Lifestyle Habits and Exposure to BPA and Phthalates in Women of Childbearing Age from Northern Italy: A Pilot Study.

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INTRODUCTION

Endocrine-disrupting chemicals (EDCs) are compounds that interfere with aspects of hormonal signalling. Considerable attention has been paid to their biological effects, especially in women of childbearing age or during pregnancy, as EDCs have been reported to cross the placenta and concentrate in the circulation system of the foetus. Lifestyle habits, daily consumption of packaged foods and use of healthcare/cosmetic products are associated with increased EDC levels. This cross-sectional research examined the EDCs' levels and the lifestyle determinants of EDC exposure in a cohort of women of reproductive age from Northern Italy.

METHODOLOGY

Forty-five women (median age: 36, IQR: 30–38) were evaluated for urinary bisphenol A (BPA) and phthalates levels and also examined for EDCs' major determinants of daily exposure; food consumption/diet, physical activity, smoking habits and weight.

RESULTS

Although 100 % of the women seemed to have been exposed to common sources of EDCs, they reported a healthy lifestyle. The multivariable model described a positive and significant association between consumption of sauces/dressings in plastic containers and monoethyl phthalate exposure ($p = 0.037$).

DISCUSSION

Since reproductive age encompasses a critical window for the future health and functioning of the ‘mothers-to-be’ and their children, future studies on prenatal dietary BPA and phthalate exposure and the role of consumer product choices in reducing such exposure are recommended.