

# Introducing solid foods

## Your questions answered

### When should I start solid foods?

Around six months of age, when the following milestones are achieved

- Your baby sits with support and with good head control
- Inserts toys or fingers into their mouth
- Shows interest in food by leaning forward and opening their mouth when hungry
- Reaches for toys and grabs on to them accurately

### What foods should I start with?

- Start with a single ingredient, well cooked and mashed food. Rice or ragi kanji, fruits (mashed banana, cooked peeled apple or pear) or mashed vegetables (potato, carrot, green beans, sweet potato) or homemade vegetable soups like tomato soup.
- Do not add salt, sugar, masala or chilli powder.
- Make the food into a thin mixture. A small quantity of your own breast milk, formula milk, or water can be used to thin the mixture.

### How do I start feeding the baby?

- Introduce the baby to one new food every few days, starting with just a few teaspoons full each day.
- Feed the baby with a teaspoon.
- Stir hot food, to help cool it evenly. Test the temperature yourself before feeding.
- **Watch out for allergic reactions.**
- Allow plenty of time to feed.
- If baby is not interested, try again later. Do not force feed the baby.
- **Have the baby sit up, facing you while feeding. Use a high chair when possible.**

### What foods should I give my baby next?

If your baby is tolerating fruits and vegetables, you can try these foods

- Pureed or mashed noodles, idli, chapati, dosa, upma, bread or pasta
- Cooked and mashed lentils or pulses (dhal or beans)
- Full fat curd, ghee, butter, pasteurised cheese or custard.
- Fully cooked mashed meat (mutton), fish, egg or chicken.

### How to introduce foods that may cause allergies?

- Some food stuff like eggs, wheat, fish and shell fish may cause allergic reaction in some babies.
- Introduce these foods one at a time, closely watching for any allergic symptoms.
- **Stop feeding if you notice any allergic reaction and discuss with your doctor.**
- **If the reaction appears severe or the baby has difficulty breathing go to a hospital immediately.**
- Do not introduce peanuts, cashew nuts, badam, pista in younger children due to risk of allergy and choking. Consult with your doctor before introducing nuts or seeds.

**Your baby needs only breast milk for the first six months of its life**

### Signs of Food Allergy

- Skin rash
- Vomiting or diarrhoea
- Coughing or trouble breathing
- Swollen lips/face

### Baby's First Foods

- Single Ingredient
- Cooked and Mashed
- Rice or ragi kanji
- Mashed fruits
- Mashed vegetables
- Homemade soups

### Foods that cause allergy

- Eggs
- Nuts, especially groundnuts
- Wheat
- Fish and Shell fish



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### How much solid food should I give my baby?

- Start with few spoonfuls of food every day for couple of weeks.
- Gradually increase it to few tablespoonful and finally about half a cup (125 ml).
- Let your baby's appetite guide you. If baby is not interested, try again later. Do not force feed the baby.
- If your baby is still hungry, offer a little more.

### How often should I feed my baby?

- Start with one feed and progress to three feeds a day.
- Offer the baby different foods at each of the three meals to add variety.

*Let your baby's appetite guide you.*

*Appetites vary; the baby's intake over a few days matters more than one particular day.*

### Practical guidance on the quality, frequency and amount of food to offer children 6–23 months of age who are breastfed on demand

AGE	ENERGY NEEDED PER DAY IN ADDITION TO BREAST MILK	TEXTURE	FREQUENCY	AMOUNT OF FOOD AN AVERAGE CHILD WILL USUALLY EAT AT EACH MEAL <sup>a</sup>
6–8 months	200 kcal per day	Start with thick porridge, well mashed foods  Continue with mashed family foods	2–3 meals per day  Depending on the child's appetite, 1–2 snacks may be offered	Start with 2–3 tablespoonfuls per feed, increasing gradually to ½ of a 250 ml cup
9–11 months	300 kcal per day	Finely chopped or mashed foods, and foods that baby can pick up	3–4 meals per day  Depending on the child's appetite, 1–2 snacks may be offered	½ of a 250 ml cup/bowl
12–23 months	550 kcal per day	Family foods, chopped or mashed if necessary	3–4 meals per day  Depending on the child's appetite, 1–2 snacks may be offered	¾ to full 250 ml cup/bowl

#### Further information

The amounts of food included in the table are recommended when the energy density of the meals is about 0.8 to 1.0 kcal/g.

If the energy density of the meals is about 0.6 kcal/g, the mother should increase the energy density of the meal (adding special foods) or increase the amount of food per meal. For example:

- for 6 to 8 months, increase gradually to two thirds cup
- for 9 to 11 months, give three quarters cup
- for 12 to 23 months, give a full cup.

The table should be adapted based on the energy content of local complementary foods.

The mother or caregiver should feed the child using the principles of responsive feeding, recognizing the signs of hunger and satiety. These signs should guide the amount of food given at each meal and the need for snacks.

<sup>a</sup> If baby is not breastfed, give in addition: 1–2 cups of milk per day, and 1–2 extra meals per day (18).

Table 1 source: Obtained from Infant and Young child feeding - Model chapter for text books for medical students and allied health professionals - WHO publications - 2009.



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### How much milk does my baby need?

- Your baby might consume less milk as solid foods are gradually increased.
- Let by your baby's appetite and thirst for milk. You may continue to breast feed on demand or offer approximately 500 ml each day of formula milk for 12 months.
- **Do not use cow's milk until the baby is 1 year old. However, cow's milk may be used in small amounts while cooking baby foods.**

### What changes do I need to make after 9 months?

- Offer 3 - 4 servings of starchy foods each day, such as hand mashed potato, hand mashed cooked rice, soaked mashed chapati, idli, dosa, kichidi, etc.
- Offer 3 - 4 servings of fruits and vegetables per day.
- Offer 2 servings of meat, fish, eggs, dhal or other pulses
- Encourage your baby to try finger foods.
- Allow your baby to feel and play with the food, *with clean hands*, as it is all a part of learning.
- Include your baby while family members are eating.

### How do I cultivate good eating habits early in life?

- During the first year, babies do not mind trying new varieties of foods. Introduce them to a wide variety of foods with different tastes, textures. This will make them less fussy later in life.
- Eat meals together as a family whenever possible.
- Stick to regular meal times.
- Water should be the main drink. Avoid juices and soft drinks.
- Encourage your children to eat slowly. A child can detect hunger and fullness better when eating slowly.

### Help! My baby is not eating!

- Do not get angry or frustrated.
- If your baby does not like certain foods, leave it out for now and try again in a week. Babies like familiarity. They may try a new food 10 times before they start liking it.
- Allow your baby to see you eat and enjoy a variety of foods.
- Do not get upset if your baby does not eat much one day. They will make up for it on another day. Appetites vary and their intake over a period of few days matters more than one particular day.

### What precautions do I need to take with baby food?

- Wash your hands and your baby's hands before feeding
- Clean chopping boards and cooking surfaces thoroughly
- Wash all bowls and spoons using hot, soapy water
- Avoid pets near cooking area
- Do not reuse half-eaten baby food
- Thoroughly wash and peel vegetables and fruits

*Increased duration of breastfeeding confers significant health and developmental benefits for the child and the mother.*  
(American Academy of Pediatrics)

#### Cow's Milk

- Should not be used as primary milk for first year
- The protein, vitamin and mineral content vary from breast milk
- Breast milk promotes better brain and immune system development in the baby
- Early introduction of cow's milk can cause allergies

#### Foods to Avoid under one year

- Salt
- Sugar
- Honey
- Nuts
- Low fat foods
- Cow's milk
- Spices and chili/masala powder.

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- Avoid half-boiled or soft boiled eggs
- Cook all foods thoroughly
- Do not reheat cooked food more than once
- Prepare fresh meal each time, do not use previously prepared and stored food

What foods to give and why?
<b>BREAST MILK:</b> continues to provide energy, nutrients and immune factors against infection
<b>STAPLE FOODS:</b> Provide energy, some protein (Cereals only) and vitamins. <i>Example: Cereals (rice, wheat, maize, millet, quinoa), roots (Cassava, yam and potato) and starchy fruits (plantain and breadfruit)</i>
<b>ANIMAL SOURCE FOOD:</b> Provide high quality protein, iron, zinc and vitamins <i>Example: Liver, red meat, chicken, fish, eggs</i>
<b>MILK PRODUCTS:</b> Provide protein, energy, most vitamins (especially vitamin A and folate), calcium <i>Example: milk, cheese, yoghurt and curds</i>
<b>GREEN LEAFY AND ORANGE COLOURED VEGETABLES:</b> Provide vitamin A, C and folate <i>Example: Spinach, Broccoli, carrots, pumpkins, sweet potatoes</i>
<b>PULSES:</b> Provide protein (of medium quality), energy, iron (not well absorbed) <i>Example: chickpeas, lentils, cowpeas, black-eyed peas, kidney beans, lima beans</i>
<b>OILS AND FATS:</b> provide energy and essential fatty acids. <i>Example: Oils (preferably soy or rapeseed (canola) oil), margarine, butter</i>
<b>SEEDS:</b> Provide energy. <i>Example: Groundnut paste or other nut pastes, soaked or germinated seeds such as pumpkin, sunflower, melon, sesame</i>

### References:

- 1) Infant and Young child feeding - Model chapter for text books for medical students and allied health professionals - WHO publications - 2009.
- 2) Patient Information: Starting solid foods with babies (The basics) - UpToDate, 2012
- 3) Weaning - Starting solid food, Department of Health, UK: January 2008.

Simple guidelines
<p><b>Infants 6-11 months</b></p> <ol style="list-style-type: none"> <li>1. Continue breast feeding</li> <li>2. Give adequate servings of <i>Thick porridge made out of maize, tapioca, millet, sorghum, ragi or rice; add milk or boiled lukewarm water.</i> <i>Mixtures of pureed foods added to the porridge. Mix with beans or lentils. Add green vegetables.</i></li> <li>3. Give nutritious snacks <i>Example: Egg, Banana, Bread, Papaya, Avocado, mango, yoghurt, milk pudding, biscuits, bread or chapati with butter, margarine, cooked potatoes</i></li> </ol>
<p><b>Children 12-23 months</b></p> <ol style="list-style-type: none"> <li>1. Cows milk may be introduced</li> <li>2. Give adequate servings of <i>Mixtures of mashed or finely cut family foods made out of plantains, potatoes, tapioca, maize, millet, sorghum, ragi or rice, mix with beans, lentils or pounded groundnuts or meat; add green vegetables</i></li> <li>3. Give nutritious snacks <i>Example: Egg, Banana, Bread, Papaya, Avocado, mango, yoghurt, milk pudding, biscuits, bread or chapathi with butter, margarine, groundnut paste, honey, bean cakes/ biscuits, cooked potatoes</i></li> </ol>

**Table 2** source: Adapted from Infant and Young child feeding - Model chapter for text books for medical students and allied health professionals - WHO publications - 2009.

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