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## ORIGINAL CONTRIBUTIONS

### Is High Consumption of Fatty Fish during Pregnancy a Risk Factor for Fetal Growth Retardation? A Study of 44,824 Danish Pregnant Women

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The authors examined the relation between fish consumption during pregnancy and fetal growth among 44,824 women from the Danish National Birth Cohort (1996–2002). They evaluated the associations between consumption of total fish, fatty fish, and lean fish in midpregnancy and birth weight, birth length, and head circumference among singleton full-term infants. Fish consumption was ascertained by food frequency questionnaire. The birth of infants classified below the 10th percentile for gestational age and gender was significantly increased among women who consumed more than 60 g of fish per day, as compared with women who consumed 5 g or less per day. Adjusted odds ratios were 1.24 (95% confidence interval (CI): 1.03, 1.49) for birth weight and 1.21 (95% CI: 1.01, 1.43) for head circumference. The adjusted odds ratio was borderline significant for birth length (odds ratio = 1.20, 95% CI: 1.00, 1.45). These increases in risk were followed by small decreases in average values for these growth measures. Furthermore, the inverse association for total fish consumption could be explained by consumption of fatty fish, while no association was found for lean fish. These results indicate that consumption of fatty fish, a known route of exposure to persistent organic pollutants, could be associated with reduced fetal growth.

birth weight; Denmark; diet; fetal development; fishes; pregnancy; seafood

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Abbreviations: CI, confidence interval; DHA, docosahexaenoic acid; EPA, eicosapentaenoic acid

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