

Infant feeding patterns and midlife erythrocyte sedimentation rate

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Breastfeeding in infancy might protect against coronary heart disease (CHD) in adult life by an unknown mechanism. The inflammatory nature of atherosclerosis and its contribution to CHD risk is well documented.

The aim of the present study was to assess the erythrocyte sedimentation rate (ESR), as well as other known risk factors for CHD in adults who were either breast- or bottle-fed in early infancy.

The study included 3614 men and women born in the greater Reykjavik area 1914 to 1935, who participated in the Reykjavik Study of the Icelandic Heart Association. Information on infant feeding patterns (breast- or bottle feeding) was gathered from complete original midwife's birth records, Adult ESR, triacylglycerol, total cholesterol, blood pressure, fasting glucose, weight and height were measured at the Icelandic Heart Association Preventive Clinic.

The number of subjects that had been bottle-fed in early infancy was 186 (5.2%). The geometric mean of ESR was 15.9% (95% CI 1.8% - 31.8%) higher in those who were bottle-fed compared with those breastfed, $P = 0.026$, when adjusting for age and gender. Those who had been breastfed in early infancy had on average 2.9% higher BMI in adulthood ($P = 0.012$). The hazard ratio for event of coronary heart disease for bottle-fed persons versus breastfed was 1.18 (95% CI 0.88-1.57), adjusting for total cholesterol, systolic blood pressure and smoking.

In conclusion, higher adult ESR, a moderate risk factor for CHD, among those bottle fed compared to those breast-fed in early infancy might indicate a long term anti-inflammatory influence of breast milk.