

Influence of Methylmercury on Fetal Growth and Development

Autores: Carla Mustra, Jessica Rodrigues, Natale Teixeira, Sílvia Gariso

Instituto Politécnico de Coimbra, ESTESC-Coimbra Health School, Dietética e Nutrição, Portugal

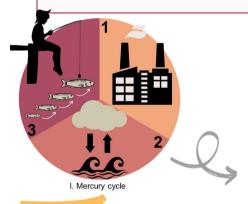
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Poster 32

Pregnancy is a period of great susceptibility of exposure to environmental contaminants, such as heavy metals, including methylmercury, since it can cross the placental and blood-brain barrier, impairing fetal growth and development [1-7].



- 1. Only metal liquid at room temperature. High volatility.
- 2. High mobility through the environment. Biotranformation in methylmercury by bacteria and absortion by animal tissue.
- 3. Bioacumulation along the food chain.

Understanding mercury metabolism and its impact on the health of pregnant women and fetal development. Identify foods with a higher risk of methylmercury contamination and propose healthier options.

Keywords

"prenatal Mercury exposure'

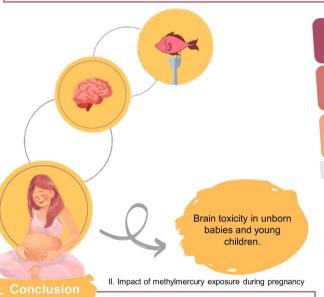
"methylmercury toxicity'

Scientific Databases

42 papers selected

31 articles analysed

Studies demonstrate a correlation between fish consumption and the levels of methylmercury in the body nd associate these levels with cognitive deficits in children whose mothers were excessively exposed to this element [8-11]. However, fish is also an important source of several essential nutrients, proteins, vitamins, minerals and fatty acids with a protective effect on exposure to mercury



- Inform pregnant women about the impact of mercury and primary sources [1,5,12,13];
- Raise awareness for the consumption of fish:
 - · Benefits for maternal and fetal health;
 - · Risks of contamination.

Fatty Acids

Vitamins and Minerals

Proteins

Methylmercury

III. Protective factors to methylmercury exposure



IV. High and low concentrations of mercury in fish



[1] Novo -P. Martine R. Rapozo RS. Pensin P.C., Orlá RB, Malve JD, et al. Cellular and molecular mechanisms mediating methylmercury neurotoxicity and neuroinflammation. In J. Mol Sci. 2021;22(6):1–25 [2]Rabton NVC, Kanelo JJ. Raymond LJ. Seisnium health bomefit values provide a reliable index of seatood benefits vs. risks. J Trace Elem Med Biol. 2019;55(January);50–7(5)Cesprints L. Rosolen V. Biggeri A. Rorfani L. Catelar D. Marius M. et al. The role of mercury, selection and the Se-Hg artisportium or cognitive neurotoxicity and neuroinflammation. In J. Mol Sci. 2021;22(6):1–25 [2]Rabton NVC, Kanelo JJ. Raymond LJ. Seisnium health bomefit values provide a reliable index of seatood benefits vs. risks. J Trace Elem Med Biol. 2019;55(January);50–7(5):Cesprint D. Marius M. et al. The role of mercury, selection and the Se-Hg artisportium or cognitive neurotoxicity and neuroinflammation. In J. Mol Sci. 2021;22(6):1–25 [2]Rabton NVC, Kanelo JJ. Raymond LJ. Seisnium health bomefit values provide a reliable index of seatood benefits vs. risks. J Trace Elem Med Biol. 2019;55(January);50–7(5):25(Seisnium A. Rosolen V. Biggeri A. Rorfani L. Catelar and molecular mechanisms mediating methylmore under the seatood benefits vs. risks. J Trace Elem Med Biol. 2019;55(January);50–7(5):25(Seisnium A. Rosolen V. Biggeri A. Rorfani L. Catelar and molecular mechanisms mediating methylmore under the seatood benefits vs. risks. J Trace Elem Med Biol. 2019;55(January);50–7(5):25(Paston N. Rosolen V. Biggeri A. Rorfani L. Rosolen V. Biggeri A. Rosolen V. Biggeri Hyg Environ Health [Internet], 2020/230113804; [4] So SCA, Tool MF, Cheung AJ, Cheung T, Cheung AJ, Cheung T, Cheung BMF, Blood and Unine Inorganic and Organic Mercury Levels in the United States from 1999 to 2018. Am J Med [Internet], 2020/230113804; [4] So SCA, Tool MF, Cheung AJ, Cheung T, Cheung BMF, Blood and Unine Inorganic and protective effects of the polen against prevatal methylmetrury induced neurotoxics in rat pups. Metab Brain Dis. 2020;35(1):215-24 [T/Camber S, Fujimura M, Bourdineaud JP. A likely placental barrier against methylmetrury in pregnant state exposed to fish-containing date. Food Chem Toxico [Imanes] 2018;12(3):548-99.09] Hobbes In Care Spring and Spring Spr pragramery and childhood and neurocognitive development. Two systematic reviews. Protagejandrines Leuket Essent Fat Acids (Internet), 2019; 151 (October); 14-36; [10] Reposo R ds S. Pricto DV, Moreira R. Disas SP, Pricto D tends, prevatal exposure and finis to focus from Long support and finis to focus finish consumption. In J. Circumptote Health [Internet]. 2018;77(1):1-8[12] Baddessingh GK. Wickliffer, van Eer ED. Sharkar A. Hindor-Hickbargoo AD. Harville EW, et al. Pernatal mercury exposure in pregnant women from surfaments in literior and its effects on birth outcomes. Int. J. Circumpton. (Availab. C. Availab. C.

