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How to Help Baby Like Fruits And Veggies *Early flavor learning promotes acceptance of healthy foods*

PHILADELPHIA (December 3, 2007) – Moms, want your baby to learn to like fruits and vegetables?

According to new research from the Monell Center, if you're breast feeding, you can provide baby with a good start by eating them yourself.

And, offer your baby plenty of opportunities to taste fruits and vegetables as s/he makes the transition to solid foods by giving repeated feeding exposures to these healthy foods — regardless of whether you're breast feeding or using formula.

“Vegetable and fruit consumption is linked to lower risks of obesity and certain cancers,” says senior author Julie A. Mennella, PhD. “The best predictor of how much fruits and vegetables children eat is whether they like the tastes of these foods. If we can get babies to learn to like these tastes, we can get them off to an early start of healthy eating.”

The study, designed to test the influence of early sensory experiences on the development of healthy eating patterns, is published in the December 2007 issue of the journal *Pediatrics*.

Mennella and co-author Catherine A. Forestell, PhD, studied 45 infants, 20 of whom were breastfed. The infants, who were between the ages of four and eight months and unaccustomed to eating solids other than cereal, were randomly assigned to one of two groups.

One group was fed green beans for eight consecutive days; the other was given green beans and then peaches over the same period. Acceptance of both foods was assessed before and after the repeated exposure period.

The results revealed that breast-feeding confers an advantage for baby's acceptance of foods during weaning — but only if the mother regularly eats those foods.

During their first exposure to peaches, breast-fed infants ate more and for a longer period of time, compared to formula-fed infants. Questionnaires revealed that mothers of breast-fed infants ate more fruits than did formula-feeding mothers, suggesting that the enhanced peach acceptance of their infants might be attributed to increased exposure to fruit flavors through breast milk.

However, both groups of mothers reported eating green beans and green vegetables infrequently, at levels below current recommendations. Accordingly, there was no difference in the amount of green beans eaten by breast-fed and formula-fed infants the first time the vegetables were offered.

“It’s a beautiful system,” says Mennella. “Flavors from the mother’s diet are transmitted through amniotic fluid and mother’s milk. So, a baby learns to like a food’s taste when the mother eats that food on a regular basis.”

In both groups, repeated opportunities to taste green beans over eight days enhanced acceptance of the vegetable, increasing intake by almost three-fold.

“Babies are born with a dislike for bitter tastes,” explains Mennella. “If mothers want their babies to learn to like to eat vegetables, especially green vegetables, they need to provide them with opportunities to taste these foods.”

The researchers also found that babies’ facial expressions did not always match their willingness to continue feeding, noting that infants innately display facial expressions of distaste to certain flavors.

They urge caregivers to provide their infants with repeated opportunities to taste fruits and vegetables, focusing on the infant’s willingness to eat the food instead of on their negative facial expressions during eating.

Dr. Forestell’s current affiliation is Department of Psychology, College of William and Mary.

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The Monell Chemical Senses Center is a nonprofit basic research institute based in Philadelphia, Pennsylvania. For 39 years, Monell has been the nation’s leading research center focused on understanding the senses of smell, taste and chemical irritation: how they function and affect lives from before birth through old age. Using a multidisciplinary approach, scientists collaborate in the areas of: sensation and perception, neuroscience and molecular biology, environmental and occupational health, nutrition and appetite, health and well being, and chemical ecology and communication. For more information about Monell, visit www.monell.org.

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