through fish consumption in Portugal – Need of Public Health Interventions

G. Henriques¹, J. Mota¹, M. Pimenta¹, S. Viegas^{2,3}

¹Environmental Health Students, Escola Superior de Tecnologia da Saúde de Lisboa; ²H&TRC-Health & Technology Research Center, ESTeSL- Escola Superior de Tecnologia da Saúde, Instituto Politécnico de Lisboa; ³Centro de Investigação e Estudos em Saúde Pública, Escola Nacional de Saúde Pública, ENSP, Universidade Nova de Lisboa, Lisbon, Portugal;

In Portugal, fish consumption has a significant role on daily diet. The Portuguese consume an average of 61.5 kg of fish per person/year, being the country with higher consumption in the European Union, and in the world, after Korea (78.5 kg per person/year) and Norway (66.6 kg per person/year).

It's well known that fish is rich in omega 3, which has valuable effects on adults and children, since that benefits in multiple ways our health.

However, human exposure to the most toxic and abundant form of environmental mercury (Hg) occurs mostly through fish consumption.

Accordingly with European regulation, the maximum allowable value of mercury in fish for consumption is 0.50 mg/kg and 1.0 mg/kg for predatory fish.

Considering the above, the aim of our work was to compare the Hg values reported in Portuguese food in scientific publications with the European reference values.

Additionally, the values found will be used to estimate exposure and the health effects for specific population groups, such as pregnant women and unborn child.

A detailed literature search of PubMed will be performed using various combinations of corresponding descriptors and free text terms such as Hg, fish contamination, food and Portugal. To restrict the results, the search will be limited to studies published in English from January 2000 up to and including June 2019. Additional inclusion criteria will be, studies with quantitative data of Hg contamination in food from Portuguese markets.

This study will deliver relevant information to support Public Health interventions related with population education and counseling. Additionally, this exploratory study will allow identifying which are the research needs for Portugal concerning the exposure to Hg and the related health effects.