A UNIQUE CHILD NUTRITION

Solid advice

How can nurseries meet the nutritional needs of babies when they move from breast milk or infant formula to complementary foods? In the first of two articles on weaning, *Nicole Weinstein* looks at the introduction of solid food at six months old

he first year of life is a critical time for good nutrition. Children are developing at a rapid rate and they need enough calories and nutrients to sustain their rapid growth and development, stay healthy and fight infections. Moving on from breast milk or infant formula to the introduction of complementary foods is a big transition for many and especially first-time - parents. It is a time when they may experience mixed emotions of excitement, anxiety, or even a sense of loss that their baby is growing up and will not physically rely on them for nutritional needs. Working closely with parents and offering them guidance on suitable first foods to introduce, and sharing recipes or supporting them with any concerns about the first stages of weaning is therefore vital during this stage of their child's development.

WHEN TO START WEANING

Solid food should be introduced at around six months. Before this, infants can get all the fluid and nutrients they need from breast milk or from infant formula, although the UK Department of Health has recommended that, wherever possible, all infants should be exclusively breastfed for the first six months of life.

But at six months, baby's bodies are undergoing developmental changes that make it necessary for them to have complementary foods. Registered nutritionist Annie Seeley explains, 'At six months, the iron stores that babies lay down in utero begin to decline. Iron is a constituent of haemoglobin in red blood cells, needed to carry oxygen round the body.

'Introducing food means that babies can increase their iron intake to meet their dietary needs with foods such as beef; lamb; fish like pilchards, sardines and salmon; wholemeal bread/flour; fortified breakfast cereals; chickpeas; lentils; baked beans; and vegetables such as spinach, broccoli, and curly kale.

'Around this time, babies are learning to sit unaided and will begin to crawl, bottom-shuffle and eventually walk, and all this increased movement helps drive their brain development. With all these developmental changes, growth and movement, their bodies need higher intakes of protein,

CASE STUDY: BUSY BEES AND BUSY BEARS DAY NURSERIES

At Busy Bees Children's Day Nursery and Busy Bears Children's Day Nursery in County Durham, each baby has a special carer who feeds them according to the times set out in their individual care plans.

Director Alexis Cooper says, 'We work closely with parents and offer them a lot of support and guidance on weaning. We ensure that each child follows the same feeding and sleeping patterns as they do at home.

'Some parents want their baby to be offered a split milk feed complemented by a fruit or vegetable purée in the morning before their nap; others prefer to introduce the first solids at the end of the day. We have a breastfeeding area for mums to come in to feed their children, while other children are bottle fed with infant formula.

'We offer each parent a weaning pack that we've developed to support them through the process. It includes a factsheet on starting solids, frequently asked questions, a sensory baby book with pictures of food, a variety of spoons available on the market for trial, a bowl with sucker bottom for trial, and a long-sleeved bib with a soft compartment to catch food.

'Menus of what we offer the children at nursery are shared with parents each week, so that they can tick what fruits and vegetables they want us to offer their child during the initial weaning stages and during stage two, three and four of weaning. This information is fed to the chef and the kitchen staff on a daily basis,



and put on a chart that covers the four stages of weaning: smooth purées, lumps, mash, and food chopped into small parts. This ensures the babies get the exact texture required in relation to their personal stage through the weaning journey. Parents are very specific about this and we find that it is imperative to get this right to ensure that babies are supported effectively.

'We provide finger food with every meal. A baby who is being introduced to solids will be offered puréed food, along with very softly cooked fruit or



The first solid foods for a baby should be fruit and vegetables purées

saturated fat, carbohydrates, iron, B vitamins and zinc. So while their main source of energy remains milk, they have greater nutrient and vitamin and mineral requirements that need to be met with solids.

By six months, babies are physically ready to start eating solid food. They can sit up with support, control their heads and move food around their mouths. Their swallow reflexes are developed, their digestive and immune systems are stronger and they are often interested in food and want to chew.

ADVISING PARENTS

Nurseries are often faced with the issue of parents wanting to wean before six months. Reasons for this are that baby is waking more at night or seems to want more milk.

'At around four to five months, there is a growth spurt and a huge

MORE INFORMATION

- NHS guide to introducing solids, www.nhs. uk/Conditions/ pregnancy-andbaby/Pages/solidfoods-weaning. aspx#close
- Caroline Walker Trust (2011) Eating well: first year of life, www.cwt.org.uk/ chew
- Information, support and advice on why 'mum's milk' is best, www.nhs.uk/ start4life/pages/ mums-milk.aspx
- World Health
 Organisation
 guidance on
 weaning, www.who.
 int/nutrition/topics/
 infantfeeding_
 recommendation/
 en/index.html
- Annie Seeley's blog, www.anniesdorset kitchen.com

leap in cognitive development,' says Ms Seeley, 'so parents often assume that they need to introduce solids. I think the nursery's role in this situation is to try to encourage parents to delay introduction of solids to around six months and even if solids are introduced before this they should only be fruit and vegetable purées. Finger food can be introduced from about six months.

She continues, 'As fruit and vegetable purées – the recommended first foods – are not high in energy (compared to baby's usual milk) they will be unlikely to meet any increased hunger and/or tackle night time wakings. Nursery staff can explain this to parents.

'Nurseries could put together an information sheet to give to parents on the benefits of weaning at about six months based on World Health Organisation guidance. Before six months, a baby's digestive system is not fully developed, so introducing solids before this time can mean increased risk of respiratory and gastrointestinal illnesses.'

If a parent thinks their child needs complementary foods before six months – 26 weeks of age – practitioners should advise them to talk to a health visitor or other qualified health professional.





vegetables to hold and put into their mouth at the same time. They will also be given a bowl with a spoon and some purée.

'We believe that feeding should be a sensory experience where babies should be exploring and making as much mess as they



like. We work with parents over their anxieties about mess at mealtimes, explaining the importance of children using their senses to explore food.

'One of the biggest challenges that we come across in the initial stage of weaning is trying to introduce solids to exclusively breastfed babies, especially those who feed on demand. Usually, the

baby will start nursery at around weaning age, when the mother goes back to work, and the child not only experiences separation anxiety but their ability to comfort-feed has suddenly gone. We do a lot of work to support the mother's anxieties and concerns that their baby's nutritional needs are not being met because they are rejecting solids in preference for breast milk when they are with their mother. Practitioners invest time in explaining that it's more about taste and getting used to the spoon at first, and that babies are getting their nutritional needs met through milk. Parent's confidence develops quickly through effective partnerships with special carers.

'Practitioners are trained and confident in the weaning process. They have first aid training that enables them to feel confident supporting babies with these first stages of food exploration. Many parents have concerns around choking, and our practitioners are strong in reassuring them due to their knowledge and understanding.'

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FIRST TASTES

The very first foods for babies should be smooth fruit purées and baby rice. Puréed fruits are naturally sweet and can easily be made into the right texture by mixing with expressed breast milk or infant formula to thin them, or with baby rice to thicken. Examples include apples, pears or apricots, which should be cooked until mushy and then sieved or put through a Mouli or baby blender. All fruits should be free of seeds, skin, pips or any lumps that a baby could choke on.

Starchy root vegetables such as carrot, parsnip, sweet potato and butternut squash are also useful first foods. They should be cooked thoroughly and then mashed and puréed with a little breast milk or infant formula. Potatoes and sweet potatoes can also be added as thickeners for other vegetables and sweet vegetables can be combined with less sweet ones when introducing new flavours. Cereals such as baby rice or baby porridge can be served on their own or added to other purées and salt should never be added when preparing purées for babies.

When the first tastes have been introduced, full-fat dairy products such as fromage frais can be added to purées. As first tastes become established, other foods like pulses – beans and lentils – and unprocessed meat and fish to avoid food processing, can be introduced, but this is at the latter end of six months. For a list of foods to avoid, visit www.cwt.org. uk/chew.html.

Ms Seeley says, 'A wide range of different flavours and textures need to be introduced in the first year of eating solids, as this is the time in a child's life when they are most open to trying new foods.'

FINGER FOOD

Finger foods can also be introduced from the age of six months. Examples of good first finger foods include avocado, banana, potato, cooked carrot or apple, cooked courgette or peppers and brocolli. Offering finger food alongside purées provides an opportunity for babies to develop their hand-mouth co-ordination as well as grasping and the pincer hold. It also offers an opportunity for babies to explore food with their hands, and research shows that they are more open to trying new foods if they have this opportunity in weaning.

Examples pictured in the Caroline

Walker Trust's CHEW guidance, *Eating Well: the first year of life*, include chopped strips of banana, avocado, cooked carrot, soft-cooked potato, and cooked yellow or red peppers.

Here is some advice from the guidance about finger food at mealtimes:

- The first finger foods a baby has
- should be soft, but not mushy.Make first finger foods slightly longer than the baby's hand so they
- can grip the food more easily in their fist.Cut soft foods into manageable-
- Cut soft foods into manageablesized pieces.
- Never leave babies alone when eating at any time, but pay particular attention when they are eating finger foods to make sure that they don't choke on pieces that might break off when they put them in their mouth.

BABY-LED WEANING

In baby-led weaning, no food is given to the baby on a spoon and they are encouraged to explore for themselves all the food on offer to them and to eat whatever they can get into their mouths independently. The CHEW guidance agrees with many of the principles of baby-led weaning, but advises offering babies foods on a spoon at mealtimes as well as offering finger food to ensure that they eat well and get all the nutrients they need during the first year of life.

Ms Seeley explains, 'I personally recommend that babies are weaned using a combination of purées/ mashed foods alongside finger foods. This ensures they are getting the nutrients they need initially (from purées and mashed foods) as well as exploring (finger) food with their hands. Though, obviously, nurseries are in a position where they have to work with parents. Baby-led weaning can be a challenge to nurseries because of worries about choking. However, if a parent is following the baby-led weaning route, nurseries need to support them.

'Ideally, I would recommend that nursery staff try to encourage parents to introduce purées initially at least, in line with the Caroline Walker Trust CHEW and Department of Health guidance. If staff do feed babies using the baby-led weaning approach, they will need training otherwise they may not be confident or have the necessary experience.

'All staff in nurseries should have as a bare minimum, first aid training that includes choking.' ■

On the menu

CHEESY BROCCOLI AND BROAD BEAN GALETTES

By Jenny Carenco, author of *Bébé Gourmet: my baby recipe book – 100 easy recipes for raising adventurous eaters*, which is out now from Vermilion

Makes 20

For the tomato sauce

600g cherry tomatoes Itsp olive oil ½ garlic clove, finely chopped

For the galettes

400g broccoli 400g broad beans, frozen 125ml vegetable stock 100g Parmesan, grated 4 fresh basil leaves 1tsp olive oil

Method

- Start the sauce by washing the tomatoes and cutting them into halves.
- In a heavy-based saucepan, heat 1tsp of olive oil and add the garlic. Brown the garlic, then add the tomatoes and lower the heat. Cover and cook over a medium heat for 15-20 minutes. Remove the pan from the heat and stir the tomatoes until have a chunky sauce.
- Meanwhile, for the galettes, wash the broccoli florets and cut them into small pieces.
- Put the broccoli, broad beans and vegetable

stock into a saucepan and add just enough water to cover. Bring to the boil,

Bring to the boil, reduce the heat and cook for ten minutes. Drain the vegetables.
Mix the drained vegetables, the Parmesan and basil until the cheese starts to melt. Blend until you have a smooth purée (it is important to blend well because the starch in the broad beans will hold the galettes together).

- Form the mixture into small galettes, about 3cm in diameter and 1cm thick. Leave them to sit for a few minutes on kitchen paper to absorb some of their moisture.
- Heat the remaining Itsp of olive oil over a medium-high heat in a large non-stick pan. Brown 10 galettes, cooking them 3-5 minutes on each side, then place them on kitchen paper and let cool. Repeat for the remaining galettes.
- Serve the galettes with the tomato sauce. Let Bébé eat the galettes with her fingers and dunk them into a cup of the sauce.

Yummy tip

For a family lunch, serve these galettes with pan-fried chicken escalopes sprinkled with lemon juice and coated with tomato sauce.

