

Complementary Foods: Guidelines and Practices

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Complementary feeding, the transition from a breast milk-based diet to inclusion of other sources of nutrition in an infant's diet, is a major milestone in infant development. Complementary feeding usually begins at around 6 months of age when an infant's requirements for energy, protein and other nutrients (particularly iron) cannot be met by breast milk alone. The complementary feeding period extends from the early initiation phase to establishing meal and food habits that will move into early childhood and beyond.

Many countries are now faced with the issue of malnutrition presenting as overweight or obesity, i.e. risk factors for the development of noncommunicable diseases in later life. As under- and overnutrition may coexist in children from the same country, it is important that the advice provided by complementary feeding guidelines meets the needs of all children helping them to grow and develop into healthy adults.

Many consistent and important themes emerge when comparing complementary feeding guidelines from different countries:

- *Timing of Complementary Foods.* Introduction of complementary foods is recommended at (or around) 6 months of age. Most guidelines include the importance of waiting for developmental cues pertaining to 'readiness' for complementary foods, and some include guidelines related to responsive feeding, where the infant's feeding cues are observed and followed by the parent or caregiver. Developmental cues rather than a specific age may be the best indicator of 'readiness' to accept complementary foods.
- *Continued Breast Feeding.* Breast feeding is universally recommended during the complementary feeding period because of its nutrient profile, protection from infection and longer-term benefits to maternal health.
- *Nutrient-Dense Complementary Foods.* Iron deficiency disorders are a major health issue in both high-income and low-/middle-income countries. Nutrient-dense, iron-rich foods are universally encouraged,

although specific foods vary slightly from country to country. In many countries, this takes the form of iron-fortified cereals, although many countries encourage early inclusion of meat, eggs and legumes in the infant's diet. A nonnutritional strategy – delayed cord clamping after birth – has been identified as a strategy for increasing early hemoglobin concentrations and infant's iron stores, thus preventing this nutritional issue.

- *Hygienic Food Practises.* Food-borne illness is an important public health issue and is important in both developed and developing countries.

- *Development of Feeding Skills and Fostering Long-Term Eating Habits.* Progression from thick spoon foods to mashed foods and finger foods, and consuming nutritious family foods are highlighted in many infant feeding guidelines. Caregivers are encouraged to follow the child's feeding cues to foster independent eating skills.

- *Prevention of Noncommunicable Diseases.* Many aspects of complementary feeding including food type and feeding styles have the potential to influence the development of early obesity and therefore potentially increase the risk of noncommunicable diseases later in life. Guidance to avoid added salt, sugar and fats, and avoidance of energy-dense drinks such as juice is included in many infant feeding guidelines. Likewise, delayed introduction to common food allergens may influence the risk of sensitization and later development of allergy, and many industrialized countries now include specific advice related to the development of allergy in their guidelines.

Complementary feeding guidelines that promote good eating during the first year and beyond recognize that nutrition, particularly during the first 1,000 days, has an important influence on immediate growth and development, but also plays an important role in programming an infant's susceptibility to the development of noncommunicable diseases later in life.