





Nutritional Epidemiology

Dairy Foods, Weight Change, and Risk of Obesity During the Menopausal Transition

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Abstract

Background

Weight gain during the menopausal transition is common. Dairy consumption may impact weight change during this critical period, and different dairy foods may have different effects.

Objectives

This study aimed to investigate the associations of different types of dairy foods with weight gain and risk of obesity in perimenopausal women from the Nurses' Health Study II cohort.

Methods

The examination at menopause was selected as the exam closest to the reported age at menopause. Weight change during 12 y surrounding menopause was derived from self-reported weight data for 3 exams before and 3 after menopause. The mean age of the first weight measure was 45.8 y and the average BMI was 25.0 kg/m². Dairy food intakes were estimated as mean intakes over the same 12 y. Generalized linear models were used to assess the association between dairy foods and annualized weight change. Cox proportional hazard models were used to estimate the adjusted relative risks for becoming obese over 12 y surrounding menopause.

Results

In longitudinal analyses, those with the highest yogurt intakes had the lowest weight gain at every exam. This was not the case for other forms of dairy. After adjusting for potential covariates, those consuming ≥ 2.0 servings/wk of yogurt (compared with < 1.0 serving/month) had a 31% (RR: 0.69; 95% CI: 0.64, 0.74) lower

risk of obesity. The highest total dairy intake (≥ 2.0 servings/d compared with < 1.0) was associated with only a 12% (RR: 0.88; 95% CI: 0.82, 0.95) reduction in obesity risk. Higher activity levels and alternative healthy eating index scores were independently associated with statistically significant reductions in risk of obesity, but higher intakes of yogurt strengthened these beneficial associations.

Conclusion

Yogurt intake was associated with less weight gain and lower obesity risk in women during the menopausal transition.



Keywords

dairy foods; weight change; menopause; obesity; yogurt

Abbreviations used

AHEI, alternative Healthy Eating Index; FHS, Framingham Heart Study; HPFS, Health Professionals Follow-up Study; MetS, Metabolic syndrome; NHS, Nurses' Health Study; NHS II, Nurses' Health Study II; SSB, Sugar-sweetened beverages

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