

At Home – Weaning

Weaning is the gradual introduction of solid foods to a baby who has only ever received breast milk or infant formula as their nourishment. As your baby gets older, breast milk or infant formula alone no longer provides for all your baby's nutritional needs; they require more nutrition and this comes from adding nutritious foods. In addition to providing your baby with extra nutrition, weaning will also teach your baby to use their mouth and jaw muscles as well as their tongue and lips. These movements will help to develop muscles that your baby will later use for speech.

There is a lot of information and guidelines about weaning available on the internet; however, most websites provide information tailored for full-term babies. Pre-term babies can be a little different than full-term babies when it comes to weaning. Compared to full-term babies, many pre-term babies experience more feeding problems. Examples of such feeding problems include: not being able to swallow properly; choking, gagging, and vomiting more easily; taking a long time to feed; or being 'picky' about foods because of texture. These problems may arise if the pre-term baby has some developmental issues that affect the muscles of their mouth or has neurological problems that affects their ability to eat. In addition, these problems may be a result of negative stimulation from their time in the NICU; their feeding-tube may have taught the infant that having anything near, or in, their mouth is an unpleasant experience. Although pre-term babies can be a little different than full-term babies when it comes to weaning, most of the advice out there is the same. The main difference between weaning a full-term baby and pre-term baby is at what age weaning should be started.

When To Start Weaning

The latest guidelines for weaning premature babies is to wait until they have reached 5 to 8 months old uncorrected age, i.e. from their actual birth date. Before this age, breast milk and/or infant formula provides your baby with all their nutritional needs, and this milk will remain their main source of nutrition until they are 12 months old. Although some premature babies are ready to wean at 5 months, most premature babies are a little older, ranging between 6 to 8 months. It's best not to wait longer than 9 months to start weaning as this may cause your baby to be more reluctant to try new foods, making weaning more difficult, and may cause them to be fussy eaters as they get older.

Why Wait Until ~Six Months?

There are a number of reasons why it's best to wait until your baby has reached 6 months, these include:

- Breast milk, and infant formula, provides for your baby's nutritional needs until this age. As your growing baby becomes more active, typically around 6 months, breast milk or infant formula alone will not provide your baby with enough nutrients.
- Before 6 months, the digestive systems of many pre-term babies can be too immature to digest food properly. If food is introduced too early, it can lead to constipation.
- If food is introduced too early, younger babies are more likely to get infections, such as gastrointestinal infections. If food is introduced before 6 months, extra care is needed when preparing and storing the infant's food.

- Waiting until your baby is physically ready to wean, reduces the risk that s/he will have a reaction to a food.
- It's especially important not to introduce new foods before 6 months if there is a history of allergies or coeliac disease, a gluten allergy, in your family.
- If foods start to replace breast milk or infant formula too early, your baby may not get all the nutrients they need.
- Babies younger than 6 months are less able to show you when they are full, therefore they may be overfed.
- Before 6 months there are many foods that aren't suitable for your baby - see the section '*Foods To Avoid*' for more details.
- Waiting until your baby is ready to begin eating solids will make them much more receptive to new foods. This could mean that you don't have to spend a long time spoon-feeding them and they may be quicker with feeding themselves, with either a spoon or their fingers. In addition, as a consequence of being more receptive to new foods, your baby will be more likely to enjoy a wide range of flavours and this could mean they will be less fussy eaters when they get older.

If you feel your baby is ready to wean before six months, talk to your healthcare professional who will be able to advise you on what's best in your situation. When your baby reaches weaning age, i.e. 5 to 8 months, look for signs that your baby is ready to wean.

Signs Your Baby Is Ready To Wean

Knowing when to start weaning can be difficult. However, there are a number of signs that you should look for that suggest your baby is ready to wean:

- Does your baby still seem hungry after a milk feed?
If your baby is at weaning age and seems hungry after a milk feed, they may be ready to start weaning. If your baby is younger than 6 months, seek professional advice if s/he seems hungry after a milk feed. Perhaps it's worth offering your baby more milk to determine does the extra milk satisfy their hunger. Perhaps ask your healthcare advisor about changing to a different infant formula.
- Does your baby have the ability to hold their head in a controlled and steady position?
Until your baby can hold their head in a steady position, it's too early to introduce solids.
- Can your baby be easily supported in a sitting position?
- Is your baby showing an interest in food?
Showing an interest in food is one of the first indications that your baby is ready for solid foods. For example;
 - Does your baby watch you when you're eating?
 - Does your baby move their mouth, or drool, when you're eating?
 - Does your baby look at the food on your plate?
 - Does your baby reach for the food on your plate?
 - Is your baby showing an interest in other people when they're eating?
- Can your baby bring their hands to their mouth?
- Is your baby exploring the shape and feel of items with their mouth?
If your baby is putting items, such as toys, into their mouth, this is a sign that they are ready to explore new tastes.
- Is your baby making munching movements (up and down) when putting things into their mouth?

- Is your baby alert and looking for new ways of feeding?
- Has your baby's weight gain slowed down?
- Can your baby swallow?
If you try solids with your baby and they push it out of their mouth, they may not be ready to swallow yet.
- Has your baby's tongue-thrust reflex faded?
The tongue-thrust reflex makes a baby stick out their tongue when something goes into their mouth.
- Is feeding from the breast or bottle going well?

Looking out for these signs of readiness to eat is important. If you miss the signs, your baby will not be introduced to solids until later. The later solids are introduced, the more reluctant your baby will become in trying new flavours and textures, i.e. weaning will be more difficult.

Weaning Methods

There are different approaches to weaning and like most parenting issues, what works for one family may not work for another family. There is the traditional approach to weaning which involves spoon-feeding the baby with food purées, which have smooth textures, and then gradually moving onto rougher, lumpier textures as the baby grows. Another approach is baby-led weaning which involves allowing the baby to feed themselves from the start of weaning with pieces of food, i.e. finger foods, allowing them to choose which foods to eat and to how to eat them.

Some mothers choose the traditional approach as they can ensure that their baby is getting a full meal and there is less worry with regards to choking with this approach. Other mothers prefer the baby-led weaning approach as they feel it leads to greater independence, better acceptance of food, less tendency to be fussy eaters, and better nutrition due to the wider range of foods being consumed. It's also more straight-forward; no messing around with making food purées and spoon-feeding. Which approach you use is your choice and you can even choose a combination of both approaches. In fact, the advice from the European Union and World Health Organisation is to use a combination of approaches; give your baby some finger foods when you are spoon-feeding them. You'll find, in time, that you will tailor your approach to suit your baby's unique taste.

An Overview To Weaning: Weaning By Age

During the first 6 months your baby's immune system has been gradually gaining strength. Now that your baby is 6 months, s/he is ready to process solid foods. If you wish to start your baby on solids before they reach 6 months, talk to your GP or healthcare advisor. If your baby is ready to start earlier than 6 months, please adjust the timelines below in accordance to when solids were first introduced.

6 to 7 months

It is recommended to use a combination of traditional (spoon-feeding) and baby-led (finger foods) weaning approaches from the beginning and at each meal. If you choose to use the traditional approach, start by feeding your baby puréed food. These foods should be smooth, have no lumps, runny, and given by spoon. If needed, mix your baby's usual milk

into the purée to make it runnier. If using the baby-led weaning approach, your baby will gum on finger foods such as fresh fruits and cooked vegetables. At this age, your baby's pincher grasp, i.e. the ability to use their thumb and forefinger to pick items up, has not been developed. Instead, they will use their entire fist to pick up foods. Suitable finger foods at this age include thick sticks of well-cooked carrots, well-cooked broccoli spears, banana chunks etc.

7 to 9 months

At this age your baby will be able to sit up with little support and will start to put food into their mouth. When this begins, introduce some lumps into your baby's food. Typically, lumps are introduced after one month of weaning. When introducing lumps, the lumps should be small, soft, and of equal size. This means ensuring that the food has been mashed well. Your baby may heave/gag if they swallow a whole lump; this is a way of bringing the whole lump back up to spit out or to chew properly. This is normal for babies starting out on lumps. When this occurs calmly encourage your baby. In addition, your baby will also start to mimic chewing patterns, moving their jaw from side to side. Although your baby will not have the teeth needed to chew foods, it's important that that your baby gets used to chewing and swallowing lumpy foods. Delaying the introduction of lumpy foods may make your baby more resistant to lumpy foods and reluctant to different textures and flavours as they grow.

Sometimes, introducing lumps using a spoon can be a big step for your baby. Often, the best way to introduce lumps is by using finger foods. Up until now, your baby used their entire fist to pick up finger foods. However, between the ages of 7 to 9 months, your baby will further develop the skills they need to eat finger food. Your baby will likely start to pick up objects with their thumb and forefinger, rather than using their entire fist. This is called the pincher grasp. In addition, when your baby reaches this age, you'll notice your baby putting more and more objects into their mouth. This is a sign that your baby is ready to try new things to eat. Suitable finger foods at this age include sticks of well-cooked carrots, banana chunks, mini rice cakes, cheese, and toast.

At this age, your baby may also start to enjoy more filling and stronger flavoured foods, for example: dark-green, leafy vegetables, such as spinach; soft cooked meat; well-cooked eggs; pulses and lentils; different type of breads; chunks of ripe avocado; and cooked pasta shapes. When your baby is 9 months old, they will likely be able to manage a wide variety of foods with different textures and flavours. Therefore, by the age of 9 months, your baby will be able to join in with family meals much more easily, providing you take their needs into account (see the section '*Foods To Avoid*' for more details). Try to be led by your baby as to what they can handle; if you are concerned about the risk of choking, cut the food a bit smaller, or mash the food more. Continue doing so until you are confident that your baby can handle bigger pieces and lumps.

10 Months Onwards

Up to 9 months, the goal was to get your baby comfortable with solid foods and textures. When your baby is 10 months old, you can be more adventurous with their meals. However, there will still be some foods that your baby will not be able to eat - see the section '*Foods To Avoid*' for details. From 10 months, your baby's meals can be more adult-

like; minced and chopped foods can be introduced, and they should be eating 2 to 3 meals a day with plenty of snacks, such as fruit, between meals. However, breast milk and/or infant formula will remain an important part of their diet. By the age of 10 to 11 months old, your baby should be at the stage where they can get the spoon into their mouth, with limited success. By 12 months, solid foods will make up a big part of your baby's diet and nutritional needs, and the number of milk feeds will begin to drop. After 12 months your baby will only need 350 ml of breast, formula, cows, goats, or sheep's milk per day - see the section '*How Much Milk To Give When Weaning*' for more details.

It is important to carry-on giving your baby a variety of foods. Your baby will not have the teeth required to chew food properly (molar teeth) until they are 18 to 24 months old. Even so, their gums will be excellent at grinding food to a pulp. As your baby gets older, give them encouragement when trying new foods, but don't comment on how much they have eaten. If they leave food, don't worry about it. Just take the food away without drawing any attention to it. Babies and young children are good at eating according to their appetite. If they don't eat much at one meal, they often make up for it at the next meal. Finally, young children do not need adult-sized portions at meal times.

How To Start Weaning: Helpful Tips

- Use a combination of traditional (spoon-feeding) and baby-led weaning (finger foods) from the beginning of weaning and at each meal.
- Start your baby on puréed food. Their foods should be smooth, have no lumps, runny, and given by spoon. If needed, use your baby's usual milk to make the purée runnier.
- Use a soft-tipped, shallow spoon to feed your baby, and let your baby hold their spoon if s/he want to; you can feed them using another spoon. If you let your baby hold their spoon, it is likely that they will try to feed themselves.
- Start with a 2-3 teaspoons; gradually increase the amount if your baby is looking for more, and over time. Remember that your baby has a tiny tummy so don't expect your baby to eat much at the start.
- Although puréed foods are the easiest for your baby at first, some babies can cope with soft lumps, as long as the food has been well mashed. Babies can quickly learn how to chew soft lumpy food even though they have no teeth.
- As your baby develops the side-to-side grinding motion, add less liquid to their purées so that the texture is thicker, chunkier, and has soft lumps. This allows your baby to work on chewing, or gumming, and swallowing. It's important that you do not delay the introduction of different textures and lumps. Babies that are first given lumpy foods after 10 months are more likely to reject it. This may cause them to be less open to trying new textures and tastes as they grow.
- If your baby can sit upright and bring their hands to their mouth, allow them to self-feed with finger foods from the start. The easiest finger foods for young babies are those that are shaped like a chip or have a handle, such as cooked broccoli spears. This is

because when your baby first tries finger foods, they will use their entire fist to pick up foods; the pincher grip will develop in the months to follow.

- Gradually introduce new foods every few days. If you think the flavour is too strong, you can make the food blander by adding a few teaspoons of your baby's usual milk; slowly introduce the flavour by gradually reducing the amount of added milk.
- If you give your baby a food and they spit it out, remember that your baby's appreciation for different flavours and textures is continually and rapidly evolving; what they hate now, they may love in a few days, weeks, or months. It is important to introduce and re-introduce foods again and again; without forcing your baby. You may need to introduce a new food to your baby at least 8 times, possibly up to 16 times, several days apart, before s/he will finally accept it. The upside is that your baby will be less likely to get bored during mealtimes if s/he often gets something new to try.
- Babies love to explore their foods and when you are weaning you should give them as many flavours and textures as possible. This will give your baby a healthy appreciation of lots of different kinds of foods which can set them up for a good appetite and a healthy relationship with food.
- Don't wait for your baby to be hungry before feeding them; they'll be too confused, angry and frustrated to try new foods. You can offer your baby solids before, during, or after a milk feed; whenever works best for you both. Typically, a good time to offer food is ~ 30 min before when a milk feed is due, i.e. before they become too hungry. Alternatively, if your baby has become hungry, it can be helpful to take the edge off the hunger with some milk. Then, take a little break from the milk feed to try some solid foods.
- Begin with one meal a day and choose a time that's good for you both. Often, lunchtime can be a good meal to start with; your baby will be less hungry and less tired than in the morning or evening. Within one to two weeks you can increase to two meals per day.
- Make sure that your baby is in a good position for feeding. It's important to keep your baby's head in line with their body when you are feeding them as it'll make it easier for them to eat. Make sure that your baby can bring their hands together and that they are upright, well supported, and able to hold their head up easily. It is likely that you will feed your baby in your arms to start. However, later on, it is better for their development if they sit in a seat, e.g., detectable car seat, bouncy chair, etc. In the early stages, your baby may need help supporting their head; use a towel to keep their head in line with their body.
- As your baby gets older, a high chair with a tray will become appropriate. The use of a high chair will encourage your baby to sit upright and to feed themselves with their fingers. Make sure that your baby can bring their hands together to touch the food in front of them. To prevent your baby from slumping when they first use the high chair, wrap a towel around their waist, or try a high chair cushion or insert seat. If your baby

gets upset, always take your baby out of the high chair as they may be bored or comfortable.

- Do not overload the spoon with food and do not force food into your baby's mouth; this can be upsetting for them. When feeding, put a small amount of food on the spoon and wait for your baby to open their mouth before you offer them another spoonful of food. If necessary, you can gently hold the spoon against your baby's lips to encourage them to open their mouth.
- If food has been cooked and is hot, make sure to stir and cool it; test the food on the inside of your wrist before giving it to your baby.
- Watch for cues from your baby. If they are happy to keep eating, then continue feeding them. They have had enough to eat if they keep their mouth shut, turn away, or start playing with their food. Your baby isn't hungry if they push their food away, turn their head away, won't open their mouth, spit out their food, keep their tongue in, cries, shouts, tries to get out of the high chair, gags, or retches when you try to feed them

The Do's And Don'ts Of Weaning

In addition, to the above tips on how to start weaning, this section lists some Do's and Don'ts when weaning.

Do's

- Feed your baby a varied diet. This will ensure that their nutritional needs are met. Feed your baby meals with various tastes; this will help your baby to like lots of different types of foods.
- Babies do not need, or necessarily prefer, bland foods. Therefore, it's okay to use herbs, spices, onions, and garlic in their food from the beginning of weaning. Note, chilli is an exception. Do not add chilli to your baby's food.
- Keep feeding times as positive as possible; this can be hard when your baby is not feeding well.
- Be patient; remember that your baby is learning a new skill.
- Remember that it's not a race for getting your baby eating solids. Take your time so that both of you can enjoy these times.
- Remember that your baby's appetite will vary from day to day. Therefore, adjust what you feed your baby daily to account for this.
- Always supervise your baby when they are eating; this will reduce the risk of choking and enable you to learn, and be led by, what your baby likes to eat.
- Feed your baby homemade meals as much as possible. Use readymade jars and baby packs only as stop-gaps. There are advantages to giving your baby home-cooked meals; you'll know what's gone into their meal and you'll be getting them used to what you eat. If your baby is being breast fed, they'll get the flavours of what you eat through your milk. This will make it easier to get your baby to accept a type of food that you enjoy. Whenever you do use the pre-prepared food options, choose the products that are lowest in salt and sugar.
- Feed your baby at family mealtimes. It'll give your baby the opportunity to watch others eat and to learn from this. It'll also teach them about mealtimes and routines.

- Give your baby their own spoon and bowl containing a small amount of food; they may try feed themselves or try mix the food, making them feel involved and independent. If your baby is determined to hold the spoon, but isn't making much progress with it, consider using a spoon for you and a spoon for them.
- Let your baby explore food with their hands and encourage them to smell, look, and taste their food. This will help with introducing them to a wide range of tastes and will make mealtimes fun and interesting, giving your baby a healthy relationship with food.
- Feed your baby meals that are based on starchy food; your baby needs high-energy foods. Also, include a good source of protein.
- Constipation is quite common in pre-term infants. If this condition affects your baby, talk to your baby's health advisor.
- Take any negative, or painful, stimulation away from your baby's mouth or stomach. For example, if your baby has reflux, make sure that the reflux is under control and is not causing further pain when feeding.
- Speak to your doctor, healthcare advisor, or qualified dietician if you have any concerns regarding weaning your baby or if you feel that your baby is not progressing.

Don'ts

- Don't put solid foods into your baby's bottle. In order for your baby to develop proper feeding skills, it is important that they learn to take solid foods separately to liquids.
- Don't add salt, sugar, or honey to your baby's food; when cooking or when serving - see the section '*Foods To Avoid*' for more details.
- Don't add chilli to your baby's food at the beginning. It can be used at a later stage.
- Never leave your baby unattended when introducing finger foods; thereby, reducing the risk of choking.
- Vegan diets are not advised for babies. If you wish to feed your baby a vegetarian diet, discuss this with your baby's GP or a qualified dietician.
- Don't put pressure on your baby to eat, and never force the extra mouthful. It could put them off the food completely. Your baby may refuse food for the following reasons: it's too hot or cold; they're not feeling well; they're tired; they aren't hungry; or it's a new, sharp or bitter tasting food.
- When starting weaning, don't worry about how much your baby eats; they'll still be getting a large part of their nutrition from their milk feeds. At the start, the aim is to get your baby accustomed to the idea of solids; therefore, it is okay if they spit most of their food back out at the start. As long as your baby is continuing to put on weight, they'll be fine.
- Do not stick to the foods that you know your baby likes, for example, babies tend to like sweet things, hence might reject sour or bitter foods, e.g., brussel sprouts. It's important to give your baby a variety of foods and flavours,
- Don't excessively worry if your baby has a slower growth rate than other babies. It's normal for pre-term babies to have slower growth curves than full-term babies. The best method of determining whether, or not, your baby is growing well is to visit your baby's doctor to have their weight, height, and head circumference measured. It's important that these measurement as made accurately by a healthcare professional.

- When starting out with weaning, most of your baby's food will likely end up on their bib. Don't get frustrated thinking of the lost time spent making purées. It's all part of the weaning process and helping them to develop a new skill.

Suitable Foods When Weaning

If you give your baby a food and they spit it out, remember that your baby's appreciation for different flavours and textures is continually and rapidly evolving; what they hate now, they may love in a few days, weeks, or months. It is important to introduce and re-introduce foods again and again; without forcing your baby. You may need to introduce a new food to your baby at least 8 times, possibly up to 16 times, several days apart, before s/he will finally accept it. Below are a list of food that are suitable for babies when weaning. Depending on the stage of weaning, these foods will be puréed, mashed, chopped, or minced.

Fruit

Fruit can be puréed, mashed, stewed, and/or chopped depending on the age of your baby. Mashed ripe avocado and banana are very good first foods as they are highly nutritious and high in energy. As your baby grows, try to give them a wide range of colours, flavours, and textures. Choose fruits that can be easily broken down to reduce the risk of choking. Good examples include banana, mango, melon, pear, peach, pineapple, avocado, and stewed apple. Fruit should be ripe, peeled, and have any stones or seeds removed. If stewing soft fruits, remove any skins and fibres until you are confident that your baby can manage them.

Vegetables

Vegetables can be puréed, mashed, and/or chopped depending on the age of your baby. Cooked vegetables should be cooled before feeding to your baby. There is no need to add salt or butter to vegetables, either during food preparation or when serving. If adding milk to mashed vegetables, add your baby's usual milk, i.e. expressed breast milk or infant formula. Cow's milk is acceptable in food preparation after six months, but your baby's usual milk is best when first introducing solids. Again, try give your baby a wide range of colours, flavours, and textures. Suitable examples include broccoli, cauliflower, potato, sweet potato, carrot, parsnip, etc.

High Energy Foods/Starchy Foods

It's a good idea to base your baby's meal on starchy foods, such as breakfast cereals, baby breadsticks, potatoes, couscous, bread, pasta, millet, rice, and oats. Pasta is a great option as a first food as babies are often intrigued by the many shapes and they can easily play with it. It's also quick and easy to make. Toast is also an ideal finger-food for babies. When introducing your baby to vegetables, many of which are low in calories, it's a good idea to combine low calorie vegetables with starchy vegetables, such as yam, sweet potato, potato and cassava. Cool cooked meals before serving.

Cereals

Cereals are a good source of energy for your baby. It's a good idea to base your baby's meal on starchy foods because your baby requires high-calorie foods to help them to grow. Examples include baby rice, sago, maize, cornmeal, and millet. Make up these cereals with

your baby's usual milk, i.e. expressed breast milk or infant formula. Cow's milk is acceptable in food preparation after six months, but your baby's usual milk is best when first introducing solids. Cool any cooked meals before serving.

Meat, poultry, and fish

Meat, poultry and fish can be puréed and/or chopped depending on your baby's age and stage of weaning. The meat should be: soft; cook thoroughly; and have all bones, skins, and fatty pieces removed. Cooked meat should be cooled before feeding to your baby.

Lentils and Pulses

Lentils, split peas, chickpeas, or other pulses should be puréed, or well mashed. If your baby eats a lot of lentils and pulses, perhaps as part of a vegetarian diet, remember that these foods are high in fibre which can quickly fill up a small tummy. This will leave no room for other high energy foods that your baby requires, e.g., pasta, bread, etc. Cool before feeding to your baby.

Eggs

Eggs can be mashed, scrambled, and/or chopped. Eggs are a good source of protein for your baby providing they are cook thoroughly. It's important that your baby doesn't eat runny yolks or egg whites to avoid food poisoning. Food containing raw eggs should also be avoided due to the risk of food poisoning.

Diary

Yoghurts, fromage frais, and custard are great first foods when weaning since they are smooth and go well with fruit/vegetable purées. They can also be used as an after dinner pudding. After-dinner desserts should only be given to your baby when they have reached the stage when they are eating 3 meals per day. Try to avoid sugary versions and use full-fat varieties. Cheese cubes are also a good finger food. Remember that your baby shouldn't have cow's milk as a drink until they are one year old.

Readymade Baby Meals

Feed your baby homemade meals as much as possible. There are advantages to giving your baby home-cooked meals; you'll know what's gone into their meal, and you'll be getting them used to what you eat. If your baby is breast fed, they'll get the flavours of what you eat through your milk. This makes it easier to get them to accept a type of food that you enjoy. In addition, home-cooked purées will have different textures depending on whether they are made of vegetables or meats etc. However, readymade jarred foods have a uniform consistency regardless of their ingredients.

It's best to use readymade jars and baby packs only as stop-gaps. Whenever you do use the pre-prepared food options choose the products that are lowest in salt and sugar. To start, use first-stage ready meals. It's recommended that meat/fish dishes should contain at least 2.5 g protein per 100 g, vegetable savouries should contain 2 g protein per 100 g, and sweet meals should contain at least 1 g protein per 100 g. With dried baby food, look for the amount of protein per 100 g of 'made-up' food rather than the 100 g dried food.

Foods To Avoid

Until your baby is 6 months old, breast milk or infant formula fulfils your baby's nutritional requirements. When your baby is ready for weaning, it's advised to give your baby a variety of foods to provide them with all the nutrients they need and to give them a healthy appreciation of lots of different kinds of foods. However, there are a number of foods that shouldn't be given to your baby until they are at least 12 months old:

➤ ***Honey***

Babies younger than 12 months should not be given honey, in food preparation or otherwise. On very rare occasions, honey can contain the spore of a bacterium (clostridium botulism) which can cause Infant Botulism; a very serious condition. If your baby acquires botulism, symptoms start to show 8 to 36 hours after consuming honey. Phone your doctor immediately if your baby has eaten honey and then has constipation, listlessness/no interest in anything, and a lack of appetite. Honey is also a type of sugar which can be bad for emerging teeth, and can cause your baby to develop a sweet tooth.

➤ ***Nuts***

If nut allergies run in your family, take care when introducing products that contain nuts. While severe nut allergies are rare, always be aware of the signs that your baby is having a reaction to an ingredient, nut, or otherwise - see the section '*Allergies*' for more details.

➤ ***Salt***

Your baby doesn't need salt added to their foods, and it's best not to give your baby a liking for it. In fact, your baby's kidneys cannot cope with added salt until they reach one year of age. You should also avoid feeding your baby processed foods because they are high in salt, e.g., sausages, ready-made meals, bacon, breakfast cereals, crackers, gravies, crisps, pies, etc. Noteworthy, it's possible to buy stock cubes that are suitable for babies rather than buying high salt options. Babies should have less than 0.5 to 1 g salt per day.

➤ ***Sugar***

Avoid giving your baby foods with added sugar, and limit the amount of sweet foods they eat, e.g., chocolate, biscuits, ice-cream, etc. If you want to sweeten a dessert, try mashed banana, or a purée of stewed dried fruit. Remember, fruits are high in natural sugars. If you are giving your baby stewed sour fruit, such as plums, add sugar very sparingly. Sugary foods and drinks are bad for your baby's teeth, and will encourage your baby to develop a sweet tooth.

➤ ***Artificial sweeteners***

Diet drinks and squashes containing artificial sweeteners are not suitable for your baby. They contain no nutritional value, and can encourage a sweet tooth.

➤ ***Certain fish***

Mercury can be found in some fish; marlin, swordfish, broadbill, orange roughly, catfish, and shark (flake) are examples of fish with high mercury levels. Mercury can damage the nervous system, therefore avoid feeding your baby these fish. Raw shellfish can be a carrier of bacteria that causes food poisoning and should be avoided until your baby is older.

➤ ***Uncooked Eggs***

Eggs are a good source of protein and can be given to your baby when they reach 6 months. However, it's important that the eggs are cook thoroughly; no runny yolks or

runny egg whites. Food containing raw eggs should also be avoided due to the risk of food poisoning

➤ *Risk Of Food Poisoning Foods*

Foods known to carry a high risk of food poisoning include: pâté; soft-boiled or raw eggs; raw or uncooked shellfish; and soft, mould-ripened cheeses, such as camembert and brie. These food should not be given to your baby until s/he is older.

➤ *Low-Fat Foods*

Low calorie spreads, yogurts, and reduced-fat foods are not good options for your baby. Your baby needs calories and fats to aid their growth and development therefore, give them full-fat options.

➤ *Choking Hazards*

Always err on the side of caution when it comes to potential choking hazards: remove all bones from meat and fish; remove stones, seeds, and tough skins from fruit; and cut food into small pieces. Make sure your baby is well supported in their seat when feeding. Avoid giving your baby sticky foods which could get caught in their throat, e.g., marshmallows. Whole nuts and other hard foods are potential choking hazards. Do not give your baby whole nuts until they are five years old. Avoid foods that do not dissolve after gumming. Be careful with small round food, such as grapes. Be careful of foods where small, hard lumps can break off when chewing, e.g., an apple. Finally, be careful of fruits that don't mash well and don't break up easily, e.g., an orange; hold onto one end of the segment while your baby sucks the other end.

If you ever feel concerned about a particular food, or think your baby is unwell as a result of something they have eaten, contact your baby's doctor, or other health professional, who will be happy to help you.

Drinks For Babies

When introducing foods, you may want to introduce drinks to your baby also. Water is the best option because drinks that are suitable for adults and older children are often high in sugar.

Water

Water given to your baby before 6 months should always be boiled and cooled before use, for example, when making their infant formula feed. There may be occasions when it has been recommended to give your baby water as a drink before they have reached 6 months, for example, in very hot weather. Again, any water given to your baby before 6 months should be boiled and cooled before use. After 6 months, there is no need to boil all water before it's given to your baby. However, if you have concerns about the water in your area continue to boil the water and/or use a water filtration system.

Fruit Juice

After 6 months, your baby may have fruit juice although they don't need it. Fruit juices contain natural sugars and acids, hence can contribute to tooth decay. Therefore, fruit juices are not considered a healthy option for young babies. If you choose to give your baby

fruit juice, always dilute the juice before giving it to them; dilute one part juice to ten parts cooled boiled water. Alternatively, you can buy specially prepared baby juices. In addition, you should give juice to your baby only at meal times; the juice will help them to absorb iron from their meal. Finally, do not give juice to your baby from a bottle, or training/sucking cup; the way that babies suck and hold fluid in their mouths can lead to tooth decay.

Cow's Milk

It is okay to use cow's milk in food preparation after 6 months, but it's not recommended to use as a drink until your baby is at least 12 months old. The reason for this being that cow's milk contains proteins and minerals that are not suitable for your baby's kidneys. When cow's milk is introduced, either in food preparation or as a drink, use full-fat versions.

Herbal Tea

After 6 months, it is okay to give your baby the occasional unsweetened herbal tea, for example, camomile, caraway, peppermint, fennel, and dill can be given to aid digestion. However, if your baby is regularly given herbal tea, it may cause them to feel 'full'. This will leave little 'room' for their milk feed which may affect their growth and weight gain. Furthermore, never give your baby herbal teas that contain the spice Star Anise. Although Chinese Star Anise is a traditional treatment for colic, Chinese Star Anise is sometimes contaminated with Japanese Star Anise, a slightly different spice, which can be poisonous to your baby.

Unsuitable Drinks

- Caffeinated drinks, such as tea and coffee, are not suitable for your baby. Tannin in tea/coffee may prevent your baby from properly absorbing iron from their food, and may affect their sleep as will the caffeine. Therefore, don't be tempted to add a bit of tea to your baby's bottle to warm their milk.
- Sugary drinks, such as fruit squashes, cordials, and fizzy drinks, are not suitable for your baby. The sugar can damage their emerging teeth and these sugary drinks can cause your baby to develop a 'sweet tooth'. In addition, sugar-free fizzy drinks should not be given to your baby either because they contain sweeteners which can also give your baby a 'sweet tooth'.
- Alcohol should never be given to your baby.
- Rice drinks should be avoided by children under 5 years as they contain inorganic arsenic.

When introducing drinks, you can also introduce your baby to using a cup. You can introduce your baby to a cup as early as 6 months old. The best options are a normal open cup, or a cup with a free-flowing opening. This will teach your baby to take measured sips rather than to suck. If you choose to give your baby a training cup, i.e. a cup that requires them to suck, never put anything other than breast milk, infant formula, or water in this cup. Sweeter drinks and juices in training cups will lead to tooth decay due to the way babies suck and hold fluids in their mouth. Finally, if you are breast feeding, take care when introducing extra drinks. Giving your baby extra drinks may affect your milk supply because breast feeding works on a supply and demand basis.

Preparing And Storing Your Baby's Food

When preparing your baby's meals, food hygiene and cleanliness are important because your baby's immune system is immature, hence is vulnerable to infections. Therefore, it's important that you remember these hygiene guidelines:

- Wash your hands before you start preparing your baby's food.
- Wash your baby's highchair, bibs, and eating areas with hot, soapy water on a daily basis.
- Wash your baby's hands before they start their meal; this is particularly important if your baby's is having finger foods.
- Wash kitchen cloths and tea towels regularly.

It's best to prepare your baby's food immediately before feeding it to them. The reason for this being that once food has been cut and/or cooked it will gradually lose its nutritional content over time. However, serving freshly prepared meals may not always be possible. At times, many busy mothers choose to prepare enough food for two, or more, meals. If you prepare food in advance, cool it quickly and store it in the fridge (4 to 8 °C) if you plan to use within 24 hr. If the prepared food will not be used within 24 hr, it's best to store it in the freezer (-18 to -20 °C). Freezing is the best method of preserving the nutritional content of foods. For later convenience, it's best to divide the prepared meal into smaller portions before freezing; therefore, you can just de-frost the quantity you need for each meal. Use flexible, plastic ice-cube trays, muffin trays, or other plastic containers, to divide the food into smaller portions. Ice-cubes trays are more suitable when your baby is first introduced to solids, i.e. when typically eating 2 to 3 spoonful at each meal, while the muffin tray will be more appropriate when your baby is older and more established on solids.

Other important safety guidelines when preparing and storing your baby's food include:

- If food is frozen, de-frost thoroughly before cooking, unless the label states otherwise. Never re-freeze raw meats once they have been de-frosted.
- Cook eggs and meats thoroughly: no runny egg whites or yolks, and no pink areas in meat.
- Always test the temperature of your baby's food on the inside of your wrist before feeding it to them.
- When re-heating food, it should be piping hot; you should be able to see steam coming out. Then, leave it to cool and test the temperature before giving it to your baby. If using a microwave to re-heat your baby's food, stir it fully to avoid hot spots. Don't re-heat your baby's food more than once.
- If your baby leaves any food behind after a meal (home-cooked or jar-food), throw the leftovers away. Food that has been in contact with saliva contains bacteria that will multiply if kept.
- Check the best-before and use-by dates of your baby's food.
- If you have jar-food that has not been in contact with saliva, store it in the fridge and use within 24 hr after opening.
- If your baby is having a family meal which contains alcohol in the recipe, remember the following:
 - Burn off as much alcohol as possible:
 - Add alcohol early in the cooking process. The longer you cook a dish with alcohol, the lower the alcohol content will be.
 - Simmer, and cook for at least 90 min.

- Use a wide and open pan. Alcohol takes longer to burn off in smaller and covered pans.
- Avoid the use of alcohol with alcohol substitutes
For example, use: apple juice instead of cider; chicken broth instead of white wine; ginger ale instead of beer; orange juice or pineapple juice instead of sherry; apricot, peach, or pear juice instead of brandy; wine vinegar; and non-alcoholic wines and beers.
- It's best not to give your baby any food that has been prepared with spirits or liquors. These drinks have a higher alcohol percentage than wine, cider, and beer.

Mealtimes

From the start of weaning, it's best to establish a daily routine of regular mealtimes and snacks. This routine will give your baby the feeling of security as they will know what to expect from each day. The longer you leave setting up a routine, the harder it'll be to introduce regular mealtimes to your baby.

Try share as many mealtimes as possible with your baby. Eating together as a family will teach your baby about mealtimes, encourage them to try different foods, teach them how to eat foods, and allow you to have fun together. It'll also enable you to learn, and be led by, what your baby likes to eat. Your baby will learn by copying you; therefore, share your baby's food, and try to make a good example by eating healthy, home-cooked meals. If your baby is eating soft finger food, add some to your plate and tell them how much you love what you are eating. A baby will often eat something from your plate which they have refused from their own. You should also remove any distractions during family mealtimes, e.g., turn off the television, radio, etc.

Allow your baby to touch their food. By touching and playing with their food, your baby will learn about different textures and how to eat various foods. In addition, if your baby touches and plays with their food, s/he will be more likely to eat it. Therefore, you should prepare for a mess during mealtimes; dress yourself and your baby appropriately. If your baby's face gets messy, try not clean it up until after the meal. Also, feed your baby in an area where you won't mind if it gets dirty. This is especially important when your baby starts self-feeding.

The ideal is to make mealtimes relaxed, unhurried, fun, and positive; but don't feel bad if this doesn't happen all the time. Offer your baby small portions, and go at their pace. Try give your baby enough time to explore their food. If your baby doesn't want a particular food, or they have had enough, don't pressure, coax, or bribe them into eating. It'll lead to mealtimes becoming an anxious time. You'll learn the signs that your baby has had enough; they'll stop eating, push their food away, or turn their head away. If your baby does this, take the food away from them.

Don't be put off if your baby makes odd facial expressions when eating. It doesn't mean that they don't like the food rather that they are surprised by the unfamiliar taste. You'll need to introduce a new food to your baby at least 8 times, possibly up to 16 times, several

days apart, before they'll finally accept it. Finally, never leave your baby unattended; thereby reducing the risk of choking.

How Much Milk To Give When Weaning

How much milk depends on whether you are breast feeding or bottle feeding your baby? If you are breast feeding you can't measure the amount of milk you give them; let your baby guide you. As your baby eats more solids, you'll find that milk feeds between meals become shorter and eventually stop. However, breast feeding is encouraged for as long as you and your baby are happy to continue due to its benefits. If you give your baby formula milk and/or expressed breast milk, continue to do so when weaning. Typically, ~850 ml of milk is needed between the ages of 6 to 12 months. However, you may find that the amount of milk that your baby consumes decreases with the introduction of food. When your baby has been fully established on solids and is less than 12 months old, the minimum amount of infant formula and/or expressed breast milk should be 500 ml per day. When your baby is 12 months old, they can have additional sources of milk as a drink, such as cows or goat's milk. However, infant formula or expressed breast milk should be their main milk source until the age of 15 to 18 months. After 12 months, your baby will only need 375 ml of milk per day, either infant formula or other sources of milk.

If you breast fed your baby longer than 6 months, it's recommended that your baby receives Vitamin D supplements: a vitamin important for healthy bones and teeth. It's not because breast milk is lacking in Vitamin D rather that it can be hard to ensure your baby gets enough Vitamin D since your body produces this vitamin in response to light exposure. Your baby will also need an iron supplement until they are 12 months old. However, if their weaning diet supplies enough iron, it can be stopped sooner. If you are feeding your baby infant formula, providing they are getting 500 ml formula per day, they will not need Vitamin D or iron supplements since infant formula is fortified.

Food Allergies

A food allergy is when the body's immune system has a bad reaction to a usually harmless protein in food, and tries to fight it by producing antibodies. Food allergies are common in infants; about 10 % of infants and 4 to 8 % of children up to 5 years old have a food allergy. Furthermore, pre-term babies have a greater risk of developing allergies than full-term babies. If your baby already has an allergy or allergic condition, such as asthma or eczema, they are more likely to be allergic to certain foods. In general, the worse the eczema, the more likely they'll have a food allergy.

The most common food allergies in babies and children are: eggs; cow's milk; peanuts; tree nuts (pine nuts, cashews, macadamias, and pecans); grains that contain gluten (wheat, rye, barley, and oats); shellfish; sesame; soy; fish; and citrus fruits. If allergies run in your family, e.g., asthma, food allergy, hay fever, eczema, talk to your healthcare professional before introducing your baby to above listed foods. It may be useful to try these foods one at a time; that way you can see how your baby gets on with each food and isolate any trigger foods. Start with a very small amount and don't give these foods to your baby until they are at least 6 months old.

Symptoms of A Food Allergy

If your baby has a food allergy, s/he's likely to show symptoms within minutes after having the food. These symptoms include: hives/welts around the mouth, nose, and eyes which can spread across the body; mild swelling of the lips, eyes, or face; runny or blocked nose; sneezing; watery eyes; itchy mouth and irritated throat; nausea and vomiting; and diarrhoea. If your baby has a severe allergic reaction, they may have wheezing, difficulty breathing, tongue and throat swelling, and/or a sudden drop in blood pressure. This is called anaphylaxis, or anaphylactic shock, and can be life threatening. If you suspect your baby is having an anaphylactic shock, use an adrenaline auto-injector pen, and immediately call an ambulance. Do not try to make your baby vomit.

Coeliac Disease

Coeliac disease is caused by an over-sensitivity of the gut to a protein named gluten. This over-sensitivity causes inflammation within the gut which makes it harder for the body to absorb nutrients. Foods that contain gluten include: cereals, wheat, barley, rye, and oats. Current guidelines suggest that it's best to wait until your baby is 6 months old before introducing them to gluten-containing foods and to gradually introduce these foods. Introducing gluten to your baby before this age, increases the likelihood that they will develop coeliac disease. In addition, if you are breastfeeding your baby, introduce gluten-containing foods before you stop breast feeding as you can pass your antibodies to your baby helping them to resist developing a gluten allergy.

Symptoms for coeliac disease include: your baby may be unsettled or irritable; diarrhoea; loss of appetite; poor weight gain; weight loss; and/or a bloated tummy. If your baby develops coeliac disease, it'll likely become evident when s/he reach 9 to 18 months old. If you expect your baby to have coeliac disease, speak to your doctor for advice. In addition, it's important to speak to your doctor before you cut gluten from your baby's diet as your baby must have gluten in their body in order for the medical test to be able to determine if your baby has an allergy to gluten

What To Buy When Weaning

➤ *Utensils*

Special weaning spoons are available; these spoons are softer on your baby's gums than an ordinary teaspoon. If your baby wants to hold the spoon themselves, give them spoons with wide, long, and looped handles; making it easier for them to grasp. It may be useful to have spoons which have long handles, making it easy for reaching into jars. Some weaning spoons are temperature-sensitive and change colour to indicate to you that the food is very hot. If your baby is determined to hold the spoon, but isn't making much progress with it, consider using a spoon for you and a spoon for them.

➤ *Plates and bowls*

Depending on your needs, you may want small plastic containers/bowls with lids. It's best to buy containers that are microwave, dishwasher, and freezer friendly. If your baby goes through a phase of throwing their food on the ground, try bowls with suction cups on the bottom. If your baby is a fussy eater and doesn't like their food to touch, you can buy bowls that are divided into separate compartments. Indulging your baby during this stage may help them eat more.

➤ *Cups*

Avoid using cups that your baby will have to suck from, such as 'any-way up' or spill-proof cups. These types of cups will not teach your baby how to sip their drinks. Instead, use a

normal cup or look for cups that have soft free-flowing spouts which will teach your baby how to sip rather than suck their drinks. In addition, free-flowing spouts will help to protect your baby's emerging teeth; they won't have to suck liquid between their teeth. However, be prepared when your baby is learning to sip their drinks as there will be spillages.

➤ *High Chairs*

By elevating your baby to your level, it'll allow them to see what is happening around them and will help them get more involved during family mealtimes. If you are looking to buy a high chair, try to purchase one that has a detachable front tray. Having a tray in front of your baby, helps to reduce any mess during meals, however, removing the tray allows the chair to be pushed up to the family table getting them more involved at mealtimes. For safety purposes, and to prevent having to repeatedly ask your child to stay seated, choose a high chair with a harness and one with a post separating your baby's legs, preventing them from slipping down. Some high chairs can recline; allowing your baby to use them before they can sit up fully, i.e. can be used from the start of weaning. Chairs with in-built padding can be quite comfy options for your baby and allows them to play in them as well as eat. Some chairs have different height settings and adjustable footrests allowing you to continue to use it as your baby grows. If possible, try to get a high chair that is easily cleaned; non-fabric cushion, a plastic frame, and a harness that is easily cleaned, or is detachable for washing.

➤ *Boosters Seats*

Boosters are suitable for older babies and toddlers. They are a good option as they are portable and do not take up a lot of space. Booster seats are useful as they allow your baby to eat with you anyway. For safety reasons, try to get a booster seat with a harness. In addition, it's possible to buy booster seats which have trays; a good option if you do not have space for a high chair. Booster seats can be made from: cloth, which hang on the back of a normal chair; plastic and wood, which generally strap onto a chair; or high density material, which sit flat on most surfaces, i.e. chair, benches, table, etc.

➤ *Clip-On Chairs.*

Another option is the clip-on chair. Advantages include: they fold flat when not in use, can be easily packed away for trips, and easy storage. Disadvantages include: they are not suitable for glass or pedestal tables, should not be used with tablecloths, and need a very stable table.