

Good food for infants *under one year*



The Swedish National Food Agency's advice on food for children up to one year is based on collected research and is intended to be support for parents. It is written to suit most families. Not all the advice will work for everyone, but it can be adapted to your family's situation.



The first six months

The first months of a child's life is a special time – radically new and fantastic. In retrospect, this period usually feels quite short, but in the middle of all the fantastic it can be exhausting. Many parents are unprepared for how they will be governed by their child's needs and how it feels to be woken in the middle of the night when he or she is hungry or needs closeness.

To get a daily routine that works, it's a good idea to gradually find a rhythm that provides your child with security and the parents with some structure to their lives. Since life, at its beginning, deals mostly with eating and sleeping, routines are often built around mealtimes.

For the first six months, breast milk or infant formula is the best food for your child. But the food isn't just about nutrition; it also provides time for closeness that is important to your child.

Breast milk

Breast milk contains all the nutrition a child needs to grow and develop during the first six months. The only exception is vitamin D, which your child needs to get through vitamin D drops.

Milk production is stimulated when your child nurses. For some, breastfeeding starts up easily; for others it can take some time. So it's important to get the help you need, for example from a maternity hospital, a breastfeeding clinic, or a nurse at a Child Health Centre (BVC). Don't be afraid to ask! Today there is a lot of knowledge about how to make it easier to get breastfeeding to work. On www.1177.se, the county council website, there is also practical advice on what to do when breastfeeding.

Can breastfeeding decrease the risk of illness?

Breast milk contains substances that decrease the risk of infections such as ear infections and gastroenteritis. Research also shows that children who are breast-fed are at less risk of becoming overweight, and develop high blood pressure and type 2 diabetes as adults. Children who are only breastfed get the greatest protection, but even a little breastfeeding is good. The risk of developing gluten intolerance during the first years is lower among children who are slowly accustomed to food with gluten while they are still being breastfed. On the other hand, breastfeeding probably does not reduce the risk of allergies.

Saving breast milk

A small child is susceptible to infections. If you are going to express breast milk, it is therefore important to wash your hands first, so that bacteria or viruses from your hands are not transferred to the milk. The milk does not need to cool down; it can be put directly into the refrigerator or freezer. Breast milk can be kept for up to three days in the refrigerator. In the freezer, it can keep for at least six months. Defrost frozen breast milk in warm or cold water or in the refrigerator, not at room temperature. Throw leftover milk away after your child has finished eating.

Is breast milk affected by what the mother eats?

What a mother eats affects her breast milk. You can read more about this in the brochure “Advice about food for you who are breastfeeding”, distributed at Child-Health Centres. This advice is also available at www.livsmedelsverket.se.

Infant formula

If you don't breastfeed your child, there are infant formulas that provide the energy and nutrition he or she needs. The formulas that are available are made to resemble the nutrients of breast milk as closely as possible.

There are different kinds of formulas – at the Child Health Centre you can get advice as to what kind is most suitable for your child. On the other hand, you should never make your own formula with regular milk or anything similar, since it's not possible to get the right proportions of nutrients yourself. The wrong proportions can damage your child's kidneys, or prevent normal growth.

Formula for infants over six months is called follow-on formula.

Combining breast and bottle feeding

Sometimes you may want to combine breast and bottle feeding. This works for many, but for some it can lead to stopping breastfeeding earlier than planned. This could be due to insufficient stimulation of breast milk production, or because your child prefers to suck on a feeding bottle because the food comes out more quickly. It could be a good idea to give them the formula from a cup instead of a bottle.

It is also a good idea, if possible, to wait until milk production has started up properly and stabilised before giving a formula. On the other hand, there are mothers who may need to provide a formula to start with, and then switch to breastfeeding. At the Child Health Centre you can get practical advice on how to combine breastfeeding and formula.

Vitamin D drops

Small children don't get enough vitamin D from food. Too little vitamin D can prevent the child's skeleton from developing as it should. All children therefore need vitamin D supplements every day for the first two years. It's important that your child gets the drops regularly. Some children, for example children with darker skin, need vitamin D drops for more than two years.



Preparing infant formula

Since children are susceptible to infections, good hygiene is important when preparing formula. Always wash your hands before you begin. It's also important to use clean bottles and teats and to wash them carefully; they do not, however, need to be sterilised.

Don't mix the formula with water from the hot water tap, as it may contain copper from the pipes. Use cold water instead, and run the water until it is cold. Heat the water afterwards, and mix the formula according to the instructions on the package. The package also shows how long the prepared formula stays good. Throw away unused formula after feeding.

On www.1177.se, the county council website, there is also practical advice on how to feed with formula.

If you have your own well, the water quality should be analysed before it is given to children. The municipal environmental department where you live can advise you how to do it. Pay particular attention to whether the water contains bacteria, arsenic, manganese, nitrate or fluoride, since small children are more sensitive to these substances than adults.

Read more about drinking water and wells at www.livsmedelsverket.se.

How much should children eat?

Since all children are different, it's not possible to say how much breast milk or formula an infant needs. The best method is usually to let your child's appetite control how much and how often he or she eats.

The more often your child is breastfed, the more milk is produced. Sometimes a child will want to eat more often, which could be due to the fact that milk production hasn't managed to adjust to his or her needs. It could also be that your child needs closeness and comfort more than food.

If you feed with formula, the package should indicate how much is recommended. But even if your child gets formula, it is important to let him or her control how much they want to eat. Sometimes they may not want all that's been prepared, and you shouldn't try to get your child to finish a bottle.

You can check your child's height and weight curve at the Child Health Centre. This is a tool to help determine more easily whether your child is growing properly. If your child is following the height and weight curve, you don't need to worry that he or she is eating too little.

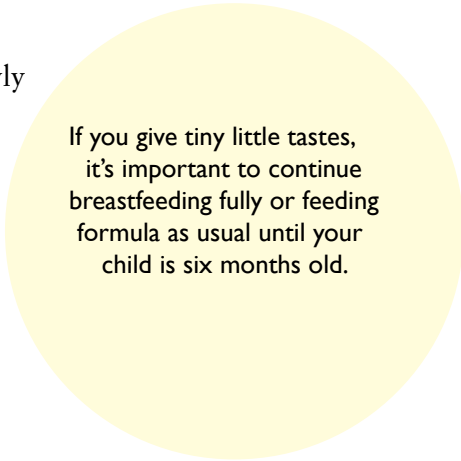
Tiny little tastes

A number of children become interested in food early on. From the age of four months at the earliest, you can let your child taste small samples of solid foods, as long as they are small amounts and they don't compete with breastfeeding. Even if you give them small tastes, it is still important to continue full breastfeeding or feeding with a formula as usual until your child is six months old.



If your child is curious about the food you're eating, you can – from the age of four months onward – let him or her taste a tiny bit once in a while.

Tiny little tastes give your child the opportunity to slowly try new flavours and textures. You can, for example, take a little of your own food – just a pinch – with a spoon or your finger, and let your child get a little on his or her tongue. It's not an issue of bringing out the bib and a plate, but letting a taste be just a taste and not the start of meals. It's not a problem if the food contains salt, since it is just a very small amount. On the other hand, the food must of course have a soft texture so that your child does not choke on it.



If you give tiny little tastes, it's important to continue breastfeeding fully or feeding formula as usual until your child is six months old.

If your child doesn't seem interested, you don't have to give him or her a taste. Breast milk or formula provides all the nutrition your child needs for the first six months, except vitamin D. It's also just as good to wait until your child is six months old.

Food containing gluten

If your child gets small amounts of gluten while he or she is still being breastfed, the risk of becoming gluten intolerant decreases. By four months at the earliest, and six months at the latest, you should therefore start giving your child a little food with gluten. Gluten is found in food containing wheat, barley, and rye, but there is only only a little gluten in oats.

You could, for example, let your child taste a small bite of white bread or wheat wafer, or a small spoonful of porridge or gruel a few times a week. It is easy to get too much gluten if you serve gruel in a bottle. After the age of six months, you can slowly increase the amount.

It is also important to start gluten slowly if your child is being given formula. Start with very, very small amounts containing gluten and increase the amount very slowly. This can also reduce the risk for gluten intolerance, even though slow introduction in connection with breastfeeding reduces the risk more.

Introducing solid foods

– from around six months

At the age of six months, it is time to start getting your child used to regular food. Learning to eat regular food is a gradual process. In the beginning, it's mostly an issue of your child getting used to new textures, more flavours, eating from a spoon, and learning how to chew. Continue breastfeeding or giving formula as usual during this period. Since breast milk and formula contain so much nutrition, you don't need to worry if your child wants to wean slowly.

What can I give my child?

There are no rules about what to start with. The important thing is that the food has a soft consistency so that your child does not choke on it. For example, you can mash a bit of cooked potato, or a little rice, with a fork and add breast milk or formula so it becomes a loose mush. You can also mash up root vegetables and greens this way. Your child can also be allowed to pick out very, very small, soft bits of food. Earlier, people were advised to give the same food for several days before introducing the next one, but trying several different foods at the same time works just as well.

You can also try boiled, mashed, or mixed chicken, fish, ground beef, beans, lentils, and tofu. Meat, beans, and tofu contain a lot of iron, which your child needs. Earlier, it was believed that waiting until children were a year old before giving them fish, eggs, milk and nuts could prevent allergies, but new research shows that this is not the case. Since fish and eggs contribute important nutrients, it's good if your child is given such food early on. Read more about milk on page 14 and about nuts on page 17.

Mashed bananas, apples, and pears can easily be prepared by carefully scraping the fruit with a spoon.

Keep in mind your child needs to slowly get used to foods, even gruel and porridge. During the first few weeks a couple teaspoons of gruel or porridge is enough; increase the amount little by little later on.

Keep serving small amounts of food containing gluten such as bread, wheat wafers, pasta, or bulgur. A number of children's porridges and gruels also contain gluten – check the packaging. Gluten is found in wheat, barley, and rye, but there is only a little gluten in oats.

Small children are sensitive to bacteria and viruses that can cause gastroenteritis. It's therefore very important to think about hygiene when preparing food for your child.

Read more in recipe ideas.

There is not enough research to be able to say how quickly children can or should get used to food. The age interval described here is instead based on proven experience. Since all children are different, you should not consider this interval as fixed. You therefore shouldn't worry if your child wants to move ahead more quickly or more slowly.

Food is not just a question of nutrition, but also about closeness and, gradually – as your child grows older – being in each other's company during mealtimes.

Sometimes there can be hassles around food for different reasons. You can get support from the Child Health Centre concerning this kind of issues.

How do I server solid foods?

If you have tried serving small bits just to taste as described in Tiny little tastes, you can slowly increase the amount. During the first few weeks, a couple of teaspoons are enough. If you didn't start with tiny little tastes earlier, you should start when your child is six months old. Start with small amounts so that your child gradually gets used to them. For the first few days a teaspoon are enough; the amount can then slowly be increased.

Make sure the food isn't too hot; feed your child with a small spoon or let him or her pick up very, very small, soft bits of food. Most children have difficulties putting food into their mouths properly and swallowing it. Food coming back out often doesn't mean your child doesn't like it, but that he or she doesn't know what to do with it and isn't used to the texture. Regular food isn't as sweet as breast milk or formula, and the new flavours can take some time to get used to.

A number of children accept it quickly, while others are more sceptical and need to try new food several times. You can put your child on the right track by tasting the food yourself and showing him or her that you like it. But if your child seems unwilling, it's better to wait a few days and then try again.



It may happen that children who breastfeed choose to stop when they start getting gruel in a bottle, since the food comes out of the bottle faster. It may therefore be better to give the child porridge instead, or gruel in a mug. Also keep in mind that porridge and gruel often contain gluten. Give your child small portions to start.

When is the best time to give solids?

The time of day you give solid foods doesn't really matter. Some people find it simpler to give them at lunch, while others think dinner time, or in between, works better. The most important thing is to offer solids when your child isn't too hungry, too full, or too tired. Try different approaches and find what works best.

How much food does my children need?

It's not possible to say exactly how much food small children need. Some children will always want more, while others will barely want to taste. Both cases can be frustrating for parents. In most cases, your child will make sure he or she gets enough food by showing that he or she is hungry. Sometimes it may be easier to your child to eat if you eat along with them. If your child eats just a little food but gets plenty of breast milk or formula, the nourishment they contain will most probably be enough. If your child is growing and developing normally, you don't need to worry.

If you have a child who wants to eat a lot, it may be difficult to know when to stop. If your child is still hungry, it may be better to top up with breast milk or formula than to increase the amount of food too quickly. The same applies to gruel and porridge – increase the amount slowly.



The first foods – a few simple basic recipes

Potato, root vegetable, or vegetable purée

Most root vegetables and greens can easily be mashed. For example, take some of the following:

1 potato, 1 small carrot, 1 parsnip piece, corn, green peas, a couple florets of broccoli or cauliflower

1 tsp liquid margarine or oil, preferably rapeseed

a little breast milk or regular milk

How to make it:

Peel and slice the potatoes and root vegetables; cut the vegetables into smaller pieces.

Place the pieces in a pot and pour water until it just covers the pieces. Boil until soft. You can also boil them in the microwave.

Mash with a fork, or in a garlic press or strainer. If you make large amounts, a food processor or blender could be practical.

Vegetarian lentil stew

1 dl dried lentils or 3 dl cooked

2 tbsp rapeseed oil

1 yellow onion

1 bell pepper

1 clove garlic

400 g crushed tomatoes

thyme

How to make it:

Boil the dried lentils according to package instructions, but without salt, or use prepared lentils. Chop the onion, pepper, and garlic and cook in oil over medium heat until soft. Add crushed tomatoes and the cooked lentils. Cook and add thyme.

A few fish balls, a couple teaspoons of liver pâté or a slice of blood pudding is food that only needs to be warmed in the microwave and is suitable for small children.





Finish off the meal with fruit scraped with a spoon, or mashed berries.

Meat or chicken

15-20 portions (1 portion = approx. 2 tbsp)
400 g minced meat or chicken
4-5 dl water
dill, parsley, or other herbs

How to make it:

Cut the chicken into bits and boil thoroughly, until the meat is white throughout.
Chop fine with a blender, food processor, or shred with a grater.
Mash minced meat with a fork while it cooks.
Add runoff to desired consistency and spice with dill or parsley, for example.

Fish

1 salmon filet (approx 100-150 g)
1 tsp liquid margarine or oil, preferably rapeseed
Dill or other herbs, (optional) pressed lemon

How to make it:

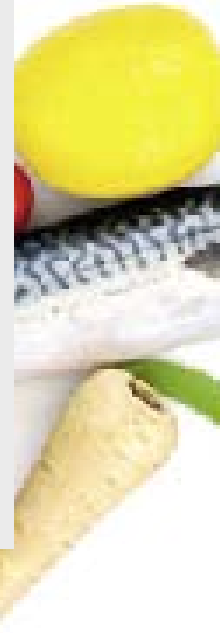
Cut the salmon into several smaller pieces and put on a plate. Cover with a loose lid and microwave on high for 2-3 min. Mash or cut into small pieces and mix with oil and herbs and/or squeeze some lemon over it.

Freeze food in appropriate portions, for example in an ice cube tray.

To keep in mind when preparing food

Children under one year are especially sensitive to bacteria and viruses that can cause stomach ailments. It's therefore very important to think about hygiene when preparing food for small children:

- Wash your hands before you begin preparing food.
- Wash your hands immediately after handling raw meat and chicken.
- Wash cutting boards and kitchen equipment carefully after cutting raw meat and chicken.
- Cook or fry minced meat and chicken thoroughly.
- Put food to be saved in the refrigerator or freezer as quickly as possible. If the food is allowed to stand at room temperature for more than a couple of hours, bacteria can start to grow. Small amounts of warm or lukewarm food can be put into the refrigerator immediately.



From around the age of eight months

When your child wants larger bits to taste, increase the amounts to small meals. Breast milk or formula still contains many of the nutrients your child needs. So there is no hurry in switching to regular food at every meal. Let your child's interest in food set the pace. Gradually, when your child is aged ten to twelve months, he or she will need two main meals a day and a few snacks in between.

At this age, the food needs to be coarsely chopped with a knife, or shredded with a grater or food processor. Your child can also be given larger pieces that he or she can hold onto.

Breakfast, snacks, and evening meals

Breast milk, formula, porridge, gruel, (preferably in a mug) or bread and butter are good for breakfast, snacks, and dinner. Serve them along with a little fruit, or some berries or vegetables.

Porridge and gruel

For children less than a year old, enriched instant porridge is a good idea, since it provides more vitamins and minerals than homemade porridge. It's rich in iron, for example, which can be difficult for small children to get enough of. At the same time, serving your child homemade porridge is good, to get him or her used to the taste. There should be no more than three meals with porridge or gruel per day. Your child will also need to get used to other foods, and to learn to chew food with a coarser consistency.



Children learn a lot through imitation. When eating with your child, try all the food yourself and show him or her you think it's good.

Whole grains and fibre

Whole grains and fibre are good, even for small children, but a number of children can get loose stool if they get too much. For other children it can be the opposite – they can become constipated. How much fibre children can eat without affecting the stomach varies from child to child – experiment with it. A good way of getting just enough fibre is varying between whole-grain products and types less rich in fibre.

Dairy products

Wait to give milk as a drink and larger amounts of sour milk or yoghurt until your child is a year old. Milk itself contains many important vitamins and minerals, but only a little iron. If your child gets too much milk or dairy, there is a risk that he or she won't manage to eat enough of other foods, which are more rich in iron. With breast milk or formula, your child will still get enough milk that's better adapted to him or her.

Iron is an important nutrient that can be difficult for small children to get enough of. If your child does not get iron-enriched instant porridge or gruel, it is very important that he or she gets other foods rich in iron like meat, blood pudding or other blood meals. Beans, chickpeas, lentils, and tofu are vegetarian sources of iron.

Lunch and dinner

Potatoes, pasta, rice, bread, bulgur, or similar items should be the base for mealtimes, along with root vegetables and greens. Meat, fish, chicken, eggs, beans, lentils, or tofu make mealtime complete. Finish off with a little fruit or berries. Fruit and berries contain vitamins such as vitamin C that help your child absorb the iron found in foods. Keep introducing new flavours and consistencies so that your child gets used to many different types of food. It may be easier to accept a new flavour if it's served alongside food your child already likes.

If you're not experienced in cooking or are unsure whether you can prepare food that provides enough nutrition, you may think that it's easier to serve ready-prepared baby foods. There's nothing wrong with prepared food, but it can be expensive to buy it. And it's not really difficult to cook homemade food. Take a little bit of the family's meal, for example, but skip the salt. Children under a year old can't regulate their salt balances properly.

Children under two years need food with a little more fat than adults do, since they're growing so quickly. A teaspoon of liquid margarine or oil – preferably rapeseed oil – per portion is enough, if there isn't already fat in the recipe. Prepared baby food already contains enough fat, so nothing extra needs to be added.

As regards protein, children in general have no problem getting what they need.

How much food does my child need?

Your child knows how much food he or she needs. During some meals your child will eat a little less food, but naturally compensates for this by eating more at another meal. Over the longer term, children most often get enough food. As long as your child is growing and developing properly, you do not need to be worried.

Small children can't manage large portions of food and therefore need to eat more often than adults. Your child will get the amount of food he or she needs more easily through regular mealtimes. A good meal routine could be breakfast, lunch, and dinner, and a few snack times in between.

How long should I keep breastfeeding or giving formula?

Breast milk and formula are still important sources of nourishment while your child is learning to eat other foods. Since it's a good idea to introduce new foods slowly, your child should continue with breast milk or formula.

The more regular food your child eats, the less breast milk or formula is needed, but you can continue breastfeeding as long as you and the child want to, even after the child is a year old. It's also good to continue with breast milk formula throughout the first year.

Avoid snacking

Corn puffs, wheat wafers, raisins, and the like may seem practical for keeping your child busy in the carriage or as a soother. But this isn't a good idea – constantly having something in his or her mouth is not good for your child's teeth or appetite.

Sweet drinks like juice mixes or sweet tea in their feeding bottles should be avoided completely. They provide no nutrition and can cause cavities. It's much better if your child gets used to drinking water when he or she is thirsty.





Is there anything children under one year should avoid?

Infants can eat most of the food the rest of the family eats, but some foods should be avoided, or they should wait until he or she is a year old.

Leafy green vegetables

Wait to serve leafy green vegetables like lettuce, rocket, and spinach until your child is a year old. Then increase the amount bit by bit. These vegetables contain nitrates, which can be converted into nitrites in the body. In children under one year old, nitrites can block the transport of oxygen in the blood.

Green potatoes

Green or damaged potatoes contain solanin, a substance that can cause stomach pains, vomiting, and diarrhoea. Both adults and children should therefore avoid green or damaged potatoes. Solanin is also found in undamaged potatoes, but just under the skin. Peel potatoes, even new ones, before you give them to children under one year old.

Honey

Do not give honey to children under one year old. It could contain spores that, in rare cases, can develop into bacteria in the intestine which produce botulin, a deadly poison.

Unpasteurised milk

Neither children nor adults should drink unpasteurised milk. It can contain harmful bacteria, like EHEC or campylobacter. EHEC is a 'new' bacteria that began spreading in Sweden in the 1990s, and which can cause serious kidney damage in small children. Unpasteurised milk cannot be sold in stores, but can be gotten at farms.

Salt

The food we eat should taste good. This also applies to children's food. Don't be afraid to spice up their food with herbs like dill, parsley, coriander, and others. On the other hand, be careful with salt for children under one year old. Small children can't regulate their salt balances properly. It's also a good idea not to get children used to salty foods. When you serve the family dinner, set a little aside for your child before you salt it. Avoid salty snacks and don't give salted meats, like sausage and smoked pork, as often.

Sugar

Avoid sweetened foods as much as possible. Sugar only provides empty calories – no vitamins and minerals. There is a lot of sugar in foods like flavoured yogurt and sour milk, biscuits and cookies, rosehip soup, and creams, jellies, and marmalades, as well as candy and ice cream.

Sweet drinks like juice mixes, fruit juices, and sodas also contain a lot of sugar. Don't give your child these drinks; get them used to drinking water instead.

Whole nuts and peanuts

Earlier, it was believed that waiting until children were a year old before giving them nuts and peanuts could prevent allergies, but new research shows this isn't the case. On the other hand there is a risk of choking on whole nuts and peanuts, but small pieces are OK.

Allergies

If you suspect an allergy

If you think your child can't tolerate a food, consulting with a nurse at the Child Health Centre is important. You shouldn't eliminate foods on your own until your child has been diagnosed. It doesn't necessarily have to be an allergy if your child suddenly gets sick from food. Small children can develop redness or a rash around the mouth, a rash on the bottom or an upset stomach without it being due to allergy or hypersensitivity.

If your child is allergic

The most common allergies during a child's first year are allergies to milk proteins and egg proteins. If your child is allergic, getting special advice from a dietician is important.

There is more information on food allergies at www.livsmedelsverket.se.

Suggestion for a daily menu for children 0-1 year

Here are examples of what a day's meals could look like during the first year. Don't take this as something you have to follow to the letter; let your child's interest in the food set the pace!

Age	Meals
0-6 months	Breast milk or infant formula according to your child's feeding rhythm*
6-8 months	Breast milk or follow-on formula according to your child's feeding rhythm Small amounts of solid foods (puréed or in soft pieces), porridge and/or gruel
8-12 months	1-2 main meals* of gradually coarser consistency Breakfast and 2-3 snacks Breast milk follow-on formula according to your child's feeding rhythm
From approximately 12 months	2 main meals** Breakfast and 2-3 snacks Breast milk as long as both child and mother like

* Age four months at the earliest, and six months at the latest, the child should start getting used to small portions of food containing gluten. If your child shows interest, he or she can also be allowed to taste tiny samples of other food. Read more on page 7.

** Main meal means a meal with

- potatoes, pasta, rice, bulgur, or similar
- meat, fish, chicken, eggs, beans, lentils, or tofu
- vegetables
- possibly fruit or berries for dessert



Would you like to know more?

Visit www.livsmedelsverket.se

There is information on food for children, and much more.