Information for patients

A recommendation for life

Beneficial for mother and child

+ Probiotics
+ Omega-3 fatty acids (DHA)
+ Vitamin D3
“Preparing for a child – Pregnancy – Breast-feeding”: these three stages in life rank among the truly special phases in the lives of many women. This brochure provides you with information on the importance of healthy eating before, during and after pregnancy and on which micronutrients can promote fertility, a sense of well-being in expectant mothers as well as the development of the baby – from preparing for a child right through to caring for the child. We’d like to help both you and your baby to feel well at all times.

(The) Orthomol® Natal Team

Contents

5  What are micronutrients?

Phase 1: Preparing for a child
7  I’d like a child!
8  Well-prepared for pregnancy
9  Baby – you can come out now!

Phase 2: Pregnancy
11  Expecting!
14  Fit and active during pregnancy
16  Eating for your baby
18  Important for nerves and brain
19  Important for the immune system

Phase 3: Breast-feeding
21  Targeted micronutrient intake after pregnancy

23  Looking at micronutrients
26  Orthomol® Natal: ideal before, during and after pregnancy – for mother and child
What are micronutrients?

Vitamins, minerals, trace elements – these are the constituents of life and they contribute towards developing and protecting the organism. More than 40 micronutrients are necessary to ensure that the metabolism functions properly. As some of these micronutrients cannot be provided by our body – or only to a very limited extent – they must be ingested through food.

In addition, the need for micronutrients can be higher in certain phases in life, for example, and these possibly cannot be obtained via a modern diet. The following chapters on preparing for a child, pregnancy and breastfeeding provide information on which micronutrients are particularly important for the health of mother and child during each individual phase.
I’d like a child!

The pregnancy test tells you at a glance whether you have succeeded or not. It is good that modern methods of contraception allow a pregnancy to be planned these days as this enables women to concentrate on adopting a healthy lifestyle and avoid alcohol or nicotine prior to pregnancy. A healthy and well-balanced diet should be a particular priority during this phase in life – with all essential micronutrients that are found naturally in food. This is important for fertility and an ideal preparation for pregnancy. If you have been using a hormonal method of contraception, you should remember that you may have an increased need for folic acid, for example.

Extra tip:
If you have been trying to conceive a child for longer than one year, then you should discuss what to do next with your gynecologist. In many cases the reason behind the delay concerns the male partner, for example if the sperm quality is impaired.

Vitamins, trace elements and minerals have a favourable influence on fertility and an ideal supply is therefore necessary at the beginning of pregnancy.

Phase 1: Preparing for a child
Well-prepared for pregnancy

Folic acid has a special importance when it comes to supplying micronutrients prior to pregnancy: it belongs to the group of B vitamins and is essential for cell division. Around 100 billion new cells are formed from the fertilized egg cell! It is important that folic acid is supplied early on because the embryonic neural tube (preliminary stage of the central nervous system, from which the spinal cord and brain develop) closes at a very early stage, on the 23rd-25th day of pregnancy. At this point in time, many women do not know that they are pregnant at all.

Antioxidants also play a significant role because they reduce the effect of free radicals that damage cells. The effective antioxidants include vitamins E and C, selenium, as well as zinc.

Well cared for – from the very beginning
During the first eight weeks of pregnancy, the growing embryo passes through the crucial stages of development: the supply of micronutrients is therefore particularly important during the first weeks of life.

Baby – you can come out now!

Are you eating a sufficient amount of healthy food with a good supply of micronutrients? Then you are well-prepared for your pregnancy! Enjoy looking forward to your child and the good feeling that you have done everything to ensure that you and your baby have received the correct care from the very beginning!
As pregnancy progresses, most women feel increasingly happy about their growing child, and when the baby can be felt for the first time they can hardly contain their joy.

Expectant mothers can help the development of their babies by maintaining a well-balanced diet. This creates an ideal starting-point for coping better with the physical changes and will also enhance your health and general well-being. At the same time, you will promote the physical and psychological development of your child.

Extra tip:
Eat several small meals throughout the day, drink 2 liters of non-carbonated mineral water, avoid foods such as white cabbage which induce flatulence and reduce the amount of sweets or fat consumed.

An adequate supply of micronutrients for mother and child supports the optimum course of pregnancy, the development of the child and the mother’s sense of well-being.
Should I change my eating habits?
A large amount of fresh fruit, vegetables, salad and wholegrain products should be eaten every day. Energy requirements increase by about 200-300 calories per day as of the fourth month of pregnancy – this roughly corresponds to one portion of curd cheese (quark) with fruit. It is important that the increased need for micro-nutrients is satisfied during this time. However, cravings for certain foods which are experienced during pregnancy, and which range from gherkins to cheesecake, can frequently lead to an unbalanced diet.

Extra tip:
For a long time sports were considered taboo during pregnancy. Nowadays we know that sports improve your physical well-being and your mood. Less demanding endurance sports such as aqua fitness, walking or dancing are recommendable.

Recommended extra quantities for pregnant women

<table>
<thead>
<tr>
<th>Vitamin A</th>
<th>Vitamin C</th>
<th>Vitamin E</th>
<th>Vitamin B1</th>
<th>Vitamin B2</th>
<th>Niacin</th>
<th>Vitamin B6</th>
<th>Vitamin B12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Folic acid</th>
<th>Magnesium</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Iron</th>
<th>Zinc</th>
<th>Iodine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0 10 20 30 40 50 60 70 80 90 100 %

1Reference values for food supplements: German Nutrition Society [Deutsche Gesellschaft für Ernährung].
Fit and active during pregnancy

A quick glance at your maternity log is enough to see the importance of eating specific foods during pregnancy. A balanced nutrient intake provides a good foundation which enables women to cope more easily with the numerous physical changes experienced as a result of pregnancy. Common pregnancy discomforts can also frequently be reduced by means of micronutrients or probiotics.

- **Tiredness** – If the increased need for iron is not satisfied then tiredness and performance weaknesses are the first signs of an iron deficiency. Anemia frequently develops because the amount of blood increases by up to 40% during pregnancy. As a result, more red blood cells must be produced and the need for iron consequently increases.

- **Magnesium boosts muscle activity and the metabolism.** Cramps in the calves are a clear indication that the body is lacking magnesium. For this reason, you should make sure that your body receives a sufficient supply.

- **“You lose one tooth for every child”** – This is a saying which has been around for generations. It is a reminder that expectant mothers should ensure that they receive a sufficient supply of calcium during pregnancy. This prevents mobilization of the calcium reserves in the body.

- **Probiotics strengthen the body’s defenses and boost the function of the mucous membranes in the urine and vaginal tracts.**

- **Constipation** is a frequent problem during pregnancy which can be regulated by probiotics.

**What are probiotics?**

Probiotics (from the Greek “pro bios” meaning “for life”) are specific live bacteria that have a positive influence on the gut flora and, in turn, on health.
Eating for your baby

The best possible diet for mothers is the source of good health for growing babies. The nutrients provided by you from your daily diet are your baby’s only source of food. The complex interaction of many different nutrients is central to the miracle of life and acts as preparation for the growing baby’s positive development and good health. The embryo reacts extremely sensitively to a lack of nutrients as well as to environmental pollutants, alcohol and cigarette smoke, particularly in the first three months of pregnancy.

Important for your child …

What the baby in your womb needs right now:

- **Vitamin C, vitamin E, vitamin D, zinc and selenium**
  For the function of the immune system.

- **Omega-3 fatty acids**
  For the development of a child’s vision and brain and to boost the immune system.

- **Iodine**
  For maintaining the thyroid gland and the metabolism.

- **Vitamin K, vitamin D and calcium**
  For the development of the skeleton.

- **B vitamins**
  For boosting the metabolic functions: Carbohydrate, fat and protein metabolism.

- **Folic acid, vitamin B12 and iron**
  For the build-up of red blood cells and for promoting cell growth and optimum organ development.

- **Probiotics**
  Strengthen the body’s defenses.
Important for the immune system

An intact immune system during pregnancy is important for mother and child. The immune system not only protects the body against bacteria and viruses, but also reacts tolerantly to everyday environmental stress, such as pollen and house dust. Mothers can enhance the development of their child’s immune system during pregnancy by taking probiotics and omega-3 fatty acids. Both of these have a positive effect on the immune system. However, their combined effect is even more powerful.

You should therefore ensure that your body receives a sufficient supply of all pregnancy-relevant micronutrients at an early stage.

Important for nerves and brain

Omega-3 fatty acids already play a central role for nerves and brain during embryonic development. These polyunsaturated fatty acids must be sourced via food as they cannot be produced by the body itself. Omega-3 fatty acids occur naturally in coldwater fish such as mackerel and herring.

**Omega-3 fatty acids play an important role in the development of a growing child**

- For intelligence and intellectual capacity
- For mental development
- For all nerve functions
- For fine motor development
- For the development of vision

60% of the human brain is made up of unsaturated brain fatty acids (omega-3 fatty acids), of which DHA (docosahexaenoic acid) is a major component.
Targeted micronutrient intake after pregnancy

Birth and pregnancy are often hard work for the organism. After you have given birth your body also benefits from a balanced combination of micronutrients in order to feel fit again quickly. They boost your psychological and physical well-being.

In principle, the need for micronutrients is higher during the breast-feeding phase: breast milk is now the most important source of food for the child. Growth and development are also dependent on the supply of omega-3 fatty acids, probiotics, vitamins, trace elements and minerals. Probiotics and omega-3 fatty acids also play a major role after you have given birth in order to maintain an intact immune system and the development of the brain and intelligence.

Extra tip:
Help yourself and your baby – make sure you relax now and then. While your little one is sleeping peacefully, it is important that you also lie down for an afternoon nap, to read a good book or listen to some music – you will feel better after resting for a short while.

A sufficient supply of micronutrients helps the mother’s body to regenerate after giving birth. The child also benefits from the micronutrients and the positive effects of the probiotics via the breast milk.
Looking at micronutrients

• **Probiotics**
  Certain probiotics strengthen the bodily defenses, regulate the gut action and have a beneficial effect on the gut flora. They also boost the protective function of the mucous membranes in the urine and vaginal tracts.

• **Omega-3 fatty acids**
  Essential for the development of the child’s brain and vision throughout the whole of pregnancy.
  (Contained in: coldwater fish such as mackerel)

• **Folic acid**
  Important for building central structures in the nervous system and the heart, as well as for cell formation and the healthy development of the child.
  (Contained in: spinach, lettuce, egg yolks, wheatgerm, curly kale, Brussels sprouts)
• **Iodine**
Controls the metabolism and the hormone balance of the mother. Regarded as “fuel” for the child’s growth. A sufficient supply of iodine is also important for the development of the unborn child’s brain and bones. (Contained in: iodized salt, rock salmon, haddock and cod – fresh or frozen)

• **Iron**
The most important means of transporting oxygen in the body. Required for the build-up of red blood cells and the development of the immune system. (Contained in: meat, liver, poultry, fatty saltwater fish, nuts)

• **Calcium, vitamin D3 and vitamin K1**
Boost the development of the child’s skeleton.

• **Vitamin C, vitamin E, beta-carotene, zinc and selenium**
Important micronutrients that play a significant role in the functioning of the immune system.

• **B vitamins**
Required for the energy metabolism. The need for B vitamins increases during pregnancy and breastfeeding. (Contained in: nuts, yeast and dairy products, egg yolks, cereals, fish)
Orthomol® Natal: ideal before, during and after pregnancy – for mother and child

If you are planning to have a child, it is important to ensure that your body receives an ideal supply of vitamins, trace elements and minerals prior to pregnancy because they have a beneficial effect on fertility.

An adequate supply of micronutrients helps to ensure an ideal course of pregnancy, the development of your child and also your own physical well-being.

Micronutrients are important for regeneration after you have given birth and your child benefits from micronutrients and probiotics through the breast milk.

Orthomol® Natal is available in a practical monthly package with 30 daily servings: as granules to dissolve combined with 3 capsules, or in a combination of 5 tablets and 3 capsules (with separate iodine tablet).

Orthomol® Natal is a food supplement for women before, during and after pregnancy. Orthomol® Natal contains vitamins, minerals, trace elements and antioxidants such as folic acid, iodine, iron, magnesium and calcium, as well as specific omega-3 fatty acids, particularly DHA, plus probiotics.

Copyright holder: Orthomol. All rights, particularly those relating to translation into foreign languages, are reserved. No part of this brochure may be reproduced in any form – by photocopying, microfilm or any other process – or transmitted/translated into a language used by machines, in particular data processing machines, without the written permission of the author.
We Value Your Health!

Orthomol pharmazeutische Vertriebs GmbH
Herzogstr. 30
40764 Langenfeld
Germany
Tel. +49-2173-90590
export@orthomol.de
www.orthomol.com