

Fertilovit®
for a new life

Fertilovit® M-Series for Men

Fertilovit® M^{plus}



7 point treatment
of male subfertility

Fertilovit® M^{plus}

The „plus“ for male fertility

**Superior efficacy due to optimized bioavailability and long-term effect.
Patent-protected* formula tackling 7 pathways of male subfertility:**

Oxidative stress (OS)

Antioxidants (vitamins C, E, folic acid, zinc, selenium, glutathione, N-acetyl-L-cysteine)
Partly with long-term effect (vitamin C, N-acetyl-L-cysteine)

Mitochondrial dysfunction

L-carnitine
Coenzyme Q10

Hyperhomocysteinemia

Folic acid

Blood perfusion

L-citrulline

Inflammation

Lycopene

Enzyme dysfunction

Zinc
Selenium

Erectile dysfunction

Arginine-precursor L-citrulline

Clinically tested and successfully established
in big European ART clinics.



Indications

- Idiopathic male infertility
- OAT (oligoasthenoteratozoospermia)
- Oxidative stress-induced male infertility
- Nutrition-related male subfertility
- Mild erectile dysfunction

Dosage

1 capsule of Fertilovit® M plus, 2 times daily for 3 to 6 months

Nutrition facts:

	Daily dose (2 capsules)	% NRV**
Vitamin C	100 mg	125
Vitamin E	100 mg	833
Folic acid	500 µg	250
Selenium	100 µg	182
Zinc	25 mg	250
Glutathione	50 mg	–
N-acetyl-L-cysteine	50 mg	–
L-carnitine	300 mg	–
L-citrulline	300 mg	–
Coenzyme Q10	15 mg	–
Lycopene	4 mg	–

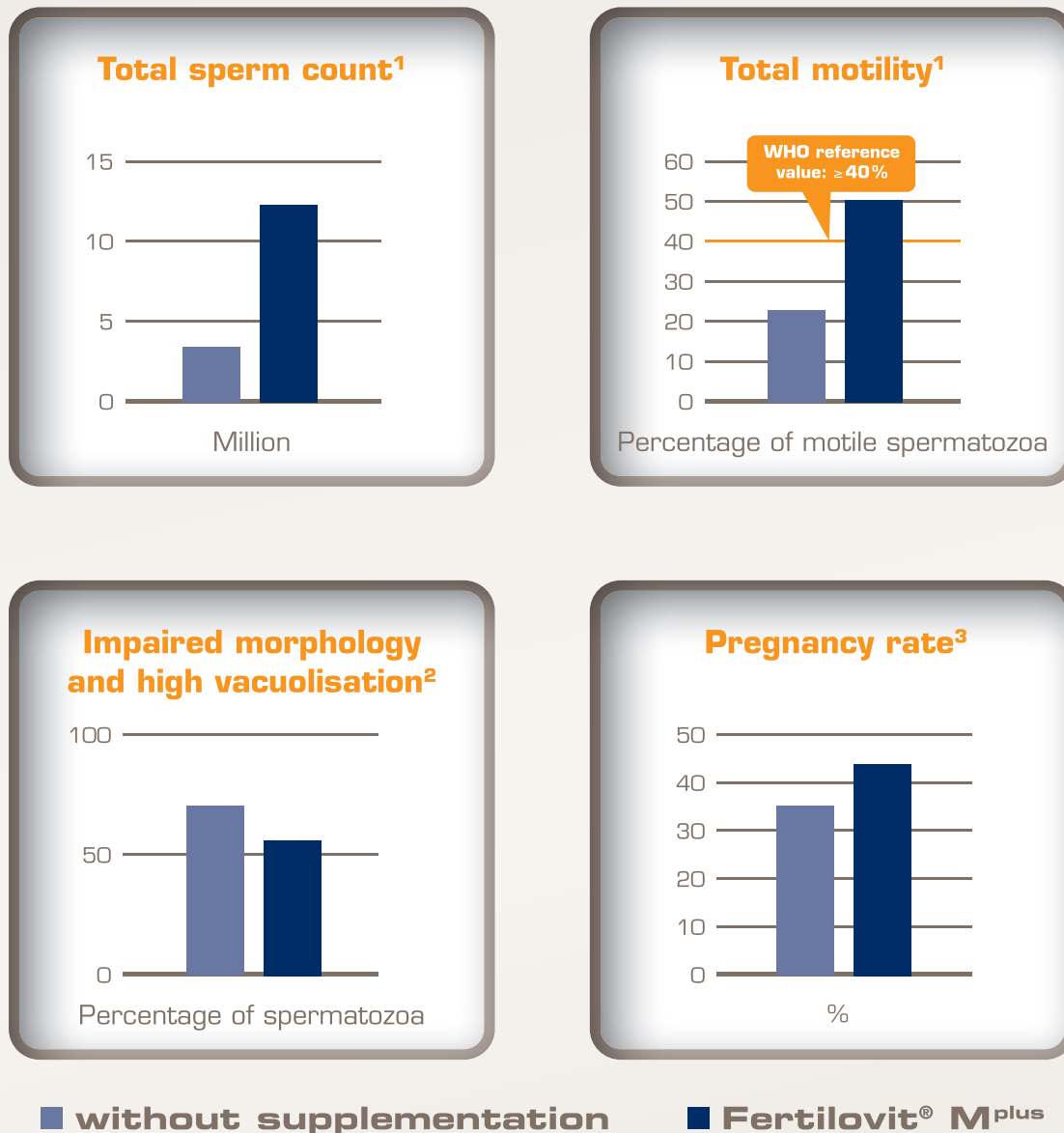
Fertilovit® M^{plus} is vegetarian, gluten-free and lactose-free
and is the first supplement for the management of fertility issues
with an antioxidant with sustained release!

* EP No. 2736354

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



At a glance: benefits of Fertilovit® M^{plus}



¹ Wirleitner et al, 2012 ($p < 0.05$ (count), $p < 0.001$ (motility), $n = 147$)

² Ajayi et al, 2013 ($p < 0.01$, $n = 160$)

³ Wogatzky et al, 2014 ($n = 92$)

Study-proven unique effectiveness

- **Increase in sperm concentration** ($p < 0.05$, Ajayi et al, 2013)
- **Raise of total sperm number** ($p < 0.05$, Wirleitner et al, 2012)
- **Improvement of total motility** ($p < 0.001$, Ajayi et al, 2013)
- **Amelioration of sperm head vacuolization** ($p < 0.05$, Wirleitner et al, 2012)
- **Significant rise in top blastocyst rate** ($p < 0.05$, Wogatzky et al, 2014)
- **Increase in pregnancy rate** (cPR 32.8 vs 39.1, Wogatzky et al, 2014)
- **Improvement of mild erectile dysfunction** ($p < 0.01$, Cormio et al, 2011)

Fertilovit® F-Series for Women

Fertilovit® F35plus

Preconceptional supplement for fertility patients

Tailored to meet the needs of female ART-patients

Special features

- 800 µg folic acid and coenzyme Q10 in combination with comprehensive preconceptional vitamin and mineral supply.
Supplemental folate intake increases maternal folate status. Increasing maternal folate status contributes to the reduction of the risk of neural tube disorders. Carriers of MTHFR 677T polymorphism benefit from higher dosage of 800 µg [Thaler et al, 2014].
- Coenzyme Q10 improves ovarian response and mitochondrial function (Burstein et al, 2009), improving fertility treatment outcome in older patients (Bentov et al, 2010)
- Vitamin C with sustained release
- Vitamin D ensuring adequate supply
Vitamin D status is inadequate in 5 to 84% of pregnant women globally (Brannon, 2012). Deficiency can increase the risk for pregnancy complications (Dror 2011) as well as unfavourable postnatal outcomes (Pérez-López et al., 2015).
- Vitamins B6, B12 and folate for normal homocysteine metabolism
- B-vitamins, iron and iodine
- Free from gluten, lactose and gelatine
- Suitable for vegetarians and vegans

Indications

- Female fertility patient
- Carrier of MTHFR 677T polymorphism (Thaler et al, 2014)
- Mature patient >35 years
- Hyperhomocysteinemia
- Low status of iron, iodine or vitamin D

Dosage

1 capsule daily for 3 months



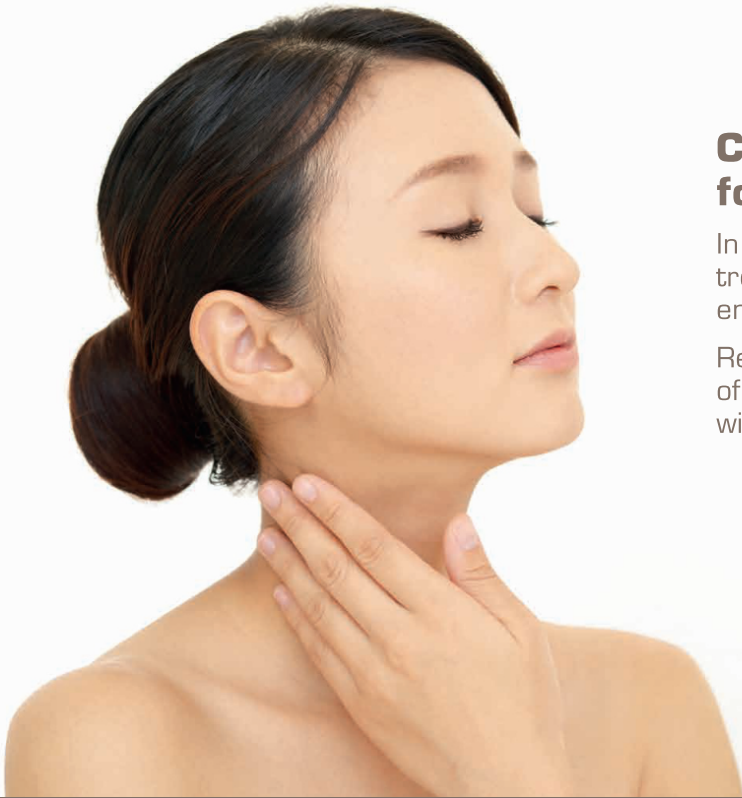
Nutrition facts:

	Daily dose (1 capsule)	% NRV *
Vitamin C	100 mg	125
Vitamin E	20 mg	166
Vitamin B1	3 mg	272
Vitamin B2	3 mg	214
Pantothenic acid	12 mg	200
Vitamin B6	4 mg	285
Vitamin B12	7 µg	280
Folic acid	800 µg	400
Vitamin D	20 µg	400
Niacin	35 mg	218
Biotin	150 µg	300
Zinc	5 mg	50
Magnesium	100 mg	26
Iodine	150 µg	100
Iron	7.5 mg	54
Coenzyme Q10	35 mg	-

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



Fertilovit® F 35plus is vegan,
gluten-free and lactose-free.



Comprehensive therapeutic concept for thyroid autoimmunity

In addition to standard hormonal and symptomatic treatments, a comprehensive therapeutic concept also encompasses complementary measures.

Recent scientific studies have shown a significant benefit of micronutrient supplementation. Iodine-free preparations with selenium and antioxidants are recommended.

Fertilovit® F^{THY}

Food for special medical purposes targeting 7 issues of autoimmune thyroiditis:

Exacerbation due to increased iodine supply

In patients with thyroid autoimmunity, iodine excess contributes to apoptosis of thyroid tissue (Xu et al, 2016). Therefore, affected patients benefit from a diet low in iodine (Bürgi, 2010).

Selenium

Selenium contributes to normal thyroid function and can improve inflammatory activity in thyroid autoimmunity (Gärtner et al, 2002; Fan et al, 2014).

Vitamin B12 deficiency

Patients suffering from thyroid autoimmunity have an increased risk of vitamin B12 deficiency (Ness-Abramof, 2006). Vitamin B12 has an important role in healthy function of the immune system and an adequate supply should be ensured.

Vitamin D deficiency

As vitamin D has immune-modulatory and anti-inflammatory properties, it doesn't come as a surprise that various scientists have observed an association between vitamin D deficiency and autoimmune thyroiditis (Mazokopakis et al, 2014).

Hyperhomocysteinemia

Hypothyroidism is often associated with increased homocysteine values (Morris et al, 2001). Folic acid as well as vitamins B6 and B12 contribute to a normalized homocysteine metabolism.

Increased oxidative stress

Oxidative stress seems to be involved in triggering thyroid autoimmunity (Bianchi et al, 1999; Erdamar et al, 2008). Patients show increased levels of oxidative stress (Taddei et al, 2006) and decreased antioxidant values (Bianchi et al, 1999).

Gluten intolerance

Autoimmune thyroiditis is often accompanied by coeliac disease (Freeman, 2016). Even if coeliac disease can not be established, thyroid patients seem to benefit from a diet low in gluten (Lundin and Wijmenga, 2015).

Ideal preconceptional combination for thyroid autoimmunity

Autoimmune thyroiditis is considered a risk factor for early pregnancy loss (Crawford and Steiner, 2016). TSH adjustment to optimum levels and indication-specific supplementation of micronutrients are obligatory measures.

Adequate supply of folic acid

Highly dosed folic acid can decrease the risk of early pregnancy loss (Chavarro et al, 2016) and allows for fast protection: with 800 µg folic acid daily, a protective status can be achieved within 4 weeks (Pietrzik et al, 2005). In addition to that, this dosage ensures an adequate supply for carriers of an MTHFR polymorphism (Thaler, 2014).

Improved response

Coenzyme Q10 can improve ovarian response and mitochondrial function in mature patients (Burstein et al, 2009).

Decreased risk of early pregnancy loss

Indication-specific supplementation can significantly increase blastocyst rate and clinical pregnancy rate following IVF/ICSI (Wogatzky et al, 2013).

Special features

- 800 µg folic acid with an indication-adjusted preconceptional vitamin and mineral supply
- Iodine-free
- 100 µg selenium
- Vitamin C with sustained release
- Patent-protected formula*
- Free from gluten, lactose and gelatine
- Suitable for vegans

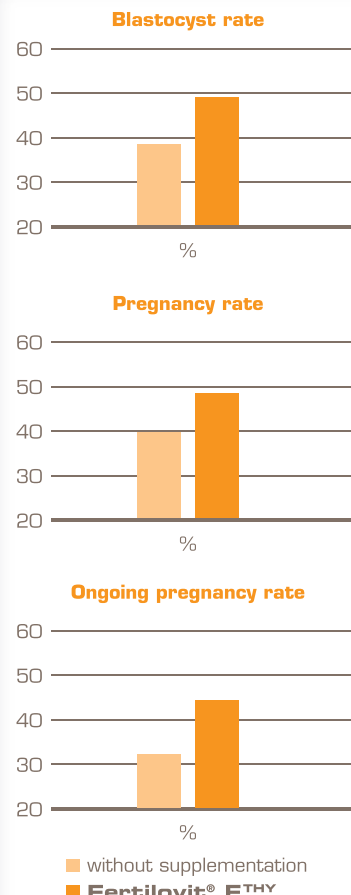
Indications

- Hashimoto
- Grave's disease
- Female fertility patient with thyroid autoimmunity

Dosage

1 capsule daily for 3 months

At a glance:



Study proven effectiveness

(Wogatzky et al, 2013, n=106 patients)

- Less L-thyroxine needed during treatment ($p < 0.01$)
- Improved blastocyst rate ($p < 0.01$)
- Increase of ongoing pregnancy rate ($p < 0.05$)

Nutrition facts:

	Daily dose (1 capsule)	% NRV**
Vitamin C	100 mg	125
Vitamin E	15 mg	125
Vitamin B1	4 mg	364
Vitamin B2	4.5 mg	321
Pantothenic acid	18 mg	300
Vitamin B6	5.4 mg	386
Vitamin B12	9 µg	360
Folic acid	800 µg	400
Vitamin D	15 µg	300
Niacin	17 mg	106
Biotin	150 µg	300
Zinc	2.3 mg	23
Magnesium	100 mg	26
Iron	7.5 mg	54
Selenium	100 µg	181
Coenzyme Q10	20 mg	–

* EP No. 2648807

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



Fertilovit® F^{THY} is vegan, gluten-free and lactose-free.



Comprehensive therapeutic concept for endometriosis

In addition to standard hormonal and surgical treatments, a comprehensive therapeutic concept for endometriosis patients also includes complementary measures.

Recent scientific studies have shown a significant benefit of micronutrient supplementation. Anti-inflammatory components and antioxidants are particularly important.

Fertilovit® FEndo

Food for special medical purposes targeting 7 issues of endometriosis:

Inflammation

Omega-3 fatty acids and lycopene contribute to downregulation of inflammatory mediators. Increased consumption of long-chain omega-3 fatty acids is associated with a lower risk of endometriosis (Hansen and Knudsen, 2013).

Oxidative stress

A high antioxidant uptake reduces increased oxidative stress in endometriosis patients. N-acetyl-L-cysteine (NAC) in particular has been established as powerful treatment option in women with endometriosis (Porpora et al, 2013).

Estrogen dominance

Vitamins B6 (Abraham 1983), C (Henmi et al, 2003) and E (Takasaki et al, 2009) act synergistically to improve progesterone levels, thus gently regulating estrogen dominance.

Escape from apoptosis

Ectopic endometrial tissue can avoid apoptosis via increased expression of the apoptosis-inhibitor survivin. Vitamins D, E and selenium down-regulate survivin-mediated escape from apoptosis (Chun et al, 2007; Patacsil et al, 2012).

Pain

Supplementation of certain micronutrients can reduce chronic pelvic pain in endometriosis patients (Santanam et al, 2013; Ray et al, 2015).

Hyperhomocysteinemia

Vitamins B6, B12 and folic acid contribute to normal homocysteine metabolism. Homocysteine levels have been reported to be frequently elevated in endometriosis patients (Ebisch et al 2006; Aidrus et al 2013).

Vitamin D-deficiency

Vitamin D-deficiency has been linked to pathogenesis of endometriosis due to the vitamin's immunomodulatory and anti-inflammatory properties (Muscogiuri et al, 2017).

Endometriosis patients trying for pregnancy

Just like every other woman too, endometriosis patients trying for pregnancy need to make sure they get enough folic acid. In addition to that, oocyte quality should be supported. Women suffering from endometriosis often have decreased oocyte quality (Navarro et al, 2003).

Folic acid

Highly dosed folic acid can decrease the risk of early pregnancy loss (Chavarro et al, 2016) and allows for fast protection: with 800 µg folic acid daily, a protective status can be achieved within 4 weeks (Pietrzik et al, 2005). In addition to that, this dosage ensures an adequate supply for carriers of an MTHFR polymorphism (Thaler 2014).

Oocyte quality

Supplementation of certain micronutrients may reduce endometriosis-related meiotic oocyte damage (Giorgi et al, 2016). Coenzyme Q10 can improve ovarian response and mitochondrial function in mature patients (Burstein et al, 2009).

Special features

- 800 µg folic acid, lycopene and N-acetyl-L-cysteine in combination with an indication-specific antioxidant, vitamin, and mineral supply
- Omega-3 PUFAs
- Vitamin C with sustained release
- Free from gluten and lactose
- Patent-protected formula*

Indications

- Endometriosis
- Dysmenorrhoea
- Fertility patient with endometriosis

Dosage

2 capsules daily for 3 to 6 months



Nutrition facts:

	Daily dose	% NRV **
Vitamin D	15 µg	300
Vitamin E	12 mg	100
Vitamin C	100 mg	125
Thiamin	3 mg	273
Riboflavin	3 mg	214
Niacin	35 mg	219
Vitamin B6	4 mg	286
Folic acid	800 µg	400
Magnesium	144 mg	38
Vitamin B12	7 µg	280
Biotin	100 µg	200
Pantothenic acid	12 mg	200
Iron	7.8 mg	56
Zinc	5 mg	50
Copper	1 mg	100
Selenium	110 µg	200
Iodine	150 µg	100
Coenzyme Q10	35 mg	–
N-acetyl-L-cysteine	100 mg	–
Lycopene	10 mg	–
Eicosapentaenoic acid (EPA)	40 mg	–
Docosahexaenoic acid (DHA)	200 mg	–

* EP No. 2 929 879 B1

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



Fertilitov® F Endo
is gluten-free and lactose-free.



Comprehensive therapeutic concept for polycystic ovary syndrome (PCOS)

In addition to standard hormonal and symptomatic treatment, a comprehensive therapeutic concept for PCOS patients also encompasses complementary measures.

Recent scientific studies have shown a significant benefit of micronutrient supplementation. Insulin sensitizers and antioxidants are particularly important.

Fertilovit® F^{PCOS}

Food for special medical purposes designed to tackle 7 issues of PCOS:

Insulin resistance

Inositol treatments are able to significantly improve the regularity of the menstrual cycle, the Acne Score, endocrine as well as metabolic parameters, and insulin-resistance in young, overweight, PCOS patients (Formuso et al, 2015). Research underlines the importance of a healthy balance of D-chiro- and myo-inositols (Garg and Tal, 2016).

Deficient vitamin D-status

Metabolic disturbances in PCOS are often associated with vitamin D-deficiency (Krul-Poel et al, 2013).

Unfavourable omega-6/omega-3 PUFA ratio

Omega-3 fatty acids reduce serum concentrations of testosterone and LH (Oner et al, 2013) and regulate menstrual cycle (Nadjarzadeh et al, 2013).

Hyperhomocysteinemia

Homocysteine levels are frequently elevated in PCOS patients (Cerqueira et al, 2010). Vitamins B6, B12 and folic acid contribute to normal homocysteine metabolism.

Oxidative stress

N-acetyl-L-cysteine can improve pregnancy and ovulation rates (Thakker et al, 2015).

Ineffective glucose metabolism

Coenzyme Q10 can support aerobic glucose metabolism, contributing to improved insulin levels (Samimi et al, 2017).

High BMI

L-carnitine is involved in mitochondrial function and can effectively support weight-loss programs for PCOS patients (Samimi et al, 2016).

PCOS patients trying for pregnancy

Just like every other woman, too, PCOS patients trying for pregnancy need to make sure they get enough folic acid. In addition to that, oocyte quality should be supported. Women suffering from PCOS often have decreased oocyte quality (Cheraghi et al, 2016) and altered epigenetic modifications (Eini et al, 2017).

Folic acid

Highly dosed folic acid can decrease the risk of early pregnancy loss (Chavarro et al, 2016) and allows for fast protection: with 800 µg folic acid daily, a protective status can be achieved within 4 weeks (Pietrzik et al, 2005). In addition to that, this dosage ensures an adequate supply for carriers of an MTHFR polymorphism (Thaler 2014).

Oocyte quality

Supplementation of certain micronutrients may reduce oocyte damage (Cheraghi et al, 2016). Coenzyme Q10 can improve ovarian response and mitochondrial function in mature patients (Burstein et al, 2009).

Special features

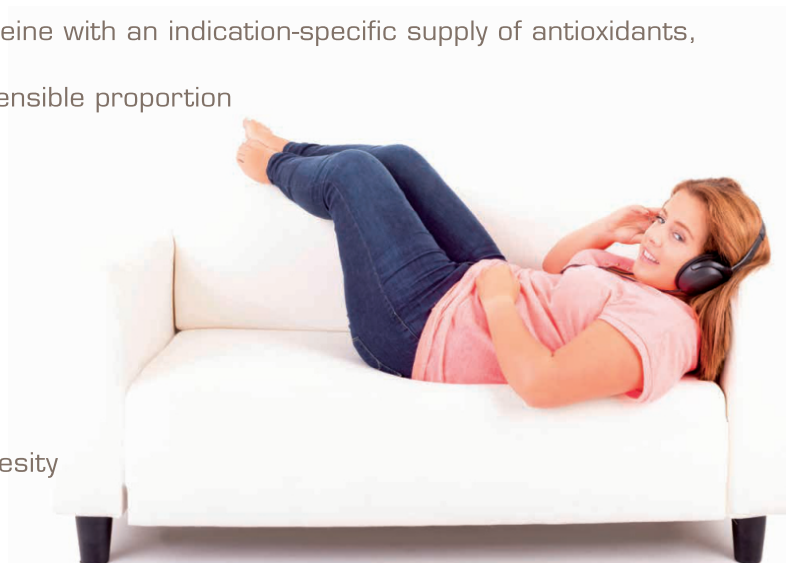
- 800 µg folic acid, inositols and N-acetyl-L-cysteine with an indication-specific supply of antioxidants, vitamins and minerals
- Myo-inositol and D-chiro-inositol in medically sensible proportion
- Highly dosed vitamin D
- Chromium
- Omega-3 PUFAs
- Vitamin C with sustained release
- Patent lodged
- Free from gluten and lactose

Indications

- PCOS
- Insulin resistance
- Fertility patient with oligomenorrhoea and obesity

Dosage

2 capsules and 1 sachet daily for 3 months



Nutrition facts:

	Daily dose	% NRV*
Vitamin D	15 µg	300
Vitamin E	20 mg	167
Vitamin C	80 mg	100
Thiamin	3.3 mg	300
Riboflavin	4.2 mg	300
Niacin	48 mg	300
Vitamin B6	4.2 mg	300
Folic acid	800 µg	400
Vitamin B12	10 µg	400
Biotin	150 µg	300
Pantothenic acid	6 mg	100
Magnesium	190 mg	51
Zinc	10 mg	100
Manganese	2 mg	100
Selenium	55 µg	100
Chromium	80 µg	200
Iodine	150 µg	100
Myo-inositol	2,030 mg	–
D-chiro-inositol	20 mg	–
Coenzyme Q10	20 mg	–
L-carnitine	300 mg	–
N-acetyl-L-cysteine	100 mg	–
Lycopene	10 mg	–
Eicosapentaenoic acid (EPA)	40 mg	–
Docosahexaenoic acid (DHA)	200 mg	–

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



Fertilitov® FPCOS
is gluten-free and lactose-free.



CAPSULES

PROLISTEM[®]

FROM ZERO TO
HAPPINESS

NON-OBSTRUCTIVE AZOOSPERMIA

PRIMARY TESTICULAR FAILURE

Testicular failure affects approximately 1% of the male population and 10% of men who seek fertility evaluation.

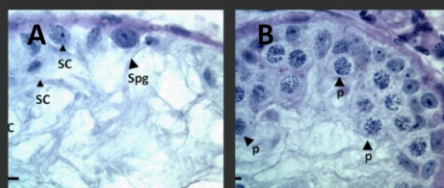
Azoospermic men with testicular failure (non-obstructive azoospermia) have either Sertoli cell-only pattern, maturation arrest, or hypospermatogenesis on testis biopsy.

There are numerous causes of nonobstructive azoospermia such as: Genetics, Y Chromosome deletion, Karyotype abnormality, Radiation and toxins or other causes that we don't know yet.

Until recently, it was assumed that men with non-obstructive azoospermia were untreatable. The only options offered to these couples to have children were the use of donor spermatozoa or adoption. Several clinically relevant findings have changed our approach to this condition.

ANDROLOGY RESEARCH AND FINDINGS

- Studies have shown that testosterone is critical for the late stages of spermatogenesis. Spermatogonia Stem Cells in the seminiferous tubules do not need testosterone to divide [1].
- Researchers have also found that testosterone is involved in the blockage of Spermatogonia Stem Cells in abnormal conditions such as azoospermia [2].
- Suppression of testosterone restores the spermatogenesis process, and in some cases, spermatogenesis was maintained after the cessation of hormonal treatment and fertility restoration [2].
- Hormones are responsible for the maintenance of sperm production in normal conditions; however, in abnormal conditions the testosterone inhibits the spermatogonial differentiation [3,4,5,6].



- (A) atrophic tubules that contained only Sertoli cells but some contained a few spermatogonia.
(B) Hormone suppression induced recovery of spermatogenesis in nearly all tubules (No sperm formation because of the low level of Testosterone)

WHAT IS PROLISTEM® USED FOR?

Prolistem® is a natural supplement that designed to support non-obstructive azoospermia (primary testicular failure) by a unique mechanism called "Spermatogenesis Restarting"

Prolistem® is a six months supplements that contain three different stages (STAGE ONE, STAGE TWO, STAGE THREE).



**STAGE ONE - One Bottle
For One Month
(90 Capsules)**



**STAGE TWO - Two Bottles
For Two Months
(180 Capsules)**



**STAGE THREE - Three Bottles
For Three Months
(270 Capsules)**

HOW PROLISTEM® WORKS?

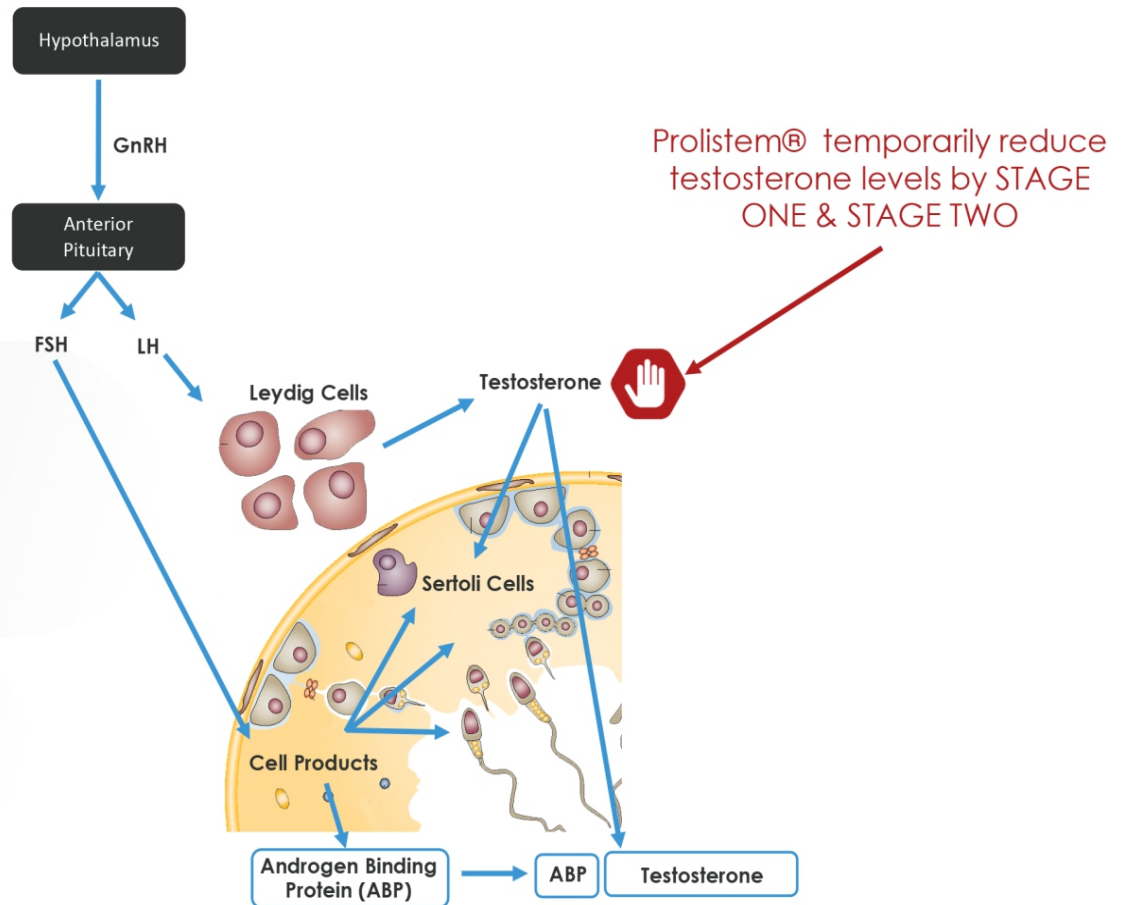
HOW PROLISTEM® WORKS?

Prolistem® works by temporarily reducing testosterone levels to allow for the crucial early stages of spermatogenesis to take place.

Prolistem® Stage one and two works on the reduction of testosterone that will push the body to restart sperm production while Prolistem® Stage three supplies the body with natural components and vitamins to increase the production of healthy sperm.

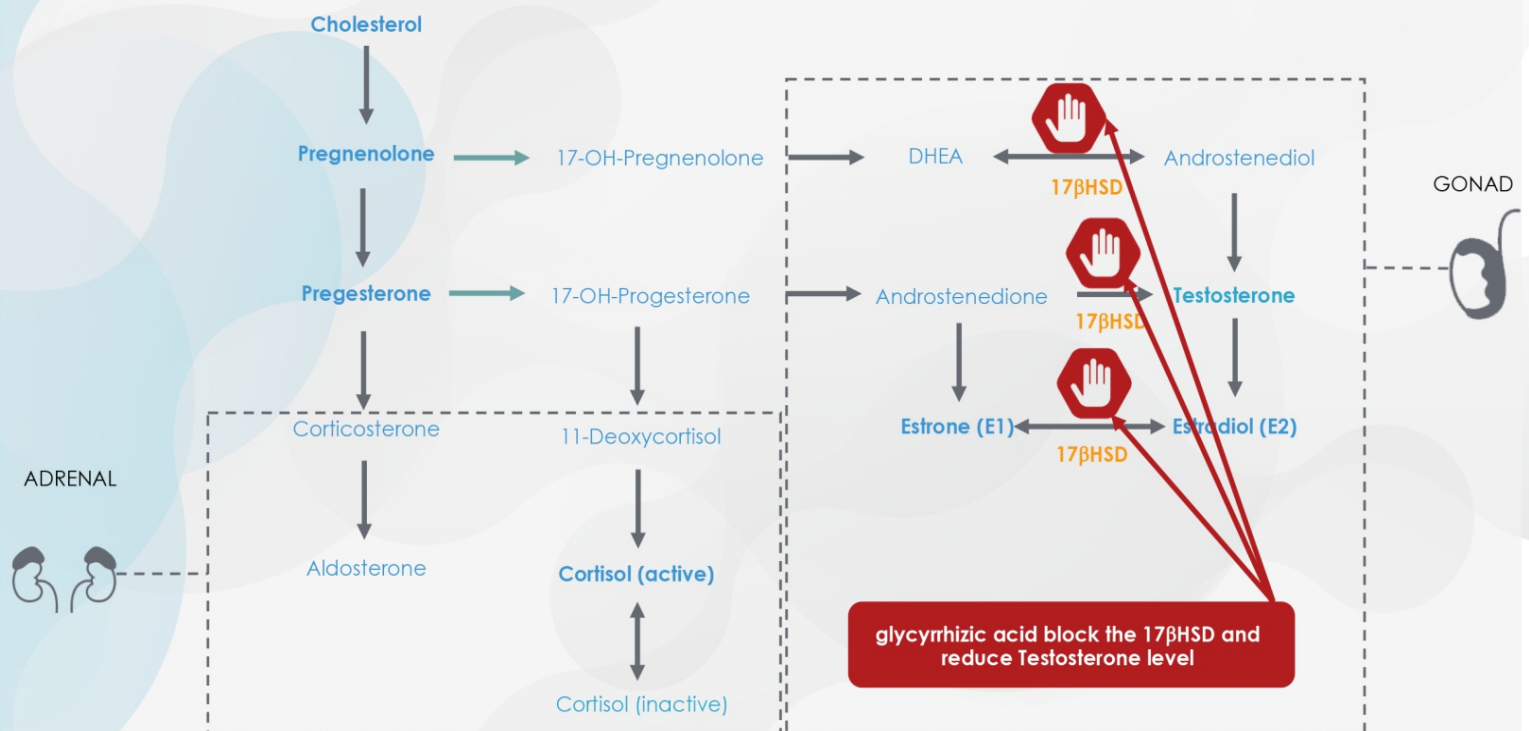
The testosterone-induced block to Spermatogonial Stem Cells mechanisms is still unknown

HOW PROLISTEM® WORKS?



HOW WE DO IT?

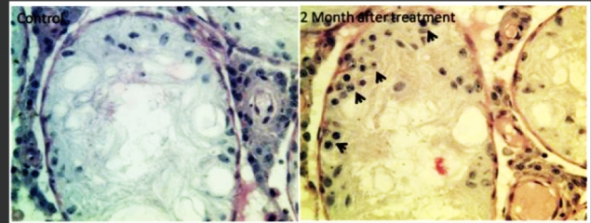
We do it by using the active component of licorice is **glycyrrhizic acid**, which is hydrolyzed in vivo to glycyrrhetic acid. This acid can block 17 β -hydroxysteroid dehydrogenase (17 β HSD), which catalyzes the conversion of androstenedione to testosterone, in addition, we use **flaxseed**, its rich in omega-3 fatty acids, which may be linked to a decrease in testosterone levels



PROLISTEM® RESERACH

Animals Models:

We examined the effects of Prolistem® on spermatogenic recovery in LBNF1 rats; Prolistem® treatment starting after 10 weeks after irradiation with 6 Gy restored the production of differentiated cells in 9% after one month and 18% after two months (fig.1). Control rats didn't show any recovery (fig. 2). Control and treated rats did not show any sperm count after one month of treatment. However, treated rats with Prolistem® for two months showed increase in sperm count from zero to 100,000 sperm cells / testis.



Histology of LBNF1 rat testes 2 months without (Control) or with (treated) Prolistem® treatment. Control rats showed atrophic tubules and interstitial edema, most tubules contained only Sertoli cells (SC) but some contained a few type A spermatogonia. Prolistem® treatment for two months induced recovery of spermatogenesis.

Clinical Study:

Our study includes 89 patients with non-obstructive Azoospermia. Hormones levels of FSH, LH and Testosterone were evaluated before the treatment and after three months to examine the effect of stage one and two. Patients with known genetic issues were excluded from the study. Table 1 showing examples of hormones behavior after three months of treatment, we showed that stage one and two can reduce testosterone levels.



Patient	Before Treatment			After Stage one & Two		
	FSH (mIU/mL)	LH (mIU/mL)	Testosterone (nmol/l)	FSH (mIU/mL)	LH (mIU/mL)	Testosterone (nmol/l)
1	16.83	16.37	4.69	20.3	6	3.43
2	17.1	7.5	14.74	20.1	6.4	12.15
3	3.6	1.6	12.94	5.3	2.8	12.2
4	22.3	11.4	9.85	20	9.2	7.14
5	22.36	6.82	3.35	27.83	9.23	3.09

Table 1: Example of hormones changes after Stage one and Stage Two Prolistem® temporarily reduce testosterone levels by STAGE ONE & STAGE TWO

After six months the patients performed semen analysis, if no sperm found then they performed TESE or micro-TESE directly after the treatment.

23% of the patients found sperm in their semen (from few sperm to few millions) and 25% of the patients performed success TESE or micro-TESE (sperm were extracted by surgery).

There is no effect in 52% of the patients that used our treatment for six months, this could be related to unknown genetic issues.

Success

48%



No Effect

52%



MAJOR ACTIVE COMPONENTS

STAGE ONE AND TWO:

Licorice Root: The active component of licorice is glycyrrhizic acid, which is hydrolyzed in vivo to glycyrrhetic acid. This acid can block 17 β -hydroxysteroid dehydrogenase (17 β HSD), which catalyzes the conversion of androstenedione to testosterone [7-11]

Flaxseed: is rich in omega-3 fatty acids, which may be linked to a decrease in testosterone levels [12-14]

Maca Roots: Maca increase several markers of fertility in men, including semen quality and sperm concentration and motility, this effect is not because of changes in serum testosterone and oestradiol levels [15-17]

Tribulus Terrestris: Tribulus improve motility and viability of human sperm, similar to Maca root, this effect is not because of changes in serum testosterone [18-19]

THE ACTIVE INGREDIENTS IN STAGE ONE ARE SLIGHTLY HIGHER THAN STAGE TWO

STAGE THREE:

Vitamin A: critical for spermatogonial differentiation, meiosis, and the cycle of the seminiferous epithelium [20]

Vitamin C: is a key antioxidant that supports sperm metabolic processes [21]

Vitamin D: shown to be positively associated to sperm motility, and to exert direct actions on spermatozoa, including non-genomic driven modulation of intracellular calcium homeostasis and activation of molecular pathways involved in sperm motility, capacitation and acrosome reaction [22, 23]

Vitamin E: help repair damage caused by the environment and aging plus prevent cellular damage from free radicals [24]

Thiamine: helps maintain normal testosterone levels for optimum performance

Riboflavin: maintaining healthy blood cells, boosting energy levels, facilitating in a healthy metabolism, preventing free radical damage

Folic Acid: is essential during cell maturation and contributes to the quality of seminal fluid [25]

Vitamin B12: is involved in cell maturation and DNA synthesis, Deficiencies in B12 have been associated with decreased sperm count and motility [26]

Zinc: play an important role in modulating serum testosterone levels in normal men, It considered as a nutrient marker with many potentials in prevention, diagnosis, and treatment of male infertility [27,28]

Grape Seed: remove free-radicals before they can harm the sperm [29]

Epimedium: increased sperm production via reducing oxidative stress and had a positive effect in a male infertility model [30]

Pomegranate: improves sperm quality and antioxidant activity [31]

Velvet Bean: Treatment with *M. pruriens* regulates steroidogenesis and improves semen quality in infertile men [32]

Damiana Leaf: is able to increase the secretion of male hormones such as testosterone, which plays a crucial role in the formation and maturation of sperm [33]

Ginkgo Leaf: antioxidant action [34,35]

Asian Ginseng: used to treat sexual dysfunction as well as to enhance sexual behavior and gonadal functions

Maca Root: Maca increase several markers of fertility in men, including semen quality and sperm concentration and motility, this effect is not because of changes in serum testosterone and oestradiol levels [15-17]

Tribulus Terrestris: Tribulus improve motility and viability of human sperm, similar to Maca root, this effect is not because of changes in serum testosterone [18-19]

L-Arginine: improved testes weight, semen volume, sperm motility and increase testosterone levels.

WHAT TO EXPECT FROM PROLISTEM®?

Our patent and unique formula can improve your chances to find sperm in semen after six months of treatment.

We recommend that all men experiencing azoospermia consider Prolistem® as a first option, before undergoing potentially risky medical procedures.

Taking Prolistem® increase the chances to find:



OR



Sperm in Semen Sperm Retrieval
(Success Rate 23%) (Success Rate 25%)

SPECIAL INSTRUCTIONS:

- Patients using Prolistem® kit should have their Hormones Levels checked (before and after the treatment).
- Hormones levels may be an indicator of improvement or not.
- Patients should check their Sperm Count after three and six months.
- The patient needs to plan for TESE or Micro-TESE after Prolistem® treatment (if no sperm found in the semen).
- The success of Prolistem® depends on many factors like the testes damage level and each person's response.
- Do not take Prolistem® along with any other fertility treatments.
- Prolistem® treatment is purely harmless and free from side effects

REFERENCES

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316 River Rd North
Wappingers Falls, NEW YORK
USA

Info@Prolistem.com
www.Prolistem.com

Phone: +1 845 233 6550
WhatsApp: +1 914 733 8327

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Biotin contributes to maintain normal skin and mucosa | Chromium contributes to the maintenance of normal blood glucose levels | Folic acid contributes to normal homocysteine metabolism and has a role in cell division | Folic acid, vitamin D and zinc have a role in cell division | 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 is achieved by taking a minimum of 400 µg of supplemental folate for at least one month before and up to three months after conception | Iron is needed for normal production of red blood cells and for normal oxygen transport | Iodine contributes to normal production of thyroid hormones and to normal thyroid function | Vitamins B1, B2, niacin and pantothenic acid support energy metabolism | Vitamin B6 contributes to normal protein metabolism | Vitamin B12 and vitamin D have a role in cell division | Vitamin C contributes to normal energy metabolism | Vitamin C contributes to normal function of the immune system and protects cells from oxidative stress | Vitamins C, E, zinc and selenium contribute to protecting cells from oxidative stress | Selenium contributes to normal thyroid function | Selenium contributes to normal spermatogenesis | Zinc contributes to normal fertility and reproduction | Zinc maintains a normal testosterone level in blood

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