INTRODUCING SOLIDS TO PREMATURE BABIES



Choosing the right time to introduce solids to premature babies can be confusing. In this fact sheet we explain what you need to consider when introducing solids to your premature baby.

When to start?

Premature babies have different nutrition needs to term babies. The current guidelines suggest starting solids at around six months in full-term babies. However, this is not the same for premature babies.

Introducing solids before your baby's digestive system is ready may increase the risk of allergy. If solids are started too late, your baby may be reluctant to accept new foods. There is also the risk of anaemia as the baby's iron stores run low.

Based on limited available evidence, a corrected age of three months (the age from the expected due date) is the appropriate time to consider the introduction of solids for premature babies. The latest time to start is around seven months of actual age (their age from birth or uncorrected age).

As a general rule, most healthy premature babies will be ready to start solids between five and seven months (uncorrected age). The exact time within this two-month time period will depend on your baby's gestational age, developmental progress and when they show signs of readiness. For example, a baby born at 23 weeks might be ready to start solids at seven months uncorrected age whereas a baby born at 36 weeks may start at five months.

Signs of readiness

Before starting solids, your baby should show at least some of the following signs:

- Can sit in a supported position on your lap, bouncer or high chair.
- Can hold his or her head in a stable position.
- Often puts hands or toys into their mouth.
- Leans toward a spoon or food when it is offered and opens their mouth.

How to start?

Your baby will enjoy watching others eat. Shared meals with friends and family will help your baby learn about mealtimes.

When feeding, place your baby in a secure, upright position, so they can take food easily. It is okay to start by feeding baby on your lap; however, using a bouncer will allow you to make eye contact with your baby. Later on, place baby in a highchair with a tray or a seat that attaches to the table so they can feed themselves with their fingers.

Make meal times pleasant. Choose a time for starting solids when you and your baby are happy and relaxed, such as mid-morning after a nap. In the beginning, offer solids after a breastfeed or formula so your baby is not too hungry.

Use a small plastic teaspoon and put the food in the middle of your baby's tongue. Start with one or two teaspoons and gradually build up the amount.

A lot of babies spit out food when it is offered for the first time. If your baby becomes upset or frustrated, stop and try again in a few days.

Playing with food is an important part of learning; so prepare your baby and yourself for a bit of mess. Using a clean, plastic sheet on the floor can be helpful especially when your baby starts finger food.

First foods

Foods should be smooth and creamy with no lumps. Try one new food every two to three days. Suggestions for nutritious first foods to offer your baby include:

- iron-fortified infant cereals
- pureed meat, chicken, fish, egg, beans/lentils or fish
- pureed ripe avocado, apple, banana, potato, sweet potato (choose one or two at a time).

Introducing more foods and textures

During the first few months of eating solids, breast milk or infant formula will continue to be your baby's major source of nutrients.

Within one to two weeks or when your baby is taking two to three teaspoons at a meal, you can start to offer another meal at a different time of day. Continue to offer iron-containing foods, more variety of fruit and vegetables, plain yoghurt and cow's milk on cereal or in cooking.

About one month after starting solids:

- Offer three solid meals per day
- Introduce a cup for drinking (cooled, boiled water)
- Add in soft finger foods and finely minced foods

About two months after starting solids:

- Offer solids before a breast or bottle feed
- Introduce cut up soft, minced or mashed food with small, soft lumps such as minced meat, egg or cooked lentils
- Offer other foods such as bread, pasta, dissolvable crackers, fine porridge, quinoa, rice and cheese

Your baby will be able to chew soft food even if they do not yet have teeth. They may cough or gag a little when starting lumpy food. This is a normal reaction for many babies trying new textures. Lumpy food should be introduced by nine months of age (from their date of birth) at the latest.

As with full-term babies, the later a premature baby is introduced to new tastes and textures the less likely they are to accept them. Babies need to explore, touch and taste new food at their own pace. Offer your baby a spoon at mealtimes even if you continue to feed them with another spoon. Start giving your baby finger food and offer different flavoured foods separately so they can distinguish between them.

Keep offering a variety of food to your baby so that by around one year of age they are eating all the usual family food.

If your baby is formula-fed, full cream cow's milk can be substituted for their main drink after 12 months corrected age. Limit milk to 500mls in total per day to ensure your toddler remains willing to eat solid foods.

Home-made vs commercial baby foods

Use homemade foods as often as possible. Shopbought jars or pouches of baby foods can be useful when out and about but they do not teach your baby about the taste of individual foods. They are also more expensive and can contain less protein than home cooked meals.

Eating Issues

Food refusal

Respond to your baby's cues and don't try to force them to eat. Babies may refuse food for many reasons, such as if they are unwell, tired or teething. Keep meal times to no longer than 30 minutes otherwise your baby may become restless and lose interest.

Signs that your baby has had enough include:

- closing their mouth
- pushing the spoon away or spitting food out
- turning their head away
- getting upset or crying.

Between five to eight months old, babies are usually willing to try new flavours but can become more reluctant as they get older. Offering new foods twice a week for at least five weeks will often lead to acceptance.

Difficulty moving from smooth to lumpy textures

Some babies born prematurely have difficulty accepting lumpy food, particularly if they had a long period of tube feeding. Try introducing lumpy food gradually by increasing the thickness of purees and slowly introducing soft lumps such as ripe mashed banana or avocado.

Aim to give your baby food that has an even consistency. For example, avoid smooth purees with floating lumps (common in commercial pouches) as the mixed textures may make your baby gag or choke. Giving your baby home-cooked food makes it easy to control the consistency.

Another way to introduce lumps to a reluctant feeder is by offering finger foods. Babies enjoy finger food as it gives them more control over what they eat.

Finger foods to try:

- Ripe, peeled soft fruit such as banana, pear and watermelon
- Well-cooked, soft vegetables such as carrot, zucchini, pumpkin and broccoli
- · Buttered toast fingers
- Well cooked pasta shapes
- Slices of cheese

Low food intake

In most cases, healthy premature babies will eat when they are hungry. It is important to offer a range of foods from the different food groups to ensure a balanced diet. Some premature babies can develop feeding problems, particularly those with long-term health problems.

If you're concerned about your baby's growth or eating skills, seek the help of a maternal and child health nurse, paediatric dietitian or speech pathologist.

Family foods

Your baby will gradually shift from mashed foods to chopped family foods by around 12 to 18 months. Avoid salty processed foods and adding salt to cooked foods.

Offer your baby water at meal times to encourage them to drink from a cup from about six months corrected age.

Allergies

Premature babies have the same risk of developing food allergies as babies born at term, so there is no reason to delay introducing solids or particular foods. In fact, introducing new foods to your baby while breastfeeding may reduce the risk of developing food allergies.

The importance of iron for premature babies

Babies born prematurely have lower iron stores than term babies and a higher risk of iron deficiency and anaemia. Iron is needed to make red blood cells, which carry oxygen around the body. It also plays a role in immunity, brain development and growth. Include iron-rich foods early in the introduction of solids.

The best sources of iron are:

- Red meat (beef, lamb, liver)
- · Chicken, pork and fish

Foods containing moderate amounts of iron include:

- Iron-fortified breakfast cereals (such as baby rice/porridge, wheat biscuits)
- · Lentils or legumes
- Eggs
- Leafy green vegetables

If your baby is prescribed iron and Vitamin D supplements at discharge, continue these until solids are well established or until 12 months of age.

For more information

Maternal & Child Health Line (24 hours)

T: 13 22 29

References

- British Association of Perinatal Medicine 2011
 Joint Consensus Statement on Weaning Preterm Babies.
- Bliss: for babies born premature or sick 2017 'Weaning your premature baby' (online) https://www.bliss.org.uk/parents/about-your-baby/feeding/weaning-your-premature-baby
- Cormack, B, 2013 'Section 2: Preterm Baby Feeding' in Infant Nutrition Handbook 4th Edition, Auckland District Health Board, Auckland
- Palmer, D.J, Makrides, M 2012, 'Introducing Solid Foods to Preterm Infants in Developed Countries' in Annals of Nutrition & Metabolism, No. 60 (Suppl 2), pp. 31–38

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