

Food for special medical purposes for the dietary management of women with polycystic ovary syndrome who want to conceive

Inositol, chromium and highly dosed folic acid in combination with a comprehensive supply of vitamins, minerals and omega-3-fatty acids. Vitamin C with sustained release.

Health care starts well before conception

When planning for pregnancy, every woman is recommended to be increasingly aware of a healthy lifestyle with a well-balanced and varied diet rich in minerals and vitamins. For optimal supply, supplementing important micronutrients can be a good option.

Women with polycystic ovary syndrome (PCOS) should be aware of their specific nutritional needs.

Polycystic ovary syndrome (PCOS)

PCOS patients usually have elevated levels of male hormones (androgens). This can be accompanied by irregular periods and insulin resistance, as well as physical signs such as excess facial and body hair (hirsutism), adult acne, loss of hair and obesity. However, not all of these signs and symptoms may be present. Approximately 70 % of women affected are diagnosed with polycystic ovaries, which are enlarged and contain numerous small fluid-filled sacs surrounding the eggs. These are often referred to as "cysts" and are eponymous for the syndrome.

While PCOS itself is not curable, the body can be supported by a healthy and appropriate diet.

Blood sugar, insulin and PCOS

When it comes to nutrition, the major aim in PCOS patients is maintenance of balanced blood sugar levels.

When we consume carbohydrates, they get into our blood as sugars. However, the majority of cells in the body are not able to take up and utilize these sugars without a specific signal: they need the blood sugar hormone insulin. After a meal rich in carbohydrates, the pancreas excretes insulin. The hormone then binds to specific receptors on the surfaces of its target cells, resulting in intracellular release of second messengers, so-called inositols. These induce complex mechanisms within the cells, which finally prompt the cell to internalize and metabolize sugar from the blood. In the ovaries, insulin has another, additional effect: it induces androgen production. This of course explains the close association of blood sugar, insulin and PCOS.

By the end of the 20th century, researchers found first evidence showing that in PCOS, signal transduction at the insulin receptor is frequently impaired, which is what doctors refer to as "insulin resistance". In order to compensate for this, the body produces excess insulin (compensatory hyperinsulinemia), simultaneously stimulating increased production of male hormones (hyperandrogenemia).

Therefore, PCOS patients are recommended to adjust their lifestyle and diet in order to avoid high blood sugar levels. At the same time, it is important to ensure that the body has enough inositol.

Myo- and D-chiro-inositol

The second messenger inositol is involved in insulin metabolism in two so-called isoforms: myo-inositol (MI) and D-chiro-inositol (DCI). Both are natural components of many animal and plant source foods. In the body, their roles vary slightly. In liver, both of them are important for insulin signal transduction, with myo-inositol triggering cellular glucose uptake and D-chiro-inositol promoting glycogen synthesis. In ovary, MI also stimulates glucose uptake and is responsible for mediating the action of follicle-stimulating hormone (FSH), too. DCI, however, mediates insulin-dependent synthesis of androgens (male hormones). In PCOS patients, the main problem seems to be a disequilibrium between the two isomers. Therefore **Fertilovit® FPCOS** contains both isoforms in their physiological ratio of 40:1 (MI:DCI). This allows for optimized dietetic management on systemic as well as ovarian level.

Folic acid

Like every woman planning for pregnancy, PCOS patients ought

to make sure they get enough folate. This vitamin belongs to the B-group of vitamins. Even though it is abundant in green leafy vegetables, it is easily destroyed during storage and meal preparation due to its sensitivity to heat and light. Thus optimal supply is often difficult, which is unfavorable, particularly when planning for pregnancy. Decreased folate levels have been linked to an increased risk of neural tube defects in the developing baby. Therefore supplemental folate intake is recommended prior to conception. In addition to this, other micronutrients are substantial in PCOS, too. These include micronutrients contributing to a balanced hormone system, normal homocysteine metabolism and effective energy production.

At more than 68%, the proportion of PCOS patients with vitamin D deficiency is higher than in the average female population, underlining the importance of an adequate vitamin D supply as well.

Fertilovit® FPCOS is a food for special medical purposes that has been tailored to meet the specific needs of women with PCOS. It contains inositol, highly dosed folic acid and vitamin D in combination with a comprehensive supply of precious vitamins, minerals and omega-3-fatty acids. These micronutrients contribute to well-being and are suitable from preconception to pregnancy:

Protection from neural tube disorders

Supplemental folate intake increases maternal folate status. Increasing maternal folate status contributes to the reduction of the risk of neural tube disorders. The positive effect can be achieved by taking a minimum of 400 µg of supplemental folate for at least one month before and up to three months after conception¹

Balanced blood sugar level

Chromium contributes to the maintenance of normal blood glucose levels¹

Zinc contributes to normal carbohydrate metabolism¹

Energy supply

Vitamins B1, B2, niacin and pantothenic acid support energy metabolism¹

The minerals manganese and magnesium contribute to normal energy-yielding metabolism¹

Hormonal balance

Pantothenic acid contributes to normal synthesis and metabolism of steroid hormones, vitamin D and some neurotransmitters¹

Vitamin B6 contributes to the regulation of hormonal activity¹

Iodine contributes to normal production of thyroid hormones and to normal thyroid function¹

Homocysteine metabolism

Vitamins B6, B12 and folic acid contribute to normal homocysteine metabolism¹

Cell protection

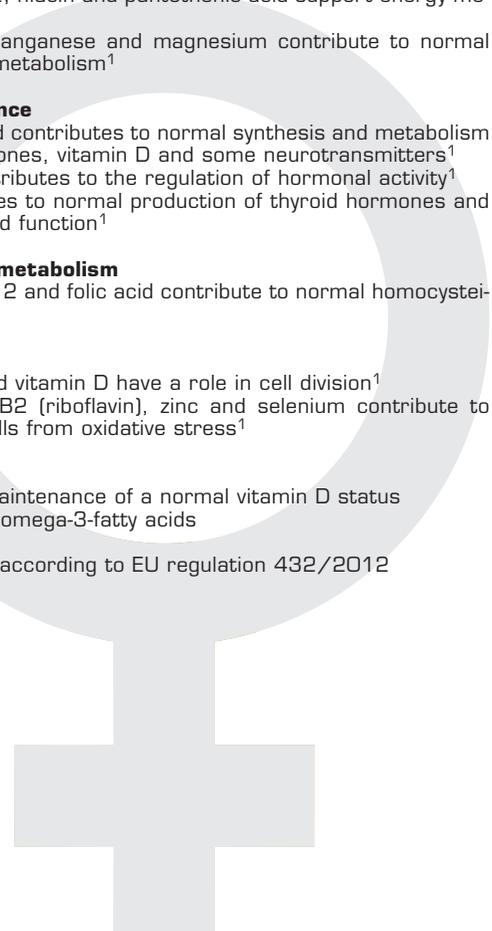
Vitamin B12 and vitamin D have a role in cell division¹

Vitamins C, E, B2 (riboflavin), zinc and selenium contribute to protection of cells from oxidative stress¹

Additionally

Vitamin D for maintenance of a normal vitamin D status
High content of omega-3-fatty acids

¹ Health claims according to EU regulation 432/2012



Supplement facts:

	Daily dose (1 vitamin and mineral capsule, 1 omega-3 capsule and 1 sachet)	%NRV*	per 100 g	%NRV*
Energy	63 kJ (15 kcal)	-	1.410 kJ (336 kcal)	-
Fat	0,50 g	-	11,2 g	-
of which saturates	0,05 g	-	1,1 g	-
Carbohydrate	2,14 g	-	47,8 g	-
of which sugars	0 g	-	0 g	-
Protein	0,33 g	-	7,4 g	-
Salt	0,03 g	-	0,7 g	-
Vitamin D	15 µg	300	336 µg	6.716
Vitamin E	12 mg	100	269 mg	2.242
Vitamin C	80 mg	100	1.791 mg	2.239
Thiamin	3,3 mg	300	74 mg	6.716
Riboflavin	4,2 mg	300	94 mg	6.716
Niacin	48 mg	300	1.075 mg	6.716
Vitamin B6	4,2 mg	300	94 mg	6.716
Folic acid	800 µg	400	17.909 µg	8.955
Vitamin B12	10 µg	400	224 µg	8.955
Biotin	150 µg	300	3.358 µg	6.716
Pantothenic acid	6 mg	100	134 mg	2.239
Magnesium	375 mg	100	8.395 mg	2.239
Zinc	10 mg	100	224 mg	2.239
Manganese	2 mg	100	45 mg	2.239
Selenium	55 µg	100	1.231 µg	2.239
Chromium	80 µg	200	1.791 µg	4.477
Iodine	150 µg	100	3.358 µg	2.239
Myo-Inositol	2.000 mg	-	44.773 mg	-
D-chiro-Inositol	50 mg	-	1.119 mg	-
Coenzym Q10	20 mg	-	448 mg	-
L-Carnitin	300 mg	-	6.761 mg	-
N-acetyl-L-cysteine	100 mg	-	2.239 mg	-
Lycopene	10 mg	-	224 mg	-
Eicosapentaenoic acid (EPA)	90 mg	-	2.015 mg	-
Docosahexaenoic acid (DHA)	60 mg	-	1.343 mg	-

*) Nutrient reference values according to regulation 1169/2011/EU

Fertilovit® FPCOS contains neither gluten nor lactose.

Administration form:

Powder and capsules

Packaging size:

60 capsules (30 vitamin/mineral capsules and 30 fish oil capsules) and 30 sachets, One month pack

Net quantity:

134,1 g (vitamin and mineral capsules: 22,6 g, omega-3 fish oil capsules: 21,5 g, sachets: 90 g)

Ingredients vitamin and mineral capsule:

L-carnitin-L-tartrate, hydroxypropyl methyl cellulose, nicotinamide, coenzyme Q10, D-alpha-tocopheryl acetate, zinc oxide, lycopene oleoresin from tomatoes, calcium-D-pantothenate, manganese sulphate, pyridoxine hydrochloride, thiamine hydrochloride, riboflavin, colour titanium dioxide, pteroylmonoglutamic acid, chromium (III) chloride, potassium iodide, D-biotin, sodium selenite, cholecalciferol, cyanocobalamin.

Ingredients omega-3 fish oil capsule:

Fish oil, gelatine (bovine), humectant glycerol, antioxidant alpha-tocopherol, water.

Ingredients powder stick:

Myo-inositol, magnesium oxide, N-acetyl-L-cysteine, L-ascorbic acid, D-chiro-inositol, sweetener steviol glycosides, glazing agent ethyl cellulose.

Please note:

Fertilovit® FPCOS is a nutritionally incomplete dietary food for special medical purposes. Some of its ingredients exceed defined maximum quantities. The product must be used under medical supervision. Do not exceed the recommended dosage.

Fertilovit® FPCOS cannot and must not replace a healthy lifestyle and a wellbalanced diet. Please store out of reach of children.

Signature:

Please take the content of a sachet, dissolved in 200 ml water, 1 vitamin/ mineral and 1 fish oil capsule with plenty of water daily (= 1 daily serving).

Made in Germany

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