

When to start. Look for the following signs of neurodevelopmental-readiness before initiating complementary feeding :

- Your baby is able to sit, even if support is still needed (your baby may still fall over after sitting for a good few seconds).
- Your baby has good head and neck control (shoulders are braced and head does not lag behind when you pull your baby up to the sitting position from lying on the back).
- Your baby has the ability to lift his or her head and push the chest up with straight elbows from lying face-down on his or her tummy.
- Your baby has stopped to push his or her tongue against objects placed between his or her lips.
- Your baby has the ability to propel foods to the back of the throat for swallowing.
- Your baby is taking objects with the hands to the mouth.
- Your baby is able to indicate a desire for food (opening of mouth and leaning forward).
- Your baby is able to indicate when he or she has had enough (leaning back or turning away).

Timing. Between 4 and 6 months. The introduction of complimentary feeding, even in the form of adding baby cereal to formula or expressed breast milk, is not recommended before 4 months of age.

Exclusive breastfeeding for 6 months is supported by the World Health Organisation and the American Academy of Pediatrics. In comparison, the growth of these babies is similar to babies who started with complimentary feeding at 4 months and they have the benefit of suffering from fewer episodes of diarrhoea.

Delaying the introduction of complimentary to beyond 7 months is associated with poor growth, iron deficiency in the exclusively breastfed baby, delayed oral motor skills and solid food aversion.

Your baby still needs to breastfeed or drink formula. The introduction of weaning foods is in addition to breastfeeding or infant formula; it is not a substitute. At the time of introduction of complimentary feeding, the exclusively breastfed baby should still be drinking 4-6 hourly (4-6 months) or on demand (6-12 months), while the formula-fed baby should still be drinking 700-1400ml (4-6 months) or 700-950ml (6-8 months) per day. Formula volumes are progressively decreased after 8 months of age:

- 475-950ml/day (8-10 months)
- 475-700ml/day (10-12 months)

First foods.

Latest recommendations suggest the introduction of **iron-fortified baby cereal and pureed meats first** and, once these are accepted, to add pureed vegetables and fruits. Iron-fortified **single grain** cereals are to be given first. Rice cereal is traditionally offered first, as it is the least allergenic. Oat and wheat cereal is also acceptable. Start by offering 1 teaspoon of cereal **after** breast- or bottle feeding. Cereal should be fed with a spoon and should not be added to bottles, unless medically indicated for gastroesophageal reflux.

There has to be a focus on iron-rich foods first (meat/ poultry/ low-sodium canned salmon/ cooked beans, peas or lentils) to prevent the development of iron deficiency. A **vitamin C-containing**

juice is recommended to be taken with or within an iron-rich meal from 6 months of age to promote the absorption of iron.

Introduce weaning foods **one at a time** at 3-5 day intervals, to identify adverse food reactions.

Persist. New foods sometimes need to be offered several (up to 15) times before your baby will tolerate it. Once tolerated, it is likely to be tolerated throughout childhood. Introducing vegetables before fruits may increase vegetable acceptance later.

Variety.

A variety of types (colours) of vegetables (sweet potato/ squash/ cooked broccoli/ carrots/ peas/ green beans) and fruits (mango /pear /peach /banana /strawberry). Remember to remove any peels, seeds and pits.

A variety of textures (pureed/mashed/minced/ground).

A variety of serving temperatures.

What about potentially allergenic foods?

Previous guidelines recommended delayed introduction of highly allergenic solid foods (cow's milk, hen's egg, soy, wheat, peanut, tree nuts, shellfish and fish) in an attempt to prevent the development of allergic disease in high-risk infants (family history of allergy; babies with moderate-severe eczema). Studies have shown that this practice might actually lead to an increase in the number of high-risk infants developing food allergy.

Early introduction of yoghurt, (cooked) egg, soy, wheat (infant cereal), peanut (butter) and fish is recommended for all infants as part of the introduction of solids from 4-6 months, unless :

- They have difficult-to-control moderate-to-severe eczema, or
- There has been an immediate allergic reaction to breast milk, formula or an introduced food

These babies require a formal allergy evaluation before further introduction of these foods.

How to advance.

Combination foods may be given after the baby tolerates the individual components.

Consistency : Thin puree→Thick puree→Mashed food→Lumpy food→Food pieces

Food groups, amount of servings and serving size : see table "Infant feeding guide".

No added sugar or salt.

Water? Bottled still water may be given in a regular cup in small amounts; by definition from the time when complementary feeding is initiated.

Juice? Infant juice (6-8 months) or pure (100%) fruit juice (8-12 months) may be given in a regular cup (not in a "sippy cup" or bottle). It should be pasteurized and limited to 120ml (6-8months) or 120-175ml (8-12months) per day. Give with or within an iron-rich meal. Not to be given at bedtime or in bed.

Whole Milk? Small volumes of cow's milk and yoghurt may be added to complementary foods, although unmodified cow's milk (as you would buy in a grocery store) is only to be given after 12 months of age.

Supplements necessary?

Exclusively breastfed baby : Vitamin D 400iu/day from soon after birth; iron drops from 4 months, until complementary feeding is established.

Exclusively breastfed baby of a vegan mom : Vitamin B12

Premature and low-birth-weight (<2.5kg) baby : Multivitamin, including vitamin D 400iu/day, and iron drops for the first year of life.

Foods to Avoid.

- Foodstuffs your baby can choke on : hard, round foods – nuts, raisins, grapes, raw carrot pieces, popcorn, pieces of sausage
- Processed meats (polony, vienna)
- Unmodified whole cow's milk
- Plant-based milk (almond, coconut, rice) (nutritionally deficient)
- Sweet foods
- Sugar-sweetened beverages
- Honey
- Salty foods

The first version of this document was compiled in conjunction with Riekie Van der Vyver, who is a registered dietician at Quenet's Family Pharmacy, Worcester (Tel: 023 347 0844 or email: riekievyver@lantic.net). The latest recommendations were added by Dr Ruaan Stander in November, 2016.