

Children Who Eat Less Dairy Gain More Weight

Heidi Splete

Low dairy intake during the preschool years strongly predicted increased body fat over the next 8 years in a study of 99 children, Dr. Lynn Moore said at the annual meeting of the North American Association for the Study of Obesity.

Using data from the Framingham Children's Study, Dr. Moore and her colleagues at Boston University studied how dairy intake affected changes in body fat from preschool to the preadolescent years. There was a significantly greater gain in body mass index (BMI) from preschool to preadolescence among children in the lowest tertile of dairy consumption.

The mean increase in BMI was 0.67 kg/m² per year for the lowest tertile of dairy consumption, significantly higher than either the 0.40 kg/m² per year or 0.42 kg/m² per year for the middle and highest tertiles. The sum of the four skin folds also increased by a significantly higher margin among children in the lowest tertile of dairy intake (7 mm), compared with the middle (5.2 mm) and highest (4.9 mm) tertiles.

This study sought to estimate the effect of dairy intake in early childhood on body fat changes into early adolescence. The children were descendants of the original Framingham study cohort, and were enrolled in the study at age 3-5 years. Researchers measured body fat at baseline, then reviewed data from 3-day diet records (of which they collected two to four sets each year), and measured body fat again at ages 10-12 years.

By the time the children were aged 10-12 years, the lowest dairy consumers had a mean BMI of 21, compared with a mean of 19 among children in the two higher levels of dairy intake.

The optimal diet to prevent obesity in children is unknown, but there's no clear data that low-fat diets prevent obesity; meanwhile dairy has become a food to be avoided over the last 20 years due to concerns about limiting dietary fat. Only 30% of American children consume the recommended servings of dairy per day, she noted, although the few available studies on dairy consumption show no association between dairy and body fat. This analysis adjusted for energy intake and dietary fat. However, dietary recommendations still should consider the need to avoid excess caloric intake and excess dietary fat intake while increasing dairy intake, Dr. Moore noted at the meeting, jointly sponsored by the American Diabetes Association.

Other confounding factors included age, activity level, mother's education level, and baseline anthropometrics. The study did not include data on calcium supplements, and did not incorporate data on Tanner stages.

Cultural sensitivity is important when advising parents about dairy, Dr. Moore noted during a discussion session. It can be difficult to promote dairy in cultures that don't have a history of eating dairy foods, and there's a tendency among people who don't eat dairy not to feed it to their children.

Some people with lactose intolerance assume that their young children can't handle dairy products, either. Since lactose intolerance usually doesn't appear until later in childhood, there's good reason to encourage dairy intake early on, she said, adding, "It's a tough issue, but I think it's something we need to consider, given the potential for dairy products to have beneficial effects."

