

# Smoking during pregnancy and lactation and its effects on breast-milk volume

Vio,

Salazar,

Infante,

The influence of cigarette smoking on daily breast-milk volume was measured by the dose-to-mother deuterium-dilution method in 10 smoking and 10 nonsmoking mothers. After administration of deuterium to the mother, breast milk and infant saliva were sampled over 14 d and analyzed by mass spectrometry. Nonsmoking mothers had a significantly greater breast-milk volume than did smokers [ $961 \pm 120$  vs  $693 \pm 110$  g/d,  $x \pm SD$ ;  $t = 5.21$ ,  $P < 0.0001$ ). Growth rates of the infants were also measured. Weight increase of infants of nonsmoking mothers was  $550 \pm 130$  g whereas of infants of smoking mothers it was only  $340 \pm 170$  g ( $t = 3.11$ ,  $P < 0.01$ ). These results indicate that cigarette smoking has a negative influence on breast-milk volume whereas the lower infant-growth rates of the smoking mothers suggest also that their breast-milk output was insufficient to support the energy requirements of their infants.