Vitabiotics WellKiD

Baby's Healthy Beginnings

Nutritional Advice From Birth to Five Years

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Introduction

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As parents we have many ambitions for our children but for most of us the foremost desire is that they will be healthy and happy. We know how important our children's diets are for their health and wellbeing but getting this right can be a daunting prospect. From the beginning many parents feel they don't know where to start and others are overwhelmed with suggestions from many sources including family, friends, healthcare professionals but often with conflicting messages as to which is the best advice.

This guide has been written to help provide you with up to date information on the best foods and drinks for your child from birth to five years. It is arranged in sections for each of the key stages when their needs change.

The guide starts with suggestions for mum's diet in the first 6 months; this is generally based on breastfeeding but still has useful information for mum if baby is formula fed. Weaning is then covered, when to start, which foods to introduce, in what order, and why. The very start of food introduction is where we can lay down our children's dietary foundations for life. Our attitudes to food are shaped not only by the flavour but by many other factors. How we introduce foods to our children may influence how they feel about food and the choices they make throughout life. Weaning needs to be taken at your baby's pace but advice is given to help you introduce foods when the digestive and immune systems are most likely to be ready.

The following sections explain which nutrients growing toddlers and children need, which foods provide these and roughly how much young children should be eating at each age stage. There are also some suggestions on how to entice picky eaters into eating the foods they need to be well.

Yvonne Bishop-Weston is a Nutritional Therapist.

"As a mum, and a Nutritional Therapist working with children and parents, I know that even with the best knowledge and intentions not everyday will go according to plan but that if we get our children's diets mostly right we can be confident that we have set them up with the best start."

She founded Foods for Life Nutrition offering personal nutritional therapy for a wide range of health issues such as optimum nutrition for babies and children, infertility, pre-conceptual care and pregnancy.

She has also held many key roles during her career in the Health Food and Nutrition Industry.

Johannes and Yasmin photo courtesy of Jackie King – www.jackieking.com

The First 6 Months

The First 6 Months

The first three months after birth are increasingly being termed the fourth trimester. At birth, your baby's whole world is suddenly changed and there is much adapting to be done.

Baby's brain needs to take in so much at this time and they are totally dependent on others to care for their every need. Over the first three months they learn to respond to the outside world. Breathing becomes more regulated and baby has more physical control over their body. Social interaction starts and by four months baby can even start to self-soothe.

For mum (and dad) the first three months can also be seen as the fourth trimester as mum copes with the change both physically and emotionally. Hormones are yet again changing, sleep is disrupted and fatigue is common. It is also useful to consider this as the next stage of pregnancy in terms of mum and baby's diet. When breastfeeding, food still needs to be safe as potentially harmful agents can be transferred to baby via breast milk. Baby's physical development is rapid and the right nutrients are needed just as they were pre-birth.

Breast or bottle

The ideal food for baby is breast milk as it is custom made. There are situations however where breastfeeding is not possible. There may be structural problems, babies can be unable to digest the sugar in breast milk, the mum may be taking medications which could affect baby, or baby may be fostered or adopted. There are a range of options when it comes to choosing formula so look at the ingredients to help choose the most comprehensive nutrient provider. Also ensure bottles and storage containers for taking formula powder out and about are BPA free.

Even if you plan to breastfeed, the first couple of weeks may be daunting and challenging so prepare for this and focus on the fact that usually it quickly becomes easier. Pre-natal breastfeeding courses are very helpful not only because they teach parents what to expect but they also open up a support network to access help where needed. Also consider looking up a local pregnancy specific reflexologist or acupuncturist before the birth as these therapies can help to stimulate milk flow if needed. This can be especially helpful if your baby was born by caesarean section.

Below we will focus on breastfeeding, if you are not breastfeeding the dietary advice would still help mum get all she needs in the first 6 months.

Breastfeeding

Why breastfeed?

Where possible, breast milk really is best. It is custom made and provides all the nutrients baby needs. Breastfed babies have been shown to have better immune systems and so fewer illnesses, fewer digestive problems, lower likelihood of allergies and even higher IQ's. The UK Government recommends exclusively breastfeeding for at least the first six months and the World Health Organisation recommends that breastfeeding continues for two years of age or beyond.

Best for baby...

1. Breast milk not only contains vital ingredients for your baby's health and development but it is also ready on demand at just the right temperature.

2. Breast milk contains optimal amounts of vitamins; C, D, E and folic acid and minerals; calcium, iron, zinc, manganese, selenium and chromium. It is not just the range and quantity of these nutrients which is important but also the quality as many have been shown to be easier to absorb than those in formula milk.

3. Breast milk provides essential fats including the omega-3 fat DHA which is vital for the development of baby's brain and nervous system.

4. Breast milk provides beneficial bifidobacteria to support the bacterial balance of your baby's gut, boosts immunity and helps prevent the development of colic and eczema. It also has factors which help your baby's gut develop and mature.

5. Breast milk has enzymes making it is easier to digest and release vital nutrients.

6. Breast milk has antibacterial, anti-viral, anti-parasitic, anti-allergenic factors and growth factors.

7. Breastfed babies are more likely to get just the right amount of milk and are less likely to be overweight.

8. Breastfeeding helps with baby's jaw development getting it into practice for eating and developing speech.

9. Breastfeeding may reduce the risk of some chronic diseases such as juvenile diabetes, childhood cancers, allergies and asthma.

10. Breastfed babies with mothers who have a varied diet may be more likely to accept unfamiliar flavours when weaned and be more willing to try new flavours and so get a better variety of nutrients.

Best for mum...

1. Breastfeeding saves time as there is no mixing, sterilizing or heating of milk needed. With a good breast pump feeding can also be delegated to give mum a break.
2. May reduce the risk of osteoporosis
3. Helps with post-pregnancy weight loss due to the approximate 500 calories a day it burns and as it triggers hormones which help the womb contract back to its normal size

Milk Supply

Babies are born with a store of sugar to see them through the first three or four days when they are learning to feed. It is in these first days that baby receives colostrum which is rich in amino acids, vitamins, minerals and antibodies and gets them prepared for the outside world. Around day four or five of breastfeeding mum starts to make milk rather than colostrum and this is all baby needs for the first six months.

The most common reason babies are supplemented with formula is the concern that they are not getting enough milk. The easiest way to check baby is getting enough, and alleviate this concern, is regular weighing. Babies lose the fluids stored before they are born in the first couple of days after birth and so have a slight drop in weight. After that their weight should steadily increase. When having baby weighed do check your healthcare practitioner is using a breastfed rather than formula-fed growth chart. Checking that baby is having regular wet nappies and bowel movements also helps to tell if baby is getting enough milk. After the first week there are generally about six to eight wet nappies in a 24 hour period and the urine should be clear and not noticeably smelly. There should also be at least two to five yellowy soft bowel movements a day.

As long as baby feeds regularly mum should automatically produce enough milk. Insufficient calories can reduce milk levels so this is not a time for significant calorie restriction to lose weight, especially not in the first six weeks of feeding. It is also however not always necessary to replace the 500 calories a day breastfeeding can burn. Some of this need may be met by fat stores laid down in pregnancy, along with mums more efficient metabolism at this time.

It is not just the quantity of calories that matter but also the quality. Pages 23-24 give tips on which foods and drinks give mum and baby the nutrients they need whilst helping mum get back her pre-pregnancy body. Breastfeeding also uses mums water stores so it is important to drink enough to prevent dehydration which, like lack of calories, can reduce milk supplies. An easy habit to get into is to have a drink of water handy for when breastfeeding as it triggers the release of the hormone oxytocin which can make you feel thirsty.

Milk supplies can also drop if mum is anaemic so if you are consistently feeling tired check with your GP. Fennel tea is also reputed to boost milk supply, choose organic teas to avoid pesticides.

How often to feed

There is much debate about whether babies should be fed at set times or on demand, which is whenever they show signs of wanting to feed and allowing them to feed as long as they like. But the experts in this field, including The WHO and La Leche League are clear that feeding on demand gives baby the best start. Babies fed on demand appear to have fewer digestive problems and have also been shown to have increased IQ and SAT scores when they are older (Avon Longitudinal Study of Parents and Children, a study of more than 10,000 children). On demand feeding is most effective when the parents learn to recognise their baby's signals that they want a feed, rather than waiting until they cry, as this makes it difficult to feed. Common signals include making rooting motions, making sucking sounds and being more active.

A new born should feed at least 8, and often 10-12 times in a 24 hour period. For the first few weeks babies don't always wake when hungry so at first they may need waking to feed if they sleep longer than four hours. For many of these feeds baby should feed enthusiastically for about 10-15 minutes on each breast and is likely to nap when full. Babies get better at letting you know when they are hungry as they get older.

Expressing milk is something to consider as it means milk can be safely stored for times when mum may not be available. It can also help a sleep-deprived mum get some sleep if dad can bottle-feed baby expressed milk. Expressed milk can be stored in the fridge for up to eight days if below 4°C or three days if 5-10°C. Freezing milk may lead to a reduction of immune-boosting properties but it can be stored for four months so is a valuable back up.

Common diet-related concerns

Colic

One in ten babies suffer with colic, which usually starts in the first few months and typically goes away by the time the baby is three to four months old. It is a distressing condition which usually occurs in the evening with the baby crying loudly and continuously and frequently drawing the legs upwards and towards the chest. The stomach is usually bloated and tense and passing wind or stools usually helps.

Colic is probably caused by a combination of various factors including an immature nervous system in the gut, over-feeding, or the wrong feeding posture, or it may be due to a cow's milk or lactose intolerance or sensitivity to something else in the mum's diet such as gas-forming foods.

Common culprit foods to watch include: dairy, chocolate, caffeine, melons, cucumbers, peppers, citrus fruits, juices and spicy foods. In addition reducing gas-forming foods such as cauliflower, broccoli, Brussels sprouts, cucumbers, red and green peppers, onions, beans and legumes may help. Discuss with your healthcare practitioner before avoiding these foods as these are healthy foods which should only be avoided if needed. Your practitioner can also check for potential problems such as lactose intolerance. Soothing herb teas may also be worth a try for mum as they may calm baby's digestive system. Camomile, fennel, peppermint and ginger can have a soothing and relaxing effect. Baby massage may also help.

Lack of beneficial bacteria

Baby's sterile gut is first populated with bacteria when they are born. They pick up beneficial bacteria from mum's birth canal on their journey and this provides a key immune support to the gut. If mum has low levels of good bacteria and thrush in pregnancy baby picks up less good bacteria but also picks up more yeast. This may lead to fermentation, bloating and irritability in baby. Baby specific probiotics can be given to support baby's gut health and are especially advisable if baby was born via caesarean section and so wasn't as exposed to the beneficial bacteria in the birth process.

Allergies / intolerance

It is possible that avoiding potentially allergenic foods in pregnancy and babyhood may reduce the chance of the child developing allergies. The UK Department of Health advise that if either parent is atopic (has inherited allergies such as eczema, asthma or hay fever) they consider avoiding peanuts in pregnancy and breastfeeding. Peanuts are however only one of the common allergens. If baby is not feeding well, is getting diarrhoea or vomiting, is not growing well or is getting eczema or skin rashes, and their doctor has ruled out other causes, it may be wise to look at sensitivities to the food mum is eating. Common triggers which may need to be removed from mum's diet are wheat, coffee, tea, chocolate, citrus, soya, nuts and eggs.

Lactose intolerance is different to an allergy or sensitivity to milk as it is the inability to digest the sugar in milk rather than an immune reaction to the protein. This can be a problem in breast and bottle-fed babies and can be tested for.

Mum's diet

The body manufactures nourishing breast milk at the expense of the mum so although it is comforting to know that baby's needs are prioritised, if mum doesn't get enough nutrients and gets run down she is less likely to enjoy fulfilling the demands that babies bring.

Plan Ahead

Plan your first couple of weeks of food before baby is born. That way when people offer to help you can be specific about what they can get or prepare for you whilst you focus on getting to know baby. Include foods which are easy to eat whilst feeding, especially meals which can be prepared in advance and frozen. Soups and stews make great meals in a cup. Include potatoes, brown rice or pasta, plenty of vegetables and some meat or beans and keep the chunks small so they can be drunk without the need for cutlery. Stock up on wholegrain crackers such as oatcakes and rye crackers which can be dipped into tubs of houmous, especially ones with added avocado or sun-dried tomato for extra nutrients, for a one-handed meal. Avoid spicy foods which may put baby off at first. Healthy muesli and fruit bars are also easy to snack on when out and about.

Balance blood sugar levels

When tired and busy it can be all too easy to reach for sugary quick fixes for fast energy. The sugars from processed carbohydrates are however quickly released into the bloodstream where, in excess, they can cause damage. The body tries to regain balance by storing excess fast carbs and turning them into body fat. This leads to weight gain, a slump in energy and mood and cravings for more nutrient-depleted calories.

Eat at regular intervals to help keep blood sugar levels balanced. Eat within an hour of waking and include healthy snacks between your main meals. Aim to have something to eat every three to four hours. Also leave a snack and drink by the bed for night feeding.

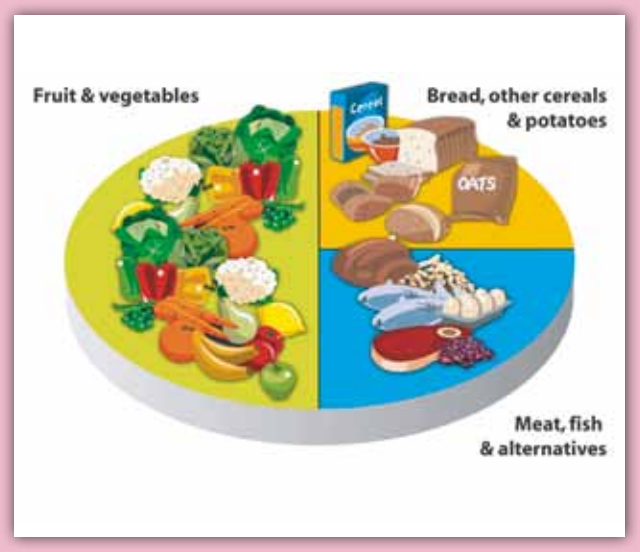
Add some quality protein *(meat, fish, eggs, nuts, seeds, beans and pulses)* to each meal as it slows digestion helping you release steady useable energy rather than highs and lows.

Add vegetables and lower sugar fruits such as berries to each meal as the fibre helps to slow digestion and keep energy steady.

Avoid caffeinated drinks which can lead to a stress hormone release which can trigger the body to release stored sugar leading to a blood sugar high and subsequently low..

If you are not getting much sleep and need a boost at night **try a kids-sized smoothie** but as fruit drinks are high in natural sugars have a handful of nuts or seeds to add sugar balancing protein.

Structure your meals to fit in with the following plate ratios to help keep blood sugar levels balanced.



Healthy mum & baby helpers

Steady energy carbohydrates

Include fibre-rich complex carbohydrates such as whole grains (brown rice, quinoa, buckwheat, millet, rye, and oats) which support blood sugar balance as well as supplying essential nutrients. Soluble fibre from oats and flax seeds is especially helpful in relieving constipation, which can be a problem post birth. Fibre supports daily detoxification and helps prevent bloating. Beans and pulses are an excellent choice of complex carbohydrates as they provide, in addition to the carbohydrate content, protein and fibre and are also low in saturated fat.

Nutrient rainbow

Go for 8-a-day vegetables and fruit as this is where the health benefit evidence lies. They provide vital vitamins, minerals, antioxidants and fibre. Focus more on the vegetables than the fruits as they are lower in sugar. Ideally have five to six portions of vegetables a day and two to three of fruit. Include three different vegetables at lunch and dinner and a fruit with breakfast and one of your snacks and you will easily reach 8-a-day. The different colours provide different nutrients so include dark green leafy vegetables for minerals and orange, red and purple for vitamins and protective antioxidants.

Brain-building fats

Include omega-3 fats from small-sized oily fish, flax and hemp seeds. These fats are essential for baby's brain, nervous system and eye development. When cooking use olive or rapeseed oil for shallow frying and organic coconut oil for baking, and keep the temperature below 180°C. Keep polyunsaturated oils such as sunflower, sesame, flax and hemp for cold use such as salad dressings or drizzling over cooked foods. Buy oils in glass rather than plastic bottles as fat can draw potentially harmful chemicals out of plastic.

Body building proteins

When pregnant and breastfeeding, mums needs more protein than usual. Protein is a key food group as it forms the building blocks of the body and hence is needed for building and repairing cells, muscles, organs and tissues. Protein building amino acids are needed for the immune system and mood. Protein is also needed for milk production.

Include protein from sources unattached to saturated fats. Vegetable protein is ideal, include, nuts, seeds, beans, pulses and tofu. Omega-3 eggs from seed-feds hens provide protein with brain-building omega-3 fats. Dairy products provide protein; choose the types which are lower in saturated fats. White fish and small sized oily fish are also good protein sources.

Vital hydration

Plenty of fluid is needed to prevent dehydration and maintain milk supply. Water is the ideal choice, ideally filtered and alkalised (from a built in system or jug). Have this between meals and drink through the day rather than in large quantities to help prevent stress on the kidneys. Avoid water with meals as it may dilute digestive enzymes, before a meal is ideal. Vegetables juices are a great way to add extra nutrients as well as fluids and they tend to be lower in sugar than fruit juices. Fruit teas and relaxing teas such as camomile can also add variety of flavour. Aim for one and a half to two litres of fluids a day, more if you are exercising or the weather is hot.

Healthy mum & baby hinderers

Fast carbs

In order to help balance blood sugar levels and maintain energy avoid confectionary and simple sugars, particularly 'hidden' sugars in processed foods. Especially watch out for added sugars in reduced-fat foods as it is often added to replace the flavour lost when the fat was removed. Avoid refined carbohydrates such as white rice, white bread and white pasta as refining depletes up to 15 different nutrients. Only have dried fruit in the same quantity as you would have fruit fresh such as, two or three dried apricots as a snack.

Avoid drinks with added sugars such as sweetened soft drinks, squashes and undiluted fruit juices. An average 250ml sized glass of fruit juice has about six or seven teaspoons of sugar and just one glass of fruit juice a day has been shown to increase the odds of developing type 2 diabetes by 18% (Harvard Medical School study on 70,000 female nurses over an 18 year period). Drinks with artificial sweeteners are not ideal as some may also have health risks but stevia is a natural sweetener which does not raise blood sugar levels. Also avoid carbonated drinks as the acidity can deplete calcium stores.

Empty calories

Choose foods which provide nutrients along with the calories. It is easy to reach for high calorie snacks like biscuits or crisps but they provide a hefty dose of calories, a craving for more and few nutrients. Opt instead for wholegrain crackers or carrot sticks with a mini houmous tub or a piece of fruit and a handful of nuts.

High saturated fats

Avoid saturated animal fats from intensively reared meat and high-fat dairy products which can hinder essential fats in the body. Chose naturally lower-fat cheeses and organic free range meat where you can. Try stews with just a little quality meat bulked out with beans or lentils and you can add fibre at no extra cost. Red meat is a good source of iron but choose meat from an animal which has run around and eaten plants for full nutritional benefit.

Avoid processed foods which can be high in 'hidden' fats and deep-fried foods.

Allergens

If you or your family have a history of allergies to foods, especially nuts, then it is recommended that you avoid eating them and foods containing them while you are breastfeeding.

Caffeine

Caffeine can lead to baby feeling nervous and irritable and can disrupt feeding and sleep. Babies can't process caffeine so it remains in their blood for up to 80 hours, potentially having a negative effect. Coffee can also flavour the milk which can put baby off. Avoid or minimise coffee, tea, energy drinks, colas and chocolate to help keep baby relaxed.

Alcohol

According to the NHS one or two units (125ml of wine, half a regular strength lager, one 25ml shot of spirits) once or twice a week should not be harmful to your baby. More than this can affect milk flow and affect baby's development. Ideally however avoid alcohol as the effect on individual babies is not known and it can deplete mum's nutrients. If you are having an occasional drink you can time it to have the least effect on baby.

It takes about two hours for a unit of alcohol to clear from mum's blood so plan your alcoholic drink and baby's feeds so you are not feeding for a couple of hours after having a drink. As it can be difficult to always know when baby will want a feed expressing milk before an alcoholic drink may be the safest option. Even if you wait a couple of hours small amounts of alcohol will still remain in the milk and this may make it smell and taste different and put baby off feeding.

Smoking

Nicotine is a stimulant and, passed on to the baby, can cause nausea and vomiting. It can also reduce milk volume because it inhibits milk hormone production. Babies of mothers who smoke tend to be weaned sooner and have a greater incidence of colic. Passive smoking could trigger respiratory problems and can still expose baby to nicotine, this has been shown by the fact that nicotine is present in babies urine.

Environmental contaminants

Avoid pollutants where you can. Babies are exposed to chemicals through breast milk. Almost all mothers carry contaminants such as PCBs and dioxins. The former is a pesticide, now banned, the latter, a by-product of chemical manufacturing and incineration. Both are non-degradable and they accumulate in fat. No one really knows what the long-term effects will be. Losing weight too fast post birth can release these chemicals from mum's fats stores and make them available to baby through the milk. So stick to losing no more than about 1lb a week, if you need to lose weight post birth. To minimise your exposure to contaminants:

- Buy food in season, which can means fewer chemicals have been needed as the growing conditions are right
- Choose naturally lower fat dairy products such as lower fat cheeses
- Choose lean organic free-range meat where possible and trim off visible fat
- Avoid eating poultry skin which is high in fat
- Choose small-sized oily fish to minimise toxicity, have tuna just once a week and avoid shark, swordfish, king mackerel and marlin. These fish are potentially too high in mercury which could affect baby's nervous system development
- Eat 8-a-day of, ideally organic, vegetables and fruits as they have protective benefits. Wash non-organic in a wash such as 'Veggie Wash' or with a tablespoon of vinegar in a litre of water
- Where possible try and buy environmentally healthy household products such as 'Ecover', especially washing up liquid and washing powder as they come into direct contact with the body.
- Try and use natural body products, especially when choosing those designed to stay on the body such as creams, lotions and conditioners

Nutrient needs for mum & baby

The table below shows the key nutrients baby and mum need at this stage. Many nutrients are prioritised in favour of baby, partly through more efficient processes in the mum and partly by using up mums supplies. For mum to stay healthy and prevent getting run down it is best to eat a range of healthy foods covering the nutrient needs.

Nutrient	What it does	Food sources
Vitamin A and beta-carotene	**Baby** Contributes to the maintenance of normal vision and immune system functioning. **Mum** Too high a level can be toxic so eating foods rich in beta-carotene helps safely top up levels. Contributes to normal iron metabolism	Beta-carotene rich foods are converted to vitamin A in the body: yellow and orange fruit and vegetables such as carrots, pumpkin and squashes, red and yellow peppers, sweet potatoes, mangoes, melon, dried apricots, strawberries, and tomatoes. Watercress, spinach and chard. Vitamin A is found in milk, butter, cheese, fish and eggs.
B Vitamins	**Mum** Vitamin B6 and B12 contribute to the reduction of tiredness and fatigue. Women have a higher need for B vitamins when breastfeeding.	Wholegrain cereals, rice, nuts, milk, eggs, meat, fish and leafy green vegetables. A B12 supplement is recommended if mum is vegetarian or vegan.
Vitamin C	**Mum** Supports iron absorption.	Many fruits and vegetables: citrus fruits, green vegetables, broccoli, cabbage, cauliflower, kale, peas, berries, currants, lettuce, red, green and yellow peppers, potatoes, tomatoes, parsley and sprouted alfalfa seeds. Tropical fruits: guava, mango, kiwi fruit and pineapple.
Vitamin D	**Baby and mum** Needed for normal growth and development of children's bones.	Mostly made by the action of sunlight on the skin. Levels are generally too low in the UK. Food sources include oily fish, fortified margarine, egg yolk and dairy products.
Vitamin E	**Baby and mum** Contributes to the protection of cells from oxidative stress.	Olives, nuts and seeds and their oils. Some fruits and vegetables: avocados, broccoli, spinach, chard, asparagus and peppers.

Nutrient	What it does	Food sources
Vitamin K	**Baby and mum** Contributes to normal blood clotting.	Curly kale, spinach, cabbage, parsley, watercress, cauliflower and asparagus.
Calcium	**Baby** Needed for normal growth and development of children's bones. **Mum** Bone health, nervous system and muscle function.	Sesame seeds, tofu, dried figs, oily fish with edible bones, almonds, Brazil nuts, watercress, spring greens and kale.
Zinc	**Baby and mum** Contributes to the normal function of the immune system.	Dried seaweed (in moderation), herring, pumpkin, sesame and sunflower seeds, pine nuts, whole-grains, wholemeal bread, brown rice, lentils, almonds, wheat germ and oats.
Iodine	**Baby** Contributes to the normal growth of children. **Mum** Contributes to normal production of thyroid hormones and function.	Seaweed, fish and shellfish.
Iron	**Baby and mum** Contributes to normal oxygen transport in the body. Breastfeeding can delay the return of menstruation so mum is not losing blood each month but supplies of iron maybe low due to bleeding in labour.	Lean red meat and dark poultry meat. Whole-grains, eggs, beans, lentils dark green leafy vegetables and dried fruits. Plant sources are lower in iron than animal but tend to come along with vitamin C which aids absorption.
Selenium	**Baby** Contributes to normal function of the immune system. **Mum** Contributes to normal thyroid function.	Brazil Nuts, sunflower seeds mushrooms and whole-grains. Fish, meat and eggs.
Magnesium	**Baby** Bone and teeth development. Contributes to the maintenance of normal bones and teeth. **Mum** Contributes to normal muscle function.	Nuts and seeds, soya beans, peas, green leafy vegetables and whole-grains
Manganese	**Baby** Contributes to the maintenance of normal bones.	Wholegrains, green leafy vegetables, legumes, nuts, pineapple, seeds and eggs.

Nutrient	What it does	Food sources
Essential Fats	**Baby** Brain, nervous system and eye development. **Mum** Support post birth, skin health and mood.	Omega 3 - small oily fish, walnuts, rapeseed oil, hemp and flax seeds and oil. Omega 6 - sunflower and sesame seeds and their oils.

The role of supplements for mum & baby

The body manufactures nourishing breast milk at the expense of the mum so although it is comforting to know that baby's needs are prioritised, if mum doesn't get enough nutrients and gets run down she is less likely to enjoy fulfilling the demands that babies bring. Mum may also be lacking in quality sleep and the adapting to challenges a new baby brings can be tiring. Just as a good supplement is recommended in pregnancy the health insurance of a good supplement at this time is also reassuring for parents. Choose a multi vitamin and mineral which is specifically adapted to this time and has the key nutrients mum needs to support. Consider a supplement from the Vitabiotics Pregnacare Range, it includes Pregnacare Breastfeeding and Pregnacare New Mum which provide carefully balanced, comprehensive formulations of micronutrients to help support the nutritional requirements of new mothers throughout the postnatal period.

Vitabiotics Wellkid Baby Drops is ideal for babies aged 1 to 12 months and provides a safe and comprehensive range of 16 nutrients, including essential vitamins and minerals. The formula contains vitamin, A, C and D as recommended by the Department of Health for babies aged six months onwards*.

**Unless they are drinking 500ml (or approx. 1 pint) of infant formula a day, as infant formula has vitamins added to it. (Source: Healthy Start)*

6-12 Months

6 - 12 Months

Setting the foundations for a life-long healthy diet

The weaning process is about introducing foods which will nourish your baby as milk becomes insufficient as a calorie and nutrient source. It is a gradual process where baby learns about new tastes and textures and not only how to eat them, but also how to digest and process them. It is therefore important to get the pace of introducing new foods right. Our attitudes to food are shaped not only by the flavour but by many other factors. How we introduce foods to our children may influence how they feel about food so make the whole experience positive. Show baby how you enjoy healthy foods and encourage them to try a variety of foods whilst they are enthusiastic for new things. It may take until baby is about 12 months before they are structured into three meals and two snacks a day and food has taken the place of milk from a calorie point of view.

Don't feel you need to push baby through each weaning stage as quickly as possible. Take it at your baby's pace and focus on the quality of food as well as the quantity. Choose the best quality food you can afford. Organic foods reduce the risk of adding a chemical burden to an immature body so are worthwhile where possible. Although it is not usually possible to make all baby's food from scratch, where this is possible it means the food is fresher so may be higher in nutrients and it is easier to vary the taste and texture. There is no harm however in buying good quality ready made foods when needed. As long as baby is getting a variety of healthy foods, and is growing well, it is likely they are getting all they need.

Another reason not to rush the weaning process is that some foods can aggravate the digestive system. Introducing foods too early may irritate the gut and make baby feel uncomfortable and apprehensive about foods and could even encourage infections, food sensitivities and allergies. This is more likely to be a risk if the parents or close relatives have food allergies or are Atopic and have eczema, asthma or hay fever.

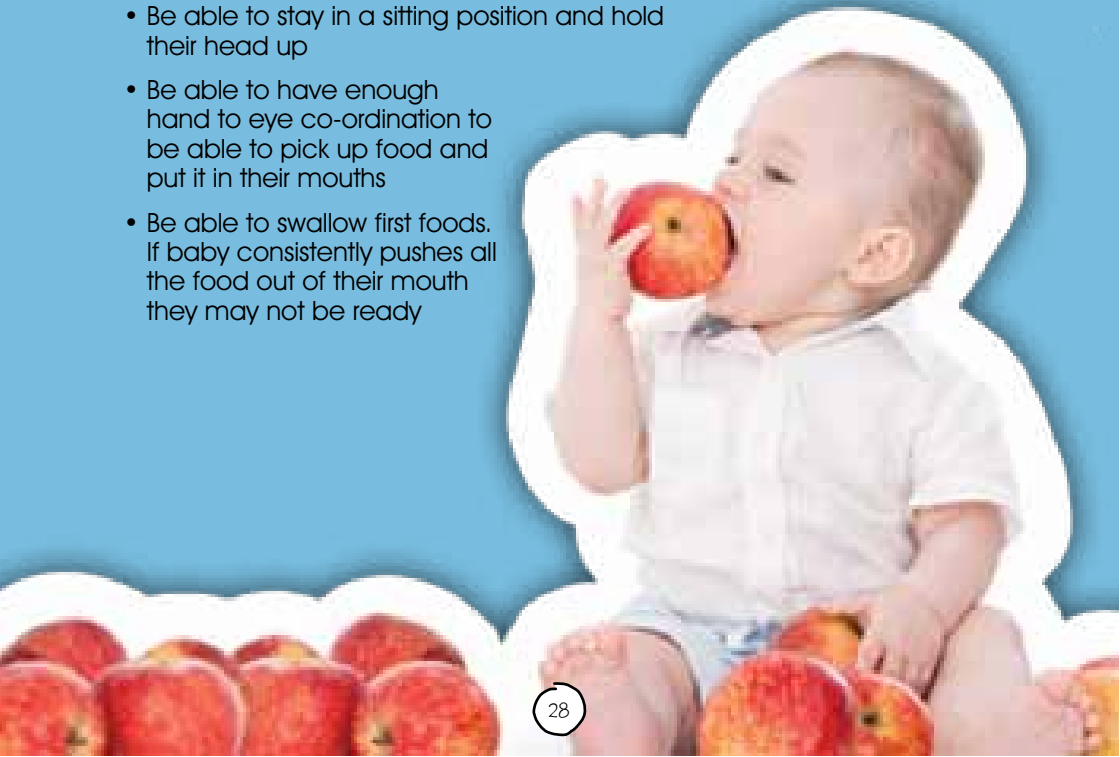
When to start weaning

The UK Department of Health recommend babies are introduced to solid foods at six months. It takes six months for baby's kidneys and digestive system to develop enough to be able to deal with solid food. Baby also needs to be ready to learn the mechanics of eating such as being able to bite and chew. Babies who were born premature may need to be weaned later than six months and this would need to be discussed with the appropriate healthcare practitioner.

Signs that baby may be ready to wean

The general rule is wait until baby is six months. If you feel that baby needs to be weaned sooner discuss this with your healthcare practitioner first. Weaning should also not be delayed longer than six months unless there is a medical reason or baby was premature. To be weaned baby should usually be able to do the following:

- Be able to stay in a sitting position and hold their head up
- Be able to have enough hand to eye co-ordination to be able to pick up food and put it in their mouths
- Be able to swallow first foods. If baby consistently pushes all the food out of their mouth they may not be ready



Which milk?

If you are able to breastfeed this remains the best milk for baby at this stage of their development. It may be lower in some nutrients than formula but the nutrients are available in a natural and easy to absorb form and breast milk also has immune boosting agents. This immune support may not only help protect baby from infections but also reduce the chance of developing allergic reactions to foods. Breast milk also contains omega-3 fats which are needed for baby's continuing brain development. If you are not able to breastfeed then discuss which would be the best milk substitute with your healthcare practitioner. Ideally choose a formula with the omega-3 fat DHA added.

If baby does not react well to formula then discuss alternatives. Eczema can be a sign that baby is not doing well on cow's milk formula for instance and other formulas could be considered. Soya formula may be appropriate for some babies as may allergen-reduced formulas. Avoid milks which are not designed for babies such as dairy, soya, rice, oat and nut milks until baby is 12 months old and then look for versions with added calcium. Before this age they may be too low in calories and nutrients to support baby's development. Rice milk is generally not recommended until four and a half years old due to the potential arsenic content.

First foods

Make this key milestone a relaxed and happy one. Choose a day and time when you are not rushed. Give baby some milk, but not a full feed, so baby is relaxed but not full. Choose the time of day baby is most settled but ideally not just before a nap in case their food doesn't stay down. Many parents find late morning works well. Start the routine as you mean to go on by seating baby in a high chair or baby seat at the table so they get used to the routine of eating at a table and taking time for food. This supports digestion and helps them focus on their food.

Baby's style

There are two key styles of weaning. Puree weaning introduces baby to texture gradually and teaches baby to swallow before they learn to chew. Baby Led weaning (BLW) teaches baby to chew before they learn to swallow. There is no right or wrong way and there are potential benefits and drawbacks to both methods.

Puree weaning

Puree weaning gives baby foods which are easy to digest allowing more efficient nutrient absorption. It gradually moves baby on to more complex foods as the digestive system adapts. This weaning style is led by the adult feeding the child so do look for signs that baby is full to help prevent setting a tendency to overeat. Puree weaning may also confuse babies when they move onto whole foods as they may not see the whole food as familiar. Showing children the whole food which went into their puree may help them to expect that food as the weaning process develops. Teaching children from the start to recognise foods and continue to include them in their diets may be beneficial. If baby is having carrot puree for instance try also giving a stick of cooked carrot to play with and perhaps try to eat.

Choose first foods which are specially designed and fortified for babies such as fortified baby rice or millet. This has little flavour so it is only the new texture baby needs to get used to. Mix this according to the pack instructions with breast or formula milk warmed to body temperature. Give baby half a milk feed and then introduce the food. Just put a little on the end of a BPA-free baby spoon and be ready for the mess! Baby is likely to only eat a few spoons initially but prepare extra so they can touch the food and suck it off their fingers if they want to. After this mini meal give baby the rest of their milk.

Babies will take to weaning at their own pace and you will find out the best timing and way for your baby as you go along. Breast or formula milk is still the key food source and solid food will, over the next six months, take over from that as the key calorie and nutrient source. Once baby is used to a meal at lunchtime you can start to introduce a meal in the evening and then at breakfast. Or in a different order if this works best for you. Once three meals are in place you can add in snacks. Aim to have baby on three meals and two snacks a day by the time they are 12 months.

First Food Tips

- Baby is getting nourishment from their milk so don't worry if they only eat a little at first. If baby's weight gain slows down then discuss weaning with your healthcare practitioner
- First foods need to be baby suitable so start with baby specific foods until you are confident with what to feed your baby
- Continue to breastfeed every 3-4 hours or give about 900ml of formula each day and extra cooled boiled water as required
- Always check the temperature of food to make sure it is not too warm
- Let baby investigate, give them food to touch and their own spoon to handle
- Choose bowls, spoons, cups and storage containers that are free from potentially harmful chemicals such as BPA
- Set basic routines from the start such as set meal times and sitting at the table when at home. This helps keep baby's blood sugar levels and mood balanced, helps them focus on their food and may help reduce over-eating in the future. Sitting up straight is also less of a choking risk and supports digestion
- Always stay with your baby to ensure baby is safe

Variety and texture

Spend the first few weeks of weaning adding in new flavours then begin to focus more on increasing the texture of foods. Introduce thicker purees and soft lumps then as these are tolerated move to chopped foods. Finger foods such as carrots, cooked until they are soft, can be tried. Increasing texture is not only needed to keep stimulating baby's desire for variety but also aids speech development. The muscles used to suck, lick, bite and chew are the same ones used for speech and eating gets these muscles in training.

The weaning guide (on page 45) shows what order to consider when introducing new foods. After introducing a new food include that food in meals for 3 days before the next new introduction so you can check if there are any adverse reactions. When you are happy baby is fine with the new food you can mix it with another accepted food to increase variety of flavour.

Baby-led weaning

Traditional weaning starts babies on purees and moves on in stages to lumpy and then solid foods. The food is fed to baby and it is the adult who is in charge of the process. Baby Led Weaning (BLW) gives baby more control over the process as they are allowed to feed themselves. BLW babies learn to chew then swallow, puree fed babies to swallow then chew. A key potential benefit of BLW is it may help teach children appetite control as they are feeding themselves rather than being fed. Spoon feeding could start the process of mindless eating where we do not focus on what we are eating. It has been found that distractions such as TV can take out focus away from what we are eating and lead to over-eating.

Advocates of BLW believe that baby is more likely to stop eating when full and this could play a part in helping reduce the chance of obesity in later life. Concerns could be that baby will not get enough nutrients as less food is likely to be actually eaten until the art of chewing and swallowing is learnt. The food will also be less processed as it will be a while before baby can fully chew and so may be harder to digest. You will find out what works best for you and your baby.

Baby-led weaning explained

- Baby is offered a range of foods that they can choose and self-feed from
- Hard foods such as carrots would need to be cooked until soft enough to gum
- Baby can be offered a spoon but may not choose to use it
- Initial foods need to be big enough for baby to hold with a fist and still be able to see some of the food sticking out. As their motor skills develop they can pick up smaller foods
- Baby is more likely to gag on food as a natural reflex to prevent choking. If babies are fed purees first they may be more likely to gag on wholefoods when introduced as they expect to be able to swallow them
- As baby may not get so much food actually eaten at first there would be a greater reliance on breast or formula milk
- Baby is often offered the same food as the rest of the family but still avoiding potentially allergenic foods unsuitable for their ages and additives such as salt and sugar
- As baby is doing much of the work it will be messy so be prepared

Gagging reflex

All of us have a gag reflex to help prevent choking but in addition until about 4-6 months babies have a tongue thrust reflex which makes them automatically push their tongues forward when things touch the back of the throat. This helps protect babies from swallowing things they shouldn't but can make the introduction of food tricky for some as they initially push it back out.

- Avoid weaning before 6 months unless advised by your healthcare practitioner. By 6 months the reflex should be less strong
- Keep meal times relaxed and take feeding at baby's pace
- Put food on the tip of the tongue and allow baby to suck the food off at a pace they can manage rather than put the spoon fully in the mouth

- When baby shows signs that they are full avoid trying to get them to continue to eat
- Always watch babies when feeding especially when feeding themselves to make sure they don't choke
- Introduce new textures gradually
- If baby is vomiting when gagging check with your GP

Which foods to introduce when

Foods should be introduced in order of their easiness to digest and their least risk of being allergenic. If either of the parents, or in baby's genetic history, there are environmental or food allergies then it may be wise to introduce potentially allergenic foods later. If the child's immediate family are Atopic and have asthma, eczema or hay fever then you may wish to discuss when to trial potentially allergenic foods like peanuts with your healthcare practitioner. It is also safer to avoid peanuts when breastfeeding.

Please refer to the weaning guide on page 45 for more details.

Food allergies

Some food allergies can cause anaphylaxis and can be life threatening so if baby's lips swell, they get a sudden rash or have any trouble breathing seek medical treatment immediately.

Symptoms of a potential food allergy

- Swollen lips or throat
- Itchy throat or tongue which may cause a cough
- Wheezing
- Skin rash
- Diarrhoea or vomiting

Most common food allergies

- Cow's milk
- Eggs
- Wheat
- Nuts
- Seeds
- Fish and shellfish

Food intolerances

Some foods can cause delayed symptoms and may trigger a food intolerance or sensitivity. This is not life threatening but the reaction may increase over time. Introducing only one new food at a time may help you spot food sensitivities. Blood testing can be done over the age of two years.

Symptoms of a potential food intolerance

- Skin rashes
- Runny or blocked nose
- Eczema
- Loose stools
- Feeling unwell after foods and becoming a fussy eater

Food to avoid at this stage

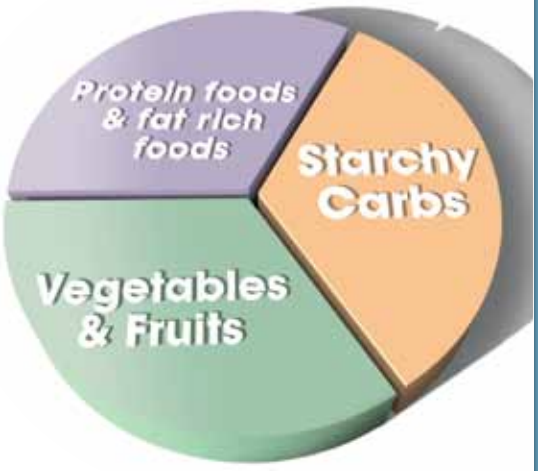
- Added salt. Babies get all the salt they need from breast or formula milk and their kidneys are not ready to cope with more
- Added sugar. Fruits provide enough sweetness for babies and adding more may put them off savoury foods reducing their variety of foods and nutrients. It can also lead to tooth decay
- Sweetened drinks and fizzy or caffeinated drinks. Milk or boiled cooled water once baby has had their milk are the best drinks
- Honey should be avoided until one year old due to potentially harmful bacteria
- Nuts and other small hard foods due to choking risk. They should also be avoided if the parents have allergies
- Artificial food additives such as colourings or preservatives
- Low fat varieties of foods such as dairy products as they may be too low calorie
- Deep-fried foods
- Fish which may be high in mercury such as fresh tuna, shark, swordfish and marlin. This can affect development of the brain and nervous system
- Raw shellfish as it has a higher risk of food poisoning
- Some foods are probably fine but you may consider a later introduction. These are noted in the weaning guide and include foods such as citrus fruits and nightshades. Some babies do not react well to these foods if introduced too early

How much and how often to feed

Baby will start on just a couple of teaspoons of food and build up to three balanced meals and two snacks a day. As baby progresses through the weaning stages work towards main meals including each of these food groups:

A starchy carbohydrate such as oats, rice, sweet potatoes, pastas and breads

A protein and fat-rich food such as beans, lentils, tofu, fish, meat and eggs. If the protein is naturally low fat such as beans, lentils and tofu also include a fat such as gently frying in olive or rapeseed oil or adding ground nuts or seeds. Hemp or flax oil added cold to foods is ideal to add if baby doesn't eat fish.



Vegetables and fruits - include orange or red and green varieties each day.

How much baby eats will vary, look at how much is being eaten over the week rather than each day as appetites will differ according to many things baby is not yet able to express. It can take many attempts for babies to accept a new flavour so after 3 days of giving baby a new food to taste if it is still rejected stop for a few days then try again.

The following table gives a rough idea of how much baby may be eating through the following six months. If baby wants more food than this and they are not overweight then give more. Once baby is having three meals a day you can add snacks and may find baby eats less at meals.

Age	Meal	Food Type	Spoons of Food
First Foods	Mid morning / Lunch	Baby cereal	1-2 teaspoons
By 7 months	Lunch	Baby cereal	2 tablespoons +
	Dinner	Baby cereal	2 tablespoons +
		Vegetables & fruits	2 tablespoons +
By 8 months	Breakfast	Cereal	2-4 tablespoons
	Lunch	Vegetables & fruits	2-3 tablespoons
		Starchy carb such as mashed brown rice	1-2 tablespoons
		Protein such as lentils	1-2 tablespoons
	Dinner	Vegetables & fruits	2 tablespoons
		Yogurt with fruit	2 tablespoons
By 12 months	Breakfast	Cereal with ground seeds and fruit	4-6 tablespoons
	Lunch	3 types of vegetables such as 2 cucumber and 2 pepper sticks and 1 medium steamed brocolli floret	3 tablespoons
		Starchy carb such as wholemeal bread	1 small slice
		Protein such as houmous or cheese	2 tablespoons
	Dinner	3 types of vegetables	3 tablespoons
		Starchy carb such as buckwheat pasta in tomato sauce or mashed sweet potato	2-3 tablespoons
		Protein such as meat, fish or beans	1-2 tablespoons
		Yogurt with fruit	2 tablespoons

Safe food

Babies are more vulnerable to picking up infections and becoming ill from bacteria in food than adults so extra precautions are needed to keep them safe.

- Ensure all cleaning agents used on food surfaces are food safe
- Wash your hands well before preparing food or drinks for baby. There is no need to sterilise feeding bowls and spoons but do keep sterilising bottles if using
- Home made baby food which will not be eaten at the meal it is prepared can be cooled and kept in the fridge for up to 24 hours or frozen if appropriate
- Defrosted foods should not be re-frozen once defrosted
- Store freshly prepared foods in the fridge in a lidded container with a label so you can ensure it is not eaten if over 24 hours old
- Food should be heated until hot and then allowed to cool before feeding. Always test the temperature of food before giving to baby, stir well to help avoid hotspots of food which could scald baby
- Food left over from baby's meal cannot be kept and reused as it may have been contaminated with bacteria during feeding
- Avoid plastics which contain Bisphenol A (BPA) for preparing, food storage and feeding baby. This is especially important with foods high in fat such as baby milk and acidic foods such as tomatoes as they can lead to the potentially harmful chemical leaching into the food. BPA free bottles, bowls and storage containers are available

The key nutrient needs

Relative to their size babies have a higher need for both calories and nutrients. Babies are born with nutrient stores which, along with breast milk (or formula), provide them with all they need for the first six months. After six months these stores become depleted and food is needed, as well as milk, to keep nutrient levels topped up. Babies stomachs are ten times smaller than those of adults so the diet needs to be calorie and nutrient dense and feeding little and often. Baby's ability to feed and digest progresses over time and as this happens the amount of milk they need will lessen as food takes over. Fat has almost twice as many calories per gram compared to carbohydrates and proteins so low-fat versions of fat-rich foods are not recommended at this stage. Don't however be tempted to load in the calories at the expense of the nutrients. To get the vitamins and minerals they need babies and toddlers need to have a variety of fruits, vegetables, starchy carbohydrates, protein and fat sources. Wholegrain starchy carbs can fill up small stomachs too quickly but have significantly more than 15 different vitamins and minerals compared to their white processed alternatives. So rather than exclude these nutrient dense foods ensure high fat foods are also included such as avocados and ground seeds and nuts (at the appropriate stage of weaning).

The table below shows the key vitamins and minerals babies need. Some of the foods sources which baby may be likely to eat are shown. These should only be included at the appropriate stages of weaning. Breast and formula milk will also be good sources of many of these nutrients. Levels of some of the key nutrients can however still be insufficient so the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D. Consider a supplement such as Vitabiotics Wellkid Baby Drops, which contains 16 carefully balanced nutrients including the recommended vitamins A, C and D.

Nutrient	What it does	Food sources
Vitamin A	Contributes to the maintenance of normal vision, skin and immune system functioning.	Oily fish Cheese and butter. Carotenes (which are converted to vitamin A): dark green leafy vegetables, carrots, sweet potatoes and broccoli. A supplement is recommended.
B vitamins, including folic acid	Vitamin B12 and B3 contributes to normal functioning of the nervous system and contributes to the normal function of the immune system. Folic acid contributes to the normal function of the immune system and normal blood formation.	Green vegetables, brown rice, chick peas and fortified cereals are a good source of folic acid. The other B vitamins are found in whole grains, brown rice, bananas, beans, eggs, meat, poultry and fish.
Vitamin C	Vitamin C increases iron absorption and contributes to the normal function of the immune system.	Fruits and vegetables including: peppers, broccoli, Brussels sprouts, berries, oranges and kiwi fruit. A supplement is recommended.
Vitamin D	Needed for normal growth and development of children's bones.	It is made by the action of sunlight on the skin but in the UK not in enough quantity to support a baby's rapid bone development. Food sources include oily fish, eggs and fortified breakfast cereals. Vitamin D occurs in few foods so a supplement is recommended.
Vitamin E	Contributes to the protection of cells from oxidative stress.	Vegetable oils, cereals and grains. Ground nuts and seeds.
Vitamin K	Contributes to normal blood clotting.	Green leafy vegetables and broccoli.
Calcium	Needed for normal growth and development of children's bones.	Dairy and fortified plant milks, cheese and other dairy foods. Green leafy vegetables. Soya beans and tofu. Nuts.
Iron	Contributes to normal oxygen transport in the body. Contributes to normal cognitive development of children.	Red meat. Iron-fortified cereals. Plant sources are lower in iron but tend to come along with vitamin C which aids absorption. Good sources include: greens, spinach, tofu, broccoli and lentils.
Zinc	Contributes to the normal function of the immune system.	Meat and fish. Cheese and eggs. Pulses. Wholegrain cereals.

Vegetarian and vegan diets

There is no reason why a vegetarian or vegan diet cannot provide enough nutrients for baby's needs. As with all children from 6 months to 5 years a supplement including vitamins A, C and D is recommended, such as Vitabiotics Wellkid Baby Drops. In addition for vegan children a vitamin B12 supplement is advisable. It is also important to ensure baby gets enough calories as many of the animal foods are high in fat so are high calorie providers. Plant based fats from avocados, ground nuts and seeds and seed oils and butters (still avoiding peanuts) are high in calories and provide healthy fats for baby's development. It is also important to ensure baby gets enough protein so beans and pulses need to be a daily food. Ground nuts and seeds also produce valuable protein when they are safe to be introduced. For vegan babies over 12 months choose plant milks such as soya and oat which have been fortified with calcium. If you are concerned discuss baby's diet with a nutritional therapist or dietician to ensure all baby's needs are covered. There are also good books such as 'Feeding your vegan infant with confidence' by Sandra Hood available and the Vegetarian and Vegan Societies can provide up to date information.

Tips for fussy eaters

- Look at what your baby eats over a week rather than each day as appetites vary.
- If your baby isn't eating much ensure they are hydrated and having the recommended amount of milk and additional boiled cooled water if more fluids are needed.
- Try offering half the milk feed, then food, then the rest of the milk feed to help prevent baby not having enough appetite for food.
- Have baby regularly weighed to check that they are gaining weight as they should. If they are not then seek the advice of your healthcare practitioner.
- Involve baby in the preparation of foods where possible. Try some water play with a bowl of water and whole vegetables so they can get used to how they look and feel. Always watch to make sure baby is safe.
- Have approximate set times for meals so baby starts to get into a pattern and is hungry enough to eat but not so hungry that they are irritable.
- Feed baby at the table when at home so they are getting signals about what will happen next. For meals out and about seat baby in a high chair where possible or at a safe position in the buggy.
- Set a positive example, showing your baby that you are eating some of the food you are expecting them to eat.
- Keep meal times relaxed. Present food in fun ways if needed but avoid toys or distractions such as TV at meal times as this doesn't develop children's understanding and acceptance of food and can lead to mindless eating and future weight problems. At this age the newness of food itself is usually enough of a distraction. If baby really doesn't want the food then take it away and try again at the next meal opportunity.

- Regularly offer a taste of foods you want your baby to eat but also have accepted foods as part of the meal. It often takes 10-15 tries for children to accept new flavours so give them plenty of opportunities to try. Do keep presenting refused foods as even one spoon can help baby acquire a taste for the food. If after 10-15 tries over a month they still don't like the food stop the food and try again a month later.
- Offer a range of flavours and age-appropriate textures at each meal as appetites increase with variety. Freezing home-made baby foods can make this easier to achieve.
- Offer savoury foods before sweet as most babies prefer sweet foods and could refuse the savoury if they know sweet is on offer.
- Resist the temptation to feed baby foods you think they may like but they don't yet know exist such as foods with added sugar or salt. Simply trying foods for the first time is enough of an enticement. If baby gets a taste for sugar it is likely to make it even harder to get them to eat the variety of healthy foods they need.

The role of supplements for mum & baby

Some nutrients can be difficult to obtain on a daily basis even with a good diet so the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D*.

Some babies will take longer to introduce a good variety of foods, some may be reluctant to try new tastes and textures and some may just have small appetites. This can make it harder to get all the ideal foods and nutrients in and make parents concerned that their baby is not getting all they need. It is important to take weaning at baby's pace and keep it happy and positive. Life also varies and through life there will be some days of ideal diet and others where other activities simply got in the way of this. A broad spectrum baby vitamin and mineral formula containing a range of nutrients rather than just vitamin A, C and D, can help provide your baby with some health insurance and give parents some piece of mind. Broad spectrum supplements may also be more effective as they may come closer to replicating the complicated natural synergy between different nutrients that we find in food. Consider a supplement such as Vitabiotics Wellkid Baby Drops. It is ideal for babies aged 1 to 12 months and provides a safe and comprehensive range of 16 nutrients, including essential vitamins and minerals. The formula contains vitamin A, C and D as recommended by the Department of Health for babies aged six months onwards.

1-2 Years

1 - 2 Years

Broadening toddler's horizons

From about the age of 12 months toddlers generally have the key foods introduced and their diets are more in line with the rest of the family. There are still some foods to avoid such as foods which are easy to choke on, including nuts, foods which are potentially allergenic such as peanuts, and those with a higher food poisoning risk such as runny eggs and raw fish. Toddlers still need no added salt or sugar, just what comes naturally in the food. This stage is about developing a taste for a greater variety of foods as well as improving feeding and chewing skills.

Setting the standard

Our attitudes to food are shaped not only by the flavour but by many other factors. How we introduce foods to our children may influence how they feel about food so make the whole experience positive. Show your toddler how you enjoy healthy foods and encourage them to try a variety of foods. Choose the best quality food you can afford. Organic foods reduce the risk of adding a chemical burden to an immature body so are worthwhile where possible.

- Have family meals where possible so your toddler can see you enjoying healthy foods. It is also still important to stay with toddlers whilst they are eating to ensure that they are safe.

- Eat at the table with toddler in a high chair so they can sit up straight. This is important for digestion and safety.
- Have set times for meals and snacks so your toddler doesn't get too hungry which can lead to a blood sugar low and mood dip. About two to three hours between meals and snacks generally means toddlers are hungry enough to eat but not irritable.
- Give toddlers 20-30 minutes to eat their food and then take the food away and let them leave the table if they wish. Don't force your toddler to eat if they are not hungry or keep encouraging them to eat more when they are full. Also avoid trying to speed up toddlers eating pace as it may encourage over-eating in the future.
- Encourage toddlers to use cutlery when they are ready but also expect some foods to be eaten with the fingers. Choose BPA-free bowls, plates, feeding utensils and storage containers.
- Try presenting food in colourful and interesting ways but avoid toys and TV at the table. Make the food fun rather than draw attention away from the food as this may lead to mindless eating.
- Include a variety of foods along with a familiar and liked food at each meal. Some toddlers prefer their food separately at this stage so some may, for instance, prefer rice and beans rather than a rice and bean mix.

Food preparation

Although there is no longer a need to sterilise things for toddlers (apart from bottles if you still need to use these) they are still more vulnerable to picking up infections than adults so some extra care is still needed.

Safe food

- Avoid plastics which contain Bisphenol A (BPA) for preparing, food storage and feeding toddlers. This is especially important with foods high in fat such as cheese and acidic foods such as tomatoes as they can lead to the potentially harmful chemical leaching into the food. BPA free bottles, bowls and storage containers are available
- Ensure all cleaning agents used on food surfaces are food safe
- Wash your hands well before preparing food or drinks
- Keep your fridge temperature below 5°C
- Store freshly prepared foods in the fridge in a lidded container with a label so you can ensure they are not eaten if over 24 hours old
- Defrosted foods should not be re-frozen once defrosted
- Food should be heated until hot and then allowed to cool. Check the food is not too hot before serving and stir well to help avoid hotspots
- Store raw meat in sealed BPA free containers on the bottom shelf of the fridge, so they can't touch or drip onto other food
- Keep cooked meat separate from raw meat
- Don't keep food in cans once opened as the metal of the can may transfer to the can's contents. Transfer the contents into a storage container or covered bowl

Safe feeding

- Offer bite sized chunks of food and foods that toddlers can grip until their cutlery skills develop
- Avoid foods which are easy to choke on such as nuts, popcorn, raisins and raw carrots. Halve grapes, olives and cherry tomatoes. Remove stones and hard pips from fruits. Remove fish bones or mash small ones such as in sardines. String beans such as green and runner beans and lightly mash whole hard beans such as chickpeas

From bottle to cup

Drinks should now be from a cup rather than a bottle. Bottles increase the time the milk is spent in contact with the teeth and can encourage decay. This is especially the case with a bedtime feed where the toddler is likely to fall asleep.

Allergies

Strong allergies to foods are likely to have been spotted during the weaning process but there is still a risk at this stage as more foods are introduced and some allergies can develop later. Look out for the signs and discuss with your healthcare practitioner if you have any concerns.

Food allergies

Some food allergies can cause anaphylaxis and can be life threatening so if your toddlers lips swell, they get a sudden rash or have any trouble breathing seek medical treatment immediately.

Symptoms of a potential food allergy

- Swollen lips or throat
- Itchy throat or tongue which may cause a cough
- Wheezing
- Skin rash
- Diarrhoea or vomiting

Most common food allergies

- Cow's milk
- Eggs
- Wheat
- Nuts
- Seeds
- Fish and shellfish

Food intolerances

Some foods can cause delayed symptoms and may trigger a food intolerance or sensitivity. This is not life threatening but the reaction may increase over time. Introducing only one new food at a time may help you spot food sensitivities. Blood testing can be done over the age of two years.

Symptoms of a potential food intolerance

- Skin rashes
- Runny or blocked nose
- Eczema
- Loose stools
- Feeling unwell after foods and becoming a fussy eater

Foods to avoid at this stage

- Added salt. Toddlers get enough from foods without adding extra.
- Added sugar. Fruits provide enough sweetness and foods with added sugar can reduce appetites for meals. It can also lead to tooth decay.
- Sweetened drinks and fizzy or caffeinated drinks. Milk (about 700mls a day) or water are the best drinks. Very diluted fruit juice can be given but is not needed.
- Nuts and other small hard foods due to choking risk.
- Artificial food additives such as colourings or preservatives.
- Low fat varieties of foods such as dairy products as they may be too low calorie.
- Deep-fried foods.
- Processed meats such a salami.
- Fish which may be high in mercury such as shark, swordfish and marlin. This can affect development of the brain and nervous system.
- Raw shellfish as it has a higher risk of food poisoning.

A little more on Salt

Toddlers only need a little salt. Salt comes naturally in some foods and is added to many foods such as baked beans and tomato sauce. Avoid a high intake of processed food and don't add extra salt to toddler's foods.

Sodium is part of salt and is usually what is shown on the food label. Food that contains 0.6g of sodium, or more, in a 100g is a lot, and foods with 0.1g, or less, in a 100g, is a little.

Age	Maximum daily sodium intake	Maximum daily salt intake
0-12 months	0.4g	less than 1g
1-3 years	0.8g	2g
4-6 years	1.2g	3g
7-10 years	2g	5g
11 years +	2.4g	6g

What toddlers need to eat

By one year toddlers are likely to have progressed to three meals and two snacks a day. It can be hard to keep track of how much is being eaten and if all the nutrient needs have been covered. At this age look more to what toddlers have eaten over several days than each day as appetites vary. Food has taken over from milk as the key calorie and nutrient source but breast milk is still valuable because as well as providing nutrients it also has immune boosting properties. The World Health Organisation recommends breastfeeding for the first two years.

Bottle-fed toddlers can now move on to whole milk rather than formula. Whole milk is recommended because it has more calories, fat and fat-soluble vitamins than reduced fat. Ideally choose organic milk from grass-fed cows which should be lower in saturated fats and higher in essential fats. The UK Department of Health advise to still avoid non-dairy milks other than soya formula at this stage as they are likely to be too low in fat. If the missing fat is added to the diet then calcium enriched non-dairy milk could however be used. Vitamin D should supplemented to all children of this age.

Calorie needs

From the start of weaning children's calorie needs steadily increase as they grow and become more active. Stomachs are still small at one to two years so nutrient and calorie-rich foods in regular small meals and snacks are needed. There is still no need for high calorie nutrient-depleted foods such as confectionary and sugary drinks. Not offering these foods may feel like you are denying your children but they do not know they are missing foods they have not tried and the less they are given when young, the less they may desire as they grow up. A diet based on healthy foods can provide all the calories needed especially with the inclusion of healthy fats such as those in avocados, ground nuts and seeds, and small sized (to minimise toxicity) oily fish.

Estimated average calorie (kcal) requirements per day

Age	Males	Females
0-3 months	545	515
4-6 months	690	645
7-9 months	825	765
10-12 months	920	865
1-3 years	1,230	1,165
4-6 years	1,715	1,545
7-10 years	1,970	1,740
11-14 years	2,220	1,845
15-18 years	2,755	2,110
19-50 years	2,550	1,940
51-59 years	2,550	1,900
60-64 years	2,380	1,900
65-74 years	2,330	1,900
75+ years	2,100	1,810

Whole or half foods?

It is often advised to avoid wholegrain starchy carbohydrates, such as wholemeal bread, brown rice and pasta, being more than 50% of toddler's intake, with white refined carbohydrates making up the rest. This is to avoid the additional fibre filling up small stomachs before enough calories have been eaten. There is also a concern that the phytic acid in grains and soya beans can reduce absorption of calcium, magnesium, iron, copper and zinc from the gut. Wholegrains however provide more nutrients than refined, so unless your toddler has a smaller than usual appetite and is underweight generally stick to these natural foods. If your toddler eats well, is gaining weight as they should, and has a varied diet with plenty of nutrients from vegetables, fruits and protein sources along with a good intake of healthy fats, then you are not likely to need to have refined instead of wholemeal. Refined carbohydrates are after all depleted of at least 15 key nutrients.

Toddler treats?

As well as generally avoiding refined, white carbs there is no need for toddlers to have processed snacks such as baby 'crisps' and sweetened biscuits. There is no harm in occasionally including processed foods as days do not always go according to plan and of course there are times when it is more important for toddlers to stay out longer than anticipated enjoying new experiences. Do however avoid labelling convenience foods as 'treats' as this can elevate the status of these foods and make them more desirable. It is also best to avoid giving food as a reward and instead go for family activities, books or toys.

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The key food groups

To ensure your toddler's diet has all the nutrients needed and to continue educating your child in terms of what a healthy diet looks and tastes like, base the diet on the key food groups. This will help as they get older and need to make choices themselves. It is never to early to start this education as children have to start making choices from their first reception year of school and the early influences lay the foundations of food attitudes for life.

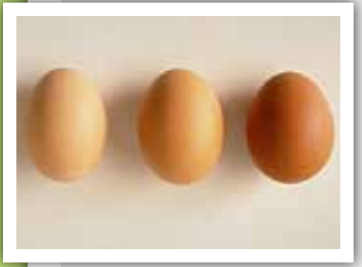
The food groups

Starchy carbohydrates

Needed for	Good food sources	Notes
Energy Fibre for the digestive system Vitamins and minerals	Oats, rice, millet, buckwheat, quinoa, barley and corn. Pastas. Breads. Potatoes and yams.	Give wholegrain unless your toddler has a small appetite and is underweight, then still give wholegrain half the time.

Proteins

Needed for	Good food sources	Notes
Growth and development Nervous system Immunity	Animal sources: meat, fish, eggs, and dairy products. Vegetable sources: Compete proteins (contain all the vital amino acids) - Soya, quinoa, hemp seed, amaranth and buckwheat. Complete proteins can be made up by combining grains with nuts or pulses e.g. beans on toast.	Choose free range meat and omega-3 eggs for lower saturated and potentially higher essential fats. Some plant proteins are 'complete' and have all the vital amino acids, the best source is soya. Some only have some of the amino acids but combined with a grain provide all.



Fats

Needed for	Good food sources	Notes
Rich energy source Essential fats are needed for brain and nervous system development and cell membranes 	Saturated fats: From meat and dairy products. Monounsaturated fats: Olive oil, rapeseed oil. Polyunsaturated fats: Omega-3 essential fats - oily fish, walnuts, rapeseed oil, hemp and flax seeds and oils. Omega-6 essential fats - sunflower and sesame seeds and oils.	Avoid hydrogenated fats, trans fats and excess saturated fats. Gently shallow fry in olive or rapeseed oil. Bake with olive, rapeseed or coconut oil. Use the polyunsaturated fats mixed in with foods cold or once they are cooked and ready to eat.

Dairy

Provides	Good food sources	Notes
Calcium and vitamin D for the maintenance of normal bones Fat for energy 	Milk and dairy products Calcium enriched dairy-free milks such as soya and oat would need additional fat adding to the diet Rice milk is not recommended at this age due to the potential arsenic content	Dairy milk can be replaced by other foods and drinks Milk is included in recommendations for toddler's diets due to the calcium, vitamin D and fat content. Calcium and fat can be obtained from plant sources and vitamin D should be supplemented at this age. If you prefer to not include dairy discuss calcium, fat and vitamin D sources with your healthcare provider.

Vegetables and fruit

Needed for	Good food sources	Notes
Vitamins, minerals and antioxidants Fibre for the digestive system The sweeter ones are an energy source	All vegetables are good, go for as much variety as possible. Try to include 2-3 types at lunch and dinner. All fruits are good. As they are higher in sugar than vegetables offer vegetables before fruits at a meal to help ensure all get eaten.	The different colours have different nutrients so include green and orange/red vegetables and fruits each day.

Water

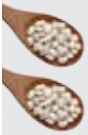
Needed for	Good food sources	Notes
Temperature regulation Aids digestion, preventing constipation Transports nutrients Cushions spinal cod and joints	Tap water is fine as is filtered.	Don't offer a large drink with meals as it can fill small stomachs and reduce appetite. Choose a BPA-free water bottle.

How much do toddlers need to eat?

The example one day meal plan on the following page is based on 1,100 calories. This is around what a toddler of 18 months should be having. It is just an average guide, how much your toddler needs will vary according to their size and activity level. As your child gets older they will need more food and portion sizes should increase to accommodate this. As it can be hard to know just how much your toddler will eat start with a serving of each food group on their plate and add more if they require more.

It is rare for children to overeat healthy foods, weight gain tends to come from them eating too many high saturated fat and sugar foods, but if your toddler seems to eat too much and is gaining too much weight discuss their diet with your health care practitioner. If your toddler is eating less than these suggested amounts, the amount they eat is not increasing with age, and they are not growing well also discuss their diet with your healthcare practitioner. The diet can then be adapted to include more foods which are high in good fats rather than feeling the need to resort to high sugar and saturated fat choices to maintain weight. For vegetarian and vegan toddlers substitute more of the plant-based foods listed.

The follow table gives suggestions on how much food from each food group to offer your child.

	MEAL					
Food Group (portion examples)	**Breakfast**	**Snack**	**Lunch**	**Snack**	**Dinner**	**Suggested portions a day**
Starchy Carbs	3 tbsp porridge mix	Cereal bar *(no added sugar)*	½ slice of bread or toast	1-2 oatcakes	2 tbsp rice	6 portions a day
3-4 tbsp of cereal						
¼ to ½ a slice of bread, tortilla, chapatti						
1-2 crackers e.g. oatcakes or rice cakes						
1-2 tbsp of rice, pasta, oats, millet, quinoa or potatoes						
Proteins	1 teaspoon ground seeds		2 tbsp beans	½ tbsp houmous dip	1-2 tbsp meat or fish	2 portions a day
1 tbsp of meat 1-2 tbsp of fish 1 small egg						
3 tbsp beans, lentils or tofu 2 tbsp of soya beans						
1 tbsp of ground nuts, seeds or nut butter						
Dairy	Approx 125ml milk, used to make porridge and rest as drink	Approx 125ml milk	Approx 125ml milk Butter or margarine on bread		60-100ml full fat yogurt Approx 125ml milk before bed	4-6 portions a day
500ml of breast milk or whole milk Soya formula						
1 tbsp hard cheese 2 tbsp soft cheese						
60-100ml of yogurt						

• Tablespoon is abbreviated to tbsp. • Teaspoon is abbreviated to tsp.

	MEAL					
Food Group (portion examples)	**Breakfast**	**Snack**	**Lunch**	**Snack**	**Dinner**	**Suggested portions a day**
Vegetables 2 tbsp raw leafy veg 1 tbsp cooked green veg 1 tbsp orange/ red veg 1 tbsp other veg 2-4 raw veg sticks		2 cucumber sticks 	¼ avocado 2 cherry tomatoes 		1 tbsp steamed carrots 1 tbsp steamed broccoli 	3-5 portions a day
Fruits 1-2 tbsp berries ¼ apple/ orange ½-1 plum/ apricot	1-2 tbsp berries or ¼ grated apple 			½ -1 plum or apricot 	¼ banana in yogurt 	2-4 portions a day
Water	Offer 	Offer 	Offer 	Offer 	Offer 	Offer water rather than juice or milk once 500ml of milk has been given during the day. Offer more water when the weather is hot.

• Tablespoon is abbreviated to tbsp. • Teaspoon is abbreviated to tsp.

Notes

- The suggested amounts are adapted from guidelines from the UK Department of Health and the United States Department of Agriculture.
- The example meal plan is 1,100 calories.
- Please do not give children glasses. The images used are only representative.
- Although the following are technically fruits and not vegetables they have been placed in the vegetable group as this is where they are most commonly considered to be:
  - Tomatoes
  - Cucumbers
  - Avocados

Exercise

How much your toddler needs to eat depends on age, size and activity. The UK Department of Health advises toddlers are physically active for three hours a day. This activity can be indoors and out and could include playing around the home and running, jumping, ball games and paying on equipment in playgrounds outside.

The key nutrient needs

Relative to their size toddlers have a higher need for both calories and nutrients than adults. Don't however be tempted to load in the calories at the expense of the nutrients. To get the vitamins and minerals they need toddlers need to have a variety of fruits, vegetables, starchy carbohydrates, protein and fat sources along with milk and water.

The table below shows the key vitamins and minerals toddlers need with some suggested sources. In addition to diet the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D.

Nutrient	What it does	Food sources
Vitamin A	Contributes to the maintenance of normal vision and immune system functioning.	Oily fish Cheese and butter. Carotenes *(which are converted to vitamin A)*: dark green leafy vegetables, carrots, sweet potatoes and broccoli. A supplement is recommended.
B vitamins, including folic acid	Vitamin B12 and B3 contributes to normal functioning of the nervous system and contributes to the normal function of the immune system. Folic acid contributes to the normal function of the immune system and normal blood formation.	Green vegetables, brown rice, chick peas and fortified cereals are a good source of folic acid. The other B vitamins are found in whole grains, brown rice, bananas, beans, eggs, meat, poultry and fish.
Vitamin C	Vitamin C increases iron absorption and contributes to the normal function of the immune system.	Fruits and vegetables including: peppers, broccoli, brussels sprouts, berries, oranges and kiwi fruit. A supplement is recommended.

Nutrient	What it does	Food sources
Vitamin D	Needed for normal growth and development of children's bones.	It is made by the action of sunlight on the skin but in the UK not in enough quantity to support a baby's rapid bone development. Food sources include oily fish, eggs and fortified breakfast cereals. Vitamin D occurs in few foods so a supplement is recommended.
Vitamin E	Contributes to the protection of cells from oxidative stress.	Vegetable oils, cereals and grains. Ground nuts and seeds.
Vitamin K	Contributes to normal blood clotting.	Green leafy vegetables and broccoli.
Calcium	Needed for normal growth and development of children's bones.	Dairy and fortified plant milks, cheese and other dairy foods. Green leafy vegetables. Soya beans and tofu. Nuts.
Iron	Contributes to normal oxygen transport in the body.	Red meat. Iron-fortified cereals. Plant sources are lower in iron but tend to come along with vitamin C which aids absorption. Good sources include: greens, spinach, tofu, broccoli and lentils.
Zinc	Contributes to the normal function of the immune system.	Meat and fish. Cheese and eggs. Pulses. Wholegrain cereals.

Vegetarian and vegan diets

There is no reason why a vegetarian or vegan diet cannot provide enough nutrients for toddlers needs. As with all children from six months to five years a supplement including vitamins A, C and D is recommended. In addition for vegan children a vitamin B12 supplement is advisable. It is also important to ensure toddlers get enough calories as many of the animal foods are high in fat so are high calorie providers. Plant based fats from avocados, ground nuts and seeds and seed oils and butters (still avoiding peanuts) are high in calories and provide healthy fats for development. It is also important to ensure your toddler gets enough protein so beans and pulses need to be a daily food.

Ground nuts and seeds also provide valuable protein when they are safe to be introduced. For vegan toddlers over 12 months choose plant milks such as soya and oat which have been fortified with calcium and add extra fat to the diet to ensure enough calories. If you are concerned discuss your toddler's diet with a nutritional therapist or dietician to ensure all your toddler's needs are covered. There are also good books such as 'Feeding your vegan infant with confidence' by Sandra Hood available and the Vegetarian and Vegan Societies can provide up to date information.

Tips for fussy eaters

- Look at what toddlers eat over a few days rather than each day as appetites vary.
- Have set routines and set times for eating so your toddler knows what to expect. When at home eat at the table. Choose a BPA free lunch box and water bottle with your toddler so they feel more engaged with the meal when eating out and about and expect to have to change these as their interests change.
- Set a positive example by eating the foods you want your toddler to eat at shared meal times. Avoid showing your toddler that you are concerned about foods. This can for instance happen if you are on a diet which could be interpreted as some foods need to be avoided.

- Involve your toddler in the shopping and preparation of food. Allow your toddler to select vegetables and put them in the bag and encourage them to help in the preparation by doing a safe task such as washing the vegetables.
- Keep presenting foods you want your toddler to eat at the table. Put a small amount on their plate and don't react if they remove it.
- Keep meal times relaxed. Present food in fun ways but avoid toys or distractions such as TV during mealtimes as this doesn't develop children's understanding and acceptance of food but can lead to mindless eating and weight problems. Allow your toddler to leave the table after 20-30 minutes. Although fussy eaters can make parents feel anxious try to not show this.
- Have familiar and liked foods as the basis for each meal with just one new or un-tasted food.
- If toddlers refuse foods don't force them to eat the food but do keep presenting them at the table so the foods remain familiar and encourage them to try a bite. If they do start to eat the food they have been avoiding, don't make a big fuss or they may stop again as they may feel they have lost the battle.
- Avoid giving sweetened drinks or foods as they can temporarily make toddlers feel full making it less likely they will eat their meal.
- Try to work out what is triggering food aversions. Some toddlers don't like different foods to be mixed. Try having the foods slightly separate on the plate but avoid plates with barriers between the sections as they may overly encourage this concern.
- Check with your healthcare practitioner if your toddler appears uncomfortable or persistently unhappy after foods as they may be having a reaction they cannot yet explain. Food intolerance (FACT) testing can be arranged by a registered Nutritional Therapist.

The role of supplements

Some nutrients can be difficult to obtain on a daily basis even with a good diet so the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D.

Some toddlers will take longer to introduce a good variety of foods, some may be reluctant to try new tastes and textures and some may just have small appetites. This can make it harder to get all the ideal foods and nutrients in and make parents concerned that their toddler is not getting all they need. It is important to inspire a positive attitude to food and this can be hard to do if meal times become stressful. Life also varies and through life there will be some days of ideal diet and others where other activities simply get in the way of this. A broad spectrum baby vitamin and mineral formula containing a range of nutrients rather than just vitamin A, C and D can help provide toddlers with some health insurance and parents some piece of mind. Broad spectrum supplements may also be more effective as they may come closer to replicating the complicated natural synergy between different nutrients that we find in food.

Consider the Vitabiotics Wellkid Range, it includes a number of great tasting supplements developed for children from the age of 1 month and provides a carefully balanced range of essential vitamins and minerals to help safeguard your child's diet.

1-2 Years Q&A

Does my toddler need a proper lunch or is it OK to snack as we are usually out?

Try to stick to the same times for meals as this helps to keep toddlers blood sugar levels balanced and energy and mood good. Pack a simple picnic for when you are out so you don't need to rely on processed snacks such as baby 'crisps' and sweetened biscuits, and don't forget food for yourself too! Wherever you have lunch encourage your toddler to sit and eat as running around and eating increases the chance of choking.

Can I now give my toddler the same food as the rest of the family?

Food should now be moving more in line with family meals with your toddler having all the key food groups, there are however still some things to avoid: added salt and sugar, sweetened, fizzy and caffeinated drinks, peanuts, other nuts and other small hard foods due to the choking risk, processed meats and food additives and high mercury fish. (See page 54 for more details).

When should my toddler use a cup instead of a bottle?

By 12 months drinks should ideally be from a cup rather than a bottle. Bottles increase the time the milk is spent in contact with their teeth and can encourage decay. This is especially the case with a bedtime feed where the toddler is likely to fall asleep.

How much does my toddler need to eat?

This will vary. How much toddlers need depends on their size, age and activity level. Follow the suggested amounts for each age stage in this guide. Once your child is indicating they have had enough avoid trying to keep coaxing them into more but do offer food and drinks at regular times through the day to help maintain good energy and mood.

My toddler only seems to like sweet things, how can I get him to eat vegetables?

Try to keep to regular meal and snack times or blood sugar levels can get very low making toddlers irritable and either craving something sweet to quickly pick them back up (temporarily), or too irritable to eat. Try offering foods like vegetables at the start of a meal when your toddler is likely to be hungrier and avoid giving in to demands for sweet things. As long as food and drink is offered at regular intervals (about every 2 to 3 hours at this age) there is also no reason why they can't wait till the next meal if they are refusing to eat the food offered. See tips for fussy eaters on page 65 for more ideas.

How often should I give my toddler treats?

Avoid labelling high sugar and saturated fat convenience foods as 'treats' as this can elevate the status of these foods and make them more desirable. It is also best to avoid giving food as a reward and instead go for family activities, books or toys. There is no need to structure in unhealthy foods as the longer you leave them out now the less they are likely to be craved later. Don't however worry about occasional foods which you wouldn't have on the healthy list, just ideally have them away from home at occasions such as parties so they are not seen as an everyday food.

Should my toddler take a vitamin supplement?

Some nutrients can be difficult to obtain on a daily basis even with a good diet so the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D. Consider the Vitabiotics Wellkid Range, it includes a number of great tasting supplements developed for children from the age of 1 month and provides a carefully balanced range of essential vitamins and minerals to help safeguard your child's diet.

2 - 5 Years

Johannes/Yasmin/Jose photo courtesty of Jackie King - www.jackieking.com

2 - 5 Years

Moving up

By the age of two years children generally have the key foods introduced and their diets are more in line with the rest of the family. There are still some foods to avoid such as foods which are easy to choke on, including whole nuts, foods which are potentially allergenic such as peanuts, and those with a higher food poisoning risk such as runny eggs and raw fish. Young children do not need added salt or sugar, just what comes naturally in the food. They are busy growing and burning up energy running around so they still need more calories and nutrients than adults for their size. It depends on your child how quickly you reduce the higher fat foods, such as full fat milk. This is needed as a toddler but can be switched to semi-skimmed when they get older. All young children need a rich supply of vitamins, minerals and other nutrients so, just like in the previous stages, their diets need to be based on a good variety of healthy foods.

Setting the standard

Our attitudes to food are shaped not only by the flavour but by many other factors. How we introduce foods to our children may influence how they feel about food so just as with weaning keep the experience positive. Show your child how you enjoy healthy foods and encourage them to try a variety of foods. It usually takes about 10-15 tries within a month before a child will find a new food familiar and acceptable. For those who are reluctant to try new things include a variety of foods and when introducing a new food, combine with a familiar and liked food as part of the meal rather than a whole new meal. Just as when food is first introduced still choose the best quality food you can afford. Organic foods reduce the risk of adding a chemical burden to an immature body so are worthwhile where possible.

- Have family meals where possible so your child can see you enjoying healthy foods. It is also still important to stay with young children whilst they are eating to ensure they are safe
- If you need to give your child their meal before you have yours in the evening try to sit with them and have a mini portion of what they are having. This will also help to keep your blood sugar levels balanced and help keep you going until you get to sit down for your own meal

- Seat your child in a chair which enables them to be near enough to the table and allows them to sit up straight to support digestion
- Have set times for meals and snacks so your child doesn't get too hungry which can lead to a blood sugar low and mood dip. About three hours between meals and snacks generally means children are hungry enough to eat but not irritable
- Keep meal times relaxed. Present food in fun ways but avoid toys or distractions such as TV at meals as this doesn't develop children's understanding and acceptance of food but can lead to mindless eating and weight problems
- Give young children about 20-30 minutes to eat their food and then take the food away and let them leave the table if they wish. As children get older gradually increase the time they spend at the table so they remain there until the family has finished. Don't force your child to eat if they are not hungry or keep encouraging them to eat more when they are full. Also avoid trying to speed up their eating pace as it may encourage over-eating in the future
- Encourage young children to use cutlery when they are ready but also still expect some foods to be eaten with the fingers. Choose BPA-free bowls, plates, feeding utensils and storage containers

Food outside the home

Few people have an ideal diet all of the time. At home try and provide foods that are nutritious and balanced as these will have the greatest lasting impression on your child's attitudes to food. Try to keep convenience foods to outside of the home and choose the best you can at the time. Where possible make packed lunches for days out when other options may be limited. Prepare easy to eat healthy foods with plenty of variety and packed lunches with compartments to open to keep children's interest when other things are going on. Encourage your child to sit while they eat and try to stick to the same meal and snack times.

It is harder to keep track of what your child is eating once meals start to be eaten away from the family. This generally starts when children start at childminders, nursery or pre-school. When you choose childcare ask about their food policy and if possible visit at a time when you can see the food. If main meals are being provided there should be a menu available so you can check each week that you are not providing the same food again at dinner time. Childcare providers in England should be following the 'Eat Better, Start Better School Foods Trust Voluntary Food and Drink Guidelines for Early Years Settings in England'.

Tips for fussy eaters

- Look at what your child eats over a few days rather than each day as appetites vary
- Have set routines and set times for eating so children know what to expect. When at home eat at the table. Choose a BPA free lunch box and water bottle with your child so they feel more engaged with the meal when eating out and about and expect to have to change these as their interests change
- Set a positive example by eating the foods you want your child to eat at shared meal times. Avoid showing your child that you are concerned about foods, this can for instance happen if you are on a diet which could be interpreted as some foods that should be avoided
- Involve your child in the shopping and preparation of food. Allow your child to select vegetables and put them in the bag and encourage them to help in the preparation by doing a safe task such as washing the vegetables. As they get older the tasks can become more involved
- Have familiar and liked foods as the basis for each meal with just one new or un-tasted food
- Keep presenting foods you want your child to eat at the table. Put a small amount on their plate and don't react if they remove it. A child needs to try a new food about 10-15 times within about a month to get used to the food. If they still don't like the food after this stop for a while then try again at a later date
- If your child refuses foods don't force them to eat the food but do keep presenting them at the table so the foods remain familiar and encourage them to try a bite. If they do start to eat the food they have been avoiding don't make a big fuss or they may stop again as they may feel they have lost the battle

- Keep meal times relaxed. Take uneaten food away after 30 minutes and allow your child to leave the table. Although fussy eaters can make parents feel anxious try not to show this
- Try presenting food in colourful and interesting ways but avoid toys at the table or distractions such as TV during meals. Make the food fun rather than draw attention away from the food as this may lead to mindless eating. 'Face plates' where the food is added onto a face template in different ways can be fun. Food can also be cut into shapes and games can be played discussing the foods. Getting children to decorate their own place mat with sections for plate, cups and cutlery can also help keep them involved and interested. Laminating the mats helps them last longer

- Avoid giving your child unhealthy foods they are asking for in order to make up calories in a meal they refused. Do make sure your child remains hydrated by encouraging them to drink water. If your child is losing weight seek the advice of your GP
- Avoid giving sweetened drinks or foods as they can temporarily make children feel full making it less likely they will eat their meal
- Try to work out what is triggering food aversions. Some young children don't like different foods to be mixed, try having the foods slightly separate on the plate but avoid plates with barriers between the sections as they may overly encourage this concern. Some children may have food intolerances which are leading them to feel uncomfortable and reluctant to eat. This can be tested over the age of two. If your child often feels bloated they may benefit from an age-appropriate probiotic, seek the advice of a Nutritional Therapist or your GP

Food preparation

Young children's immune systems are constantly developing and it is normal to pick up colds and viruses. Foodborne infections should be prevented so some extra care is still needed.

Safe food

- Avoid plastics which contain Bisphenol A (BPA) for preparing, food storage and children's tableware. This is especially important with foods high in fat such as cheese and acidic foods such as tomatoes as they can lead to the potentially harmful chemical leaching into the food. BPA free bottles, plates and storage containers are available
- Ensure all cleaning agents used on food surfaces are food safe
- Wash your hands well before preparing food or drinks
- Keep your fridge temperature below 5°C
- Store freshly prepared foods in the fridge in a lidded container with a label so you can ensure they are not eaten if over 24 hours old
- Defrosted foods should not be re-frozen once defrosted
- Food should be heated until hot and then allowed to cool. Check the food is not too hot before serving and stir well to help avoid hotspots
- Store raw meat in sealed BPA free containers on the bottom shelf of the fridge so they can't touch or drip onto other food
- Keep cooked meat separate from raw meat
- Don't keep food in cans once opened as the metal of the can may transfer to the can's contents. Transfer the contents into a storage container or covered bowl

Safe eating

- Offer bite sized chunks of food as well as foods that your child can cut up whilst cutlery skills develop
- Avoid foods which are easy to choke on such as nuts, popcorn, raisins and raw carrots. Halve grapes, olives and cherry tomatoes. Remove stones and hard pips from fruits. Remove fish bones or mash small ones such as in sardines.
- String beans such as green and runner beans and lightly mash whole hard beans such as chickpeas until they have enough teeth to tackle them
- Stay with your child to ensure they are safe when eating

Safe drinking

Drinks should now be from a cup rather than a bottle. Open cups are best but if using a lidded cup choose a free-flow type with no valve. This encourages children to sip rather than suck and is better for their teeth. Baby bottles increase the time the milk is spent in contact with the teeth and can encourage decay so should be avoided. This is especially the case with a bedtime drink. Choose BPA free drinking cups and water bottles.

Allergies

Strong allergies to foods are likely to have been spotted during the weaning process but there is still a risk at this stage as more foods are introduced and some allergies can develop later. Look out for the signs and discuss with your healthcare practitioner if you have any concerns.

Food allergies

Some food allergies can cause anaphylaxis and can be life threatening so if your child's lips swell, they get a sudden rash or have any trouble breathing seek medical treatment immediately.

Symptoms of a potential food allergy

- Swollen lips or throat
- Itchy throat or tongue which may cause a cough
- Wheezing
- Skin rash
- Diarrhoea or vomiting

Most common food allergies

- Cow's milk
- Eggs
- Wheat
- Nuts
- Seeds
- Fish and shellfish

Food intolerances

Some foods can cause delayed symptoms and may trigger a food intolerance or sensitivity. This is not life threatening but the reaction may increase over time. Introducing only one new food at a time may help you spot food sensitivities. Blood testing can be done over the age of two years.

Symptoms of a potential food intolerance

- Skin rashes
- Runny or blocked nose
- Eczema
- Loose stools
- Feeling unwell after foods and becoming a fussy eater
- Failure to thrive

Foods to avoid at this stage

- Added salt. Young children get enough from foods without adding extra. As children eat more of the same foods as the rest of the family their salt intake tends to become too high so prepare foods without salt and add to adult dishes later if required. 75% of the salt we eat is already in the food we buy. To keep your child's salt intake within recommended limits read the label on products to see how much salt it contains
- Added sugar. Fruits provide enough sweetness and foods with added sugar can reduce appetites for meals. Sugar can also lead to tooth decay. Occasional sweet foods are of course fine but avoid foods with added sugar on a regular basis and ideally don't offer these at home where they can easily become part of daily habits
- Sweetened drinks and fizzy or caffeinated drinks. Milk or water are the best drinks. At least 50% diluted fruit juice can be given once a day but is not needed
- Nuts, whole grapes, popcorn, hard sweets, chewing gum and other small hard foods due to choking risk
- Artificial food additives such as colourings or preservatives
- Deep-fried foods
- Fish which may be high in mercury such as fresh tuna, shark, swordfish and marlin. This can affect development of the brain and nervous system
- Raw shellfish as it has a higher risk of food poisoning

A little more on salt

Young children only need a little salt. Salt comes naturally in some foods and is added to many foods such as baked beans and tomato sauce. Avoid a high intake of processed food and don't add extra salt to young children's foods.

Sodium is part of salt and is usually what is shown on the food label. Food that contains 0.6g of sodium, or more, in a 100g is a lot, and foods with 0.1g, or less, in a 100g, is a little.

Age	Maximum daily sodium intake	Maximum daily salt intake
0-12 months	0.4g	less than 1g
1-3 years	0.8g	2g
4-6 years	1.2g	3g
7-10 years	2g	5g
11 years +	2.4g	6g

What young children need to eat

By the age of two children are usually eating family meals and eating most of the foods the rest of the family eats. Appetites do vary and as long as all the food groups are covered and your child is growing they should be getting all they need.

Calorie needs

From the start of weaning children's calorie needs steadily increase as they age, grow and become more active. Stomachs are still small at two years so they need to be regularly filled with nutrient rich foods. It is difficult to know how much your child is eating if they graze all day, so aim to give your child a meal or snack every three hours with only water in between. There is still no need for high calorie nutrient-depleted foods such as confectionary and sugary drinks. A diet based on healthy foods can provide all the calories needed especially with the inclusion of healthy fats such as those in avocados, ground nuts and seeds, dairy products and small sized oily fish (to minimise toxicity). As your child gets older and their stomachs get bigger there is less reliance for calories to come from fat and lower fat versions of foods such as dairy milk, which contain saturated fats, are more appropriate. Do however stick to semi-skimmed rather than skimmed for the vitamin content.

Estimated average calorie (kcal) requirements per day		
Age	Males	Females
0-3 months	545	515
4-6 months	690	645
7-9 months	825	765
10-12 months	920	865
1-3 years	1,230	1,165
4-6 years	1,715	1,545
7-10 years	1,970	1,740
11-14 years	2,220	1,845
15-18 years	2,755	2,110
19-50 years	2,550	1,940
51-59 years	2,550	1,900
60-64 years	2,380	1,900
65-74 years	2,330	1,900
75+ years	2,100	1,810

Whole or half foods?

Before the age of two it is often advised to avoid wholegrain starchy carbohydrates, such as wholemeal bread, brown rice and pasta, being more than 50% of toddler's intake, with white refined carbohydrates making up the rest. This is to avoid the additional fibre filling up small stomachs before enough calories have been eaten. There is also a concern that the phytic acid in grains and soya beans can reduce absorption of calcium, magnesium, iron, copper and zinc from the gut. Wholegrains however provide more nutrients than refined, so unless your child has a smaller than usual appetite and is underweight generally stick to whole grains. The longer these foods are avoided the harder it will be to introduce them later so only avoid whole rather than refined starchy carbohydrates such as rice, bread and pasta on your healthcare practitioners advice, they are after all depleted of at least 15 key nutrients. Over the age of two years starchy carbohydrates should generally be wholegrain rather than white.

What are treats?

Most of us term foods which offer no benefits as treats and these so should not be filling small stomachs on a regular basis. By doing this we make them more desirable and even something to work towards as a reward. To help prevent your child over-eating such foods, especially as they get older and have more freedom to choose themselves, keep fatty, sweet and salty processed foods to a minimum. Also avoid calling convenience foods 'treats' and avoid giving food as a reward. Instead choose family activities, books or toys as rewards.

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The key food groups

To ensure your child is getting all the nutrients required and to continue educating your child in terms of what a healthy diet looks and tastes like, base their diet on the key food groups. This will help as they get older and need to make choices themselves. It is never too early to start this education as children have to start making choices from their first reception year of school and the early influences lay the foundations of food attitudes for life.

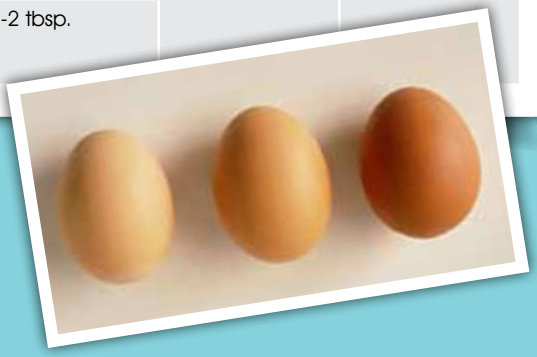
The food groups

Starchy carbohydrates

Needed for	Good food sources	Rough portion size	How much to give a day	Notes
Energy release vitamins and minerals including vitamin B12 and B6 and iron Provide fibre for the digestive system.	**Breads** pitta bread, chapattis, roti, naan, wraps, crackers and oat cakes.	1 medium slice of bread. 1 roll, or small pitta 2 oatcakes, 1 larger cracker. ½ large wrap.	4 portions a day. 1 portion with each main meal and 1 with a snack. Have at least 3 different types a day.	Give wholegrain unless your child has a small appetite and is underweight, and then give wholegrain half the time and white the rest. Avoid high salt versions such as tinned spaghetti in sauce.
	Pasta and noodles	3-4 tbsp.		
	Rice	2-3 tbsp.		
	Starchy vegetables Potatoes, sweet potatoes, yam, plantain and cassava.	1 small baked potato. 2-3 tbsp potatoes		
	Other grains Oats, millet, wheat, bulgar wheat, buckwheat, rye, quinoa, barley and whole cornmeal.	2-3 tbsp.		
	Breakfast cereals	3-5 tbsp.		

Proteins

Needed for	Good food sources	Rough portion size	How much to give a day	Notes
Growth and development, the nervous system and immunity. Meat and beans provide protein, iron and zinc. Oily fish, hemp and flax seeds provide protein and omega-3 fats.	**Meat** Chicken and turkey.	1-2 tbsp.	2 portions a day. 1 portion with lunch and 1 with dinner. Give an extra portion if having vegetarian proteins as they tend to be lower in protein than animal sources. Oily fish should only be given twice a week due to possible pollutants. Avoid fresh tuna, shark and swordfish. UK recommended daily intake (RNI) for protein is: 1-3 years – 14.5g 4-6 years – 19.7g	Where possible choose organic free-range meat and omega-3 eggs for lower saturated and higher essential fats. Give meat off the bone rather than processed, formed meat such as burgers, sausages and nuggets. Watch out for bones in fish. Some plant proteins are 'complete' and have all the vital amino acids, the best source is soya. Quinoa, hemp seeds, amaranth and buckwheat are also complete but not as good a source of all amino acids.
	White fish Canned tuna (oil is removed) cod, coley haddock, hake, halibut, and pollack.	2 tbsp.		
	Oily fish Herring, mackerel, pilchards, sardines, salmon and trout.	1-2 tbsp.		
	Shellfish Crab, mussels, prawns and shrimps.	2 tbsp.		
	Eggs	1 egg.		
	Cheese Hard cheese, soft cheese.	1 tbsp.		
	Meat alternatives	1-2 tbsp.		
	Beans, split peas and lentils Soya beans.	3 tbsp. 2 tbsp.		
	Ground nuts and seeds and butters	1-2 tbsp.		



Dairy (Calcium rich foods)

Needed for	Good food sources	Rough portion size	How much to give a day	Notes
Energy, protein, calcium and vitamins A and D.	**Milk** from grass-fed cows, goats and sheep. Calcium enriched dairy-free milks such as soya and oat.	100-150ml	3 portions a day as part of meals snacks and drinks.	From the age of 2 children can have semi-skimmed rather than full fat as long as they are getting enough calories and growing well. Milk is included in recommendations for children's diets due to the calcium, vitamin D and fat content. If your child is dairy free, give calcium enriched soya or oat milk. If needed, extra calcium and fat can be obtained from plant sources and vitamin D should be supplemented at this age for all children. Rice milk is not recommended at this age due to the potential arsenic content.
	Yogurt and soya yogurt**.**	100ml		
	Cheese	1 tbsp hard cheese. 2 tbsp soft cheese.		

Vegetables and fruits

Needed for	Good food sources	Rough portion size	How much to give a day	Notes
Provide vitamins, minerals and antioxidants. Provide fibre for the digestive system. The sweeter ones are an energy source.	**Dark green vegetables** Bok choy, broccoli, green cabbage, greens, kale, spinach and watercress.	2-4 tbsp of raw leafy vegetables such as spinach, 1-2 tbsp cooked.	5-9 portions a day. At least 1 portion with each main meal and with snacks.	All vegetables are good, go for as much variety as possible. Try to include 2-3 types at lunch and dinner. All fruits are good but as they are higher in sugar than vegetables offer vegetables before fruits at meals to help ensure all get eaten. The different colours have different nutrients so include green and orange/red vegetables and fruits each day. Give dried fruits only with meals as they can stick to the teeth and cause decay.
	Red, orange and purple vegetables Beetroot, carrots, pumpkins and squashes, red and yellow peppers, red cabbage and tomatoes.	1-2 tbsp.		
	Other vegetables Artichokes, asparagus, aubergine, avocado, bean sprouts, cauliflower, courgettes, cucumber, green beans, green peppers, lettuce, mushrooms, okra, and onions.	1-2 tbsp cooked vegetables. Small bowl of vegetable soup. 4-6 raw vegetable sticks.		
	Beans, split peas and lentils: Black eye beans, chick peas, baked beans, kidney beans, lentils, soya beans and split peas.	1 tbsp.		

Vegetables and fruits continued

Needed for	Good food sources	Rough portion size	How much to give a day	Notes
See previous page.	**Fruits**	½ a large fruit such as apple or banana. 2 small fruits such as apricots or plums. 1-2 tbsp stewed fruit. 2 soaked dried fruits such as apricots or prunes.	See previous page.	See previous page.
	Fruit or vegetable juice	Limit fruit juice to 50ml of juice with at least 50ml of water once a day.100ml of vegetable juice.		

Drinks

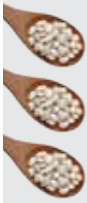
Needed for	Good food sources	Rough portion size	How much to give a day	Notes
Water is needed for concentration, temperature regulation, digestion, preventing constipation, nutrient transport and to cushion the spinal cord and joints.	**Water** tap, filtered or bottled.	Limit fruit juice to 50ml of juice with at least 50ml of water once a day. 100ml of vegetable juice.	6-8 drinks of 100-150ml a day, more if hot.	Don't offer a large drink with meals as it can fill small stomach and reduce appetite. Only offer water between meals rather than drinks with sugar which can cause tooth decay. Avoid caffeine and fizzy drinks. Choose a BPA-free water bottle
	Milk as part of 300ml daily allowance.			
	Fruit or vegetable juice			
	Unsweetened children's herbal teas such as fruit or peppermint.			

How much do children need to eat

The example meal plan on the next page is based on around 1,400 calories. This is what a child in the middle of the 2-5 age range should be having. It is an average guide, boys generally need more calories than girls, children at the lower end of this age range will need less and older more. How much your child needs will vary according to their size and activity level. As your child gets older they will need more food and portion sizes should increase to accommodate this. As it can be hard to know just how much your child will eat start with a serving of each food group on your child's plate and add more if they require more. It is rare for children to overeat healthy foods. Weight gain tends to come from eating too many high saturated fat and sugar foods, but if your child seems to eat too much and is gaining too much weight discuss their diet with your healthcare practitioner. If your child is eating less than these suggested amounts, the amount they eat is not increasing with age, and they are not growing well also discuss their diet with your healthcare practitioner. A child's diet can then be adapted to include more foods which are high in good fats rather than feeling the need to resort to high sugar and saturated fat choices to maintain weight.

For vegetarian and vegan toddlers substitute more of the plant-based foods listed.

The following table gives suggestions on how much food from each food group to offer your child.

	MEAL					
Food Group (portion examples)	**Breakfast**	**Snack**	**Lunch**	**Snack**	**Dinner**	**Suggested portions a day**
Starchy Carbs 3-5 tbsp of cereal 1 slice of bread, 1 small wrap, 1 chapatti 1-2 crackers e.g. oatcakes 2-3 tbsp of rice, pasta, oats, millet, quinoa or potatoes	4 tbsp of porridge mix *(then made up with milk)* 	Cereal bar *(no added sugar)* 	1 slice of bread or toast 	2 oatcakes 	3-4 tablespoons of rice 	4 portions a day
Proteins 1-2 tbsp of meat/ meat alternatives 1-2 tbsp fish 1 egg 3 tbsp beans, lentils or tofu 2 tbsp soya beans 1-2 tbsp ground nuts, seeds or nut butter	1 teaspoon ground seeds 		3 tbsp of beans 	I tbsp houmous 	1-2 tbsp meat or fish 	2-3 portions a day. Ideally no more than 1 meat portion a day. Have processed meats a maximum of once a week

• Tablespoon is abbreviated to tbsp. • Teaspoon is abbreviated to tsp.

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	MEAL					
Food Group	**Breakfast**	**Snack**	**Lunch**	**Snack**	**Dinner**	**Suggested servings a day**
Dairy 150ml of whole milk or semi skimmed milk depending on child's weight and calorie need. 300ml of calcium enriched soya or oat milk. 1 tbsp hard cheese 2 tbsp soft cheese 100ml of yogurt	Approx 150ml milk used to make porridge and rest as drink 		Butter or margarine on bread 		100ml full fat yogurt Approx 150ml milk before bed 	3 portions a day
Vegetables 2-4 tbsp raw leafy veg 1-2 tbsp cooked green veg 1-2 tbsp orange/ red veg 1-2 tbsp other veg 4-6 raw veg sticks		4 cucumber and red pepper sticks 	¼ avocado 3 cherry tomatoes 		1-2 tbsp steamed carrots 1-2 tbsp steamed broccoli 	3-5 portions a day
Fruits 2-4 tbsp berries ½ apple/ orange 2 plum/ apricot	2 tbsp berries or ½ grated apple 			1-2 apricots or plums 	½ banana in yogurt 	2-4 portions a day
Water	Offer 	Offer 	Offer 	Offer 	Offer 	Offer water rather than juice or milk once 300ml of milk has been given during the day. Offer more water when the weather is hot.

• Tablespoon is abbreviated to tbsp. • Teaspoon is abbreviated to tsp.

Notes

- The suggested amounts are adapted from guidelines from the UK Department of Health, the United States Department of Agriculture and the 'Eat Better, Start Better School Foods Trust Voluntary Food and Drink Guidelines for Early Years Settings in England'.
- The example one day meal plan is based on about 1,400 calories. This is based on the average need for males and females and taken as an average for the age groups 1-3 years and 4-6 years (based on the UK Dietary Reference Values for Food Energy and Nutrients for the UK). A child at the lower end of the age range is likely to need less food and at the higher end more food.
- Although the following are technically fruits and not vegetables they have been placed in the vegetable group as this is where they are most commonly considered to be:
    - Tomatoes
    - Cucumbers
    - Avocados

Exercise

How much your child needs to eat depends on age, size and activity. The UK Department of Health advises young children are physically active for three hours a day. This activity can be indoors and out and could include playing around the home and running, jumping, ball games and playing on equipment in playgrounds outside.

The key nutrient needs

Relative to their size young children have a higher need for both calories and nutrients than adults. Don't be tempted to load in the calories at the expense of the nutrients. To get the vitamins and minerals they need children need to have a variety of fruits, vegetables, starchy carbohydrates, protein and fat sources along with calcium-rich foods or drinks and water.

The table below shows the key vitamins and minerals young children need with some suggested sources. In addition to diet the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D. Consider the Vitabiotics Wellkid range, it includes a choice of great tasting supplements developed for children from the age of 1 month to 12 years and provides a carefully balanced range of essential vitamins and minerals to help safeguard your child's diet.

Nutrient	What it does	Food sources
Vitamin A	Contributes to the maintenance of normal vision and immune system functioning.	Oily fish Cheese and butter. Carotenes (which are converted to vitamin A): dark green leafy vegetables, carrots, sweet potatoes and broccoli. A supplement is recommended.
B vitamins, including folic acid	Vitamin B12 and B3 contribute to normal functioning of the nervous system and contributes to the normal function of the immune system. Folic acid contributes to the normal function of the immune system and normal blood formation.	Green vegetables, brown rice, chick peas and fortified cereals are a good source of folic acid. The other B vitamins are found in whole grains, brown rice, bananas, beans, eggs, meat, poultry and fish.
Vitamin C	Vitamin C increases iron absorption and contributes to the normal function of the immune system.	Fruits and vegetables including: peppers, broccoli, Brussels sprouts, berries, oranges and kiwi fruit. A supplement is recommended.
Vitamin D	Needed for normal growth and development of children's bones.	It is made by the action of sunlight on the skin but in the UK not in enough quantity to support a childs rapid bone development. Food sources include oily fish, eggs and fortified breakfast cereals. Vitamin D occurs in few foods so a supplement is recommended.
Vitamin E	Contributes to the protection of cells from oxidative stress	Vegetable oils, cereals and grains. Ground nuts and seeds.
Vitamin K	Contributes to normal blood clotting	Green leafy vegetables and broccoli.

Nutrient	What it does	Food sources
Calcium	Needed for normal growth and development of children's bones	Dairy and fortified plant milks, cheese and other dairy foods. Green leafy vegetables. Soya beans and tofu. Nuts.
Iron	Contributes to normal oxygen transport in the body.	Red meat. Iron-fortified cereals. Plant sources are lower in iron but tend to come along with vitamin C which aids absorption. Good sources include: greens, spinach, tofu, broccoli and lentils.
Zinc	Contributes to the normal function of the immune system	Meat and fish. Cheese and eggs. Pulses. Wholegrain cereals.

Vegetarian and vegan diets

There is no reason why a vegetarian or vegan diet cannot provide enough nutrients for children's needs. As with all children from six months to five years a supplement including vitamins A, C and D is recommended. In addition for vegan children a vitamin B12 supplement is advisable. It is also important to ensure young children get enough calories as many of the animal foods are high in fat so are high calorie providers. Plant based fats from avocados, ground nuts, seeds, seed oils and butters (still avoiding peanuts) are high in calories and provide healthy fats for development. It is also important to ensure children get enough protein so beans and pulses need to be a daily food. Nuts and seeds also produce valuable protein. For vegan children choose plant milks such as soya and oat which have been fortified with calcium and add extra fat to the diet to ensure enough calories if the child is underweight. Rice milk can also be given over the age of five. If you are concerned discuss your child's diet with a Nutritional Therapist or Dietician to ensure all their needs are covered. There are also good books available such as 'Feeding your Vegan Infant With Confidence' which covers up to pre-school age, by Sandra Hood and the Vegetarian and Vegan Societies can provide up to date information.

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The role of supplements

Some nutrients can be difficult to obtain on a daily basis even with a good diet so the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D.

Some children will happily eat a wide variety of foods and others may be reluctant to try new tastes and textures. Some may just have small appetites. This can make it harder to get all the ideal foods and nutrients in and make parents concerned that their child is not getting all they need. It is important to inspire a positive attitude to food and this can be hard to do if meal times become stressful. Life also varies and through life there will be some days of ideal diet and others where other activities simply got in the way of this. A broad spectrum children's vitamin and mineral formula containing a range of nutrients rather than just vitamins A, C and D can help provide children with some health insurance and parents some piece of mind.

Broad spectrum supplements may also be more effective as they may come closer to replicating the complicated natural synergy between different nutrients that we find in food.

Consider the Vitabiotics Wellkid Range, which provides supplements for children from 1 month to 12 years. Each supplement provides a carefully balanced and comprehensive range of essential vitamins and minerals.

2-5 Years Q&A

My daughter is really hungry when she gets home from nursery and can't wait till dinner so she has a snack when we get home but then doesn't want to eat her evening meal.

Check with the nursery not only that she is eating enough but also what she is having as she may only be choosing carbs and releasing the energy from her food too quickly so she has run out by home time. You may also want to give her a small snack on the way home so there is more time until the evening meal for her to get her appetite back. If the evening meal is quite late she may just not be hungry so make the snack on the way home a healthy one.

My son won't sit at the table for long and it is making family meals stressful, what can we do?

Encourage him to stay at the table for 20 minutes then let him leave to do a pre-discussed quiet activity in the same room. Gradually increase this time as he gets older. Avoid toys or TV at meals as this takes the focus away from food and can lead to over-eating problems later but do try to make meal times a happy and relaxed time. Usually children become happy to stay at the table if that is where meals are consistently eaten and once they know it is for a set amount of time. It is also worth persevering or meals out can become a dreaded activity.

I can only get my child to eat in front of the TV.

Eating in front of a distraction such as TV can lead to 'mindless eating' and weight problems so do try to avoid this. Meals at the table do become easier as children get older and more able to take part in family conversations.

I am concerned my daughter is not eating enough.

How much children need to eat depends on their size, age and activity levels. See page 86-88 for an idea of roughly how much your child should be eating but as long as they are having all the key foods groups and growing well they are likely to be getting enough. See page 73 for some suggestions for fussy eaters and those with small appetites and do discuss with your healthcare practitioner if you are concerned.

I am concerned my son is eating too much.

If your child seems to eat more than other children of their size and activity level and is becoming overweight look at what they are eating. Are meals too high in fat, as full fat products may no longer be needed? Is the portion size too big? Ensure they have the right sized plate so it cannot easily be overfilled and include some protein with meals as this supports the feeling of being satisfied and full. Also ensure there are not sweet or high saturated fat snacks or drinks between meals and instead offer healthier options. If you have any concerns about your child's health do discuss this with your healthcare practitioner. Page 81 explains the key food groups.

What sort of drinking cup is best at this age?

Drinks should now be from a cup rather than a bottle. Bottles increase the time milk, and other drinks with sugar, are spent in contact with the teeth and can encourage decay. This is especially the case with a bedtime drink where a child may drink after teeth brushing. If you need a lidded cup choose one which is free flow rather than with a valve as this leads to a sucking action which can also be detrimental to teeth.

Are there any foods my child still needs to avoid at this age?

Food should now be moving more in line with family meals with your child having all the key food groups, there are however still some things to avoid: added salt and sugar, sweetened, fizzy and caffeinated drinks, peanuts, other nuts and small hard foods due to the choking risk, processed meats and food additives and high mercury fish. See page 77 for more details).

What size plate should my 4 year old have?

A plate of about 20cm diameter is about right for lunch and dinner.

Should my child take a vitamin supplement?

Some nutrients can be difficult to obtain on a daily basis even with a good diet so the UK Department of Health recommends that all children from six months to five years old are given supplements, in the form of vitamin drops, which contain vitamins A, C and D. Consider the Vitabiotics Wellkid Range, it includes a range of great tasting supplements developed for children from the age of 1 month to 12 years and provides a carefully balanced range of essential vitamins and minerals to help safeguard your child's diet.