Mercury Contained in Fish may Contribute to Premature Birth

According to a recent American study, eating too much fish during pregnancy could be linked to high mercury levels in mothers, which in turn could put women at a higher risk of giving birth prematurely. Nevertheless, more research is needed in order to further test the reported association.

Pregnant women receive mixed messages about fish consumption. High levels of fish consumption during pregnancy have been associated with longer gestation, increased birth weight and cognitive abilities. These reported benefits have been attributed to large amounts of omega-3 fatty acids in fish. On the other hand, fish can also be potential sources of exposure to pollutants such as mercury. There is concern that levels of mercury, in particular methyl mercury, which are not toxic to adults, may pose a hazard to the developing foetus, i.e. cause severe neurological damage.

A recent American study has reported for the first time that mercury may pose yet another risk: premature birth. The scientists tested a group of 1024 pregnant women between their 15th and 27th weeks of pregnancy. Dietary consumption of fish was evaluated by in-person interviews, while hair samples were taken in order to establish total mercury levels in the mothers.

The results suggest that those women who ate most fish tended to have higher mercury levels in hair, a correlation that has been observed in previous studies conducted in Europe and South America. The greatest fish-related source of mercury exposure appeared to be canned fish. Furthermore, the scientists observed an association between delivery at less than 35 weeks’ gestation and maternal hair mercury levels at or above 0.55 parts per million (the average total mercury level was 0.29 parts per million).

According to the authors, the biological mechanism supporting this finding requires further investigation, but it was previously suggested that methyl mercury produces stress at the cellular level, which may be a contributing factor.

Nevertheless, since only 44 of the women gave birth before 35 week’s gestation (about four percent of the study population), the authors call for further research in order to replicate this finding.

This is the first large-community based study to examine the risk of preterm birth in relation to mercury levels among women with low to moderate exposure. The obtained results highlight the importance of considering both the potential risks as well as the benefits when advising pregnant women on fish consumption.


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