
Guide Part 3

Breastfeeding





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Guide Part 3 Breastfeeding

1. Physical changes after birth

Birth is an overwhelming event, but it also means an extraordinary feat of strength for both mother and child. The stress is not only limited to the physical aspects. The transition from pregnancy to breastfeeding is associated with an abrupt change in hormones, which can lead to strong emotional fluctuations in new mothers (more about this on page 11).

Immediately after childbirth, the uterus begins to shrink. At the beginning, it is about the size of a melon, shrinks to around 70 grams and still has the dimensions of a pear. This process takes six to eight weeks and can be associated with pain at first. During delivery, there may also be an injury to the perineum. This takes several weeks to heal.

In the first four to six weeks, so-called lochia is also discharged. This is the wound secretion that the body gradually releases via the vagina. At first, the amount and colour of this postpartum bleeding is similar to that of menstruation.

After four weeks, the cervix has closed. The lochia is now light in colour and the discharge is at the same level as before pregnancy. Six weeks after birth, menstruation is possible again. If the child is being breastfed, it may take a few months for periods to start again.

After the child is born, the weight loss after the amniotic fluid and placenta have left the body averages five kilograms. The abdominal and especially the pelvic floor muscles, which have been taxed during pregnancy, are weakened, which brings with it the risk of incontinence problems. For this reason, postpartum gymnastics and sufficient exercise are an important prerequisite for successfully managing the return of the body to its pre-pregnancy state (see page 12).

Milk production is stimulated when the placenta is expelled and the baby attaches to the breast for the first time directly after birth. The milk supply makes the breast firmer and, above all, significantly larger in the first few days.

2. The nutritional needs of mother and child

During breast-feeding, a mother's nutritional needs are even greater than during pregnancy – depending on the vital substance, for instance vitamin A, they can be almost twice as high! This is not surprising, as the baby is supplied with everything it needs for life and healthy development through its mother's milk. It is not for nothing that the World Health Organisation (WHO) recommends that newborns be breastfed for at least six months.

Breast milk is THE perfect nutritional drink, which not only makes the little being grow big and strong, but also protects it from infections and diseases. Breast milk contains millions of living cells (for example, white blood cells or stem cells), proteins, sugar molecules, enzymes, vitamins and minerals, antibodies and many other components.

Empirical studies show that children who were exclusively breastfed for the first six months fare better in terms of their health when compared to children who received infant formula. They suffer less from flu-like infections, ear infections, respiratory infections or diarrhoea. If they do fall ill, they usually recover more quickly because the mother's milk reacts to the infection in question by producing specific antibodies.

Not every woman can or wants to breastfeed. Midwives and breastfeeding counsellors provide support and advice in such situations.



To ensure that the baby has everything it needs, it is of course essential that the mother eats a balanced and healthy diet. Breastfeeding burns about 500 calories a day. The remaining nutritional requirements that cannot be covered by food are usually met with multivitamin products.

In her expert interview (see page 14), the Zurich gynaecologist Lea Köchli states that, with five portions of vegetables, salad or fruit a day, it would theoretically be possible to do without a multivitamin. "However, practical experience shows that this goal is difficult to achieve, especially after birth. You simply have other things to do."

The following is an overview of the nutrients which are needed more during breastfeeding:

Vitamin A +85%: promotes the growth of cells, eyes, skin and mucous membranes. Strengthens the immune system and is important for the formation of blood cells

Beta-carotene +85%: plant substance that the human body converts into vitamin A. Important for the body's immune defences. Protects against infectious diseases

Iodine +65%: regulates metabolism

Zinc +60%: strengthens the immune system, forms metabolic enzymes and is important for cell growth

Vitamin E +40%: protects cells from being destroyed (antioxidants). Plays a role in the control of the gonads. Is therefore also referred to as an "anti-sterility vitamin"

Vitamin C +35%: strengthens the immune system, improves the absorption of iron, builds connective tissue

Calcium +30%: promotes good bone and tooth formation and is responsible for muscle contraction

Phosphorus +30%: essential for energy metabolism as well as cell function, and promotes the growth of bones and teeth

Biotin +15%: plays an important role in protein, lipid and carbohydrate metabolism, important for hair and nails

Vitamin D₃: plays an important role in bone formation and strengthens the immune system

Vitamin K₂: recent findings show that vitamin K₂ in combination with vitamin D₃ has an influence on bone and jaw formation

B group vitamins +14–40%: important for protein, fat and carbohydrate metabolism. Also for blood formation and the nervous system

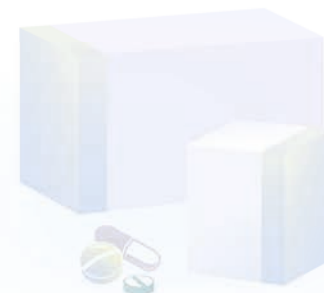
Folic acid: promotes cell division and blood formation

Iron +33%: important for oxygen transport and storage

Magnesium +30%: important for muscle tension and relaxation

Selenium +25%: protects cells from oxidative stress and strengthens the immune system

Omega-3 fatty acids: the omega-3 fatty acid DHA (docosahexaenoic acid) in particular is a vital polyunsaturated fatty acid that is an important building block of cells, especially brain and nerve cells and in the retina of the eyes.



3. Nutrition: what breastfeeding women should bear in mind

The following list provides an overview of the different foods that ensure a healthy diet during breastfeeding. It also points out products that should not be consumed to protect the child and mother from possible illnesses. The recommendations linked to this list originate from the Federal Food Safety and Veterinary Office (FSVO).

Beverages

Recommendation: drink at least 2 litres a day while breastfeeding. Give preference to unsweetened drinks such as water, fruit and herbal teas.

Caution: you should reduce your consumption of caffeinated drinks such as coffee, black tea, green tea, iced tea, cola drinks and ready-to-drink coffee lattes to 1 to 2 cups. The same applies to energy drinks.

You should also avoid alcoholic drinks whenever possible while breastfeeding. Drinking alcohol can inhibit the development of the child's organs or damage the nervous system.



Fruit & vegetables

Recommendation: at least 5 portions (120 g each) per day, comprising 3 portions of vegetables and 2 portions of fruit. This includes, for example, tomatoes, carrots, broccoli, apples and apricots.

Cereals, potatoes and pulses

Recommendation: whole-grain products such as whole-grain bread, whole-grain flakes, brown rice and legumes such as lentils, chickpeas, dried beans and peas are particularly good sources of vitamins and minerals. These foods also help prevent constipation. Pulses also contain a lot of protein.

Milk and dairy products

Recommendation: milk and dairy products are important for an adequate calcium supply. You should consume 3 to 4 portions daily.

Meat, fish, eggs, tofu and other sources of protein

Recommendation: poultry, meat, fish, but also eggs are all foods that contain a lot of protein. Eat one portion from this group of protein sources every day.

Caution: due to potential harmful substances (dioxin), the following products should be avoided during breastfeeding:

- **Game and liver**
- **The following types of fish: marlin, swordfish, shark, Baltic salmon, Baltic herring**
- **Fresh tuna and foreign pike should be consumed no more than 1 x a week.**

Oils, fats and nuts

Recommendations: oils such as rapeseed oil and olive oil, fats such as butter and margarine, and nuts contain a lot of fat. This makes them valuable sources of energy.

Note: it is important to pay attention to the quality: some vegetable oils (rapeseed oil) and nuts (tree nuts) contain vital omega-3 fatty acids.

Sweet and savoury

Recommendations: why not treat yourself to a portion of chocolate, a sweet drink or a savoury snack once in a while as part of a varied diet? As long as you keep your intake within limits, it is no problem at all.





Vegetarian and vegan diet:

What you need to know

Some of the nutrients needed during breastfeeding are lost when meat products or animal foods are not consumed and need to be substituted elsewhere.

"Avoiding meat and fish usually leads to critical vitamin B₁₂, iron and omega-3 fatty acid levels," explains Lea Köchli, a gynaecologist from Zurich. Requirements should be met from other sources – be it other foods (tofu, pulses), fortified foods (for example, soy milk with calcium) or nutritional supplements.

Drugs / Cigarettes

Recommendations: avoid.

Medication

Recommendations: only after consultation with a specialist.



4. The famous roller coaster of emotions

Unprovoked crying fits, a roller coaster of emotions with highs and lows, depressive moods: new mothers may experience such emotional roller coaster rides while recovering from the exertions of childbirth in the postpartum period and at the same time taking care of their newborn.

The reason for this is the abrupt hormonal change that occurs after childbirth and explains the fluctuating emotions. However, it is not a lasting condition; after a few days, the emotional tsunami should have subsided.

The value of breastfeeding is also evident in this context. Because when a child feeds on a breast, oxytocin hormones are released. This hormone is nicknamed the "love or cuddle hormone".

Scientific studies have shown that oxytocin has an antidepressant effect. Women with increased levels of oxytocin suffer less from anxiety and depression by comparison. They are calmer and less stressed.

Breastfeeding not only has great advantages for the child (see page 5), but also for the mother. The love and cuddle hormone prevents further blood loss after birth (and associated iron deficiency due to anaemia) and reduces the risks of heart disease, type 2 diabetes and cancer throughout life.

And finally, breastfeeding strengthens the relationship between mother and child, who experiences love and security through the intimate, warm physical contact. Incidentally, there are also scientific studies on this that have found a connection between the oxytocin level and the mother's feelings for the newborn.

5. Postnatal gymnastics

Pregnancy expands the abdominal muscles and stretches the pelvic floor. In order to avoid subsequent health problems such as incontinence or abdominal and back pain, it is important to build these weak muscles back up again after birth with appropriate postnatal exercises.

However, the exercises should not be started too early. The University Hospital Basel has prepared a guidebook which addresses the points below.

Recommendations for the first six to eight weeks (puerperium):

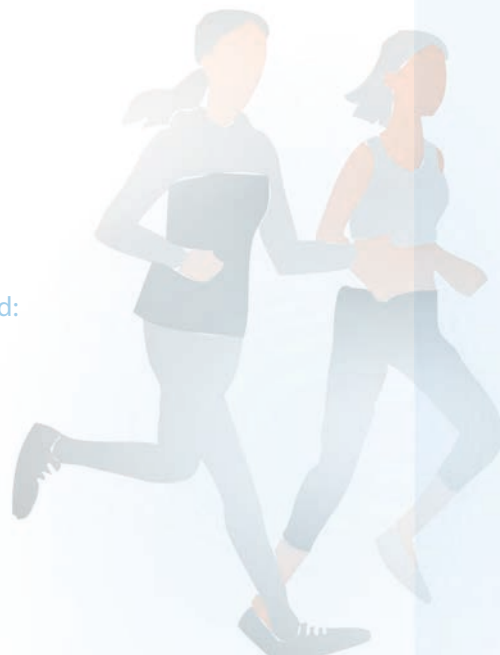
- Lie on your stomach for 10 to 15 minutes a day, as this has a positive effect on the uterus and lochia.
- In the event of water retention in the legs, regularly elevate the legs and move the toes and feet in the air.
- Carry and lift no more than 5 to 7 kg in the first 6 weeks after birth.
- When coughing and sneezing, tense the pelvic floor muscles and turn the upper body sideways.
- Avoid pushing down unnecessarily when urinating and emptying your bowels.
- Sit upright when urinating and tilt the pelvis slightly backwards when emptying your bowels.
- Refrain from strenuous abdominal exercises.
- Always sit up and stand up from the side.

Earliest start date for postnatal classes:

- normal birth: from 6 weeks onwards
- Caesarean section: from 8 weeks onwards (after medical follow-up)

Guidance for sport:

- Straight away: cycling, walking
- After lochia and after the wound has healed: swimming
- After 6 months: jogging, bouncy sports



"You don't have to give up anything when you're breastfeeding"

The Zurich gynaecologist on nutrition during breastfeeding, taking multivitamin preparations and her legendary baby photo wall.

6. Expert interview with Lea Köchli

As a gynaecologist, how do you accompany women after they have given birth?

That depends on whether I am present at the birth or not. If it takes place in a public hospital, I see women again for the first time after six weeks for a follow-up check-up. This is when we talk about the birth experience, getting the pelvic floor back into its pre-pregnancy state, breastfeeding issues, contraception and other questions that come up.

What about when you perform the delivery?

Then the support is much more intensive. I visit the women every day in the postpartum period and help them to give structure to this very stressful time. Often, the first days as a mother are more challenging than the birth itself. New mothers can reach their limits, especially when breastfeeding problems arise, they get little sleep and birth injuries cause them a lot of pain.

Should certain foods be avoided during breastfeeding?

Even though it is often claimed otherwise and there are lots of tips on nutrition during breastfeeding, it is important to note that nothing needs to be avoided in principle. In rare cases, children may develop an allergic reaction to food components, even if they are breastfed. However, this is no reason to avoid certain foods as a preventative measure.

And what about alcohol?

I would advise caution here. If you can't do without the occasional glass, you should wait until your breastfeeding rhythm has established itself, your milk supply has adjusted and you have already had some positive experience of breastfeeding or expressing breast milk. Alcohol should be drunk immediately after breastfeeding or pumping and only in small amounts.

Coffee or black tea: is that okay?

Caution is also advised when it comes to caffeinated drinks. You have already mentioned coffee and black tea, but I would also mention cola, mate tea or the various energy drinks. These drinks have an invigorating effect – not only on the breastfeeding mother, but also on the baby. Caffeine can also cause stomach aches and flatulence in babies, because they do not yet have the enzymes to metabolise caffeine. A baby needs more than three days to break down the ingested caffeine in its body.

Do you also recommend vitamin products to patients during this phase?

I usually recommend taking the multivitamin product taken during pregnancy also during breastfeeding. The need for vitamins and minerals remains higher during breastfeeding. If a balanced diet of five portions of vegetables, salad or fruit is eaten each day, the multivitamin can theoretically be dispensed with. However, practical experience shows that this goal is difficult to achieve, especially after birth. You simply have other things to do.

Do you and the team enjoy receiving birth announcements, especially since you have already witnessed countless births?

We are very happy to receive birth announcements! They often contain a few lines of thanks, which of course makes us happy. Pregnancy is also a challenge for the doctor involved, so it is all the more satisfying when our efforts are appreciated. Our "photo wall" in the practice is legendary.



7. Andreaal products

AndreaCare Striae

AndreaCare Striae Care Cream contains high-quality ingredients that provide optimum care for stressed skin:

- **Tiger grass plant extract prevents stretch marks and increases the skin's firmness and elasticity.**
- **Almond oil and dexpanthenol hydrate the skin and protect it from drying out.**
- **Natural bisabolol soothes the skin.**

By regularly massaging AndreaCare Striae into your skin, you can help it and prevent stretch marks. The skin compatibility of AndreaCare Striae care cream has been dermatologically confirmed.



AndreaVit® – Vitamins and minerals for pregnancy

AndreaVit® is a multivitamin preparation containing 11 vitamins and 9 minerals and trace elements for women to prevent deficiencies before, during and after pregnancy.



AndreaDHA® plus D₃ + K₂ helps babies' development

In addition to vitamins, minerals and trace elements, it is important that pregnant and breastfeeding women get enough omega-3 fatty acids. DHA (docosahexaenoic acid) is a vital polyunsaturated fatty acid that is an important building block especially with regard to brain and nerve cells, and is found in the retina of the eyes. Vitamin D₃ promotes calcium absorption and therefore contributes to optimum bone health (strong bones) and high bone density. Vitamin K₂ plays a role in the transport of calcium. It helps to fortify the teeth and boosts jaw growth.



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having children or becoming pregnant?

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