



INTRODUCING SOLIDS TO PREMATURE BABIES

When to Start?

Most healthy premature babies will be ready to start eating solid food between five and eight months uncorrected age (their age from their date of birth) or, at the very earliest, from three months corrected age (their age from their **expected** date of birth).

The timeframe will vary from one baby to another and will depend on your baby's developmental progress and when they show signs of being ready for solids.

Introducing solids before your baby's digestive system is ready may increase the risk of allergy or anaemia. 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.

Generally, solids should be introduced by **seven months** from birth (or from the expected date of birth).

Signs of Readiness

The best time to introduce solids is when your baby shows signs of being developmentally ready. These signs include when your baby:

- » is easily supported in a sitting position on your lap, bouncer or high chair
- » has some head control
- » often puts their hands or toys into their mouth
- » leans towards food when it is offered and opens their mouth.

Preparing for Mealtimes

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

Make meal times fun. Try introducing solids for the first time when you and your baby are happy and relaxed.

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

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.

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 foods.

Premature Babies Feeding Guide

Use this guide to help you decide when to start solids

Birth date:

Example: 04/06/2013, 28 weeks gestation age (GA)

Estimated due date:

27/08/2013

16 weeks after birth date:

24/9/2013; 1 week of age corrected for prematurity (CA)

16 weeks after estimated due date:

17/12/2013; 4 months CA

The earliest date to start considering solids but check for signs that baby is ready:

Mid-point between the two dates above:

6/11/2013; 2½ months CA (5½ month actual age)

The latest date to start solids in most cases

7 months after birth date:

05/01/2014

Adapted from Cormack, Auckland City Hospital 2004

First Foods

Suggestions for nutritious first foods to offer your baby:

- » iron-fortified infant cereals
- » pureed meat or fish mixed with pureed vegetables
- » mashed ripe avocado or banana.

Begin with one meal a day of solids offered after a breastfeed or formula so your baby is not too hungry. Foods should be smooth and creamy with no lumps.

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.

Introducing more foods and textures

Within one to two weeks you can start to offer two meals a day, depending on your baby's appetite. After about two months of solids, offer three meals a day after a breast or bottle feed. During the first few months of eating solids, breast milk or infant formula will continue to be your baby's major source of nutrients.

After a few weeks, introduce more texture by moving from smooth to mashed food with small, soft lumps such as finely minced meat or soft, cooked lentils. 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.

Home-made vs commercial baby foods

Use homemade foods as often as possible. Shop-bought 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 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 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

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. The best sources of iron are red meat, chicken, pork and fish. Other foods containing iron include iron-fortified breakfast cereals, lentils, leafy green vegetables and eggs. Include iron-rich foods early in the introduction of solids.

Where to get further 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 2011, 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