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## **Organochlorine exposure and pregnancy: The role of maternal body mass index, weight gain and fish consumption**

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Organochlorine compounds (OC), such as PCB and organochlorine pesticides, and their harmful effects on human have been extensively studied. OC are lipophilic substances accumulated in maternal fat stores. Furthermore, since a dramatic mobilisation of maternal fat stores occurs during the third trimester of gestation and lactation, mother, foetus and newborn are at risk. The objective of this study is to determine the effect of maternal BMI before pregnancy, weight gain, and fish consumption on circulating OC concentrations during pregnancy and in cord blood. Our multivariate analysis demonstrates that the BMI before pregnancy and the weight gain during pregnancy have significantly negative, but relatively small impact on maternal OC levels and no impact on cord blood OC levels compared to the effect of the maternal age. However, the fish consumption before pregnancy, especially of fresh market fish, was positively related to PCB concentrations at delivery. These results suggest that the obesity degree don't increase the circulating levels of OC in pregnant women.