

A Focus Summary on “Biological and Experiential Factors that Impact the Acceptance of Complementary Foods”

Learning to enjoy nutritious foods early sets the stage for lifelong healthy eating habits

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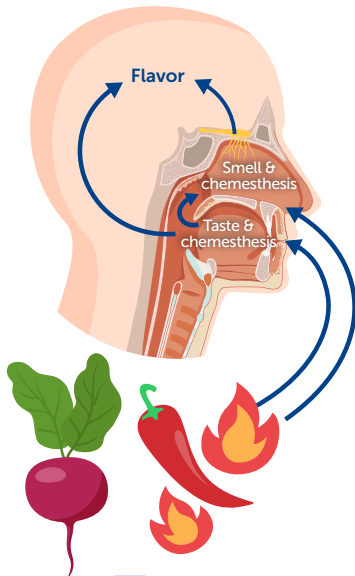
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In brief

Food preferences in infants can shape diet and health in adulthood. The transition from an all-milk diet to one that contains complementary food is influenced by biological and experiential factors. Children are also influenced by the social context of feeding, including family members modeling eating foods. While some factors are defined before birth, plasticity within the brain allows for modulation of acceptance during the introduction of complementary foods.

Flavor is a primary driver of food acceptance:



Flavor is a complex sensation mediated by the chemical senses: taste, smell, & chemesthesis



Taste



Smell



Chemesthesis

Children are naturally drawn to **sweet and salty** foods

Factors influencing food acceptance and eating habits:



Flavors transmitted from the mother's diet to amniotic fluid and breast milk can influence later flavor and food acceptance



Infants learn to like the flavors of the foods they eat



Repeated exposures to tastes, flavors and textures during complementary feeding encourage acceptance of a variety of foods



As they grow, children model the eating habits of their family members and peers

Repeated exposure 8-10 times



Young children learn to like what they eat
It is important to provide them with a healthy start

Highlights

- Flavor preferences are learned, beginning prenatally through exposure to flavors in maternal amniotic fluid, as well as innate chemosensory responses.
- The emergence of teeth and the maturation of the oral cavity – including the development of muscles, bones, and the tongue – enable the processing of a wider variety of food textures.
- Beginning early in life, there are many opportunities and ways to introduce healthy foods to children's diet so that they grow to like and enjoy the flavors of these foods. Flavor acceptance can be modified through early and repeated exposure (8–10 exposures or more) or by modeling behaviors of family members.
- Food choices significantly impact health and life expectancy, therefore there is a window of opportunity during complementary feeding to shape future dietary patterns.