

## **Duration of Lactation and Incidence of Myocardial Infarction In Middle-To-Late Adulthood**

**Alison M. Stuebe\***, Karin B. Michels, Walter C. Willett, JoAnn E. Manson, Kathryn Rexrode, Janet W. Rich-Edwards. Department of Obstetrics and Gynecology, Brigham and Women's Hospital, Boston MA.

**Background:** Lactation is associated with favorable maternal glucose and lipid metabolism and lower blood pressures. Women who have breastfed have a lower risk of type 2 diabetes. We hypothesized that lactation may also be associated with a lower risk of coronary heart disease.

**Methods:** We conducted a prospective observational cohort study of 88,908 parous women participating in the Nurses' Health Study from 1986 to 2002. Our primary outcome was incident myocardial infarction or death from coronary disease.

**Results:** During the study period, 2555 cases of coronary heart disease were diagnosed during 1,386,803 person-years of follow-up. Compared with parous women who had never breastfed, women who had breastfed for a lifetime total of  $\geq 2$  years had 36% lower risk of coronary heart disease (95% CI 22-48%, p for trend  $< 0.0001$ ), controlling for age, parity and stillbirth history. When additional adjustment was made for early-adult adiposity, parental history, smoking, diet, exercise, and use of aspirin, alcohol, postmenopausal hormones and multivitamins, women who had breastfed for a lifetime total of  $\geq 2$  years had a 24% lower risk of coronary heart disease (95% CI 6-38%, p for trend = 0.02) than women who had never breastfed. Women who had breastfed for a lifetime total of  $> 1$  year had a 13% (95% CI 2-23%) lower covariate-adjusted risk of coronary heart disease than women who had never breastfed.

**Conclusions:** In a large, prospective cohort, longer duration of breastfeeding was associated with a reduced risk of coronary heart disease. Whether this relationship is causal requires further investigation.