

## Psychosocial stress and cortisol stress reactivity predict breast milk composition

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## Maternal and infant anthropometrics

Maternal height was measured using a stadiometer. Weight and body fat were measured with Tanita SC-240 MA Body Scale (Tanita Corp., Japan). Infant weight was measured to the nearest 1 g by using a hospital analog infant scale. The supine length was measured to the nearest 0.1 cm using an infant measuring board (Seca GmbH, Germany).

## Breast milk sample analysis

### Content of macronutrients

Milk samples of 10 ml were slowly warmed to 40 °C before testing and homogenized with MIRIS Sonicator (an ultrasonic homogenizer) (1.5 s/1 ml ). Each sample was tested three times, using 3 ml of milk per one replication, and the average from 3 measurements was reported.

### Content of fatty acids

Separation was carried out under the following conditions: column HP-88 (100m x 0,250 mm x 0.20 µm), column temperature from 70°C (5min) to 240°C (4°C/min), the carrier gas - helium (20 cm/s), injection spray 1µl, 260°C, split 100:1. DHA and AA were identified based on retention times obtained for standards and by comparing their mass spectra with the standards.

### Salivary sample analysis

Enzyme-linked immunosorbent assays is a solid phase based on the principle of competitive binding. The optical density was determined with a microplate reader (LEDETECT96, Labexim Products, Austria) at 450 nm. The sensitivity provided by the manufacturer is 0,09 ng/ml, with a detection range of 0,09 - 30 ng/ml. All the analyzed samples fell into this range.