

Title: Nutrient composition and mercury concentration in breast milk from lactating women living in post-conflict area in Colombia.

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Mercury concentration in breast milk (BM) is a concern in areas of gold mines, because of environmental risk and food consumption. **Objective:** To identify BM nutrient composition and mercury concentration in a sample of BM from lactating women in post-conflict area in Colombia. **Methods:** Information of socio-economic status was recorded. BM samples collected using Marmet technique, analysed for energy and macronutrients using MIRIS (BM) analyser, mercury concentration quantified using atomic fluorescence spectrometry. Mother´s weight and height were measured. BMI was calculated; food and nutrient intakes were analysed using a semi-quantitative food frequency questionnaire and a 24-hour recall. **Results:** BM samples from 13 lactating women aged 28 (±5.9) in 100ml report 74 (±11.0)kcal, protein 0.9 (±0.4)g, fat 4.3 (±1.3)g and carbohydrates 7.8 (± 0.6)g. Mercury concentration was 0.58 (± 0.1). 53.8% were overweight, 15.4% obese. Mothers consumed mostly fast food, sugary drinks and low dairy products, fruits and vegetables consumption. A significant positive correlation was found between mother´s BMI and fat content in breast milk (r= 0.583, p=0.05). There was no correlation between mothers' food consumption and mercury levels. **Conclusion:** Fat content in BM was correlated with mother´s BMI in lactating women with high prevalence of overweight and mercury concentration in BM was not associated with mother´s food consumption.

Bibliography

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