**A NEW HUMAN BIOMONITORING STUDY IN GREEK PREGNANT WOMEN IN THE FRAME OF HBM4EU-MOM STUDY EXPLORING THE MERCURY EXPOSURE**

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**ABSTRACT**

Mercury and its compounds are toxic and placed among the most important substances of global importance. Toxicity depends on mercury compounds, route of exposure and duration. The European population is mostly exposed to organic mercury (mercury-MeHg monomers) due to fish consumption; while exposure to inorganic and elemental mercury is largely associated with dental amalgams, accidental spills of elemental mercury, and food produced in contaminated sites.

Previous studies have shown that mercury levels in European population are higher in countries with higher fish consumption. However, because of the provided beneficial nutrients, fish are an essential component of the human diet. In order to reduce exposure and avoid adverse health effects, it is extremely important to balance the risks and benefits of eating fish, especially in vulnerable groups such as pregnant women.

Most European countries do not have official guidelines for the consumption of fish during pregnancy, and even if these guidelines exist, they are often not communicated to women in an appropriate way. As such, under the European Human Biomonitoring Initiative (HBM4EU) an intervention study – HBM4EU-MOM – is being developed in five European countries with high fish consumption (Cyprus, Greece, Iceland, Portugal, Spain) to help pregnant women reduce prenatal exposure, while ensure the nutritional benefits of fish by developing and raising awareness of specific recommendations for fish consumption during pregnancy.

This presentation will highlight the work performed, including the harmonized development of the intervention and support materials to be implemented in Greece, one of the afforemention countries. Preliminary results on the implementation of the developed intervention and its evaluation using Human Biomonitoring will be also presented.

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**KEYWORDS:** MeHg, Pregnat women, Intervention, Fish consumption