

# Effect of maternal smoking on offspring growth Efecto del tabaquismo materno en el crecimiento de sus hijos

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**Background:** Maternal smoking negatively affects birth weight, breast milk volume and growth at one month of age. **Aim:** To study the effect of maternal smoking on the growth of three month old infants.

**Subjects and methods:** Ten smoking and 10 non smoking mothers with one month old children, under exclusive breastfeeding, were selected for the study. Urinary cotinine levels in the mothers and children were measured to assess smoking. Two months later, children were reassessed.

**Results:** Smoking mothers consumed a mean of 6.5 cigarettes/day. Compared to non smokers, urinary cotinine levels were higher in these mothers ( $60 \pm 21$  and  $1428 \pm 716$  ng/ml respectively,  $p < 0.001$ ) and their offspring ( $21 \pm 20$  and  $156 \pm 101$  ng/ml respectively  $p < 0.001$ ). Compared with smokers, at three months of age, children of non smoking mothers had a higher average weight ( $5829 \pm 498$  and  $6325 \pm 427$  g,  $p < 0.02$ ). **Conclusions:** Measurement of urinary cotinine levels is a reliable and objective measure of maternal sm