



FOOD & NUTRITION

for Childcare settings

Section 3

Introducing solid foods

Section 3

Introducing solid foods

Contents

Key role of childcare settings in providing food for babies	3
Introducing food	4
Getting started	4
Around 7-9 months	5
Around 10-12 months	6
Texture progression and how much to offer	6
Important nutrients	7
Specific issues – food allergies and preventing choking	8
Breastmilk, infant formula and other milks	9
Providing a menu and example of a typical day's provision	10
Catering for vegetarian and vegan diets	13
Encouraging babies to eat well	13
Further information	14
References	15
Appendix	16



Key role of childcare settings in providing food for babies

Settings that are providing care for babies play a central role in shaping food habits. By providing nutritious food and encouraging babies to eat well, settings can help children meet their nutritional needs and maintain a healthy weight as they grow. Good nutrition in the first 1000 days (from conception to a child's second birthday) helps build the foundations for health, wellbeing and development.

Most babies are developmentally ready for complementary feeding, which is the introduction of solid foods alongside breastmilk or infant formula milk, at around 6 months of age. At about 6 months, additional foods are needed to complement the nutrients in breast milk, or infant formula. It is a key time to introduce babies to a range of tastes and textures as they start their journey to healthy family meals.

Introducing first foods is a special and exciting time for families and an important milestone

in their baby's development. It is also a time when they might have questions and concerns about which foods to give and when. Childcare settings can play a valuable role in signposting families to correct, up to date information from reputable sources. If families or staff have questions, they can refer to this best practice guidance and the web links provided.

If babies are starting solid food when attending a setting, it is essential that key carers work closely with families to make sure there is consistency between home and setting routines. Ideally, feeding up to one year of age should be flexible and guided by the baby. Work with families around menus offered at the setting to try and incorporate all infants' needs. It is important to discuss with families if they are happy for new foods and textures to be given in the setting that they have not had at home. Their preferences, and requirements for the baby can be recorded using the 'encouraging children to eat well template' in section 5 (Appendix 2).

“

When babies join our nursery we work closely with the parents. It's all about building a positive relationship with the family and getting to know their baby's individual eating and sleeping routines. This way, we can work together to provide quality care consistent between home and the setting.

Day Nursery Leader, Cardiff

My son's key worker keeps me up to date with foods my son's having at nursery. I can't believe the variety of meals he's given – and he's eating them! It's given me the confidence to try new foods with him at home.

Mother of 11 month year old

”



Getting started: around 6 months

Introducing solid foods should be based on baby readiness rather than a staged process based on age alone. Babies will develop at different rates.

The aim of first foods is to familiarise babies with new tastes and get used to moving food around their mouth and swallowing it. At about 6 months, many babies will be able to manage a range of pureed and mashed foods as well as being able to hold soft finger foods themselves. Some babies may need a little longer to get used to new textures and prefer pureed foods on a spoon to start with. Chatting to the family and getting to know the baby will help you determine their needs.

Babies' first foods can include a variety of foods from the different foods groups.

Foods offered as part of the menus for older children can also be prepared for babies getting started. Expressed breastmilk, first infant formula and / or full fat cow's milk can be mixed with first foods to achieve the desired consistency.

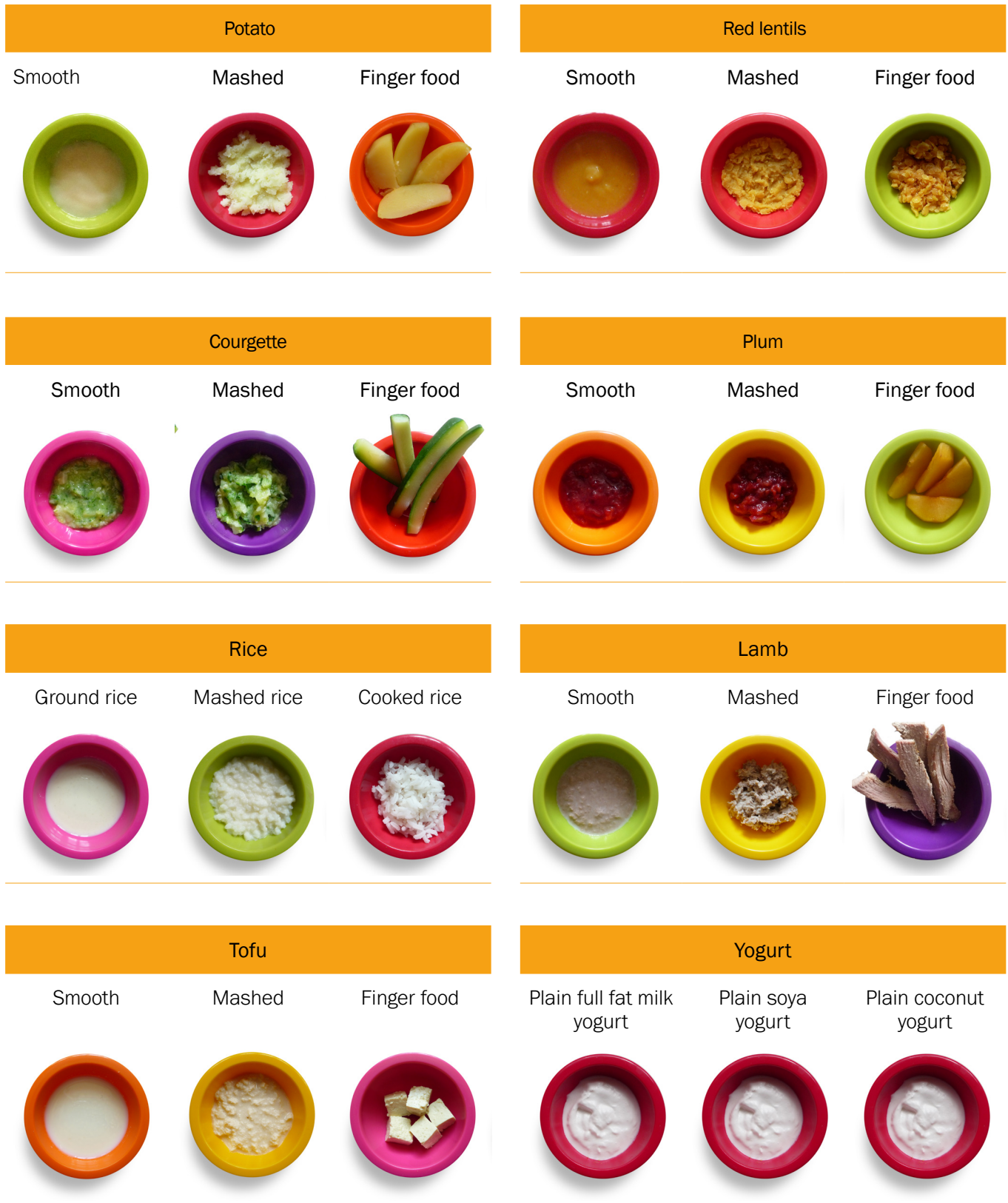
It is useful to offer not-so-sweet vegetable flavours such as broccoli, cauliflower, green beans, mushrooms and spinach as evidence suggests this might help babies be more accepting of vegetables later on¹. For more guidance on first foods for babies see the 'Further Information' section on page 14.

At around 6 months, babies can be encouraged to drink from a cup. Milk (breast milk or first infant formula) and water are the only drinks babies need.

Practice Point

Some families may make the decision to introduce solid foods to their baby before the recommended time of 'around 6 months'. This usually follows discussion with a health professional and individual advice needs to be sought on appropriate food and textures. Feeding bowls and spoons must be sterilised for babies under 6 months of age.

First food examples:



Around 7-9 months

By about 7-9 months, babies should be offered three meals a day (alongside their breastmilk or infant formula milk feeds). At this stage, food can be offered mashed with increasing texture and soft lumps. Providing finger foods

as part of each meal will encourage babies to feed themselves and develop chewing skills, independence and co-ordination. As the baby becomes used to taking solids, a wider variety from the four main food groups can be offered.

Around 10-12 months

At around 10-12 months babies should be having a varied diet including three meals a day (breakfast, lunch and tea) alongside their breastmilk or infant formula feeds. The texture of food should now be minced or chopped up as needed. A wider range of finger foods and crunchier textures can be offered including breadsticks, strips of pitta bread, fingers of toast, sliced tomatoes, sliced boiled egg and cooked pasta. Lunches and teas can include a healthy dessert such as full fat natural yogurt with fruit, baked apple with cinnamon, to ensure the diet is nutrient dense and to move their eating patterns closer to that of children over one year.

Texture progression

It is important to move on to lumpier textures as soon as the baby can manage them. Evidence suggests that offering lumps and finger foods before the age of 9-10 months (at the latest) might help the child be less fussy with food later on¹. The recipes provided in the guidance can be blended, minced, mashed or chopped to suit the needs of the baby and finger food ideas are included in the example menus.

Many families worry about choking and may rely on pureed and soft foods for a longer period than needed. Settings can play an important role in reassuring parents, and childcare staff, and work closely together to encourage texture progression.

How much food to offer?

Table 2 (page 12) gives a guideline food provision for babies 7 to 9 and 10 to 12 months. From 12 months of age most young children will be enjoying 3 meals and 2-3 nutritious snacks across the full day (between the setting and home).

Typical amounts to offer infants are shown, however there is no need to worry a lot about portion sizes at this age. How much infants eat depends on their appetite so let them guide you on how much food they need. If the baby turns their head away from the food, clamps

their mouth shut, pushes the food or spoon away, they may be full. Never force a baby to eat more than they want to. Remember that babies' appetites can vary from child to child and from day to day.

Moving on with textures:



7 to 9 months – Salmon pie



7 to 9 months – Spaghetti bolognese



10 to 12 months – Fish pie and courgette



10 to 12 months – Savoury mince and green beans

Homemade vs commercial baby foods

It is best practice for settings to prepare and provide homemade foods for babies and children of all ages.

A range of products marketed as ‘baby foods’ are widely available to buy including ready prepared meals and purees in jars, packets and pouches. Many baby food products are less nutritious, sweeter, and of a different consistency to homemade equivalents³. Commercial baby foods can also be more expensive and may be sold in portion sizes larger than required. Homemade foods will allow babies to experience a range of tastes and textures and help them to enjoy family meals. If provided by parents, commercial baby food should be decanted into a bowl before feeding so the child can see, smell and touch what they are eating, and if appropriate add some finger foods.

Settings are encouraged to share the recipes and the web link to the guidance with families, should they welcome a copy.

Important nutrients

It's important that babies are offered a variety of foods to get all the energy and nutrients they need. Babies should be given iron rich foods daily, examples include beans, lentils, red meat, green vegetables, iron fortified breakfast cereals (low in salt and sugar) and fish such as salmon and tuna, that has been checked for bones.

Vitamins and the Healthy Start Scheme

It is recommended that from birth to one year of age, exclusively or partially breastfed babies should be given a daily supplement containing 8.5 micrograms to 10 micrograms of vitamin D.

Formula-fed babies do not need a vitamin D supplement unless they are receiving less than 500ml (about a pint) of formula a day.



All children aged 1 to 4 years of age should be given a daily supplement containing 10 micrograms of vitamin D.

You may be entitled to free vitamins and money off healthy foods for your child until the age of four under the Healthy Start Scheme. Check at www.healthystart.nhs.uk

Specific issues

Food allergies

If a baby already has a diagnosed food allergy this should be recorded and processes put in place at registration, before attending.

Babies and children may develop allergies to certain foods and there are some foods more likely to cause allergies than others. Those that most commonly cause problems in children are milk, eggs, soya, fish / shellfish, gluten, wheat, peanuts and tree nuts. Many families worry about introducing these foods to their baby but they can be given, just like any other foods. However, it is important to introduce one allergenic food at a time and in small amounts so that carers can spot any reaction, see Table 1. Once introduced, and if tolerated, keep offering these foods as part of the baby's diet. Remember: when introducing these foods they should be the correct consistency for the baby's age.

Table 1

Signs of a food allergy (can include one or more of the following reactions):

- diarrhoea or vomiting
- a cough
- wheezing and shortness of breath
- itchy throat and tongue
- itchy skin or rash
- swollen lips and throat
- runny or blocked nose
- sore, red and itchy eyes
- feeling dizzy or lightheaded

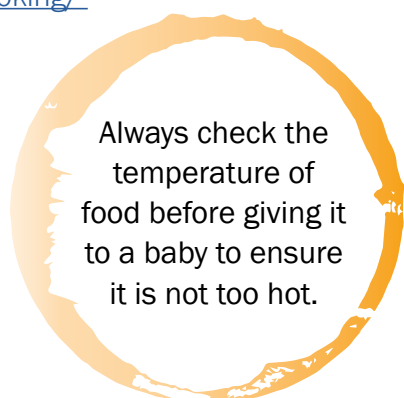
In a few cases, foods can cause a severe allergic food reaction (anaphylaxis), which can be life-threatening. Call 999 and get medical help immediately. You can find out more at www.111.wales.nhs.uk/encyclopaedia/a/article/alergeddbwyd/

Parents may wish to offer allergenic foods at home before giving them in the childcare setting particularly if there is a family history of allergies. If a baby has an existing, diagnosed food allergy, it is important to work with the parents / carers to write and agree a clear management plan. Health professionals will be involved, if required. For more information see section 4 of this guidance.

Preventing choking

It is common for babies to gag and spit when introducing solid foods. This is normal as they get used to chewing, swallowing and new textures. Choking is different from gagging and requires immediate attention. All childcare practitioners supervising infants at snack and mealtimes should hold an up-to-date certificate in paediatric first aid. Information about helping a choking baby can be found on:

www.111.wales.nhs.uk/livewell/pregnancy/safetychoking/



Practice Point

Keeping babies safe at mealtimes

Always ensure babies are supervised when eating. They must never be left alone with food or drink and should be given time to eat and swallow each mouthful. Babies should be upright, alert and sitting to eat e.g. safely strapped into a highchair with their feet supported. Walking or running around with food is a safety hazard.

To avoid choking, cut small foods like grapes, tomatoes and blueberries into quarters lengthways. Take care with: pips; stones; tough skins; hard foods such as unripe fruits, chunks of raw vegetables or cubes of cheese (grate or slice instead); slippery foods such as tinned peaches, sticky foods and white bread. Do not give babies under 1 whole raisins or dried fruit. Cut them into small pieces. Never give babies whole nuts or popcorn (until 5 years old) or add food to bottles of milk. A table of early years food choking hazards can be found here: www.foundationyears.org.uk/2021/09/food-safety-advice-on-choking-hazards-in-settings/

Practice Point

The only drinks babies need are water and milk (breast milk or first infant formula). Babies can be encouraged to drink from a cup from around 6 months of age. This should be an open cup (without a lid) or a non-valve free-flowing cup. Drinking from a cup is an important skill to learn and can take time and practice. For babies being fed with a bottle, they are encouraged to be bottle free by around 1 year, so you can work with the family to achieve this. The prolonged use of bottles can lead to tooth decay and nutritional problems.

Breast milk, infant formula and other milks from 6-12 months

Breastfed babies will adjust their milk intake as their food intake increases. For guidance on infant formula milk and responsive feeding see section 2 'how much milk do babies need?'.
Fresh drinking water can be offered as appropriate to babies and children over 6 months of age, especially in warm weather.

Other milks and babies 0-12 months

Cow's milk, goat's milk and sheep's milk are not suitable as a main drink in the first year of life because they are low in iron. However, small amounts can be used when preparing foods for babies as long as they are pasteurised

and full fat (e.g. to make homemade custard, white sauce or to add to breakfast cereal). Goat's milk and sheep's milk are not suitable for babies with a diagnosed cow's milk protein allergy.

Ready-made milk alternatives such as oat, soya, hemp, nut and coconut milks can also be used in cooking e.g. for babies who exclude dairy foods from their diet. It is important that these are fortified with calcium and unsweetened. These are not suitable as a main drink for babies under 12 months of age because they are low in iron and energy. Families are encouraged to speak to a health professional before using as a drink for children 1-2 years.

	In cooking for babies	As a drink for babies 0-12 months of age	As a drink for children 1-4 years
Pasteurised full fat animal milk e.g. cow's milk, goat's milk, sheep's milk	✓	✗	✓
Unsweetened, calcium fortified milk alternatives e.g. soya milk, oat milk, nut and coconut milks	✓	✗	✓*
Rice milk should not be given to children under 5 years as it contains arsenic	✗	✗	✗

*These milks are lower in energy and nutrients than animal milks. Families are encouraged to speak to a health professional before using as a drink for children 1-2 years.

Baby Teeth Matter

- Sugary foods and drinks should not be given to babies to protect their teeth. Decay in baby teeth can affect the development of adult teeth.
- Families are encouraged to brush their baby's teeth twice a day as soon as they appear – using a smear of toothpaste containing at least 1,000ppm fluoride.
- It is recommended that babies are taken to the dentist as soon as teeth appear and no later than the first birthday².
- For older infants and young children your setting may be part of the Designed to Smile scheme (see section 4 of this guidance).



Providing a menu and cooking for babies

Include babies in mealtimes with others as soon as they start to eat solid foods. There is no need to make special foods for babies. The example menus in 'Menus and Recipes' for those aged 7 to 12 months show how the menus for 1 to 4 year olds can be modified to meet the needs of babies. The recipes include modifications in ingredients and textures so that babies can enjoy similar meals to others at the table.

Batch cooking and freezing portions for babies can be cost effective and reduce the time spent cooking, particularly if you care for a small number of children or cater for those following a special diet.

It is important not to add salt to babies' food including stock cubes, gravy granules and condiments (e.g. ketchup). Babies' kidneys are not yet mature and cannot cope with too much salt in the diet. Herbs, garlic and mild spices can be used to add flavour to dishes instead.

It is also important not to add sugar or artificial sweeteners to foods for babies and young children. Honey is unsuitable in the first year of life as it contains bacteria that can cause botulism (a form of food poisoning) so not recommended for infants and young children as well as also being high in free sugars.





Summary – Foods and drinks to avoid in the first year of life

- Honey
- Salty foods, stock cubes, condiments (e.g. ketchup, soya sauce), gravy granules
- Processed ready meals
- Food and drinks high in free sugars
- Artificially sweetened foods and drinks
- Whole nuts, popcorn, whole raisins / dried fruit and hard chunks of food*
- Tea and coffee (can interfere with sleep and iron absorption)

Remember – water and milk (breast milk and / or first infant formula milk) are the only drinks babies need in the first year of life.

* not recommended for under 5's due to risk of choking.

For further information on choking hazards in settings see: www.foundationyears.org.uk/2021/09/food-safety-advice-on-choking-hazards-in-settings/

Practice Point

Babies are vulnerable to the bacteria that cause food poisoning. Food hygiene and safety is paramount when preparing, storing and reheating foods for babies. Refer to section 6 for more information and the Food and Hygiene safety guidance in Safe Food, Better Business from the FSA.

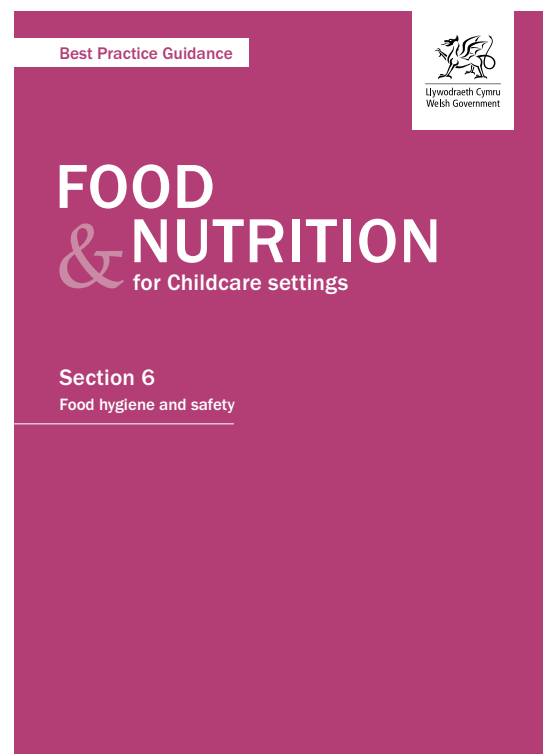


Table 2. Example of a day’s typical food provision for babies aged 7 to 9 months and 10 to 12 months, and children 1 to 4 years

To help illustrate progression in food patterns, the differences in typical food provision for babies 7 to 9 and 10 to 12 months and then children aged 1 to 4 years for one day of an example menu is provided in the table below.

Meal	Babies 7 to 9 months	Babies 10 to 12 months	Babies 1 to 4 years
Breakfast	Malt wheat cereal (mashed as needed) and milk with sticks of banana as finger food.	Malt wheat cereal (mashed as needed) and milk with sticks of banana as finger food.	Malt wheat cereal and milk with sliced banana. Wholemeal toast and spread.
Mid-morning snack	Not provided (energy and nutrient needs met by main meals and breastmilk / first infant formula).	Not provided (energy and nutrient needs met by main meals and breastmilk / first infant formula).	'Plain rice cakes, cream cheese, carrot and pepper sticks. Milk or water.
Lunch	Creamy chicken (or soya), leek and potato hotpot (blended / mashed with soft lumps) and broccoli florets as finger food.	Creamy chicken (or soya), leek and potato hotpot (chopped or minced as needed) and broccoli florets as finger food. Baked apple with cinnamon (no sugar added) and natural yogurt.	Creamy chicken (or soya), leek and potato hotpot and broccoli florets. Baked apple with cinnamon.
Mid-afternoon snack	Not provided (energy and nutrient needs met by main meals and breastmilk / first infant formula).	Not provided (energy and nutrient needs met by main meals and breastmilk / first infant formula).	Pear and natural yogurt. Milk or water.
Tea	Butternut squash and lentil soup (blended / mashed as needed) with cooked green beans as finger food.	Butternut squash and lentil soup (mashed as needed) with wholemeal bread and spread as finger food. Raspberries as finger food with custard.	Butternut squash and lentil soup and wholemeal bread fingers with spread. Raspberries and custard.
Breastmilk* / first infant formula	Typically, four breastmilk / infant formula feeds per day spaced between meals in line with individual routines.	Typically, four breastmilk / infant formula feeds per day spaced between meals in line with individual routines.	Provided in line with individual routines. Children over 1 year no longer require infant formula milk unless on specific medical advice. Full fat or semi skimmed cow’s milk can be offered as a drink. Breastmilk can still be offered.
Fresh drinking water	To be offered as appropriate, e.g. with meals to all infants and children. Breastfed babies under 6 months are unlikely to need drinks of water.		

Practice Point

It is important that families talk to their Health Visitor should they have questions about feeding their baby. Families with a baby who was born prematurely or has additional or more complex needs will usually seek individual feeding advice from their health professional. Record any specific requirements in the baby's care plan.

Vegetarian diets

Some families will be vegetarian and want to bring up their baby following a vegetarian diet too. Following the food standards and guidance to provide a variety of vegetarian choices will ensure the nutritional needs of these babies are met (see volume 1, section 4). Settings providing full day menus are encouraged to provide at least one lunch and one tea every week using pulses or a meat alternative for all the children in their care. Check the food labels on processed vegetarian products (e.g. vegetarian sausages) as these can be high in fat and salt – don't use those with red traffic light labelling.

Vegan diets

A well planned vegan diet will ensure the baby gets the energy and nutrients they need for growth and development. If families have concerns about their baby's growth and development they can be encouraged to seek advice from their healthcare professional.

The parent / carer will have all the necessary dietary information to give to the setting. You may be able to fully cater for vegan babies or you might work together with the family to plan foods from both home and the setting. Providing parents / carers with a copy of menus will allow them to bring in plant-based options similar to the dishes on offer.

The First Steps Nutrition Trust provides a visual and practical guide 'Eating well: vegan infants and under-5s' at www.firststepsnutrition.org/eating-well-early-years

The Vegan Society website contains information on planning plant-based meals for babies and children at www.vegansociety.com



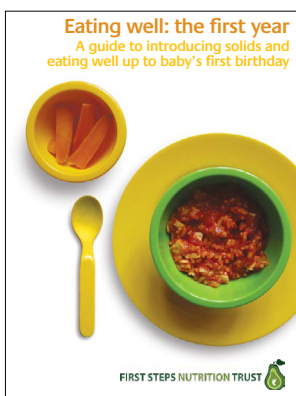
Top Tips: encouraging babies to eat well

- Allow babies to experiment and make a mess at mealtimes. Clean their hands and face at the end of the meal rather than during.
- Make eating a relaxed and sociable occasion. Watching others eat can help encourage acceptance of new foods.
- Interact and talk to babies whilst helping them to eat. Mealtimes provide valuable opportunities to develop communication skills.
- It may take repeated attempts for babies to learn to like a new food. Even if a baby spits out a food initially, try it again another time.
- Allow children to self-feed whenever they wish to with finger foods or their own spoon (if spoon-feeding).
- Think about colour when planning menus to make meals interesting and appealing.
- If using a spoon, allow the baby to open their mouth before offering the next spoonful.
- Keep mealtimes free from screens and distractions. It can be hard for babies and young children to concentrate on more than one activity.
- Allow plenty of time for eating so babies can eat at their own pace.

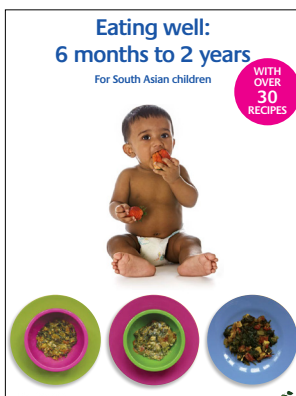
Further information



NHS website www.everychildwales.co.uk



First Steps Nutrition for practical and visual resources on feeding babies and young children www.firststepsnutrition.org



References

- 1 Scientific Advisory Committee on Nutrition (2018). Feeding in the first year of life. Available at: www.gov.uk/government/publications/feeding-in-the-first-year-of-life-sacn-report [8th August 2019].
- 2 British Society of Paediatric Dentistry (2018). Dental Check by One. Available at: www.bspd.co.uk/Patients/Dental-Check-by-One [Accessed 19th August 2019].
- 3 First Steps Nutrition (2017). Baby Foods in the UK. Available at: www.firststepsnutrition.org/babyfood-composition [Accessed 2nd October 2019].

Action Plan – Feeding babies and introducing solid foods

Name of setting:		Completion date:	Review date:
I / we encourage and support breastfeeding	Is in place and can be demonstrated by:	Actions needed:	By date:
A welcoming environment is provided for mothers to breastfeed or express milk			
Supporting breastfeeding is part of our setting's policy			
Expressed breastmilk is stored and handled safely			
Expressed breastmilk is clearly labelled with the child's name and only used for that child			

I / we follow the safe bottle feeding recommendations in the national food and nutrition for childcare settings – best practice guidance	Is in place and can be demonstrated by:	Actions needed:	By date:
All bottles and teats are cleaned and sterilised before use			
Feeds are prepared in a hygienic area with access to fresh drinking water			
Feeds are prepared freshly each time the baby needs one			
Babies are fed by the same carer / key worker whenever possible and held close during feeds			
I / we follow the principles of responsive feeding			

I / we plan varied menus for infants aged 7-12 months which meet the national food and nutrition for childcare settings – best practice guidance	Is in place and can be demonstrated by:	Actions needed:	By date:
Solids are started in partnership with the family			
Foods for babies are prepared and stored following regulated food safety and hygiene practices			
Babies are closely supervised at mealtimes and never left alone with food or drink			
Babies are offered a variety of homemade foods			
No salt or sugar is added to food for infants			
Self-feeding is encouraged. We / I work with families to provide appropriate finger foods for infants around 6 months and over			

I / we plan varied menus for infants aged 7-12 months which meet the national food and nutrition for childcare settings – best practice guidance	Is in place and can be demonstrated by:	Actions needed:	By date:
Babies eat with others to make mealtimes sociable			
We / I stop feeding when the baby shows signs of having had enough (milk or food)			
Babies are encouraged to drink from a cup from around 6 months of age (lidless or free-flowing)			