



chat Healthy conversations
from pregnancy to preschool

Ten Steps for Feeding Infants

Ten Steps for a baby's first twelve months



Practical advice for healthy eating habits
from pregnancy to preschool



Breastfeed if you can – it will help protect your baby from illness. It may take a few days for you both to learn how it works best for you

Breastfeeding is the optimal way to feed an infant. Research shows it reduces the risk of otitis media (ear infections), respiratory infections and gastroenteritis in infants, particularly for infants under 6 months of age. Fewer breastfed infants are admitted to hospital than those who are formula fed. Breastmilk boosts the immunity of infants because it contains antibodies to illness and infection produced by the mother.

Breastfeeding is cheaper than formula feeding and involves no preparation or sterilisation of equipment. It is immediately ready when the infant wakes and demands it.

At birth infants can already suck and swallow as they have been doing this in utero. However they need to develop a pattern of feeding, fitting in breathing with their suck and swallow. This may take a few attempts at feeding to perfect. But as infants have a net fluid loss in the first few days, they only need very small amounts (5 -20mLs per day) of colostrum - the low volume breastmilk produced in those days.



Supply of colostrum is under hormonal control and will not be increased by frequent or prolonged feeding. Hence in those first 2-3 days mothers and their infants have plenty of time to find the best way for breastfeeding to be successful. Some mothers need support with attachment and the correct latch for the baby on the nipple.

Around day three infants begin demanding more milk to satisfy their hunger and thirst and usually demand feeds very frequently – about every 2 hours. At the same time the volume of breastmilk produced increases to satisfy this demand and most mothers experience discomfort in their breasts due to the sudden increase in the volume of milk produced.

From this time on breastmilk is produced in response to an infant's suckling and over about 24 hours the mother's supply should adjust to the amount the infant is demanding. This short period of breast discomfort will diminish as the breasts adjust to producing the amount the infant is demanding. If the infant is allowed to feed for as long as they continue sucking and to come off the breast when they release the nipple, the infant should gradually adjust to a less frequent feeding pattern.

It is preferable to:

- offer both breasts at each feed
- allow the infant to feed as long as he or she wishes at each breast and to have a break in between when the infant can be winded
- alternate the breast that is offered first at each feed



Give breast milk, the best option, or infant formula as your baby's milk drink for at least twelve months

- The most common reason for giving up breast feeding is a perception that not enough breastmilk is being produced. As infants find it easier to suck against the lower pressure when sucking from a bottle teat compared to sucking from the nipple, they will prefer bottle feeding if it is offered. Therefore offering formula milk at one feed per day and breastfeeding at other feeds is preferable to maintain breastfeeding than topping up with bottle feeding after each feed
- If infants are given cow's milk in place of breast milk or formula milks as their main milk drink before 12 months of age, they are at higher risk of iron deficiency anaemia (IDA) during infancy or in their toddler years. IDA affects their growth and development
- Follow on formula can be given as the main milk drink from 6 months of age although it is not necessary if complementary feeding progresses well and high iron foods are offered. Follow on formulas are higher in iron and some nutrients than infant formulas



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Begin a vitamin D supplement from birth as milk and foods do not necessarily provide enough

If mothers have taken a vitamin D supplement during pregnancy their infant will be born with a small store of vitamin D.

However in 2016 the Scientific Advisory Committee on Nutrition (SACN) changed policy and set new recommended dietary intakes of vitamin D for the UK. They set a Safe Intake of 8.5-10µg/day for infants from birth and 10µg/day for children 1-4 years. These recommendations are to guarantee sufficiency in those whose needs may not be met by sunlight alone. Adequate vitamin D is considered vital for infants to support their rapid rates of bone growth.

Vitamin D drops are needed from birth because breastmilk contains very low amounts of vitamin D. Infant formula is fortified with vitamin D but only volumes of more than 800mLs/day will provide the recommended safe intake of 8.5-10µg of vitamin D.



Let your baby decide how much milk to drink. Offer a feed when they are hungry and remember babies cry for reasons other than hunger

- Most infants regulate their energy intake over each day very accurately and grow according to their genetic inheritance
- Infants signal when they are hungry with a rooting reflex and by crying with hunger. However infants also cry when any of their needs are not being met e.g. when they are uncomfortable with cold or in pain or when they would like some social stimulation. Parents and carers need to learn to distinguish the hunger signals from the signals for other needs
- A small number of infants have poor appetite regulation and if they consume an excess of milk they will cross upwards across the weight for age centiles on their growth chart. Crossing upwards across the weight for age centiles after eight weeks of age is a risk factor for childhood obesity
- It is easier to overfeed infants with a bottle than when breastfeeding, as the bottle teat can be held or forced into an infant's mouth when the infant has consumed enough milk and is satisfied



Begin to offer food alongside their milk feeds when you think your baby is ready for more, by 6 months but not before 4 months

Complementary feeding or weaning is introducing solid foods in addition to your baby's milk feeds. Between 4 and 6 months is when healthy term infants are ready to learn new feeding skills and when milk feeds alone no longer provide all the nutrients and energy they need to grow and develop normally.

Introducing complementary feeding gives infants the opportunity to learn to like different tastes when they are happy to do so, while offering more nutrients in a smaller volume and increasing the iron content of their diet.

Infants develop skills at different rates and some are ready to begin complementary feeding at an earlier age than others. Parents usually begin earlier with large male babies who are growing at a faster rate than smaller male and female infants. There is no harm in beginning anytime between 4 and 6 months. Delaying introducing complementary foods until after 6 months may cause nutrient deficiencies.



Signs that the infant is ready to begin complementary feeding are:

- able to sit with support and control his head
- seeming less satisfied with milk feeds
- watching others intently when they are eating

Eating solid food requires moving the food to the back of the mouth for swallowing by moving the tongue backwards. This is the opposite to pushing the tongue forwards when sucking from the nipple or teat. Some infants need several attempts to learn to move the tongue backwards with food and they learn this through trial and error and practice.



Stop feeding when your baby shows you he or she has had enough by keeping his mouth closed or turning away from food or milk

Infants can signal to parents that they no longer want food or milk. They do this when tired from practicing a new skill or when their hunger and thirst is satisfied.

Overriding these signals and forcing infants to take more food or milk than they need can cause excess weight gain, increasing the risk of childhood obesity. It also makes the mealtimes a negative experience for the infant.

Signalling satiety

Milk-fed infants can show that they have had enough by:

- stopping sucking
- spitting out the nipple or teat and/ or turning their head away
- slowing down their feeding pace



Signalling satiety

Complementary fed infants can show that they have had enough by:

- turning their head away from the spoon
- keeping their mouth shut
- blocking their mouth with their hand or pushing away the spoon or food
- holding food in their mouth
- crying

Older infants will:

- throw food
- signal 'no' in response to unwanted food given to them



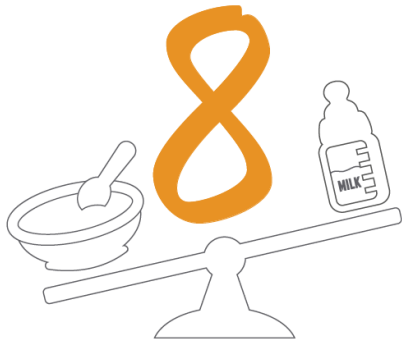


Offer spoon-feeding, soft finger foods and a cup of water at all meals so that your baby develops all their feeding skills - some babies learn their new feeding skills more slowly than others and some are more sensitive to tastes, smells and textures

- Some infants learn the new oromotor skills required for managing the different textures of complementary food more quickly than others
- Beginning with smooth food before offering thicker textures and lumps allows infants to progress these skills. Some need more practice with new textures before they master eating them and are ready to move on
- Infants may need small tastes of certain foods on several different days before they learn to like a new taste. Sweet tastes are accepted more readily than savoury tastes as infants are already familiar with the sweet taste of breastmilk or formula milk
- Offering water in a lidded cup without a valve encourages an infant to learn to sip rather than suck as they do when drinking milk from a nipple or teat



- Finger foods offer the opportunity for infants to
 - touch and play with food
 - learn to recognise foods visually and to associate them with their smell and taste
 - develop their self-feeding skills
- Some infants will show a preference for self-feeding finger foods while others will prefer spoon feeding but it is best that they have the opportunity to learn and acquire both skills
- Including infants in family meals allows them to learn by copying those eating around them



Allow your baby to drink less milk as he or she begins to eat more food

- Feeding responsively is vital to allow infants to move from a milk based diet to food based diet with less milk as food provides more energy and nutrients in a smaller volume
- Once an infant is able to mange food well, food should be offered before the milk feed and the volume of milk consumed at each feed or the number of feeds each day can gradually decrease
- Infants who develop their feeding skills more slowly will remain more milk dependent for longer
- By 9 -12 months infants only need 500-600mLs milk over each 24 hour period
- By 11-12 months it is best to discontinue bottles and use lidded beakers without a valve for expressed breast milk or formula milk drinks. If bottles are continued into the toddler years they can be used as a comfort. Some toddlers stubbornly insist on continuing to drink milk from a bottle



Offer allergenic foods- yogurt, cheese, egg, peanut butter, fish, wheat based foods and soya containing foods- any time after 4 months and this may help prevent food allergies. Introduce them one at a time

- In the UK, data indicates that between 2.2 and 5.5 per cent of infants have an IgE mediated allergy. The figure for all allergies is not known, and will be higher. The trend worldwide indicates that almost 10 per cent of preschool children have allergies
- The latest research indicates that those at highest risk are infants who develop eczema early in infancy. Infants with a parent or sibling with asthma, eczema, hay fever or food allergy are also at risk
- The foods most likely to cause an allergic reaction need to be introduced one at a time for at risk infants so that it is easy to identify if a certain food has caused a reaction. These foods are cow's milk, cheese, yogurt, eggs, nuts, fish, wheat based bread and pasta and foods with soya. One allergenic food can be given every day for about three days and if there are no reactions, then another allergenic food can be introduced
- Avoiding these foods before 6 months will not prevent food allergy and research now indicates that giving these foods regularly early in weaning may prevent food allergies developing. Parents of infants with eczema should discuss their introduction with their doctor before introducing them



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Move onto thick mash with soft lumps between 6 and 8 months and onto minced and chopped family foods and firm finger foods between 9 and 12 months

It is important to keep moving through the more complex food textures during the second half of infancy so that infants are eating minced and chopped family foods and self-feeding firmer finger foods by 12 months of age.

As a guide parents and carers should aim to:

- have introduced thick mashed textures with lumps and soft finger foods any time from beginning complementary feeding but by about 8 months
- move onto minced and chopped foods and firm finger foods by 12 months. Firm finger foods include raw apple, raw carrot, crackers and bread sticks

Some infants are more sensitive to textures and need more practice to accept them. Infants who spit out lumps can continue to be offered lumpy food and soft finger foods so that they learn to manage lumps in their mouth rather than reverting back to only smooth foods.

Some infants and children have an inherited tendency to avoid particular textures.



Quiz

- Now test your understanding of the Ten Steps for Feeding Infants and take the [quiz!](#)
- Enter your contact details to be sent a certificate if you pass!





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