

Health

Fat Content of Breast Milk Increases with Time

By **Amanda Gardner**
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TUESDAY, Sept. 6 (HealthDay News) -- The longer a mother breast-feeds, the higher the fat and energy content of her breast milk.

However, experts are not sure what this finding, which appears in the September issue of *Pediatrics*, signifies.

"This is the first study to analyze the fat and energy content of breast milk of mothers who breast-feed for longer than a year," said study co-author Dr. Ronit Lubetzky, who is with the department of pediatrics at Dana Children's Hospital at Tel Aviv Sourasky Medical Center in Israel. "There are more and more women who choose to breast-feed for longer time periods, and not many studies about the nutritional value of their milk during this prolonged lactation."

"This is a nicely done study which looked at a question that really needed to be answered," added Dr. Ruth Lawrence, a professor of pediatrics at the University of Rochester School of Medicine and a member of the executive committee of the American Academy of Pediatrics' section on breast-feeding. "I think many people's general impression is if you continue to breast-feed beyond a year, probably the nutrient value drops, and this is quite different information and very important."

No one is sure how long mothers should breast-feed, although the American Academy of Pediatrics recommends that "breast-feeding continue for at least 12 months, and thereafter for as long as mutually desired."

A reduction in cardiovascular risks in adulthood is one oft-cited benefit of this practice. Others, however, have said it might have the opposite effect.

To determine the fat and energy content of human breast milk at longer periods, Lubetzky and colleagues sampled the breast milk of 34 mothers who had been breast-feeding for 12 to 39 months, and compared that with the milk of 27 mothers who had been breast-feeding for only two to six months.

They found a startling difference: the fat content in the mothers who had breast-fed for longer periods of time was 17.5 percent, versus only 5 percent in the short-term group.

The researchers said that, while it was possible that something other than duration might be affecting the findings, they still felt this was the most likely explanation for the difference.

It's not clear what the effects of this higher energy and fat content are on a child's health.

"We showed that the milk of mothers who breast-fed more than a year had a very high fat content," Lubetzky said. "That contradicts the claim that breast-feeding at this stage has no nutritional contribution. On the other hand, the long-term effect of such a high-fat intake has not been studied."

"The constituents of fat and human milk are very different than what we provide in formula today. One of the most important constituents of human milk is cholesterol. Formula does not,"

Lawrence said. "There are many people who think that probably one of the problems with cholesterol today occurs because infants have not had any cholesterol in the first few months of life; perhaps the body doesn't learn to deal with it. There are studies that show that young adults have much lower cholesterol levels if they were breast-fed than if they were bottle-fed."

Still, Lawrence added, this is an area that needs to be researched further.

Lubetzky agreed. "Further studies should analyze this milk fat qualitatively, and try to sort out the influence of prolonged breast-feeding on cardiovascular issues," she said.

Another study in the same issue of the journal found, not surprisingly, that American hospitals designated as "Baby Friendly" by the World Health Organization (WHO) and the United Nations Children's Fund had higher breast-feeding rates than other hospitals. These hospitals follow WHO's "Ten Steps to Successful Breast-feeding."

At Baby Friendly institutions, the rate of women beginning breast-feeding was 83.8 percent, versus 69.5 percent nationally. The initiation rate at hospitals with a higher proportion of black patients was only 70.7 percent.

The overall rate of women who breast-fed exclusively during their hospital stay was 78.4 percent at Baby Friendly hospitals compared with a national mean of 46.3 percent.

More information

The [American Academy of Pediatrics](#) has a policy statement on breast-feeding.