

Nutraceuticals

vitamins & herbal extracts

The perfect combination of
the wisdom of nature
and solid
scientific evidence



product catalogue

Disclaimer

The Medaxis products described in this booklet are produced to strict standard of purity. All ingredients are enumerated and the quantities of active products contained therein are as given in the individual product brochures.

The products themselves fall under the headings of either Nutritional Supplements or Complementary and Alternative Medications (CAM's), and contain active ingredients as described in the text.

The use of such substances focused on maintenance and promotion of general health, better metabolism and wellbeing or the relief of symptoms as described for each of the indications listed in the product brochure.

They are not meant to replace medically prescribed treatment for any specific medical diagnosis. However such natural products/extracts can interact with allopathic (the term used to describe conventional Western Pharmaceutical medications) treatments.

If you are on treatment for any specific medical condition it would be wise to check with your doctor regarding the use of CAM's. This applies also to the use of CAM's while undergoing allopathic therapy for cancer.

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Cybele

female fertility

Specialized food supplements with herbal extracts and vitamins that contribute to normal female fertility and reproduction *

* EFSA-Commission Regulation (EU) No 432/2012, May 16 2012, Official Journal of the European Union

DIRECTIONS: 1 tablet, twice a day with meals (preferably morning and evening) or as directed by a healthcare professional. Cybele female fertility should be taken regularly for a period of at least 3 months. Its use can and should continue until conception takes place.



Nutrition information	2 tabl.	RDA
Vitamin D3 (as Cholecalciferol)	400IU (10 µg)	200%
Vitamin E (α-TE) (as Vitamin E acetate)	15mg (22,3 IU)	125%
Vitamin B1 (as Thiamine hydrochloride)	1,375 mg	125%
Vitamin B2 (Riboflavin)	1,75 mg	125%
Vitamin B3 (Niacin)	20mg	125%
Vitamin B6 (as Pyridoxine hydrochloride)	1,75 mg	125%
Vitamin C (Ascorbic acid)	100mg	125%
Vitamin B12 (Cyanocobalamin)	3,125µg	125%
Pantothenic acid (as Calcium-D pantothenate)	75mg	125%
Folic acid (as methyltetrahydrofolate)	250 µg	125%
Biotin (D-Biotin)	62,5µg	125%
Vitamin K2 (Menaquinone-7)4	30µg	3%
Molybdenum (as Sodium molybdate)	50g	100%
Chromium (as Chromium picolinate)	40µg	100%
Manganese (as Manganese chelate)	2mg	100%
Copper (as Copper sulphate)	0,5mg	50%
Zinc (as Zinc picolinate)1	10mg	0%
Iron (as Ferrous fumarate)	4,2mg	30%
Ferrous (as Ferrous fumarate) 3	4,2mg	0%
Selenium (as Selenomethionine)	55µg	100%
Iodine (as Potassium Iodide)	150µg	100%
Coenzyme Q10	100 mg	-**
DHA microencapsulated (std.10% DHATG)	200mg	-**
Myo-Inositol	200mg	-**
Rhodiola rosea root extract (std 396 rosavins)	100mg	-**
Alpha-Lipoic acid*	100mg	-**
Damiana leaf extract (10:1) (Turnera diffusa Willd. ex Schult)	90mg	-**
Green tea leaf extract (Camellia sinensis (L.) Kuntze) (std.50% polyphenols)	5mg	-**
Glutathione	50mg	-**
DHEA (Di-Hydroxy-Epi-Androsterone)	30mg	-**



Infertility refers to a problem of the reproductive system that results in a couple not being able to conceive (ie achieving a pregnancy), or a pregnancy coming to an end before term. The definition accepted according to the World Health Organization characterizes a couple as infertile in the absence of conception after at least one year of regular intercourse, without the use of contraceptive methods. Regular intercourse refers to a frequency of intercourse of two to three times a week. The period of one year is reduced to six months when the woman is over 35 years old. [1]

Infertility is not a new situation, but it seems to have increased in rates over the last few decades. Internationally, 15% of couples of reproductive age (estimated at 50-80 million people) have a fertility problem. [2]

In Greece, it is estimated that there is a higher rate of infertility (18-20%), a finding that is attributed to the high frequency of gynecological problems (eg uterine adhesions, fallopian tube occlusions), a result of limited sexual education of young people (multiple abortions, low rate use of the contraceptive pills or condoms, a large number of pelvic inflammations) in combination with the fact that today the Greek woman conceives at an older age. There are a wide variety of factors that can affect a couple's fertility. The presence of one of these factors does not exclude the existence of another in the same pair, while one factor may have a different importance in each couple. For this reason we should consider, investigate and treat infertility as a problem of the couple and not of one or the other partner individually. 40% of infertility cases are due to the male, 40% to the female while 20% are related to problems that exist in both. In some cases, the causes of infertility remain unclear. This condition affects 10-15% of infertile couples and is known as unexplained infertility. Although a complete screening of both male and female proves to be per-

fectly normal, unexplained fertility problems are likely to be a combination of various, minor factors. The good news is that couples with unexplained infertility have the highest rates of normal (spontaneous) pregnancy among all infertile couples. [3-5].

Cybele female fertility is a food supplement containing vitamins and herbal extracts which, according to the following EFSA health claims, contribute to normal fertility and reproduction [6].

Fertility and reproduction

- Zinc contributes to normal fertility and reproduction.
- Folic acid contributes to normal blood formation, normal maternal tissue growth and plays a role in the process of cell division.

Protection of cells from oxidative stress

Vitamin C, vitamin E, manganese, riboflavin, selenium, copper and zinc contribute to the protection of cells from oxidative stress. Oxidative stress is an important factor in fertility [4,5].

Energy production and reduction of fatigue

- Vitamins B2, B3, B5, B6, B12, C, magnesium and iron contribute to normal energy productions as well as reduction of fatigue.
- Iron contributes to normal oxygen transport in the body.
- Vitamin C increases iron absorption.
- Copper contributes to normal iron transport in the body.

Immune function

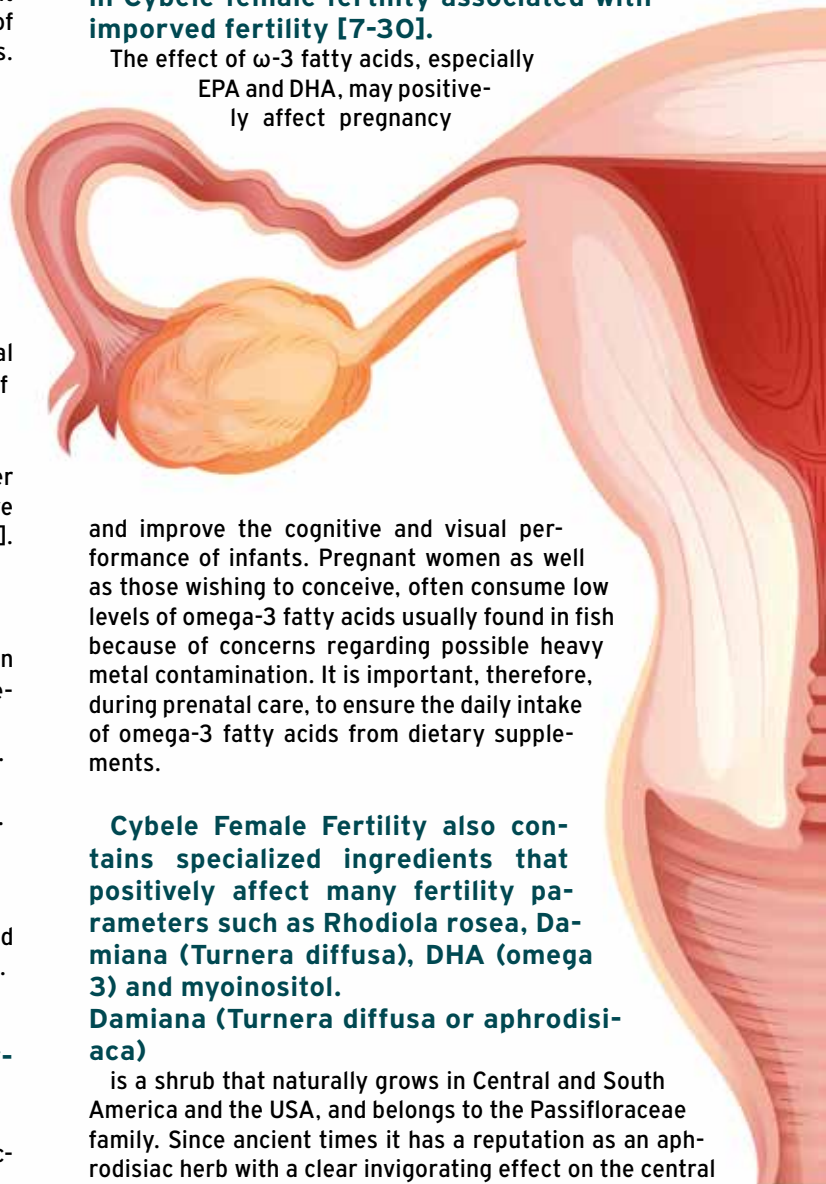
Vitamins B6, B12, C, D, selenium, iron, folic acid, copper and zinc contribute to the normal function of the immune system.

Claims that reinforce the nutritional goal of Cybele female fertility

- Zinc contributes to normal DNA synthesis.
- Vitamin B6 contributes to the regulation of hormonal activity.
- Pantothenic acid contributes to normal synthesis and metabolism of steroid hormones, vitamin D and some neurotransmitters.
- Thiamine contributes to the normal function of the heart.

Claims of clinical studies regarding ingredients in Cybele female fertility associated with improved fertility [7-30].

The effect of ω -3 fatty acids, especially EPA and DHA, may positively affect pregnancy



and improve the cognitive and visual performance of infants. Pregnant women as well as those wishing to conceive, often consume low levels of omega-3 fatty acids usually found in fish because of concerns regarding possible heavy metal contamination. It is important, therefore, during prenatal care, to ensure the daily intake of omega-3 fatty acids from dietary supplements.

Cybele Female Fertility also contains specialized ingredients that positively affect many fertility parameters such as Rhodiola rosea, Damiana (Turnera diffusa), DHA (omega 3) and myoinositol.

Damiana (Turnera diffusa or aphrodisiaca)

is a shrub that naturally grows in Central and South America and the USA, and belongs to the Passifloraceae family. Since ancient times it has a reputation as an aphrodisiac herb with a clear invigorating effect on the central nervous and endocrine systems. Various studies in the scientific literature emphasize the aphrodisiac and rejuvenating characteristics of the plant, while contributing to the normal increase of sexual desire and satisfaction in women both before and during menopause. At the same time it is reported

to improve the microenvironment of the vagina, reducing vaginal dryness, increasing sexual desire, sexual intercourse and orgasm, and improving the sensation of the clitoris. It is also traditionally used to support the healthy mood and healthy function of the urinary system.

Rhodiola rosea

is considered an adaptogen, which means that it helps the body adapt to the effects of stress. It is traditionally used to adjust the menstrual cycle. In a study of 40 women with amenorrhea (loss of menstrual cycles), 100 mg of Rhodiola rosea was given

twice daily for 2 weeks. In some women the pattern was repeated 2-4 times. Normal menstruation was restored in 62.5% (25/40 women), 44% of which (11/40) became pregnant. Rhodiola, also known as arctic or golden root, contains more than 140 active ingredients, the two most potent of which are rosavin and salidroside. It is traditionally used to calm the symptoms of anxiety. It also boosts the body's resistance to stress factors, improves memory and concentration, and reduces fatigue.

DHA is an omega-3 fat

that we should consume from foods, supplements or both, as our body does not produce much of it. It can help prevent or improve chronic conditions such as heart disease, Alzheimer's disease, depression and inflammatory diseases. DHA is also essential for sperm health and a healthy pregnancy. It acts synergistically with Alpha Lipoic Acid (ALA).

Alpha Lipoic Acid (Alpha Lipoic Acid)

is an organic compound found in all human cells. It is well known for its strong antioxidant properties. Alpha-lipoic acid is both water- and fat-soluble, which allows it to function in any cell or tissue in the body. The antioxidant properties of alpha-lipoic acid have been linked to many benefits, including lower blood sugar levels, reduced inflammation, slower skin aging and improved nerve function. Humans only produce alpha-lipoic acid in small quantities.

Glutathione (GSH)

is also a very powerful antioxidant. It has a huge ability to fight oxidative stress and neutralize harmful free radicals. Chemically, glutathione is a tripeptide that consists of 3 amino acids: Glutamic acid, Cysteine and Glycine. The body uses glutamic acid to produce glutamine. When these three amino acids are combined into glutathione, they gain the power to detoxify dangerous free radicals, toxic drugs and heavy metals. This mechanism protects the whole body from dysfunction and disease.

Myoinositol

is a vitamin-like substance. It is mainly used in cases of metabolic syndrome and polycystic ovary syndrome (PCOS). Its function is that it can balance certain chemicals in the body to possibly help with mental illnesses such as panic disorder, depression and the like. It can also help insulin work better. This can help with conditions such as polycystic ovary syndrome or diabetes during pregnancy. In a clinical study of 3602 patients with PCOS and infertility, myoinositol and folic acid were administered for 3 months. According to the results, 70% (2,520 women) showed an improvement in their menstrual cycle. Among them, a total of 15.1% became pregnant (545 women). In a subgroup of 32 patients where hormonal values were evaluated before and after treatment, a significant improvement in androgen levels and an increase in progesterone levels were observed.

Green tea to reduce oxidative stress

Oxygen free radicals (ROS) are present in low levels in the genitals of men and women. Excessive growth leads to oxidative stress that damages DNA, lipids and proteins. In women, oxidative stress interferes with egg maturation and may inhibit oocyte maturation in vitro. The excellent antioxidant action of catechins of green tea is the key to improving fertility

by reducing oxidative stress. In particular, epigallocatechin-3 (EGCG) is considered the most promising bioactive compound in green tea due to its strong antioxidant activity.

DHEA (Di-Hydroxy-Epi-Androsterone)

Its use supports the improvement of egg quality as well as the chances of pregnancy in IVF, as well as the support of the ovarian reserve, especially for women aged 35 and above.

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origen

male fertility

Specialized food supplements with herbal extracts and vitamins that contribute to normal male fertility and reproduction *

DIRECTIONS: Take 1 tablet, twice a day with meals (preferably morning and evening) or as directed by a healthcare professional. Origen male fertility should be taken regularly for a period of at least 3 months. Its use can and should continue until conception takes place.

* EFSA-Commission Regulation (EU) No 432/2012, May 16 2012, Official Journal of the European Union



Nutrition information	2 tabl.	RDA
Vitamin A (RE) (as Vitamin A acetate and 25% beta-Carotene)	2668 IU	105%
Vitamin D3 (as Cholecalciferol)	400 IU (10 µg)	200%
Vitamin E (a-TE) (as Vitamin E acetate)	15 mg (22,3 IU)	125%
Vitamin B1 (as Thiamine hydrochloride)	1,375 mg	125%
Vitamin B2 (Riboflavin)	1,75 mg	125%
Vitamin B3 (Niacin)	20 mg	125%
Vitamin B6 (as Pyridoxine hydrochloride)	1,75 mg	125%
Vitamin C (Ascorbic acid)	100 mg	125%
Vitamin B12 (Cyanocobalamin)	3,125 µg	125%
Pantothenic acid (as Calcium-Dpantothenate)	7,5 mg	125%
Folic acid (as methyltetrahydrofolate)	250 µg	125%
Biotin (D-Biotin)	62,5 µg	125%
Vitamin K2 (Menaquinone-7)	30 µg	43%
Molybdenum (as Sodium molybdate)	50 µg	100%
Chromium (as Chromium picolinate)	40 µg	100%
Manganese (as Manganese chelate)	2 mg	300%
Copper (as Copper sulphate)	0,5 mg	50%
Zinc (as Zinc picolinate)	25 mg	300%
Ferrous (as Ferrous fumarate)	4,2 mg	30%
Selenium (as Selenomethionine)	55 µg	100%
Iodine (as Potassium iodide)	150 µg	100%
Coenzyme Q10	30 mg	***
Glutathione	50 mg	***
Flaxseed oil microencapsulated (std.30% alpha-Linolenic acid, ALA-TG)	200 mg	***
Ashwaganda root extract (std.5% with anolides, Withania somnifera (L.) Dunal)	100 mg	***
Mucuna pruriens (L.) DC extract (std.15% L-DOPA)	100 mg	***
Alpha-Lipoic acid	100 mg	***
Acetyl-L-carnitine	100 mg	***
Milk thistle extract (std. 80% silymarin, Silybum marianum (L.) Gaertn.)	50 mg	***
Astaxanthin microencapsulated (Std.2% from H. pluvialis)	1,6 mg	***

Infertility refers to a problem of the reproductive system that results in a couple not being able to conceive (ie achieving a pregnancy), or a pregnancy coming to an end. The definition accepted according to the World Health Organization characterizes a couple as infertile in the absence of conception after at least one year of regular intercourse, without the use of contraceptive methods. Regular intercourse refers to a frequency of intercourse of two to three times a week. The period of one year is reduced to six months when the woman is over 35 years old. [1]

Infertility is not a new situation, but it seems to have increased in rates over the last few decades. Internationally, 15% of couples of reproductive age (estimated at 50-80 million people) have a fertility problem. [2]

Infertility may stem from problems affecting either the male or the female. On the male side the problems are largely related to sperm production (quantity or quality), which the Origen male fertility can help to address.

Fertility and reproduction

- Selenium contributes to normal spermatogenesis.
- Zinc contributes to normal fertility and reproduction.
- Zinc helps maintain normal testosterone levels in the blood. Numerous scientific studies have shown the impressive results of zinc in improving the vitality, morphology and motility of sperm.
- In a group of men receiving Vit D, a significant increase in total testosterone, bioactive testosterone and free testosterone levels was achieved.

Protection of cells from oxidative stress

- Vitamin C, vitamin E, manganese, riboflavin, selenium, copper, zinc contribute to the protection of cells from oxidative stress. Oxidative stress is an important factor for fertility [4,5].

Immune function

- Vitamins A, B6, B12, C, D, selenium, iron, folic acid, copper and zinc contribute to the normal function of the immune system.



Energy production and reduction of fatigue

- Vitamins B2, B3, B5, B6, B12, C, magnesium and iron contribute to the normal function of metabolic processes aimed at producing energy and reducing fatigue.
- Iron contributes to the normal transport of oxygen to the body.
- Vitamin C increases the absorption of iron.
- Copper contributes to the normal transport of iron in the body.

Claims that reinforce the nutritional goal of Origen male fertility

- Zinc contributes to normal DNA synthesis.
- Vitamin A has a role in the process of cell specialization.
- Vitamin B6 contributes to the regulation of hormonal activity.
- Pantothenic acid contributes to normal synthesis and metabolism of steroid hormones, vitamin D and some neurotransmitters.
- Thiamine contributes to the normal function of the heart.

Claims of clinical studies regarding ingredients in Origen male fertility associated with improved fertility [7-31].

Omega-3 fatty acids are essential for the proper function of spermatozoa. The cell membrane of normal spermatozoa contains omega-3 polyunsaturated fatty acids. Long chain DHA and EPA (fish oil omega-3) can not cross the blood-testicular barrier due to their high molecular weight, while the ALA (flaxseed oil omega-3) short chain passes through and is converted to DHA. It is therefore important that men ensure the daily intake of omega-3 fatty acids from dietary supplements.

Origen Male Fertility also contains specialized ingredients that positively affect many fertility parameters such as:

Alpha Linoleic Acid, Ashwagandha, Mucuna pruriens, Milk thistle, Astaxanthin, N-Acetyl L-carnitine.

Alpha Linoleic Acid

from flaxseed oil is an essential omega-3 fatty acid. It is called «essential» because it is necessary for normal human development. Alpha-linolenic acid is thought to reduce the risk of heart disease by helping to maintain a normal heart rate.

Why α -linoleic acid?

Omega-3 fatty acids are essential for the proper function of sperm. The membrane of normal sperm contains omega-3 polyunsaturated fatty acids (PUFAs) of long chain in high concentration, namely icosahedral hexaenoic acid (DHA), which ensures high fluidity in the membrane phospholipids. The cell membrane of sperm with infertility contains less DHA and shows lower fluidity. As a result of the reduced fluidity of the membrane, the ability of the sperm to fuse with the oocytes decreases, which explains the reduced ability to fertilize. However, sperm

concentration and motility were inversely correlated with dietary intake of long-chain PUFAs EPA and DHA, but were positively correlated with omega-3 PUFA α -linolenic acid (ALA) short-chain intake. This is because long-chain DHA and EPA cannot cross the blood-testicular barrier due to their high molecular weight, while the short-chain ALA can. Due to the abundant presence of the necessary enzymes in the seminal vesicles, ALA is metabolized to long-chain PUFAs. It acts synergistically with Alpha Lipoic acid.

Alpha Lipoic Acid

is an organic compound found in all human cells. It is well known for its strong antioxidant properties. Alpha-lipoic acid is both water- and fat-soluble, which allows it to function in any cell or tissue in the body. The antioxidant properties of alpha lipoic acid have been linked to many benefits, including lower blood sugar levels, reduced inflammation, slower skin aging and improved nerve function. Humans only produce alpha-lipoic acid in small quantities.

Glutathione (GSH)

is also a very powerful antioxidant. It has a huge ability to fight oxidative stress and neutralize harmful free radicals. Chemically, glutathione is a tripeptide that consists of 3 amino acids: Glutamic acid, Cysteine and Glycine. The body uses glutamic acid to produce glutamine. When these three amino acids are combined into glutathione, they gain the power to detoxify dangerous free radicals, toxic drugs and heavy metals. This mechanism protects the whole body from dysfunction and disease.

The effect of Ashwagandha on sperm quality and stress reduction

Ashwagandha is commonly used for anxiety. It is an «adaptogen» ingredient that helps balance the body's response to stress. It increases the body's ability to resist physical, chemical or biological factors and therefore enhances the normal smooth response to stress. Studies support a significant effect of ashwagandha for this purpose and it seems to reduce cortisol levels. Ashwagandha can also reduce insomnia, fatigue and depressive symptoms. In addition, it can increase the quality of testosterone and sperm in infertile men. A study of the spermatogenic effect of Ashwagandha root extract (*Withania somnifera*) in men with oligospermia showed a 167% increase in sperm count, a 53% increase in sperm volume, a 57% increase in sperm motility and a 17% increase in testosterone levels 90 days after starting treatment. Clinical studies in men and women with chronic stress show that Ashwagandha reduces stress levels after 30 days of administration and even more after 60 days of administration.

Mucuna pruriens, the adaptogen with an effect on fertility

Mucuna pruriens (velvet bean), is a plant that is one of the most important superfoods. It has tonic, invigorating and aphrodisiac properties. Clinical studies in infertile men have shown that sperm count and motility are significantly restored after adminis-



tration of *Mucuna pruriens* for 3 months. The extract from the plant *Mucuna pruriens* has a biochemical profile, which contains a number of active ingredients such as nicotine, serotonin and perhaps most importantly, L-dopa (or L-hydroxyphenylalanine) - the main precursor of the neurotransmitter dopamine. *Mucuna pruriens* is additionally used: To restore sexual desire by increasing testosterone and dopamine levels. For support in cases of infertility in men and women (increasing the number of sperm and encouraging ovulation). To improve mental alertness, motor coordination and in conditions of apathy.

The antioxidant action of Astaxanthin

Astaxanthin is a carotenoid that belongs to the subclass of xanthophyll. *Haematococcus Pluvialis* algae have the highest bioavailability of astaxanthin. Astaxanthin is often referred to as the "king of carotenoids" because of its reputation as one of nature's most powerful antioxidants, making it ideal for its health-related benefits. Our body cannot produce astaxanthin on its own, which means it must be taken in through food or supplements. Astaxanthin has a strong anti-inflammatory effect. A pilot, double-blind study using astaxanthin reported a significant reduction in oxygen free radicals in semen and a decrease in serum inhibitor B, which is associated with improved sperm motility and morphology. These parameters were associated with higher monthly (23.1%) and overall (54.5%) pregnancy rates than placebo (11.1% and 3.6%). It should be noted that increased inhibitory B protein inhibits follicle stimulating hormone and suppresses spermatogenesis.

Milk thistle, for detoxification and liver protection

Milk Thistle (*Silybum marianum*) is a perennial herb whose seeds contain silymarin, a group of compounds reported to have antioxidant and anti-inflammatory effects. Milk thistle milk has been used traditionally to treat liver and gallbladder disorders, including hepatitis, cirrhosis and jaundice. Today, milk thistle is mainly recognized as a therapeutic and hepatoprotective agent, especially in cases of cirrhosis, chronic hepatitis, alcohol consumption and exposure to environmental toxins. There is evidence that milk thistle is hepatoprotective, through antioxidant activity, blockade of toxins at the membrane level, increased protein synthesis, anti-inflammatory action and possible immunomodulatory effects. The elimination of toxins from the liver and the regulation of metabolism, positively affect male fertility.

In addition, Origen male fertility contains N-Acetyl L-carnitine.

In the body, acetyl-L-carnitine is produced from L-carnitine. L-carnitine is a derivative of an amino acid. L-carnitine and acetyl-L-carnitine are used to help the body convert fat into energy. Administration

of carnitine to patients with weak sperm improves many parameters of the sperm, such as concentration, number, motility and morphology of the sperm. L-acetylcarnitine, in fact, has better results in increasing sperm motility than L-carnitine.

L-Carnitine and N-Acetyl Carnitine (NAC)

Origen male fertility contains L-Carnitine and N-Acetyl-L-Carnitine. In the body, acetyl-L-carnitine is produced from L-carnitine. L-carnitine is a derivative of the amino acid lysine. Both carnitines belong to a class of compounds termed "pseudo vitamins" since although they can be synthesized in the body under some conditions, not enough is produced leading to deficiencies for certain functions requiring high concentrations.

L-Carnitine and N-Acetyl Carnitine are used to help the body convert fat into energy. Administration of carnitine to patients with weak sperm improves many parameters of the sperm, such as concentration, number, motility and morphology of the sperm. N-Acetyl Carnitine, in fact, has better results in increasing sperm motility in low sperm count than L-Carnitine.

For low sperm count, the amino acid N-acetyl-L-carnitine (NAC) helps sperm maturation, enhances their motility, and protects spermatozoa against oxidative damage. NAC has important roles for male fertility as it is naturally found in human sperm and seminal fluid. Low carnitine levels are linked with reduced sperm count, or oligospermia, and poor sperm motility. NAC is deficient in infertile semen and sperm samples. Amino acids are the building blocks that form proteins. This particular amino acid is critical to providing fatty acids to the mitochondria in each cell to fuel energy production. This helps give sperm the boost they need if they are going to have a chance at fertilizing an egg. Human sperm cells have to travel farther than any other single cell and they need a tremendous amount of energy in order to make the journey.

Normal sperm motility is around 55% to 75%, which decreases 5 to 10% on average per hour. NAC helps sperm to swim, and so is a crucial nutrient for men with poor sperm quality. This is especially important because weakly-swimming sperm, or asthenospermia, is one of the most important reasons for male factor infertility.

Sperm counts have been steadily decreasing over the last 50 years from 50 to 60 million/ml, which was considered normal, to today's "new normal" of 20 million/ml. It is now much more common to see counts under 10 million/ml than ever before. While there has been recent research on the effects of chemical exposure, endocrine disruptors, and environmental pollutants, it has been well established that some medications and recreational drugs can impair sperm production and fertility. For example, endocrine disruptors such as insecticides, flame retardants, and phthalates from plastics, are specifically toxic to the male hormones responsible for sperm production. Also, excessive oxidant stress from pollutants can damage DNA and impair sperm function. Infertility affects up to 15% of the sexually active population. Most studies and data focus on infertility in women, yet there has been relatively little attention given to the male contribution to infertility which may be a factor for more than half of infertile couples. Infertility is a multifactorial condition that may have many causes.

For enhancing healthy sperm count, NAC can help in several ways:

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NAC have been reported to be lower in infertile semen and sperm samples with low motility.

2 NAC acts as an antioxidant, protecting spermatozoa against damage from reactive oxygen species.

3 More sperm are produced with normal anatomy, or morphology.

4 NAC has a potential benefit for pH encouraging an optimal pH in the slightly alkaline range of 7.8.

5 Studies indicate that NAC may increase testosterone production and improve testicular function, ultimately boosting healthy sperm count.

While overall sperm count is critical, it is also important that the sperm have matured and have normal structure or morphology in order to function. In an average ejaculate specimen, abnormal morphology may account for 20 to 40% of sperm. These sperm have deformed heads which hampers their ability to break through the egg's wall for fertilization. Some spermatozoa have multiple heads – defects in the

ability to perform the acrosomal (egg penetration) reaction – or multiple or deformed tails. A higher proportion of abnormal, deformed, or even dead sperm will decrease the overall count and affect fertilization. A placebo-controlled double-blind randomized trial examined the ability of NAC to enhance the kinetic parameters of sperm. The study concluded that NAC enhanced sperm cell motility.

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cybele care plus

Food Supplement with herbal ingredients and vitamins that contribute to normal psychological function and regulation of hormonal activity in women.*

DIRECTIONS: Take 1-2 tablet daily or as directed by a healthcare professional.

*EFSA-Commission Regulation (EU) No 432/2012, May 16 2012, Official Journal of the European Union



Nutrition information	1 tabl.	RDA
Fenugreek seed extract (Trigonella foenum-graecum) 4:1 (std. 25% Saponins)	500mg	**
Ashwagandha root extract 25:1 (Withania somnifera) std. 5% Withanolides	150mg	**
Damiana leaf extract 10:1 (Turnera diffusa Willd. ex Schult)	100mg	**
Agnus castus fruit extract 10:1 Vitex agnus-castus	40mg	**
Pantothenic acid (as Calcium-Dpantothenate, Vitamin B5)	12mg	200%
Vitamin B6 (as Pyridoxine hydrochloride)	20mg	1.429%
Vitamin D3 (as Cholecalciferol)	500 IU (12,5µg)	250%



- **Vitamin B5 contributes to the synthesis and metabolism of steroid hormones, vitamin D and certain neurotransmitters, enhancing mental performance.**
- **Vitamin B6 contributes to normal nervous system and psychological function and the regulation of hormonal activity.**
- **The combination of vitamin B5 & B6 contributes to the normal function of metabolic processes aimed at producing energy and reducing fatigue.**
- **Vitamin D helps maintain muscle function and the normal functioning of the immune system.**

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Trigonella foenum-graecum (fenugreek)

Trigonella the Greek or buckwheat is an annual plant, the seeds of which are rich in proteins, minerals and vitamins and a wide range of minerals such as copper, iron, magnesium and manganese. Hormonal function involves a complex set of interactions between the hormones estradiol and testosterone. Extensive reports in the literature support that the administration of Trigonella seed extract (foenum-graecum), leads to a significant increase in these hormones, as well as sexual desire and arousal in women of reproductive age.

Among others, Rao A et al. evaluated the effect of Trigonella seed extract on sex hormones and sexual function, in healthy women with normal menstruation, and low sexual drive compared to taking placebo for 2 months. There was a significant increase in free testosterone and estradiol in the active treatment group as well as increased sexual desire and arousal compared to the placebo group. The results show that Trigonella foenum-graecum extract can be a useful treatment to increase sexual arousal and desire in women.

Damiana (Turnera diffusa)

Damiana (Turnera diffusa or aphrodisiaca) is a shrub that naturally grows in Central and South America and the USA, and belongs to the Passifloraceae family. Since ancient times it has a reputation as an aphrodisiac herb with a clear invigorating effect on the central nervous and endocrine systems. Various studies in the scientific literature emphasize the aphrodisiac

and rejuvenating characteristics of the plant, while contributing to the normal increase of sexual desire and satisfaction in women both before and during menopause. At the same time it is reported to improve the microenvironment of the vagina, reducing vaginal dryness, increasing sexual desire, sexual intercourse and orgasm, and improving the sensation of the clitoris. In a double-blind, randomized supplementation study containing damiana compared to placebo, Thomas Y. et al investigated the role of supplementation in sexual function in women at different menopausal stages (PRE-, PERI- & POST-). After only a few weeks, the PRE women who took the supplement had a significant improvement in their level of sexual desire (72%, $p = 0.03$) and satisfaction with their overall sex life (68%, $p = 0.007$) compared to the placebo group. The frequency of sexual desire (60%, $p = 0.05$) and the frequency of sexual intercourse (56% $p = 0.01$) also increased among PRE women. Among women in the PERI group, significant improvements were reported for frequency of sexual intercourse (86%, $p = 0.002$), sexual satisfaction (79%, $p = 0.03$), and vaginal dryness (64%, $p = 0.03$) compared to the placebo group.

Ashwagandha (*Withania somnifera*)

Ashwagandha, also known as Indian ginseng, is a shrub that grows in India, whose roots have been used for thousands of years in Ayurveda. It has antioxidant properties and among other things is considered to improve a variety of conditions, such as the general stimulation of the body (adaptogen - adaptogenic herb, i.e. protects the body from stress and helps it cope with its effects). Also, enhancing sexual ability, dealing with stress and depression and enhancing athletic endurance. In the scientific literature, various studies report the improvement in the parameters related to female sexual function such as arousal, natural vaginal lubrication, orgasm and satisfaction.

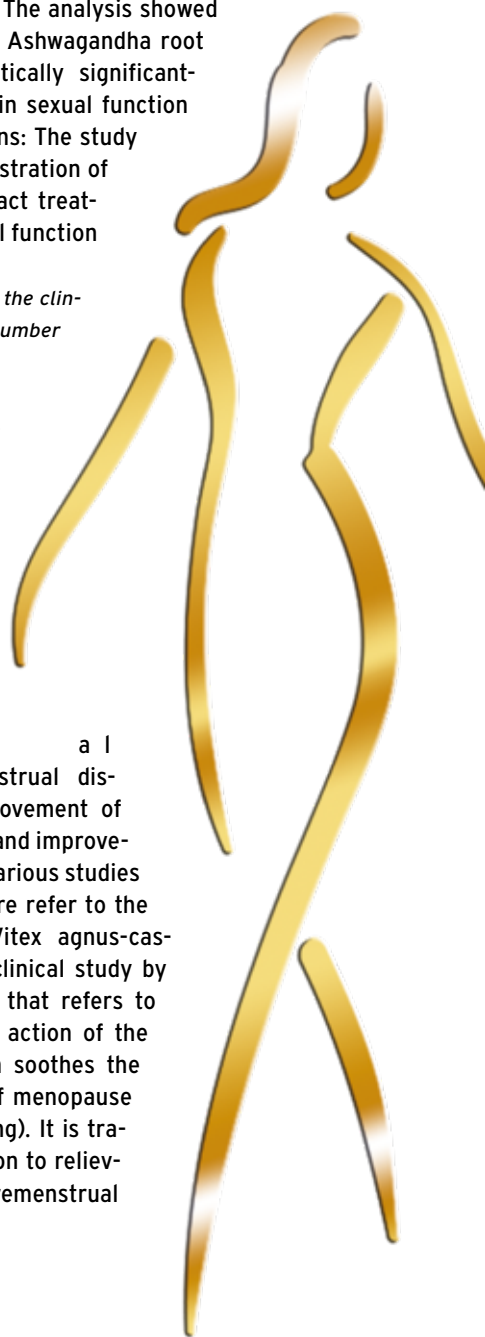
Among others, Dongre S et al. reported the following: Fifty (50) females were randomized to either: (i) a group receiving Ashwagandha HCARE root extract, or (ii) a group-receiving placebo (starch) for 8 weeks. Sexual function was assessed using two psychometric scales, the Female Sexual Function Index (FSFI) and the Female Sexual Distress Scale (FSDS). At the same time, the number of total and successful sexual encounters was

monitored and counted. The analysis showed that the treatment with Ashwagandha root extract leads to statistically significantly higher improvement in sexual function than placebo. Conclusions: The study showed that oral administration of Ashwagandha root extract treatment can improve sexual function in healthy women.

(This study is registered in the clinical trial register, with number CTRI / 2015/07/006045).

Agnus castus (Chasteberry)

Vitex agnus-castus, Vitex is a shrub especially widespread in the Greek countryside. It is most often used against the symptoms of premenstrual syndrome (PMS), menstrual disorders, infertility, improvement of menopausal symptoms and improvement of sexual health. Various studies in the scientific literature refer to the beneficial effects of Vitex agnus-castus. Among them is a clinical study by Abbaspoor Z et al. (5) that refers to the aphrodisiac normal action of the plant, the use of which soothes the vasomotor symptoms of menopause (hot flashes and sweating). It is traditionally used in addition to relieving the symptoms of premenstrual syndrome (PMS) (6).



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blossom

Dietary supplement with 2 double coenzyme coQ10 for:

- support of fertility and reproduction in women and men
- Invigoration and anti-aging
- Antioxidant protection
- Stimulation of heart function and
- Reduction of myopathy by statins

INGREDIENTS: CCO Q10 ws, GS402 mix5 (Ceratonia aqua extr, Crithmum maritimum aqua extr. Oregano aqua extr.), N-Acetyl L-Carnitine, Pomegranate extr., Black pepper extr., Zinc (as Zinc gluconate), PROMIX 302FS, (CDs, D3, C, L-Glutamine, Chios Mastiha)

DIRECTIONS: Take 5ml daily with a meal

Nutrition information	5ml	RDA
CCO Q10 ws	80 mg	**
CaVa Q10 complex	20 mg	**
(EQUIVALENT CO Q10)	80 mg	**
TOTAL CO Q10	160 mg	**
GS402 mix5	5 mg	**
(Ceratonia aqua extr, Crithmum maritimum aqua extr. Oregano aqua extr.)		
N-Acetyl L-Carnitine	300 mg	**
Pomegranate extr.	0.167 mg	**
Black pepper extr.	0.033 mg	**
Zinc (as Zinc gluconate)	5 mg	50%
PROMIX 302FS	100 mg	**
(CDs, D3, C, L-Glutamine, Chios Mastiha)		



Coenzyme Q10 (CoQ10) & Fertility

Sperm and egg development and maturation are highly complex processes, require a great deal of energy, and are subject to oxidative damage.

Coenzyme Q10 (CoQ10) is a biomolecule that exists naturally in the human body and is present in every cell. It acts as a potent antioxidant and functions critically in cellular energy generation. As the body ages, CoQ10 levels diminish, and our ability to convert CoQ10 into its active form also deteriorates.

Because of this, CoQ10 is used widely as a dietary supplement to support various aspects of health and wellness and has been reviewed extensively for its potential benefits in supporting sperm and egg quality or other aspects of male and female fertility.



Fast Facts About CoQ10 and Fertility

1. Sperm and egg cells require a lot of energy to develop and are prone to destructive oxidation.
2. Coenzyme Q10 functions as an antioxidant and is the key energy-generating pathway within cells.
3. Levels of CoQ10 decrease as you age. Taking CoQ10 supplements can increase blood and tissue CoQ10 levels.
4. CoQ10 supplementation has been shown to improve egg quality, sperm quality, and pregnancy rates.
5. Sperm takes about 90 days to develop. For best results, fertility specialists recommend taking CoQ10 and other fertility supplements for 90+ days if possible.

How CoQ10 Works

Coenzyme Q10 helps to improve fertility and the functioning of our cells in two main ways.

(1) CoQ10 is a vital part of the electron transport chain, which is responsible for generating energy in our cells. When CoQ10 levels are higher, the electron transport chain works more quickly and efficiently to produce energy. When more energy is produced, cells function at a higher level, positively impacting processes like sperm and egg development.

(2) CoQ10 functions as a strong antioxidant. CoQ10 works to protect our cells and decrease the damaging effects of free radicals on our reproductive system.

It is theorized that these are the mechanisms whereby CoQ10 may help improve sperm and egg quality.

CoQ10 for Egg Quality and Female Fertility

It is no secret that fertility declines as we age, and for women, that decline is much more rapid and drastic. When we say women's fertility declines as they age, what we are specifically referring to is the number of eggs they have available (ovarian reserve) and the quality of their eggs.

Coenzyme Q10 levels also decrease as we age. A 2015 study showed that suboptimal levels of CoQ10 can lead to oocyte deficits and age-associated declines in fertility. The good news is that the

same study produced results indicating that supplementing CoQ10 can help to reverse the age-related decline in oocyte quantity and quality. In simpler terms, CoQ10 can help support egg quality as you age.

But CoQ10 hasn't just been shown to help older women. CoQ10 has also been shown to improve egg and embryo quality and improve pregnancy rates in younger women as well.

Co-Q10 for Male Fertility and Sperm Quality

The concentration of CoQ10 in the blood has been shown to correlate with key semen parameters such as sperm concentration, motility, and morphology. Researchers believe this is because CoQ10 supplementation improves total antioxidant capacity. A 2015 study of 60 men demonstrated improvements in measures of male fertility, sperm count and motility. Sperm count improved by 53%, and total sperm motility increased by 26% after supplementation.

Other studies have supported findings similar to these and routinely demonstrate improvements in sperm concentration, motility, progressive motility, and sperm morphology.

In Conclusion

CoQ10 is possibly the most famous fertility nutrient and it's famous for good reason. Many studies have demonstrated that CoQ10 can help to support both male and female fertility.

N-Acetyl-L-Carnitine (NAC) aids in low sperm count

For low sperm count, the amino acid N-acetyl-L-carnitine (NAC) helps sperm maturation, enhances their motility, and protects spermatozoa against oxidative damage. NAC has important roles for male fertility as it is naturally found in human sperm and seminal fluid. Low carnitine levels are linked with reduced sperm count, or oligospermia, and poor sperm motility. NAC is deficient in infertile semen and sperm samples.

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Infertility affects up to 15% of the sexually active population. Most studies and data focus on infertility in women, yet there has been relatively little attention given to the male contribution to infertility which may be a factor for more than half of infertile couples.³ Infertility is a multifactorial condition that may have many causes.

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relief

Natural food supplement with an innovative combination of highly bioavailable curcumin and boswellia plant resin:

- With strong pain-relieving and anti-inflammatory action.
- Does not irritate the gastric environment or cause stomach ulcers.
- Does not affect liver & kidney function.
- Helps to treat inflammatory pain:
 - Osteoarthritis
 - Rheumatoid arthritis
 - Musculoskeletal pains & Joint pains
- Dysmenorrhea
- Inflammatory bowel disease
- Bronchial Asthma

DIRECTIONS: Take 1 curcumin capsule in the morning and 1 boswellia capsule in the evening or as directed by a health-care professional.

Nutrition information	per 1 capsule	RDA
Curcumin Extract (curcuminoids 80mg)	400 mg	**
Black pepper extract	400 mg	**

Nutrition information	per 1 capsule	RDA
Boswellia gum Extract	400 mg	**
Black pepper extract	400 mg	**



Proven Health Benefits of Turmeric and Curcumin

Curcumin may have anti-inflammatory, anticancer, antioxidant, and other benefits.

Turmeric may be the most effective nutritional supplement in existence. Many high-quality studies show that curcumin has major benefits for your body and brain.

What are turmeric and curcumin?

Turmeric has been used in India for thousands of years as both a spice and medicinal herb. Recently, science has started to back up traditional claims that turmeric contains compounds with medicinal properties. These compounds are called curcuminoids. The most important of them is curcumin. Curcumin is the main active ingredient in turmeric. It has powerful anti-inflammatory effects and is a very strong antioxidant. Curcumin is poorly absorbed into our bloodstream. In order to experience the full effects of curcumin, its bioavailability (the rate at which your body absorbs a substance) needs to improve. It helps to consume it with black pepper, which contains piperine. Piperine is a natural



substance that enhances the absorption of curcumin by 2,000%. In fact, the best curcumin supplements, like relief, contain piperine, and this makes them substantially more effective.

Proven Health Benefits of Curcumin

1. Curcumin is a natural anti-inflammatory compound

Chronic inflammation contributes to some common health conditions, such as:

- heart disease
- cancer
- metabolic syndrome
- Alzheimer's disease
- various degenerative conditions

Curcumin can suppress many molecules known to play major roles in inflammation.

2. Turmeric can increase the antioxidant capacity of the body

Oxidative damage is believed to be one of the mechanisms behind aging and many diseases. It involves free radicals, highly reactive molecules with unpaired electrons. The main reason antioxidants are so beneficial is that they protect your body from free radicals. Curcumin is a potent antioxidant that can neutralize free radicals due to its chemical structure. In addition, animal and cellular studies suggest that curcumin may block the action of free radicals and may stimulate the action of other antioxidants.

3. Turmeric as Pain Relief

In clinical studies, turmeric's anti-inflammatory action appears to help improve rheumatoid arthritis, post-operative inflammation, Crohn's disease, ulcerative colitis, irritable bowel syndrome, stomach ulcers. Arthritis patients respond well to curcumin supplements. Arthritis is a common disorder characterized by joint inflammation. Many studies show that curcumin can help treat symptoms of arthritis and is, in some cases, more effective than anti-inflammatory drugs.

4. Curcumin may help fight various degenerative processes in your brain

Curcumin may boost levels of the brain hormone BDNF (brain-de-

rived neurotrophic factor), which increases the growth of new neurons. Many common brain disorders have been linked to decreased levels of BDNF protein, including depression and Alzheimer's disease. Interestingly, studies have found that curcumin may increase brain levels of BDNF. By doing this, it may be effective in delaying or even reversing many brain diseases and age-related decreases in brain function. It may also help improve memory and attention, which seems logical given its effects on BDNF levels.

5. Curcumin may lower risk of heart disease

Heart disease is the number one cause of death in the world. Curcumin may help reverse many steps in the heart disease process. Perhaps the main benefit of curcumin when it comes to heart disease is improving the function of the endothelium, the lining of your blood vessels. The endothelial dysfunction is a major driver of heart disease. Several studies suggest that curcumin can lead to improvements in heart health. In addition, curcumin can help reduce inflammation and oxidation, which can play a role in heart disease. 121 patients undergoing coronary artery bypass surgery, were assigned either to a placebo or curcumin a few days before and after the surgery. The curcumin group had a 65% decreased risk of experiencing a heart attack in the hospital.

6. Turmeric may help prevent cancer

Curcumin may lead to several changes on the molecular level that may help prevent and perhaps even treat cancer. Studies have shown that it can:

- contribute to the death of cancer cells
- reduce angiogenesis (growth of new blood vessels in tumors)
- reduce metastasis (spread of cancer)

7. Curcumin may be useful in treating Alzheimer's disease

Alzheimer's disease is the most common form of dementia and may contribute to up 70% of dementia cases. Curcumin can cross the blood-brain barrier and has been shown to lead to various improvements in the pathological process of Alzheimer's disease.

8. Curcumin has benefits against depression

A study in 60 people with depression showed that curcumin was as effective as Prozac in alleviating symptoms of the condition.

10. Curcumin may help delay aging and fight age-related chronic disease

Due to its many positive health effects, such as the potential to prevent heart disease, Alzheimer's, and cancer, curcumin may aid longevity.

In summary

Curcumin has many scientifically proven health benefits, such as support overall reproductive health, the potential to improve heart health and prevent Alzheimer's and cancer. It's a potent anti-inflammatory and antioxidant. It may also help improve symptoms of depression and arthritis. Piperine increases curcumin's scarce bioavailability by as much as 2,000%.

Proven Health Benefits of Boswellia serrata

Boswellia, also known as Indian frankincense, is an herbal extract taken from the *Boswellia serrata* tree. The resin made from boswellia extract has been used for centuries in Asian and African alternative medicine. It's believed to treat chronic inflammatory illnesses as well as a number of other health conditions. Studies show that boswellia may reduce inflammation and may be useful in treating the following conditions:

- osteoarthritis (OA)
- rheumatoid arthritis (RA)
- asthma
- inflammatory bowel disease (IBD)

Because boswellia is an effective anti-inflammatory, it can be an effective painkiller and may prevent the loss of cartilage.

How boswellia works

Some research shows that boswellic acid can prevent the formation of leukotrienes in the body. Leukotrienes are molecules that have been identified as a cause of inflammation. They may trigger asthma symptoms. Four acids in boswellia resin contribute to the herb's anti-inflammatory properties. These acids inhibit 5-lipoxygenase (5-LO), an enzyme that produces leukotriene. Acetyl-11-keto- β -boswellic acid (AKBA) is thought to be the most powerful of the four boswellic acids.

On Osteoarthritis

Many studies of boswellia's effect on OA have found that it's effective in treating OA pain and inflammation. One 2003 published study reported that all 30 people with OA knee pain who received boswellia reported a decrease in knee pain. They also reported an increase in knee flexion and how far they could walk. Newer studies support the continued use of boswellia for OA. Increasing the dosage of enriched boswellia extracts led to an increase in physical ability. OA knee pain decreased after 90 days with the boswellia product, compared to a lesser dosage and placebo. It also helped reduce the levels of a cartilage-degrading enzyme.

On Rheumatoid arthritis

A study published in the *Journal of Rheumatology* found that boswellia helps to reduce RA joint swelling. Some research suggests that boswellia may interfere with the autoimmune process, which would make it an effective therapy for RA. Further research supports the effective anti-inflammatory and immune-balancing properties.

On Inflammatory Bowel Disease

Due to the herb's anti-inflammatory properties, boswellia may be effective in treating inflammatory bowel diseases such as Crohn's disease and ulcerative colitis (UC). A 2001 study compared a boswellia extract to the effect of an anti-inflammatory prescription drug. The study reported that the boswellia extract may be effective in treating Crohn's disease. Several studies reported the herb could be effective in treating ulcerative colitis (UC) as well. We're just beginning to understand how the anti-inflammatory and immune-balancing effects of boswellia can improve the health of an inflamed bowel.

On asthma

Boswellia can play a role in reducing leukotrienes, which causes bronchial muscles to contract. A 1998 study of the herb's effect on bronchial asthma found that people who took boswellia experienced decreased asthma symptoms and indicators of the disease. This shows the herb could play an important role in treating bronchial asthma. Continued research highlights the positive immune-balancing properties of boswellia in alleviating the overreaction to environmental allergens in asthma.

On cancer

Boswellic acids act in a number of ways that may inhibit cancer growth. Boswellic acids have been shown to prevent certain potential mutagens from negatively affecting DNA. Studies have also found that boswellia extract may have a positive role in reducing breast cancer, leukemia and brain cancer. Studies continue on the anti-cancer preventing activity of boswellia. As with all complimentary products no claims can be made for therapeutic efficacy for patients suffering from these conditions and their use in those being treated with allopathic medical therapy should be discussed with the treating physician.

Side effects

Boswellia may stimulate blood flow in the uterus and pelvis. Therefore it can accelerate menstrual flow.

Other possible side effects of boswellia include:

- nausea
- acid reflux
- diarrhea
- skin rashes

Boswellia extract may also interact with medications, including ibuprofen, aspirin, and other non-steroidal anti-inflammatory drugs (NSAIDs).

elevate

**Natural food supplement with
D3 | B6 | B9 | B12**

**To maintain the normal condition of bones,
muscles and the normal functioning of the
immune system**

DIRECTIONS: Take 1 dispersible tablet per day or as directed by a healthcare professional. Let the tablet melt in the mouth for a few minutes, like candy. Absorption occurs through the oral mucosa.

Nutrition information	per 1 tablet	RDA
Vitamin D3 (as cholecalciferol)	2000 IU (50µg)	1000%
Vitamin B6 (as Pyridoxine HCL)	1,4mg	100%
Vitamin B9 (as Folic acid)	800 µg	400%
Vitamin B12 (as methylcobalamin)	1000 µg	40000%



Studies have revealed a clear link between nutrition and fertility, indicating that couples trying to conceive should pay particular attention to vitamin B9 (folic acid), vitamin B12, vitamin B6 and vitamin D3.

B6 How can vitamin B6 boost fertility?

1. Balances Estrogen and Progesterone

Vitamin B6 plays a key role in maintaining hormone balance. Adequate levels of vitamin B6 can balance estrogen and progesterone, which are the two key factors in reproduction.

2. Increases cervical mucus

Cervical mucus is extremely important as it helps in the easy transfer of the sperm to the egg. In addition, it nourishes and protects the egg and sperm. Vitamin B6 helps create cervical mucus.

3. Strengthens the Luteal Phase

Vitamin B6 is known to enhance the luteal phase. This means it makes the uterus more receptive to pregnancy factors. Adequate amounts of vitamin B6 in the body can create hormones that make the lining of the uterus stronger and increase progesterone levels, thus increasing your chances of conception.

4. Restores libido

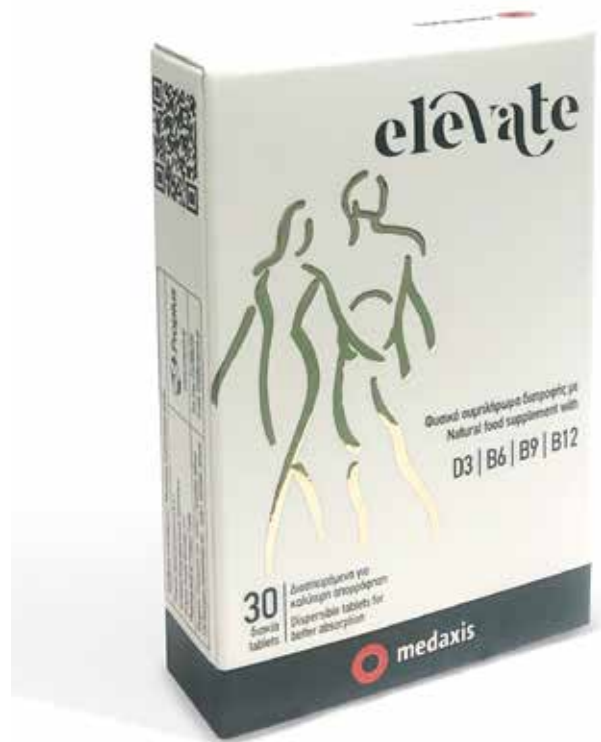
Vitamin B6 can also increase or restore libido or sex drive. This is due to the increase in the hormone progesterone.

Vitamin B6 and sperm

Studies have shown that vitamin B6 levels affect sperm quality and other sperm parameters. Studies have also shown that vitamin B6 deficiency can alter the function of the gonads, as vitamin B6 is involved in the synthesis of testosterone.

B9 Folic acid and male fertility

Before we have an embryo, we need an egg and a sperm. While women are born with all the eggs they will ever have, a man's body creates sperm on a daily basis. In fact, 1,500 new sperm are "born" every



second. The process from germ cell to sperm takes about 60 days. Folic acid is an essential nutrient when it comes to cell division and DNA synthesis.

Folic acid levels measured in semen have been correlated with sperm count and health. One study found that low sperm folate levels were associated with poor sperm DNA stability.

Folic acid can additionally help with erectile dysfunction and can boost sperm count. Studies have shown that folic acid supplementation improves sperm parameters.

Folic acid and female fertility

Women who do not get enough folic acid in their diet are at greater risk of having a baby with neural tube defects (NTDs). When we consider how a baby starts - a single cell that divides on and on - it makes sense that folic acid could help ensure cell division and therefore fetal development progresses normally. Neural tube defects include spina bifida, anencephaly, and encephalocele. Neural tube defects (NTDs) occur in 1.4 to 2 per 1000 pregnancies and are second only to cardiac defects as the most common congenital malformations worldwide. At best, these birth defects can lead to lifelong disability and at worst, they can lead to premature death.

Folic acid supplementation that begins before conception and continues into early pregnancy has been found to reduce the occurrence of these birth defects by up to 60%.

Other potential benefits of folic acid supplementation include:

- Lower risk of congenital heart defects
- Lower risk of premature birth and lower risk of low birth weight babies
- Increased progesterone levels and lower risk of irregular ovulation

Couples trying to conceive should make sure they get enough folic acid.

B12 Vitamin B12 and Fertility

Low levels of vitamin B12 can affect fertility in both men and women. Considering that approximately 15-40% of the population is deficient in vitamin B12, this is not a vitamin we want to ignore.

Vitamin B12 deficiency and fertility

Vitamin B12 is a water-soluble vitamin that supports brain and nervous system function, body cell metabolism, production of genetic components in egg and sperm, sperm count, and more. When the levels become deficient, there is a feeling of weakness, fatigue and lack of concentration. Other symptoms include anemia and infertility.

Vitamin B12 and Male Fertility

It has been found that a vitamin B12 deficiency can lead to:

- Low sperm motility
- Loss of libido
- Low sperm count
- DNA damage in sperm
- Premature ejaculation

Vitamin B12 and Female Fertility

If a woman is trying to conceive with a B12 deficiency, chances are she will experience some level of difficulty. Unfortunately, even if a woman does become pregnant, vitamin B12 deficiency can lead to pregnancy complications such as low birth weight, miscarriages, and neural tube defects.

If you are currently having difficulty conceiving and B12 deficiency is a concern, B12 deficiency can affect your reproductive health in the following ways:

- Abnormal ovulation
- Disturbance of normal cell division
- Disorder of egg development
- Difficulty of implantation and complications

Does B12 Make You Fertile?

In addition to supporting reproductive health, research shows that higher levels of B12, as well as folic acid, may enhance fertility in women undergoing infertility treatment.

If you eat a vegetarian or vegan diet, have a gastrointestinal condition such as Crohn's disease, or have a known genetic mutation (ie CBS or MTRR), you should consider supplementation. In one review, a total of 40 studies of vitamin B12 in vegetarians found that up to 86.5 percent of vegetarian adults had low levels of vitamin B12.

Vitamin D

Vitamin D has many positive biological effects in the body, including reducing inflammation, boosting the immune system, increasing nutrient absorption, and is associated with positive reproductive metrics and outcomes.

People are considered to be at risk of vitamin D deficiency if their serum 25(OH)D concentration is less than 30 nmol/L.

During an initial fertility screening, a woman's vitamin D level is usually checked. A vitamin D test is an essential part of female fertility testing. Men can also be tested for vitamin D.

Studies show and many doctors recommend that women who are trying to conceive, are pregnant, or are breastfeeding should consume higher levels of vitamin D (between 50-100 mcg per day). This is largely due to the fact that vitamin D levels have been shown to be positively associated with many parameters of fertility and pregnancy.

How low vitamin D affects female fertility

Vitamin D levels have been positively associated with many aspects of female fertility and pregnancy outcomes.

Vitamin D supplementation is an effective way to increase vitamin D levels and has been shown to support female fertility, embryo quality and pregnancy outcomes when deficient.

Vitamin D and male fertility

The simplest way to measure a man's fertility is through sperm analysis. A sperm analysis measures many different parameters of sperm to determine its overall quality.

Research has shown that low vitamin D status has been associated with decreased measurements of several sperm parameters, including sperm count and motility. This is likely caused by the effect of vitamin D on the testes. Vitamin D affects hormone production and spermatogenesis (sperm development).

On the other hand, high levels of vitamin D have been linked to greater sperm motility. In addition to supporting sperm motility, vitamin D has also been shown to have a positive effect on other aspects of sperm quality.

One way vitamin D can support healthy sperm is through aiding in testosterone production and supporting healthy testosterone levels. In one study, men were given vitamin D or a placebo. The placebo group saw no change in mean testosterone levels from their baseline to post-supplementation results. The vitamin D supplementation group saw a significant increase in total testosterone levels from 10.3 nmol/l to 13.4 nmol/m, bioactive testosterone levels from 5.21 nmol/l to 6.25 nmol/l, and free testosterone levels from 0.222 nmol/l to 0.222 nmol/l.

Mean circulating 25(OH)D concentrations were also significantly increased by 53.5 nmol/l in the vitamin D group. This study showed that vitamin D supplementation could help increase testosterone levels by up to 25% in a time.

Vitamin D and Pregnancy

Babies get vitamin D from their mothers both during pregnancy and breastfeeding. Maternal vitamin D levels are associated with a variety of childhood health outcomes. Therefore, it is important to ensure that the mother's vitamin D levels are adequate both during pregnancy and breastfeeding.

In a longitudinal study, researchers demonstrated that vitamin D supplements can help support healthy vitamin D levels for pregnant women.

In another study, researchers measured the safety of vitamin D supplements during pregnancy. For the 350 women in pregnancy, no adverse effects were attributed to vitamin D supplementation. The researchers conclude that vitamin D supplementation is safe and effective for women throughout pregnancy.

Most fertility supplements only contain about 400 IU of vitamin D. While this may be enough for some women, it may not be enough for others to ensure their vitamin D levels are in a healthy range. Research shows that getting at least 2000 IU of vitamin D per day is not only safe, but recommended for women, especially those who are or want to become pregnant.

Protect your reproductive health and increase your chances of getting pregnant

If you're deficient in vitamin B12, it's important to make sure your needs are also met in other B vitamins, including vitamin B6 and folic acid. By addressing your diet and participating in a more active lifestyle, you will also be able to achieve a healthy weight. Research shows that both men and women whose Body Mass Index (BMI) is in either the overweight or obese category have a very difficult time getting pregnant.

Stress is another key variable to consider. In one study, women whose saliva had high levels of alpha-amylase, an enzyme that indicates stress, took 29 percent longer to get pregnant compared to those with normal levels of this enzyme.

The takeaway here is to never underestimate the small steps you take toward optimal reproductive health. Although reproduction is a complex process with many complex variables, addressing your nutritional needs and general lifestyle is a great place to start.

If you are trying to increase your intake of vitamin B12, other important B vitamins, as well as vitamin D, Elevate can greatly support your efforts.

Acerola berry extract

Organic acerola berry extract which yields 85 mg of natural vitamin C. For energy, protection from oxidative stress, normal immune function, vascular protection and normal collagen formation.

INGREDIENTS: standardized organic extract acerola cherries (*Malpighia glabra* L.), organic maltodextrin, stabilizer (capsule shell) hydroxypropyl methylcellulose

OTHER INGREDIENTS: extract carrier: Starch from cassava - capsule shell material: vegetable cellulose

DOSAGE: 1 capsule per day.



Nutrition information	per 1 capsule	RDA
Acerola Berry Extract (yielding at least 17% vitamin C as ascorbic acid)	500 mg 85 mg	***** 106,25%

VALUABLE CONTRIBUTION TO OVERALL HEALTH

• Enhances vision

Due to its high level of vitamin C content, it helps improve our vision. It also helps in avoiding retinal hemorrhage (bleeding in the eye) as well as in the formation of cataracts.

• Provides essential nutrients

In addition to vitamins C and A, acerola is also packed with many other nutrients that are essential for maintaining the normal functioning of the organs in our body. These include B vitamins (B1 or thiamine, B2 or riboflavin, B3 or niacin, B5 or pantothenic acid, B9 or folic acid etc.) minerals and electrolytes (iron, magnesium, potassium, calcium, zinc, copper, phosphorus etc.), malic acid, sugars (sucrose, fructose, dextrose etc.), dietary fibers, proteins, lipids, fatty acids

• Rich in antioxidants

Acerola is full of polyphenolic compounds anthocyanidins, such as ferulic acid, quercetin, tannins, chlorogenic acid, cyanidin-3-glucoside and many others, which offer excellent antioxidant properties. In addition, vitamins A and C act as natural antioxidants. All this helps prevent infections and cellular aging by making the body free of harmful Free Radicals.

• It strengthens immunity

Antioxidants, especially phytochemicals, as well as vitamin C, which are present in the berry, play a key role in strengthening our immune system. It helps us stay away from inflammation, degenerative diseases, various types of cancer, etc.



It has been reported that acerola vitamin C is better absorbed by humans than synthetic ascorbic acid. Acerola is one of the few fruits, which apart from the higher content of ascorbic acid, also contains a host of other phytonutrients such as phenolics, flavonoids, anthocyanins and carotenoids in reasonable amounts. The fruit also contains pro-vitamin A, vitamins B1 and B2, niacin, albumin, iron, phosphorus and calcium.

In a 2011 study published in "Food Chemistry", scientists compared the vitamin content C in various fruits. Guess who the winner was? Acerola cherry, especially when organically grown. It is used worldwide as an effective treatment for the common cold, hay fever, depression, gum infection, tooth decay and many other health issues.

- **Increases collagen production**

Studies have shown that the vitamin C content of acerola can produce enough collagen in our body, something which is essential for anti-aging

- **Improves metabolism**

As stated earlier, the acerola berry (includes a good amount of B vitamins, which help our metabolism and makes the digestion of carbohydrates, proteins and fats much easier.

- **Reduces gastrointestinal problems**

The high fiber content of the berry can keep our entire gastrointestinal system healthy facilitating bowel movements and cleansing of intestines. Therefore, it faces digestive problems such as cleansing, constipation, diarrhea and dysentery among others.

- **Better heart health**

Acerola is able to maintain a powerful cardiovascular system by regulating blood pressure level and normalizing heart rate. The extract of the berry is also known to postpone coronary artery damage, atherosclerosis, thrombosis, etc. It lowers sugar levels. Acerola berries, as already stated, contain a lot of antioxidants, including chlorogenic acid.

When taken in the form of juice or concentrate extract, acerola provides benefits including control of glucose levels, thus reducing the risks of hyperglycemia, diabetes and type 2 diabetes.

- **Fights oxidative stress**

Acerola extract is very useful in fighting "Oxidative Stress", which in return prevents premature aging.

- **Prevents lung cancer**

The acerola fruit has shown its effectiveness in the treatment of lung cancer by slowing and stopping the abnormal growth of cancer cells in the lungs.

- **Promotes weight loss**

It enhances metabolism and provides the required nutrition to our cells, which are essential for controlling obesity and achieving optimal health. So, include acerola in your regular diet today and give yourself a major boost in health!

- **Allergies**

Many studies have shown that vitamin C reduces levels of histamine, a chemical that is responsible for allergic symptoms.

As an excellent and safe source of vitamin C and indeed in a completely natural form acerola can provide the body to some extent with the benefits of vitamin C:

EFSA 2009· 7(9):1226 & 2010·8(10):1815

In summary, Acerola may support:

1. **maintenance of normal function of the immune system**
2. **normal formation of collagen and normal blood vessel function**
3. **normal nervous system immune**
4. **in the normal Central Nervous System**
5. **cell protection from the oxidative stress**



Acetyl L-Carnitine (ALCAR)

Dietary supplement with the acetylated, bio-active form of carnitine.

Natural - herbal - vegan & vegetarian suitable. Product of European specifications

INGREDIENTS: Acetylcarnitine (82.6%), vegetable cellulose, antioxidant: ascorbyl palmitate (fat-soluble form of Vitamin C)

DIRECTIONS: Take up to 3 capsules a day day.



Nutrition information	per 3 capsules	RDA
Acetyl-L-Carnitin	1500 mg	***



Acetyl-L-carnitine (ALCAR) is the biologically active form of L-carnitine and has been shown to protect cells in the entire body from age-related degeneration. The research shows that acetyl-L-carnitine is critical for maintaining youthful cell function in the brain, the heart, liver, nervous and muscular systems and throughout the body.

ENERGY PRODUCTION - DETOXIFICATION

Transports long-chain fatty acids to mitochondria, so that they can be oxidized and produce energy. It also transports out the toxic substances that accumulate in the mitochondria. Given these basic functions, it is concentrated in tissues such as skeletal muscles and the heart muscle that use fatty acids as "Fuel". ALCAR can give you energy and reduce fatigue. ALCAR helps your mitochondria burn fat and create more energy.

POWERFUL ANTI-AGING – ANTIOXIDANT

Glycosylation is a term used to describe the binding of sugars to proteins which in turn form dysfunctional structures in the body. Studies show that acetyl-L-carnitine suppresses glycosylation by 42%, something that simple carnitine cannot achieve. Decreasing glycosylation puts a brake on deterioration, aging and oxidative stress. The most important antiaging action of acetyl-L-carnitine, however, is to work with the coenzyme Q10 and alpha lipoic acid to maintain the function of mitochondria. When the function of the mitochondria decreases, the degenerative disease becomes an inevitable consequence.

Protects the myocardium from fatigue, and gives energy to the heart! Supplementation with the acetylated form of carnitine in people suffering from acute myocardial infarction reduced all-cause mortality by 27%, ventricular arrhythmias by 65%, and angina by 40% , as shown in clinical studies. The cardiac mitochondrial content of cardiolipin decreases significantly with advancing age, and this implies risks of serious cardiac events. Nutritional support with acetylcarnitine reverses the decrease in the content of age-related cardiolipin.

This recently recognized mechanism helps explain why acetyl-L-carnitine is so beneficial as a natural treatment in congestive heart failure. Carnitine in general, and particularly so in its acetyl form as it is better bioavailable, can help people suffering from heart attacks-myocardial infarction, heart failure, angina pectoris and any other diseases resulting from insufficient blood supply to the heart (ischemia).

MUSCLE FATIGUE - MUSCLE PAIN - FIBROMYALGIA

ALCAR reduces the fatigue in both young and older people through a mechanism of higher energy production in cells. It has a significant neuroprotective effect against degeneration of injured motor neurons. These findings have practical applications for those who have suffered loss of nerve function. At the same time, it supports muscle stimulation through its energy production mechanism. With these two actions, acetyl-L-carnitine is used for muscle-related fatigue weakness in multiple sclerosis. In people with fibromyalgia and multiple sclerosis, acetylcarnitine provides proven relief from pain and dyskinesia and positively supports mental and overall health

INTERMITTENT CLAUDICATION

Acetylcarnitine can improve the performance of skeletal muscles in the legs. In a clinical trial, in people with moderate to severe intermittent claudication ALCAR significantly improved walking distance and ease of movement.

NEURODEVELOPMENTAL DISEASES

ALCAR prevents and reverses neuro defoliation, creating a shield against neurodegenerative diseases (Alzheimer's, Parkinson's, multiple sclerosis). Acetyl-L-Carnitine is a highly bioavailable molecule, penetrates the brain barrier better than carnitine and is easily converted into carnitine as needed. It has beneficial effects in preventing brain function deterioration which usually occurs with aging, and exhibits neuroprotective effects of benefit to the hippocampus, the prefrontal cortex, and the black substance.

These benefits include antioxidant action, improved mitochondrial energy, stabilization of intracellular membranes and cholinergic neurotransmission and repair of neuronal damage. It can also promote synthesis and release of acetylcholine and other neurotransmitters while at the same time it stimulates membrane phospholipid synthesis of brain cellular structures.

BRAIN FUNCTION

ALCAR is an anti aging, nootropic, meaning that it helps your brain perform better. The acetyl moiety allows it to cross into the blood barrier, and to reach the brain and neurons where it can improve mood, learning and memory while at the same time it creates an environment of renewal and protection in brain cells. Because levels of acetyl-L-carnitine decrease with age, it is thought that taking acetyl-L- carnitine can help slow down Alzheimer's and dementia in the elderly, improving memory and cognitive ability. Other recent studies show that acetyl-L-carnitine protects brain cells from glutamic acid and ammonia-induced toxicity.

ALZHEIMER'S DISEASE

Acetyl-L-carnitine can slow down progression of the disease, improve memory and improve certain measures of mental function and behavior in people with Alzheimer's with the improvement of blood flow in the cerebral vessels.

INABILITY TO CONCENTRATE DUE TO CHEMICAL SUBSTANCE USE AND DEPENDENCE

Taking acetyl-L-carnitine appears to improve memory in people aged 30-60, in whom alcohol use has caused long-term problems.

DIABETES - INSULIN RESISTANCE

ALCAR improves insulin sensitivity in humans that do not process glucose satisfactorily. A recent study showed that carnitine deficiency was linked to the pathogenesis of diabetic neuropathy. The researchers came to the conclusion that acetyl-L-carnitine has great potential as a natural treatment in this type of neuropathy.

FAT BURNING & WEIGHT LOSS natural supplemental treatment

Stored body fat must be broken down into fatty acids and be sent to the mitochondria. Mitochondria convert these fatty acids into ATP (energy) that fuels your cells. Basically, carnitine attaches itself to fatty acids and helps them transport to your mitochondria. In other words, you need carnitine to metabolize fat.

CATARACT

Age progression makes cataract formation inevitable. Acetyl-L-carnitine (but not L-carnitine) can prevent the cataract by blocking glycosylation-induced protein damage to the eye lens.

MALE FERTILITY

Studies in recent years have proven that in combination with CoQ10, ALCAR significantly contributes to mobility and strengthening of the sperm in cases of infertility. It has also shown good results in therapeutic regimens for infertility and andropause-related problems. Taking acetyl-L-carnitine seems to help symptoms related to the hormonal reduction in men. ALCAR improves sexual dysfunction, depression and fatigue and improves distribution and better use of the existing testosterone. Also, it increases sperm movement, improves the number and movement of spermatozoa.

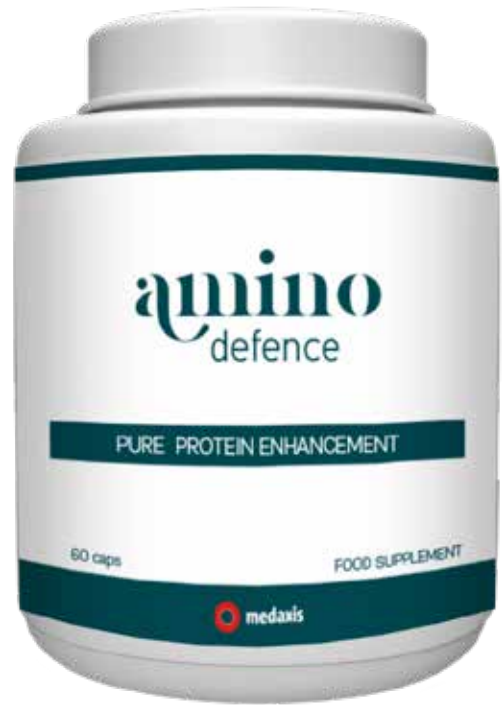
Amino defence

Food supplement with all the essential amino acids in powder form.

Yields 90.6% naturally occurring amino acids. The amino acids are derived from a fermentation process with cornstarch as a raw material and/or glucose

INACTIVE INGREDIENTS: 9.06% (1g) natural fragrance, 0.36% (0.04g) stevia extract

DIRECTIONS: Take 1-2 scoops daily (10-20g) dissolved in water or juice with empty Stomach.



Nutrition information	1scoop - 10gr	RDA
L- LEUCINE	2045,71 mg	**
L- ISOLEUCINE	1071,79 mg	**
L- VALINE	1168,74 mg	**
L- LYSINE as monohydrochloride	1363,53 mg	**
L- THREONINE	682,21 mg	**
L- PHENYLALANINE	633,29 mg	**
L- METHIONINE	487,42 mg	**
L- GLUTAMINE	584,37 mg	**
L- TRYPTOPHAN	584,37 mg	**
L- HISTIDINE	438,50 mg	**
as hydrochloride monohydrate		

PROTEIN DEFICIENCY:

- Attention Deficit Hyperactivity Disorder (ADHD)
- Autism spectrum disorders
- Depression and stress
- Epileptic seizures
- Chronic fatigue syndrome
- Insomnia
- Cardiovascular diseases
- Hypertension
- Digestive disorders
- Infertility (in men and women)
- Nutritional deficiencies
- Rheumatoid arthritis and other autoimmune diseases

WHY ARE ADEQUATE PROTEIN LEVELS SO IMPORTANT?

Proteins are found throughout the body, in muscle, organs, blood, bones, hair and skin. Literally everywhere!!! The human body has the ability to store a small amount of protein to cover its basic requirements. However, these needs increase significantly in specific circumstances such as during growth and pregnancy. If we take into account the additional decrease in protein absorption with age, it is understood that in emergencies (for example in illness, overwork, cancer, muscle strain, aging, autoimmune disorders etc) protein intake through diet may not be sufficient. And without protein we can't cope! Protein is essential for a healthy body as it is not only part of the structure but also participates in important chemical reactions that take place in the body. Inadequate dietary protein intake can have far-reaching consequences. Inadequate protein intake causes the body to break down tissue, according to the School Harvard School of Public Health. In addition to muscle mass loss, protein malnutrition can reduce immunity, weaken the heart and respiratory system and stunt growth, reports www.EveryDiet.com



REASONS THAT LEAD TO PROTEIN DEFICIENCY

Mammals feeding on foods completely different to the biology of their body highly processed foods, poor food digestion, preservatives, stress, deficiencies in vitamins necessary for digestion and the transport of proteins, drugs are some of the reasons that contribute to chronic amino acid deficiency in our body.

SHOULD WE TAKE PROTEIN OR AMINO ACIDS?

The building blocks of proteins are amino acids. In total there are 22 different amino acids of which 9 are considered essential, as they cannot be synthesized from other molecules in our bodies and must be supplied via the diet. The essential amino acids are glycine, valine, isoleucine, leucine, threonine, methionine, lysine, glutamic acid, phenylalanine and tryptophan as the building blocks for proteins.

In other words, we would say that the body has no need for specific proteins but for specific amino acids. Only adequate intake of these essential amino acids will ensure the ability of the body to compose and maintain protein adequacy. Disturbance of the balance of amino acids in the body can often be the first indication of many diseases and is a common finding in people with poor nutrition. But because stress, age, the presence of inflammation and various other factors including exercise, can affect the levels of amino acids, people with even a good nutritional plan, may also manifest amino acid deficiencies.

HOW DO AMINO ACIDS BENEFIT US?

Restore the muscular system to youthful levels of strength, endurance and performance. No more permanent feeling of weakness, fatigue. Amino acids have demonstrated the ability to prevent the mental fatigue that occurs when the levels amino acid tryptophan are LOW.

They reduce muscle catabolism.

Sometimes, muscles are used for fuel because the process of breaking down the muscle produces energy. This prevents muscle growth and muscle tissue is significantly reduced. Three essential amino acids (leucine, valine, isoleucine) are metabolized directly in muscles and are used as a source of energy by muscle fibers.

Amino acid supplements change the way which the body uses its main fuel sources: carbohydrates and fat. Glycogen, a storage form of sugar, is quickly exhausted and thereafter energy demands have to be met by metabolism of either fat or protein. A problem that leads to exhaustion and sharp decline in performance in daily activities. Amino acids reduce recovery time in cases of injuries or inflammations.

Amino acids are part of the structure of proteins that are present in all organs and membranes of the body.

They improve and maintain enzyme production (not only digestive, but all enzymes in the body). Enzymes are proteins that catalyze most biochemical reactions that occur in the body. Without enzymes no metabolic process can be completed. They enhance the production of neurotransmitters, and so improve brain function and performance and may help in combating depression and anxiety.

They strengthen the immune system

by enhancing the production of antibodies which are proteins that recognize antigens and bind to and neutralize them.

They increase fat burning.

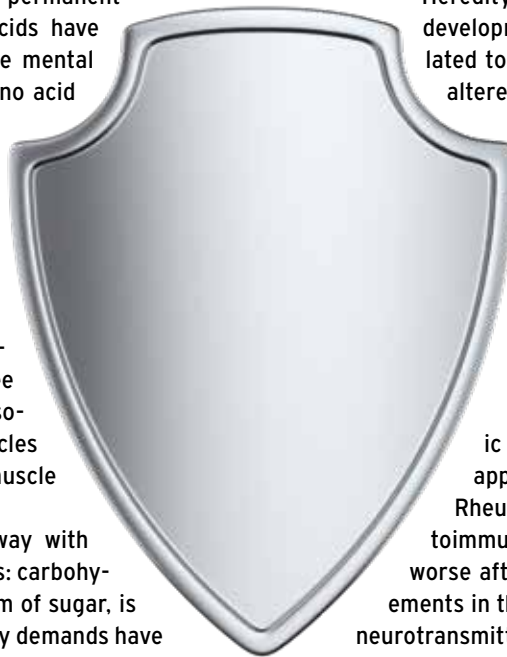
How do you think amino acids protect glycogen? By promoting the fat burning process. For those who are trying to lose fat, amino acids help the body to "pull" the fuel from the fat.

Autoimmune disorders and amino acid deficiency

Heredity is involved in less than 20% of autoimmune development disease. It i the remaining 80% are related to allergies and metabolic factors that can be altered. Many of these are linked to lifestyle, body and diet.

Normal fluctuations in food intake cause periodic activation of the mTOR mechanism (on- off) and this promotes the smooth functioning of the immune system. Chronic continuous activation of mTOR causes metabolic dysregulation, increases vulnerability to infections and development of autoimmune and allergic diseases.

Based on well-documented scientific studies as well as individual observations it appears that many autoimmune diseases such as Rheumatoid arthritis, Sjogren's syndrome and autoimmune diseases of the thyroid gland start or get worse after stress. And amino acids are necessary elements in the regulation of stress as well as endogenous neurotransmitter production.



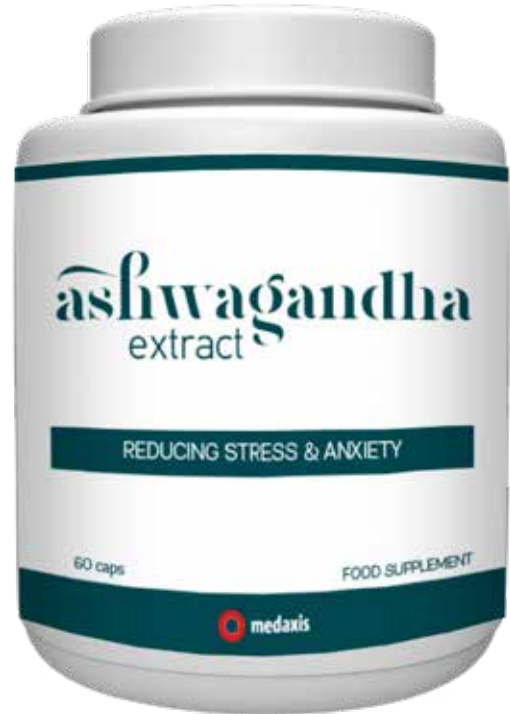
Ashwagandha extract

Meet the best ashwagandha extract in the market and benefit from countless and its supporting actions of its beneficial effects.

INGREDIENTS: standardized ashwagandha root extract (8:1) (withania somnifera) stabilized to yield at least 7% withanolides. Shell component capsule vegetable cellulose, formulation up to 7% with nitrogen radicals.

DOES NOT CONTAIN: fillers, antiseptics and dyes. Suitable for vegetarians and vegans.

DIRECTIONS: Take 1 capsule daily on an empty stomach stomach.



Nutrition information	1 caps	RDA
Ashwagandha root extract 8:1	230 mg	**
Which yields withanolides 7%	16 mg	**



Ashwagandha, a well-known Ayurvedic herbal alternative medicine has in recent years attracted the interest of the scientific community, mainly for its excellent actions as an adaptogen. Ashwagandha is also enlisted as an important herb in Unani and in traditional Chinese medical systems.

Herbs characterized as adaptogens have the ability to support the body as an entirety, both the physical body but also the mind, in trying to avoid the effects of daily stress. Stress causes real and meaningful changes in the body, such as neurological, endocrine and immune-related.

Adaptogens have stimulant properties that help neutralize these harmful effects. It is essentially a group of herbs or herbal extracts of medicinal action which you may receive for a long period of time in order to help your body to adapt to stress and fatigue.

THE ACTIVE INGREDIENTS OF ASHWAGANDHA:

The active substances of the plant, withanolides, mimic in their action that of the naturally occurring steroid hormones. They act preventively and strengthen the body's resistance in cases of chronic diseases such as rheumatoid arthritis and lupus erythematosus.

ITS MAIN ACTION IS THE REGULATION OF STRESS

Cortisol is known as the "stress hormone" because your adrenal glands release it in response to stress. When ashwagandha enters the body, it automatically decreases cortisol levels; the so-called stress hormone and thyroid hormones are balanced. In a study of adults with chronic stress, those who supplemented with ashwagandha had significantly greater reductions in cortisol compared to the control group.

Those who received the highest dose experienced a reduction of 30% on average. Researchers report that withanolides block the stress pathway in the brain by regulating chemical signaling in the nervous system. The results of our research show that the basic components of ashwagandha may play an important role in the development of treatments for neurological disorders associated with GABAergic signaling dysfunction, such as general anxiety disorders, sleep disorders, muscle convulsions and seizures. Additionally, the differential activation of GABA receptor subtypes elucidates a possible mechanism by which ashwagandha may achieve these adaptive properties.

ASHWAGANDHA AND MALE FERTILITY

Studies have confirmed encouraging evidence regarding the use of Ashwagandha in oligospermia which leads to infertility. The most consistent positive finding was that the reduced male fertility was improved by the extract of Ashwagandha root as evidenced by the increased concentration of sperm, the volume of ejaculation, motile sperm count and increased levels of serum testosterone. Ashwagandha therefore improves the functioning

of the reproductive system by promoting a healthy sexual and reproductive balance and increases the sperm count and balances hormones in men during andropause.

IMPROVEMENT OF CARDIORESPIRATORY ENDURANCE

Ashwagandha was used for improved muscular strength, fatigue resistance, exercise recovery and as labor assistance for many years. In a study, oral administration of a high concentration root extract of Ashwagandha led to increased VO₂ max, improved cardiorespiratory endurance.

The findings of these studies show that Ashwagandha root extract improves cardiovascular dynamics by increasing maximal levels of VO₂ thereby increasing cardiorespiratory endurance and also improves quality of life. VO₂max reflects the ability of the respiratory and cardiovascular system to transport oxygen to the muscles and can be characterized as an aerobic capacity index.

STIMULATION OF BRAIN FUNCTION

Ashwagandha may be effective in enhancing both immediate and general memory in people with mild cognitive impairment as well as in improvement of executive function, attention and the speed of information processing.

- Improves brain and nervous system function as well as memory
- Improves the function of recognition
- It is useful in neurodegenerative diseases, such as Parkinson's disease and Alzheimer's.
- Because it has a GABA-mimetic effect it can promote the formation of dendrites
- Ashwagandha delays, inhibits, reverses or improves nerve atrophy and loss of synapses

Any form of stress has detrimental effects on the brain and nervous system. According to recent research Ashwagandha relieves stress, protects the brain from cell degeneration, which can lead to neurodegenerative diseases such as Alzheimer's and Parkinson's disease. This is due to the fact that Ashwagandha contains powerful antioxidants that destroy free radicals that cause aging of brain cells. According to research the active substances in Ashwagandha help the growth of new neurons, the reduction of plaque accumulation and beta-amyloid burden, which is the main cause for the development of Alzheimer's. Ashwagandha improved both immediate and general memory effectively in people with mild cognitive impairment. It also improves concentration, information processing speed and mental abilities.



ASHWAGANDHA AND THYROID

The use of Ashwagandha extracts can be beneficial for the normalization of thyroid indicators in subclinical hypothyroidism. It is proven that Ashwagandha helps in the case of an under-reactive thyroid in people diagnosed with Hashimoto's disease. According to studies in people with an under-reactive thyroid, the group that received 600 milligrams of Ashwagandha root extract daily improved TSH and thyroxine (T₄) hormone levels.

At the same time, according to other studies, ashwagandha has thyroid boosting properties. In a study of patients with bipolar disorder to determine the effects of Ashwagandha on cognitive function some subjects showed an increase of T₄ levels during the study period of 8 weeks. Although this was not the original purpose of the study a number of biochemical parameters were monitored and these observations provide further evidence that ashwagandha is able to stimulate the release of thyroid hormone. Since ashwagandha improves thyroid function, it may be possibly contraindicated in people with hyperthyroidism, such as those who suffer from Graves' disease.

ASHWAGANDHA AND DIABETES

In several studies, Ashwagandha has been proven to lower blood sugar levels. Also, quite a few human studies have confirmed its ability to lower blood sugar levels in both healthy and in diabetics.

In addition, in a small study in people with type 2 diabetes, supplementing with Ashwagandha for 30 days, decreased fasting blood sugar levels as effectively as with an oral administered medication. Ashwagandha may lower blood sugar levels through its effects in insulin secretion and sensitivity.

ASHWAGANDHA AND INFLAMMATION – IMMUNE SYSTEM

Human studies have found that it increases activity of natural killer cells, which are immune system cells that fight infection and help you stay healthy.

It also has proven to reduce markers of inflammation, such as C-reactive protein (CRP). This indicator is associated with increased risk of heart disease.

ASHWAGANDHA AND ADRENAL FUNCTION

According to research, Ashwagandha helps the function of the adrenal glands and relieves the "fatigue" of adrenal glands. Adrenal glands are endocrine glands that release cortisol and adrenaline in response to stress.

Astaxanthin extract

Patented astaxanthin [XANTHIN®- 60% astaxanthin extract]

WITH THE STRICTEST QUALITY STANDARDS.

INGREDIENTS: filtered water. O2B MIXTURE [natural tocopherol, spice extract and herbs]

DIRECTIONS: Take 1 capsule daily.



Nutrition information	1 caps	RDA
Astaxanthin ZANTHIN®- 60% astaxanthin extract]	4 mg	**



“YOU DON'T NEED ANOTHER ANTIOXIDANT!!! WITH ASTAXANTHIN YOU HAVE ABSOLUTE QUALITY AND AN INCOMPARABLE ANTIOXIDANT PROTECTION”

According to research, the ability of Astaxanthin to absorb free radicals turns out to be 6,000 times higher than vitamin C and 550 times higher than vitamin E.

TOP ANTIOXIDANT

Astaxanthin belongs to the carotenoid family and it is related to beta-carotene and lutein. The richest natural source of astaxanthin is the marine microalgae *Haematococcus pluvialis*, but it is also found in a lot of seafood, such as salmon, prawns, lobster and crab, which is responsible for their characteristic pink color. Studies demonstrate that the antioxidant abilities of astaxanthin exceed those of other carotenoids, such as beta-carotene, lycopene or lutein, as well as vitamin E.

Astaxanthin, in addition to possessing the highest antioxidant action (many times even that of vitamins E C,) it has the ability to recycle other antioxidants, such as vitamins C and E, lutein, beta carotene and glutathione and to enhance their action.

CLINICAL STUDIES HAVE SHOWN THAT:

REDUCES FAT, IMPROVES LIPID PROFILE, PROTECTS THE HEART

In fact, research published in the scientific review "Bioscience, Biotechnology and Biochemistry", showed that administration of astaxanthin to obese subjects who were following a weight loss program, contributed to further reduction in weight (15% more), adipose tissue (34% more), of liver triglycerides (58% more), of plasma triglycerides and total cholesterol. Astaxanthin appears to be able to improve many parameters that could be beneficial in cases of heart disease.

In doses up to 8 mg per day, it can reduce the oxidation of LDL cholesterol and prevent clogging the vessels. Astaxanthin has the property of reducing C-reactive protein, which is an important indicator of inflammation, and to reduce the risk of cardiovascular events.

IMPROVES PROSTATE HEALTH

Astaxanthin inhibits the enzyme 5- α -reductase which converts testosterone to dihydrotestosterone. It enhances sperm motility and some early clinical trials have given encouraging results about its action in male infertility.

IMPROVES COGNITIVE FUNCTION

Astaxanthin can reduce the accumulation of compounds called "phospholipid hydroperoxides" (PLOOH), which are known to accumulate aberrantly in the red blood cells of people with dementia. Astaxanthin helps maintain brain health, thanks to its anti-inflammatory and antioxidant properties. It improves cognitive and psychomotor function. The results from current scientific research confirm the neuroprotective properties of astaxanthin including anti-inflammatory, anti-apoptotic and antioxidant effects that it has, as well as the possibility of promoting or maintaining the nerve plasticity. These emergent mechanisms establish astaxanthin as a promising agent for improvement of function after stroke or from neurodegenerative disease.

There is considerable support for the idea that Astaxanthin may increase levels or promote activity of endogenous antioxidant enzymes including superoxide dismutase and catalase. This observation is related to neurodegeneration and the protection of cognitive function with age, as it is observed that the effectiveness of these molecules decreases with age.

DELAYS AGING-PROTECTS SKIN

According to multiple studies astaxanthin is proven to reduce hyperpigmentation, wrinkle formation and collagen breakdown rate. Astaxanthin improves skin elasticity and moisture content of skin cells. All these result in healthier, firm and youthful skin, with fewer wrinkles.

PROTECTS FROM EXCESSIVE RADIATION

Several studies show that astaxanthin offers natural protection from the harmful UV rays of the sun (UV), which is the number one cause of premature aging of the skin. One study showed that astax-

anthin slows down the production of the collagen degrading enzyme MMP-1 and the enzyme skin fibroblast elastase (SFE) stimulated by exposure to UVA radiation. Since these enzymes break down the skin's collagen, elastin fibers and connective tissue, the researchers hypothesized that astaxanthin might offer significant protection against loosening skin and wrinkles caused by photoaging and oxidation.

PROTECTS THE EYE AND VISION

Delays and aborts degenerative diseases of the eye, improving the blood flow in the capillaries and reducing free radicals in the environment of the eye. Clinical research has shown that it helps with diabetic retinopathy, macular degeneration, eye strain and fatigue. Astaxanthin easily crosses the tissues of the eye and exerts its effects safely and with greater power than any other carotenoid.

PROTECTS HEARING

Astaxanthin may benefit hearing by increasing levels of neurotrophin-3 (NT3), which is a protein that plays a role in the communication between the ears and the brain. Astaxanthin may thus help to prevent or reduce hearing loss that occurs with aging.



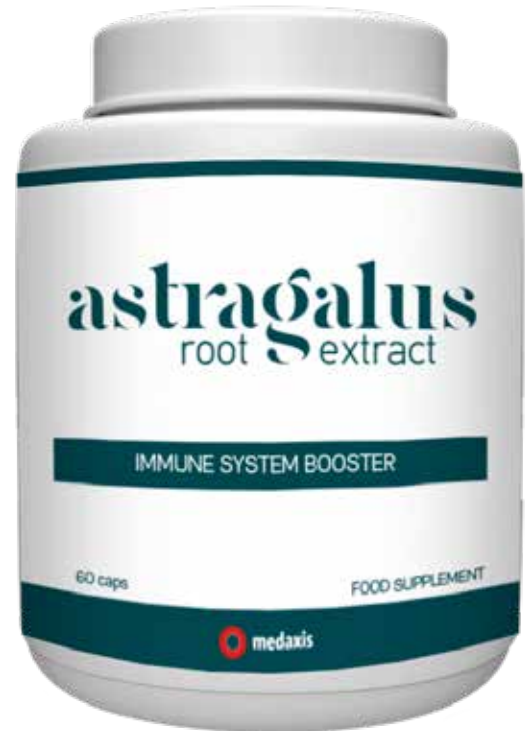
Astragalus root extract

Food supplement with strong (50:1) calendula root extract of fixed yield 5% in astragalosides.

A natural product with remarkable potential to support your health on almost every level: intellectual, emotional, physical, energy-related and spiritually.

INGREDIENTS: Astragalus root extract standardized, 5% Astragaloside IV, stabilizer -hydroxypropyl methylcellulose (ingredient capsule shell), filler - cellulose

DIRECTIONS: Take 1 capsule daily



Nutrition information	1 caps	RDA
Astragalus root extract (50: 1) which yields astragaloside IV	180 mg 9 mg	** **

ITS DISTINGUISHING PROPERTIES

Astragalus is considered by experts to belong in adaptogenic herbs, meaning it helps with protection against different disorders of the body, including the physical, mental and emotional stress. It is mainly used today as an immune system booster. This herb is considered to offer cardiotonic, hepatoprotective, antibacterial, anti-inflammatory and adaptogenic action, while it is ideal for use by people who feel sluggish, fatigued, who often get colds or are in recovery stage.

Recent research in the United States has shown that Astragalus can significantly affect the immune system of people exposed to chemotherapy or radiation, stimulating the organism and improving quality of life. A recent survey in China shows that Astragalus may provide antioxidant benefits in people with severe forms of heart disease, relieving their symptoms and improving heart function.

ITS ACTIVE INGREDIENTS

Astragaloside IV is a bioactive saponin that was first isolated from the dried roots of plants of the genus Astragalus. It has wide application prospects, especially in cardiovascular diseases, digestive diseases, cancer and other high-risk diseases.

ASTRAGALOSIDES AND TELOMERES. THE ANTI-AGING SHIELD FOR CELLS

As we age, our cells are constantly reproducing and are divided. Whenever this happens, you should keep in mind that new copies of our cellular DNA are made to be able to support new cell proper function.



Astragalus has a long history of use in traditional Chinese medicine and is used for support and strengthening of the immune system. Its root is rich in magnesium and potassium while it also contains iron, linoleic acid, manganese, choline, betaine, rhumatenin, β -sitosterol, saponins, flavonoids, polysaccharides among others. It also contains many antioxidants, which protect cells from damage caused from free radicals.

Use of Astragalus to:

- Protect your heart
- Stimulate the immune system
- Shield your body from cellular wear and aging
- Protect yourself from cancer mutations
- For its antioxidant effect
- Protect the lungs and liver

However, due to environmental factors, diseases and acquired dysfunctions the cells may carry incorrect information and are copied in that way. Moreover, there is a small percentage of genetic transcription errors that occur naturally every time a cell reproduces. While typically minimal, over time these small changes compound and add to bigger problems. This degradation of cellular DNA over time is what most scientists agree causes aging. Telomerase is our body's natural mechanism to fight DNA damage and aging.

The telomerase enzyme works to restore genetic errors in damaged DNA restoring it to its healthy, original design. In this front, the Astragalus root contains special compounds that are called cycloastragenol and Astragaloside IV, which have been shown in human and animal studies to exert strong stimulation of telomerase activity.

Dr. Elizabeth Blackburn of the University of California at San Francisco (Nobel Prize winner, Physiology and Medicine 2009), Dr. Carol Greider of Johns Hopkins, and Dr. Jack Szostak of Harvard Medical School and researcher Dr. Gil Atzmon states: "Telomeres are one piece of the puzzle that explains why some people live so long." Telomeres are small repeating sequences of nucleotides that terminate and prevent the deterioration of chromosomes. These sequences get shorter each time cells reproduce. The telomerase enzyme maintains the telomere length after DNA replication and cells show no signs of fatigue and degeneration. The extract of astragalus and especially astragaloside IV is proven that activates telomerase found in cells and prevents the reduction of telomere length.

ASTRAGALOSIDE AS AN ANTIOXIDANT

In addition, Astragaloside IV exhibits antioxidant, anti-inflammatory, antiviral, cardioprotective and neuroprotective actions which could directly bind to the telomerase activating property.

ASTRAGALOSIDE FOR IMMUNITY

It is used as an immunostimulant because of its ability to increase the proliferation of T lymphocytes. Studies at UCLA School of Medicine showed that astragaloside found in astragalus, helps in maintaining telomeres in damaged T4 immune cells (specialized white blood cells that cause immune response). This means you have a stronger, better reproductive cellular force of attack against viruses, virulent infections and chronic diseases as well as against aging and cellular damage because immune cells that fight against disease have faster response and potency.

ITS ACTION ON THE CARDIAC SYSTEM

The lack of blood or oxygen supply to the myocardium can weaken the heart function and put our health at risk. Astragaloside IV may improve cardiac function in conditions of an ischemic myocardium and myocardial infarction. It inhibits intracellular calcium overload caused by ischemia and hypoxia, by restoring the balance between free calcium and total calcium and improving the activity of calcium pumps in erythrocyte membranes to reduce the secondary damage that is caused by calcium.

In addition, the actions of AS-IV on the myocardium improve circulation, and offer antioxidant protection as well as reducing inflammation.

ANTI-CANCER ACTION OF ASTRAGALUS

According to research, Astragalus enhances the action of T-cells and strengthens the immune system of cancer patients. Some preliminary studies have shown that Astragalus not only improved immune system function, but also increased the survival of some cancer patients. Astragaloside has significant in vitro antitumor activity on human cancer cells of lung and liver origin.

This is achieved by inhibiting the activity of the transcription factor NF- κ B that controls the transcription of the DNA of more than 500 genes. NF- κ B has emerged as the main chemical mediator of inflammation. Factors that can inhibit NF- κ B and eliminate chronic inflammation have the potential to prevent or delay the onset of chronic diseases or even cure them.

SYMPTOMS OF HIV AND AIDS

The properties of Immune System strengthening in this herb can offer immune support for AIDS patients, where HIV directly attacks the T- cell component immune system . The active compounds found in Astragalus can enhance function of the immune system of these patients.

WARNING This however would be ancillary to HAART (highly active antiretroviral therapy) which is mandatory for all patients with HIV infection. Complementary use of Astragalus with HAART should be discussed with the physician treating HIV infected patients .

ASTRAGALUS IS AN ADAPTABLE HERB

Adaptogens are a small group of plant substances which coordinate and regulate a wide range of adaptive biochemical processes, including prostaglandin production, blood sugar level control, response to stress and physical and mental fatigue due to stress, etc.



Black Aged Garlic extract

The unique extract of black garlic with published studies & test response dose "in vitro" and "in vivo".

INGREDIENTS: ABG10+® black extract of aged and fermented garlic. Fermented and standardized in content to min. 0.1% S-allylcysteine, stabilizer - hydroxypropyl methylcellulose (shell capsule).

DIRECTIONS: Take 1 capsule 2 times a day with meals.



Nutrition information	2 caps	RDA
Black Aged garlic (AGED) 10: 1	800 mg	**
Stabilised yield 0,1% in S-allylcysteine	0.8 mg	**



S-allylcysteine, which is the main component of fresh garlic and a derivative of cysteine, found in higher concentrations in black garlic helps the reduction of cholesterol as well as the prevention of cancer, while at the same time, it protects the body from infections. In addition, it improves blood pressure and blood circulation, while it has antimicrobial, antibiotic, anti-inflammatory and antifungal properties.

It also contributes to the reduction of Alzheimer's symptoms. Recent research shows anti-cancer properties and amelioration of the symptoms of Alzheimer's disease. This makes black garlic the best natural choice for the treatment of important health problems.

CLINICALLY PROVEN: IT PROTECTS YOUR HEART IN TWO WAYS

Cardioprotective effect: ABG10+® can reduce blood pressure, improve coronary perfusion and increase the heart muscle contraction

Metabolic effect: ABG10+® can improve the lipid profile

In vitro studies confirm that Black garlic:

- Promotes the release of nitric oxide and has a vasodilating effect.
- Reduces blood pressure without affecting heart rate.
- Increases superoxide dismutase gene expression and therefore the antioxidant mechanisms.

In vivo studies confirm that ABG10+®:

- Lowers triglyceride and LDL cholesterol levels in the blood.
- Increases the level of HDL cholesterol in the blood

Because "black garlic" is black

It is the result of fermentation of white garlic at high temperatures and at high levels of humidity for about a month. Then, to achieve a sweet taste, garlic is left to "oxidize", age and ferment in a special chamber for another 45 days.

No additional chemicals or preservatives are added. Black garlic has twice the antioxidant power of white garlic, offering the body an important ally against free radical attack.

The improvement of blood pressure, levels of cholesterol and blood circulation, the antimicrobial, anti-inflammatory and antifungal properties of black garlic, but also recent research showing anti-cancer properties and reduction of symptoms of Alzheimer's disease, bring the black garlic at the forefront of healthy nutrition and solutions that nature has to offer for dealing with important health problems and diseases.

S-ALLYLCYSTEINE – SAC

S-Allylcysteine is a component of fresh garlic and derivative of the amino acid cysteine, which is found in much higher concentrations in black garlic. Plethora of research confirms the strong antioxidant property and protective action against can-

cer and against many other diseases. In addition, S-allylcysteine helps in the better absorption of garlic allicin by the body.

SAC induces apoptosis in cells of hepatocellular carcinoma (HCC) origin. HCC is the most common type of primary liver cancer in adults and constitutes the most common cause of death in people with cirrhosis.

It suppresses the proliferation and metastatic potential of these cells through the formation of important regulators involved in proliferation, invasion, apoptosis, cell cycle initiation and angiogenesis, which suggests that SAC may be a potential therapeutic agent for treatment of patients with cancer and liver malignancies.

WARNING. Proof of such activity from clinical trials in patients with cancer is lacking.

S-allylcysteine neutralizes oxidative stress in endothelial cells. Low lipoprotein oxidation density (LDL) has been recognized to play an important role in the initiation and progression of atherosclerosis.

More than double the antioxidant power

Garlic is also high in antioxidants. Black garlic, in particular, has been found to have twice as strong antioxidant properties compared to conventional white garlic. Antioxidants protect cells from any disease and are believed to slow down the aging process. The increased levels of protection against free radicals make black garlic an ideal supplement for the prevention of chronic diseases. The fermentation of raw garlic has been shown to improve its antioxidant power.

The most common antioxidant that is found in black garlic is SAC. A comprehensive review of SAC and black garlic (in in-vivo and in-vitro scenarios) reports that its antioxidant effect is the result of many complex mechanisms, because it:

- Neutralizes free radicals (superoxide, peroxide of hydrogen, hydroxyl, peroxide radicals, as well as hypochlorous acid and simple oxygen)
- Causes the action of endogenous antioxidant enzymes [glutathione peroxidase, quinone and superoxide dismutase (SOD)]. Its effect on production and improvement of levels of glutathione is almost immediate.
- Chelates iron and copper ions and
- Inhibits oxidative enzymes (nitric oxide synthase (NOS), xanthine oxidase, NADPH oxidase and cyclooxygenase (COX))
- Can bind and consequently eliminate carcinogens. Carcinogens or molecules that cause cancer are extremely dangerous and increased levels in the circulation will cause cell damage and can lead to cancer. For those who work or live in highly polluted areas, the reduction of this risk is of vital importance.

IMPROVEMENT OF MICROCIRCULATION

Reduced microcirculation can lead to conditions such as Raynaud's disease which causes cold extremities (hands

and feet). This sensation can be quite painful and unpleasant and a quick treatment is always beneficial. S-allylcysteine has been shown to improve microcirculation almost immediately.

PROTECTION AGAINST INFECTIONS

White garlic has antimicrobial, antibiotic and antifungal activity, thanks to its most powerful active component, allicin. In black garlic, S-allylcysteine helps to better absorb allicin and in its easier metabolism by the body, which offers an enhanced protection against infections, while itself has a strong anti-viral properties. NK Cells (Natural Killer) are vital to our immunity against pathogenic bacteria and it is important that they work efficiently. During the winter months, the existence of a healthy immune system can help in prevention of bacterial infections. S-allylcysteine can increase the effectiveness of NK cells.

THE ANTI-CANCER PROPERTIES OF BLACK GARLIC AND THE ACTION OF S-ALLYLCYSTEINE.

Mechanisms underlying anticancer actions of garlic and S-allylcysteine.

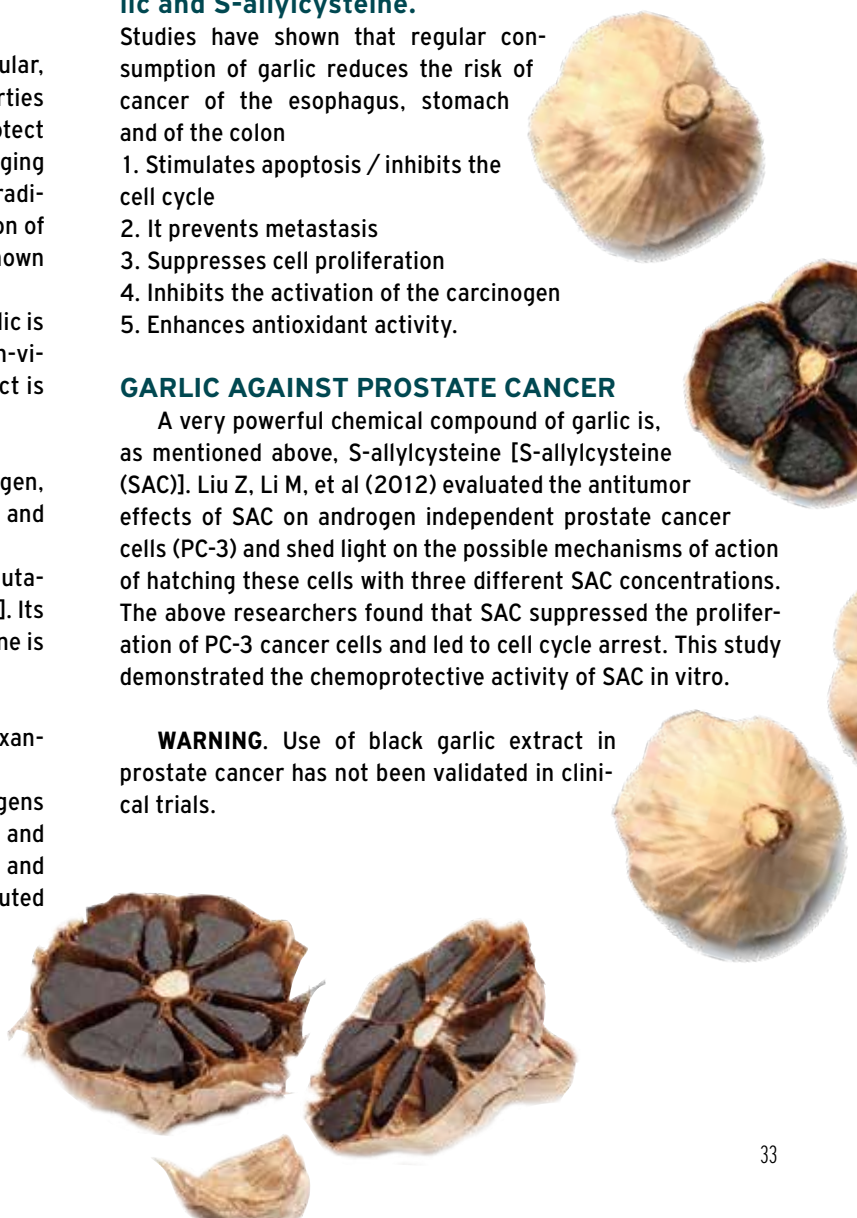
Studies have shown that regular consumption of garlic reduces the risk of cancer of the esophagus, stomach and of the colon

1. Stimulates apoptosis / inhibits the cell cycle
2. It prevents metastasis
3. Suppresses cell proliferation
4. Inhibits the activation of the carcinogen
5. Enhances antioxidant activity.

GARLIC AGAINST PROSTATE CANCER

A very powerful chemical compound of garlic is, as mentioned above, S-allylcysteine [S-allylcysteine (SAC)]. Liu Z, Li M, et al (2012) evaluated the antitumor effects of SAC on androgen independent prostate cancer cells (PC-3) and shed light on the possible mechanisms of action of hatching these cells with three different SAC concentrations. The above researchers found that SAC suppressed the proliferation of PC-3 cancer cells and led to cell cycle arrest. This study demonstrated the chemoprotective activity of SAC in vitro.

WARNING. Use of black garlic extract in prostate cancer has not been validated in clinical trials.



Bone Support

Food supplement with trace elements, minerals and vitamins that contribute to the normal bone production and maintenance. Further enriched with herbal extracts.

INGREDIENTS: Calcium, phosphorus, magnesium, vitamins [C-D3-K2 (MK7)], zinc, copper, manganese, silicon, boron, red sage extract.

OTHER INGREDIENTS: herbal capsule material cellulose

DIRECTIONS: Take 2-4 capsules per day or according to the instructions of a health care professional.



Nutrition information	4 Tabl	RDA
CALCIUM derived by	600 mg	75%
20% of calcium carbonate 120mg		**
50% of calcium L-Pintolate 300mg		**
50% of dibasic calcium phosphate 300mg		**
PHOSPHORUS		
from dibasic calcium phosphate	132 mg	18,85%
MAGNESIUM from magnesium oxide	200 mg	53,33%
VITAMIN C from calcium ascorbate	50 mg	62,5%
ZINC as zinc chelate	5 mg	50%
COPPER as copper chelate	0,5 mg	50%
MANGANESE as Manganese Chelate	1,5 mg	75%
SILICON from bamboo extract	65 mg	**
BORON from boric acid	0,4 mg	**
VITAMIN D3 as Cholecalciferol	1000 IU	500%
BITAMIN K2 (MK7) as Menaquinone	150 mcg	200%
RED SAGE EXTRACT	40 mg	**

- Vitamin D has multiple roles in the body, most notably well-known and proven, is its participation in bone metabolism. Specifically, its active form of vitamin D3, which is produced by the kidneys and liver from the pro-vitamin D, increases the absorption of calcium and phosphorus from the intestine and at the same time it acts on the reabsorption of calcium from the kidneys, resulting in an increase in calcium in the body. Also, VitD3 is involved with parathormone in the mineralization of bones. Supplementary administration of vitamin D3 maintains or even increases bone density, especially in the elderly.
- According to studies that have examined the relationship of vitamin K with bone formation, it has been observed mainly in women that supplementation of vitamin K, especially in combination with vitamin D3 improved bone density. According to the latest research prolonged intake of vitamin D promotes the production of a large number of proteins, which also depend on vitamin K for production. These proteins often remain inactive due to low concentration of K2, which is required in order for them to be activated. As leading scientists underline, vitamin K2 activates important proteins (osteocalcin and matrix GLA) which thus acts as a "traffic controller" for calcium, directing it to the bones and not to the vessels for sedimentation. Overall, it seems that the combination of vitamins D3 and K2 is ideal for the prevention of osteopenia and osteoporosis, especially in elderly people.



CALCIUM-VITAMIN D3 AND VITAMIN K2

• Calcium is a key element in rebuilding the bones. There is sufficient evidence to support the importance of calcium administration in prevention and the treatment of osteoporosis, in combination with D3 and K2.

CALCIUM PINTOLATE

According to scientific research Calcium pintolate is the most effective and safest calcium supplement for the treatment for osteoporosis because it is the only form of calcium whose carrier is a protein.

RED SAGE: THIS HERB COULD OFFER A NECESSARY SOLUTION

Using a compound derived from red sage, researchers from the University of British Columbia have found a way to selectively block an enzyme called Cathepsin K (CatK), which plays an important role in the destruction of collagen in bones during osteoporosis. According to Dieter Brömme, Professor of British Columbia, this compound can selectively block the enzyme Cathepsin K (CatK), which plays an important role in distribution of bone collagen. "For a long time, the pharmaceutical industry has recognized that Cathepsin K is a good target molecule to treat osteoporosis". "We have been trying to develop Cathepsin K inhibitors since 1996".

In osteoporosis there is an imbalance between bone breakdown (mediated by osteoclasts) and bone formation (mediated by osteoblasts). Since the CatK enzyme is expressed mainly in osteoclasts, the inhibition of activity would prevent excessive bone degradation.

Researchers started their work in this area examining a wide range of compounds. Ultimately, they chose a compound called Tanshinone IIA sodium sulfonate (TO6), which seemed like the best possible for their purposes. After testing in human and animal bone cells, they conducted an in vivo study in mice. Their results, published in the Journal of Bone and Mineral Research, were impressive

- mice that received TO6 increased the numbers of osteoblasts by approximately 28% compared to controls and showed a 35% increase in bone density.

In addition, there were no adverse events. "The majority, perhaps 95% of other drugs aimed at this enzyme are highly active inhibitors, leading to total deactivation of the enzyme. Says Brömme. "In this case, it is good to suspend collagenase activity but perhaps not so good if it prevents all of its other activities. We already have preliminary evidence that suggests we can prevent the problems commonly seen with inhibitor aggregates so we strongly believe that the approach TO6 is a viable alternative." Brömme believes that this could one day form the basis of a powerful anti-osteoporosis drugs, with further implications for other bone and cartilage diseases.

PHOSPHORUS, COPPER, MAGNESIUM, BORON, ZINC, MANGANESE, SILICON

Phosphorus. Essential for bone health helps in the effectiveness of calcium. About 85% of the total amount of phosphorus in our body is deposited in bones

Magnesium. It is necessary for the formation of bones. Magnesium ensures proper parathyroid glands function. This regulates the production of hormones that are important for bone health. Studies report that deficiency of magnesium is associated with reduced bone growth, bone formation and osteoporosis

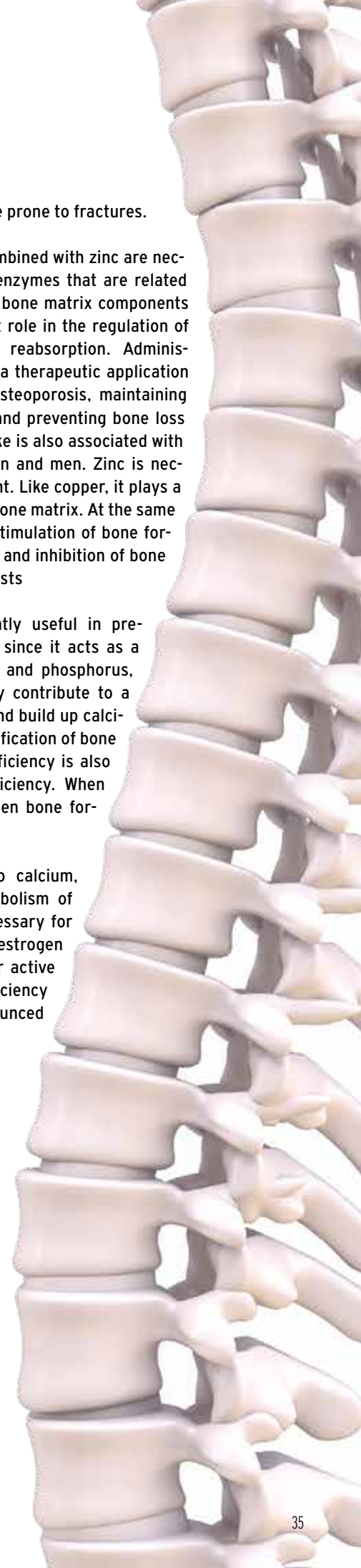
Manganese. The administration of manganese in combination with calcium, zinc and copper appear to be effective in Postmenopausal osteoporosis. Experimental animals fed with a low-manganese diet created smaller bones, with lower bone

density and were more prone to fractures.

Copper - Zinc, combined with zinc are necessary cofactors for enzymes that are related to the composition of bone matrix components and play an important role in the regulation of bone deposition and reabsorption. Administration of copper has a therapeutic application in the treatment of osteoporosis, maintaining integrity of collagen and preventing bone loss density. Low zinc intake is also associated with osteoporosis in women and men. Zinc is necessary for development. Like copper, it plays a structural role in the bone matrix. At the same time, it is related to stimulation of bone formation by osteoblasts and inhibition of bone resorption by osteoclasts

Silicon. Significantly useful in preventing osteoporosis, since it acts as a regulator for calcium and phosphorus, elements that directly contribute to a healthy bone cortex and build up calcium stores. The decalcification of bone caused by calcium deficiency is also related to silicon deficiency. When silicon is deficient, then bone formation is limited.

Boron. Related to calcium, magnesium and metabolism of phosphorus. It is necessary for the conversion of estrogen and vitamin D in their active forms. Boron deficiency leads to a more pronounced vitamin D deficiency.



Brain support

Effective formula with natural ingredients to support memory and concentration

INGREDIENTS: bacopa extract, phosphatidylserine, ex ginkgo, citicoline, ex. rosemary, acetyl tyrosine, acetylcarnitine, vitamin B12, PQQ and especially patented Memophenol extract.

DIRECTIONS: Take 2 tablets per day after a meal



Nutrition information	2 caps	RDA
EXTRACT BACOPA MONNIERI	350 mg	**
yielding 20% bacosides	70 mg	**
PHOSPHATIDYL SERINE	100 mg	**
EXTRACT GINGO BILOBA	50 mg	**
which yielding 6% flavonoids		
CITICOLINE	100 mg	**
MEMOPHENOL STANDARISED	75 mg	**
EXTRACT ROSEMARY	100 mg	**
yielding 50% urosolic acid		
PQQ	1 mg	**
VITAMIN B12	15 mcg	600%
N- ACETYL-TYROSINE	100 mg	**
ACETYL-CARNITINE	300 mg	**
(as acetyl-L-carnitine HCL)		



BRAIN support is an innovative product aimed at protecting, enhancing and improving cognitive function and in general mental health and natural behavior, safe and above all effective. From the age of fifty onwards, maybe even earlier than that, many of us will lose about 10% of our original brain cells as a result of "normal" aging.

This constant loss of brain cells may deteriorate further from age-related conditions such as hypertension, hardening of the arteries, diabetes, cerebrovascular deficiency, strokes. Dementia, or the loss of cognitive or intellectual functions, is characterized by a profound impairment of memory and loss of

complex abilities required for problem solving, decision making, orientation in space and even the ability to communicate. Dementia is a chronic, progressive disease that affects primarily the elderly, who over time may lose the ability to function normally and may need occasional supportive care.

BACOPA MONNIERI, COMMONLY KNOWN AS BRAHMI

Bacopa improves blood flow to the brain, strengthens the neural response and by extension the whole spectrum of brain functions. Recognizing that the root cause of problems related to brain function focuses on aging and neurodegeneration, the use of Bacopa extract focuses on the restoration of the degenerative phenomena in brain cell structures and especially in synapses.

PHOSPHATIDYL SERINE

Phosphatidylserine is part of the cell structure and the key to maintaining cellular function. It helps to generate, transmit and receive nerve impulses, particularly those related to information and knowledge. Phosphatidylserine improves attention and memory in the elderly with reduced comprehension skills. It is absolutely necessary for healthy neurotransmission and its lack leads uniformly to serious disorders, such as dementia and Alzheimer's. It also helps in restoration of the production of acetylcholine, one of the most important neurotransmitters.

CITICOLINE

It is effective in memory related problems with age. Its supplementation helps protect cognitive function mainly in people over 50 years. It increases energy in brain cells. Citicoline repairs damaged nerve cells in the brain. Therefore, it is used in degenerative and functional brain diseases.

ACETYL-L-CARNITINE

It is a cognitive enhancer and neuroprotective factor that protects against a wide range of age degenerative changes in the brain and nervous system.

N-ACETYL-TYROSINE

Increases attention, motivation and concentration, improves memory and learning. N-acetyl tyrosine supports brain function by supporting the synthesis of catecholamines - norepinephrine and dopamine (neurotransmitters). Another benefit of acetyl tyrosine is the protection of memory from stress. A study showed that it could reverse memory loss caused as a result of stress.

ROSEMARY EXTRACT

Diterpenes, the active compounds in rosemary have shown to inhibit neuronal cell death caused by a variety of factors while investigations report that the multifunctional nature of its compounds in rosemary provide general antioxidant mediated neuroprotection to other specific mechanisms including inflammation and formation beta amyloid precursors.

GINGKO BILOBA

The use of ginkgo leaves first appeared in China in 2800 BC. Studies have shown that the herb is effective in increasing blood flow to the extremities and brain. Better blood flow means better memory and longer general alertness. Restoring a smoother blood flow to the brain reduces memory loss, confusion, disorientation and psychomotor agitation.

VITAMIN B12

Supplementing with vitamin B12 can help prevent an age-related cognitive decline.

MEMOPHENOL STANDARDIZED

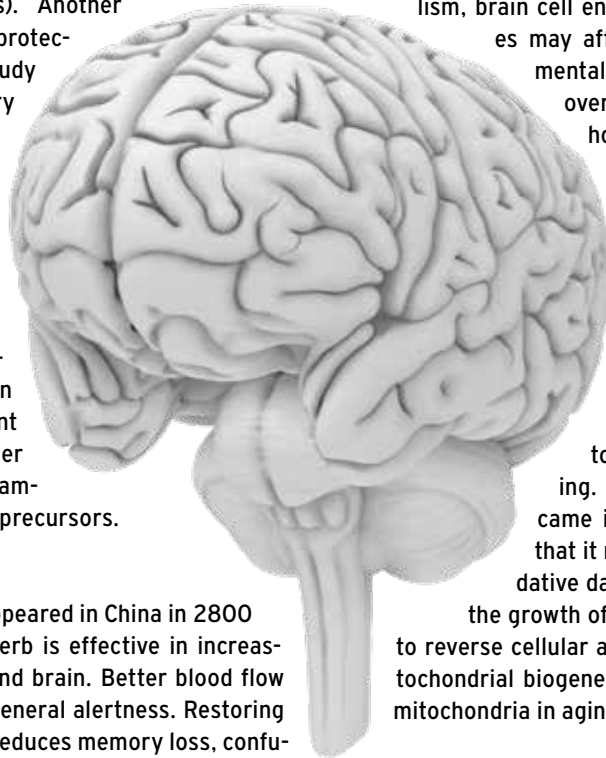
Memophenol™, an amazing ingredient that has clinically proven to enhance learning ability and short-term and long-term

memory. It is a unique patented French Grape (*Vitis vinifera* L.) extract formula and North American vaccinium (*Vaccinium angustifolium* A.) that provides a unique ratio of polyphenols with synergistic effects on cognitive performance.

PQQ (Pyrroloquinoline Quinone)

As we age, changes occur in many areas in our brain - mainly in the prefrontal cortex and hippocampus - which can negatively affect levels of neurotransmitters, proteins, glucose metabolism, brain cell energy and blood flow to it. These changes may affect processes such as memory recall, mental work capacity, emotional well-being and overall quality of life. Research is focused on how we will be able to provide nutritional support to support brain function.

Scientists recognize mitochondrial dysfunction as a key biomarker of aging leading to degenerative diseases. And everyone agrees on the beneficial effect of the coenzyme pyrroloquinoline quinone or PQQ. PQQ is a micronutrient whose antioxidant capacity provides excellent defense against mitochondrial decay and degenerative aging. But the most exciting revelation in PQQ came in early 2010, when researchers found that it not only protects mitochondria from oxidative damage - but also stimulates and triggers the growth of fresh mitochondria! PQQ has the ability to reverse cellular aging by activating genes that cause mitochondrial biogenesis—the spontaneous formation of new mitochondria in aging cells!

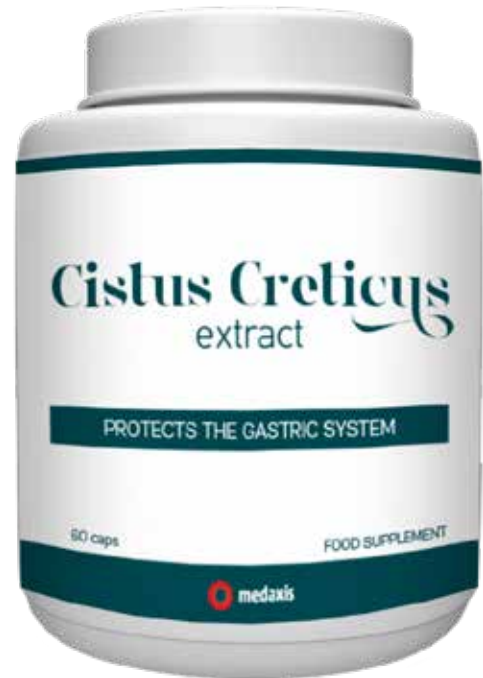


Cistus Creticus extract

Food supplement. Cistus creticus herbal extract (also known as Rockrose), standardized for 20% polyphenols.

INGREDIENTS: standardized extract from Kistos (Cistus creticus), [20% polyphenols], stabilizer - hydroxypropyl methylcellulose (shell capsules)

DIRECTIONS: Take 1 capsule 2 times a day



Nutrition information	2 caps	RDA
CISTUS CRETICUS HERB EXTRACT	460 mg	**
Yielding 20% polyphenols	92 mg	**



Aromatic, medicinal and bee-feeding plant known for centuries. Historically, references to the frankincense (resin) of Rockrose, were made by Herodotus, the Dioscorides and Theophrastus.

Kistos (Cistus Creticus) has the highest content of polyphenols of any plant in Europe, with surprising capacity for destruction of free radicals as well as high antioxidant activity. The stem and leaves contain balsamic resinous aromatic matter, called frankincense.

NATURE'S BEST ANTIOXIDANT

This was the result of trials and tests carried out by the Lefo Ahrensburg Foundation. In their study, the researchers compared various teas, juices and wines in terms of their ability to neutralize so-called free radicals, such as environmental pollutants and other harmful by-products of metabolism.

THE WINNER OF ALL THE COMPARISONS WAS KISTOS

It significantly reduces oxidative damage to tissues, which can enhance the resistance of the human body to cancer. The secret of these incredible results is the particularly high level of vitamin P (flavonoids), as well as its content of certain tannic acid compounds called polyphenols. These substances have stronger antioxidant activity than vitamins E or C.

Kistos detoxifies the body and removes toxic heavy metals coming from cigarette smoke, dental materials and environmental pollutants, according to Professor Claus Peter Siegers. In a study, that of the University of Lubeck, he claimed that smokers who received Kistos twice a day drastically decreased levels of cadmium in their blood in only one month.

A POWERFUL PROTECTION FOR YOUR HEART

Kistos and especially its polyphenols (vitamin P) limit the oxidation of blood lipids, increase the levels of "good" cholesterol and reduce atherosclerotic plaques that cause coronary artery disease. Based on its anti-inflammatory action, Rockrose reduces the possibility of clot formation.

It protects the heart four times better than red wine and is antioxidant twenty times stronger than fresh lemon juice. Rockrose contains an extremely effective combination of antioxidants: its power is compared to the results with vitamin C and according to studies are stronger than green tea.

STRONG AGAINST FUNGI AND BACTERIA

The fact that Rockrose is also beneficial for the immune system was discovered in laboratory tests by Dr. Vinzenz Nowak from Bad Iburg. Dr. Frank Petereit stated in his thesis at Munster University that Rockrose helps with many fungal infections such as mycosis, candida albicans. Also, many other harmful microorganisms such as bacteria, E. coli, candida and helicobacter, were controlled by Rockrose.

This is very important because the pressure and the increasing burden through environmental pollutants destabilize the delicate balance of the useful bacteria in the gut very quickly. The symptoms are slow digestion, fatigue and lack of energy. Rockrose extract has been proven to improve all of this and support healthy bacterial flora. We all know that a healthy gut also means a better overall health in all systems.

STRONG PROTECTION AGAINST VIRUSES, EVEN THE MOST DANGEROUS, INCLUDING FLU

Rockrose has a very strong antiviral effect on avian influenza viruses (H1N1 & H7N7). This was discovered by the biologists of the "Institut für Molekulare Virologie" (Institute of Molecular Virology) at the University Hospital Münster.

Professor Stefan Ludwig of Münster Hospital points out that the best thing is that this extract attacks the viruses only, without physically harming the cells that are affected by the virus. Unlike treatments with antibiotics, the virus does not develop any sign of resistance to Rockrose.

POLYPHENOLS

Polyphenols are phytochemicals found in plants and in plant foods, they protect them from outside factors such as UV and microbial invasions, strengthening their natural defenses. They are a few of the best antioxidant nutritional substances and have anti-inflammatory properties that protect the brain, heart and gut health. According to scientific studies they seem to have a beneficial effect on the human body by showing antioxidant, anti-inflammatory, anti-cancer, antimicrobial activity and their anti-allergic properties contribute to the digestion of nutrients.

Finally, they reduce the risk of cardiovascular disease occurrence as they help to reduce the appearance of many factors that cause them, such as cholesterol, diabetes and hypertension. Studies have suggested that polyphenols reduce the risk of type-2 diabetes thanks to their ability to enhance our body's sensitivity to insulin.

Polyphenols can also contribute to prevention of certain cancers by reducing oxidative stress, inflammation and cancer cell growth. When we consume dietary polyphenols, only 5%-10% of these are absorbed in the small intestine. The remaining 90%-95% goes down into the large intestine, where trillions bacteria break them down into smaller molecules resulting in many polyphenols to act as a food source for healthy gut bacteria.

As we age, brain health can begin to decline and possibly lead to diseases such as Alzheimer's disease. Polyphenols can help in preventing the degeneration of brain health, helping to reduce oxidative stress and inflammation, two factors that play an important role in this.

CHEMICAL COMPOSITION AND PHARMACOLOGY ACTION OF CISTUS CRETICUS RESIN

(CON/NOS DEMETZOS, Ph.D, Assistant Professor of Pharmacognosy, University of Athens)

Newer chemical data combined with the advent of technology, allowed the most complete analysis of chemical components of the plant and the resin and led to the interpretation of its pharmacological action. The dominant ingredients belong to the group of Diterpenes and especially of Labdanic diterpenes, while components were also isolated which belong to the group of polyphenolic substances - mainly methylated flavonoids but also their glycosides. Some of them were characterized as new natural products and were presented for the first time in the international literature.

There are interesting results of in vitro experiments in cell lines such as KB, P388, NSCLC-N6, RAJI, MTHE OLT3, H9 which originated as cancer cell lines. Also interesting results have been published and concern antimicrobial activity of the plant and its resin. *(Aristotle University of Thessaloniki, Department of Pharmacy, Department of Pharmacology-Pharmaknowledge)*

Recent studies on pharmaceutical actions of the extracts from *C. creticus* ssp. *creticus* shows antimicrobial (Demetzos et al., 1995) and anticancer activity (Skoric et al., 2012). Particularly sensitive to the extract's antimicrobial action seem to be members of the pathogenic species *Staphylococcus aureus* and *Bacillus subtilis* (Demetzos et al., 1995). Specifically it is the labdanic diterpenes that have been isolated from the leaves of the plant have tested in vitro for the activity against fungi, bacteria and cancerous cell lines.



Curcumin complex

Nutritional supplement with patented extracts of turmeric and bioperine. Product with high bioavailability and absorption.

INGREDIENTS: Curcumin extract (75% patented) stabilized yield 95% in curcuminoids, material capsule vegetable cellulose, filler microcrystalline cellulose, BioPerine®

DIRECTIONS: Take up to 3 capsules a day day.



Nutrition information	per 3 capsules	RDA *
Turmeric extract	1500 mg	**
Which yields 95% curcuminoids	1425 mg	**
Of which:		
curcumin	1100 mg	**
Dimethoxycurcumin	255 mg	**
Dis-dimethoxycurcumin	66 mg	**
Bioperine	15 mg	**



THE ACTIONS OF TURMERIC IN THE BODY

A significant number of clinical studies have shown that curcumin helps to inhibit the production of many substances involved in any inflammation reaction. There are also studies that show the action of curcumin, at the cellular and metabolic level, in diseases such as diabetes mellitus, malignant neoplasms, autoimmune conditions such as Sjögren's disease, rheumatoid arthritis, neurological diseases and irritable bowel syndrome. Many of these actions can be justified due to its great antioxidant activity in neutral and acidic pH and in enhancing metabolic activity of cells by interfering with enzyme biochemical reactions.

TURMERIC AFFECTS MORE THAN 700 GENES - IT HAS A VERSATILE ACTION.

- Dimethoxycurcumin has shown significant anticancer properties, mainly against prostate cancer.
- In general, curcuminoids exert cytotoxic effects in cancer cells.
- It has an anti-inflammatory effect: it acts against arthritis, reduces rheumatic pains and period pains.
- It has an antioxidant effect, Curcumin C3 Complex® is an effective "bioprotective" antioxidant that quenches free radicals and also prevents their formation.
- Curcumin has been shown to be a Cox-2 inhibitor (cyclooxygenase-2)-1. Unlike conventional Non-steroidal anti-inflammatory drugs (NSAIDs), curcuminoids do not cause gastrointestinal side effects or ulcers
- Curcuminoids support a healthy immune system.

CURCUMIN AND PAIN

Neuropathic pain is generally defined as a chronic pain condition resulting from peripheral and / or central nerve damage. There is a lack of effective treatment for neuropathic pain, which can potentially relate to poor understanding of the pathologic mechanisms at the molecular level. Curcumin has been shown to be capable of reducing chronic pain. Several clinical studies reported that curcumin has remarkable anti-inflammatory and analgesic properties. Similarly, the effectiveness of curcumin has been studied multiple times in the attenuation of diabetic neuropathic pain. The safety evaluation studies show that curcumin can be used in high doses without any toxic adverse events.

Cyclooxygenase is an enzyme that catalyzes the conversion of arachidonic acid to prostaglandins (PGs), which are the key mediators of hypersensation of the pain. Recent studies have shown that curcumin works mainly by inhibiting the cyclooxygenase-2 pathway. Curcumin also has anti-rheumatic and anti-arthritic properties, which are probably due to its regulation of cyclooxygenase-2, tumor necrosis factor (TNF) and of other inflammatory cytokines.

TURMERIC AND CANCER

Curcumin, the main polyphenolic curcuminoid, obtained from *Curcuma longa* has been long used to support treatment regimens in chronic diseases (neoplastic and neurodegenerative). Studies indicate that curcumin can have anticancer, antioxidant and anti-inflammatory properties and give special emphasis in antioxidant, apoptotic and anti-inflammatory activity as well as participating in various molecular signaling mechanisms.

The development of new anticancer treatments with effectiveness and fewer side effects remains a challenge to scientific and medical research. Curcumin has been shown to inhibit survival and proliferation of cancer cells and accelerates the rate of destruction of cancer cells without any toxicity. However, due to poor solubility and low bioavailability, curcumin has not yet been used clinically to treat cancer. It is known that the anti-cancer effects of curcumin are mainly due to the activation of apoptotic pathways in cancer cells as well as in inhibition of changes in the tumor environment (inflammation, angiogenesis and metastasis). Specifically, extensive studies have shown that curcumin targets many important cancer signaling pathways such as P53, Ras, PI3K, AKT, Wnt- β catenin, mTOR and so on.

Clinical studies also suggested that either curcumin alone or in combination with other drugs have a promising anticancer effect in cancer patients without causing adverse events. Curcumin binds kinase-2 (DYRK2) at the cellular level. This previously unknown biochemical interaction of curcumin leads to inhibition of the DYRK2 enzyme, which ultimately prevents cell proliferation and prevents the spread of cancer. Several recent studies have shown that turmeric can block cancer cells.

A study conducted from UCLA, found that people who had mouth and throat cancer and were supplemented with curcumin, were able to stop cancer progression in other parts of the body. In addition, researchers at University of Texas, found that curcumin can limit the development of other forms of cancer, such as breast and lung.

TURMERIC AND ALZHEIMER

Studies have found that extracts containing turmeric can slow down the formation of plaques that slow down proper brain function and lead to the disease.

The addition of BioPerine increases absorption of Curcumin up to 2000%.



D3 | K2 complex

Food supplement with microencapsulated vitamins D3 and K2 that contribute to normal bone state and in the normal absorption and utilization of calcium

(EFSA: 2009· 7(9):1227 & 2011·9(6):2203 & 2009· 7 (9):1228)

OTHER INGREDIENTS: Microcrystalline cellulose (vegetable)

DIRECTIONS: Take 1 capsule per day



Nutrition information	1 caps	RDA
VITAMIN D3 (as cholecalciferol)	2000 IU	**
VITAMIN K2 (as menaquinone MK7)	100 mcg	**



VITAMIN D3

Vitamin D is undoubtedly one of the most current objects of scientific research nowadays. Its older, well-known and established uses are now fully accepted in current scientific practice. However, new well-documented research is constantly indicating how necessary vitamin D3 adequacy is for all organic systems. Vit D3 is only of animal origin, it is produced from wool sheep!! Through processing of the fat contained in wool, lanolin is extracted.

Although enough foods contain D3, its main source remains the sun, as the human body can synthesize 90% of vitamin D through the sun's ultraviolet radiation and can only absorb 10% through food. Vitamin D3 has multiple roles in the body, the most well-known and proven action being its participation in bone metabolism. Specifically, its active form of vitamin D3, produced by the kidneys and liver, increases absorption of calcium and phosphorus from the intestine but at the same time acts on the reabsorption of calcium from the kidneys, resulting in an increase in calcium in the body.

Also, it is involved in the action of parathormone in the mineralization of the bones, which mainly helps in children development phase. Observational studies have shown that vitamin D3 deficiency is associated with reduced bone density. In addition, the supplementary administration of vitamin D3 leads to stability or even increase of bone density, especially in the elderly.

VITAMIN K2

Up until some decades ago scientists believed that vitamin K action in body functions related only to blood clotting. Further research however has proven that the effects of K, relate to the activation of multiple components in the body. These are substances (mainly proteins) that are produced endogenously in an inert form and are then activated with the help of vitamin K.

The vitamin K plays key roles in numerous physiological functions, such as blood clotting, bone metabolism and the regulation of the action of enzymes that affect function of the immune system and the control of inflammation. One of the consequences of vitamin K deficiency is an increased deposition of minerals, such as calcium, in soft tissue.

One of the most common consequences of chronic inflammation is the deposition of calcium in the tissue that has been damaged. This can, for example, happen in the joints, knees, shoulders or hips. Similarly, chronic inflammation leads to calcium deposition in the vessels, resulting in arteriosclerosis and coronary artery disease. The lack of vitamin K, vitamin D, magnesium and other components involved in calcium management, leads to increased deposition of calcium in places that should not accumulate. If there is not enough vitamin K, then our body is not able to distinguish where and how much calcium it needs. Our blood vessels are among the first organs that are affected and atherosclerosis inevitably develops.

Vitamin K is actually a group of fat-soluble vitamins with similar chemical structure. Their main role in the body is participation in blood clotting but also in the binding of calcium ions either in bones or other tissues. K1 is found in foods such

as leafy greens vegetables as it participates in the process of photosynthesis. In contrast, K2 is produced by bacteria and fermentation.

According to studies that have examined the relationship of vitamin K with the bones, it has been observed that in women the supplementary administration of vitamin K, especially in combination with vitamin D3, improved bone density. In addition, it appears that the low concentration of vitamin K in the body is associated with increased fracture risk in different age groups. MK-7 is obtained by fermentation using the bacterium *Bacillus subtilis natto*, which is also responsible for production of the traditional Japanese fermented soybean Natto.

VITAMIN D3 AND VITAMIN K2: ONE OF A KIND COLLABORATION WITH A SINGLE GOAL: STRONG BONES

According to the latest research, the prolonged and high intake of vitamin D promotes the production of large amounts of proteins, which depend on vitamin K. These proteins very often remain inactive due to a low concentration of vitamin K2, which is required in order to activate those proteins (through carboxylation).

As leading scientists underline, vitamin K2 activates important proteins (osteocalcin and matrix GLA protein) which thus act as a "traffic warden" for calcium, guiding it to the bones and not to the vessels for sedimentation. Overall, it appears that the combination of vitamins D3 and K2 is ideal for preventing osteopenia and osteoporosis, especially in middle-aged people.

D3 | K2 PROTECTS THE HEART

In addition, it appears that vitamin K plays an important role in cardiovascular health. More specifically, it reduces vas-

cular calcification, in macro- and micro-circulation, activating a protein that inhibits calcium deposition in the arteries. In studies it was observed that in postmenopausal women after 3 years of vitamin supplementation K2 improved the arterial stiffness and the elasticity of the carotid artery. Thereby reducing the risk of cardiovascular disease.

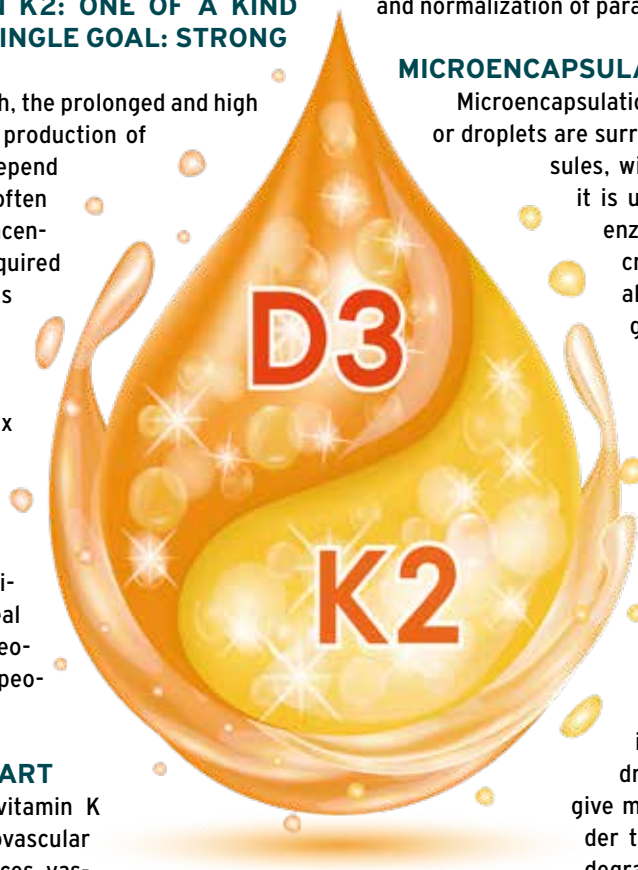
D3 | K2 AGAINST DIABETES

The synergistic action of vitamins D3 and K2 seems not to be limited in bone tissue. The combination of these vitamins promotes metabolism of insulin, through gene overactivation of insulin receptors, regulation of secretion of insulin from the β -cells of the pancreas, the enhancement of β -cell proliferation and normalization of parathyroid hormone.

MICROENCAPSULATION

Microencapsulation is a process in which tiny particles or droplets are surrounded by a coating to give small capsules, with many useful properties. Generally, it is used for embedding food components, enzymes, cells or other materials in micrometric scale. Microencapsulation can also be used to enclose solid, liquid or gaseous media in a micrometric wall made of hard or soft soluble film, in order to reduce the frequency dosage and to avoid degradation of pharmaceuticals products.

The reasons for microencapsulation are countless. It is mainly used to increase the stability and shelf life of the product contained in a capsule, for facilitating product handling and control of its release in sufficient time and place of intervention. Microencapsulation is a process in which tiny particles or droplets are surrounded by a coating to give micromolecules of the substance in order to reduce dosing frequency and avoid degradation of activity and effectiveness.



Defence

power

Food supplement with vitamins, minerals and plant extracts. For normal immune system support.

INGREDIENTS: ex. wild rose, dry ex. propolis, ex. grapefruit seeds, zinc, ex. elderberry, ex. ankle root, ex. cyst, ex. Black garlic, ex. olive leaves, beta glucans, yestimun® beta glucans, ex. ginger root, D3.

DIRECTIONS: Take 2 capsules per day.



Nutrition information	2 caps	RDA
WILD ROSE EXTRACT	300 mg	**
yields 70% vitamin C	210 mg	262,5%
DRY PROPOLIS EXTRACT	200 mg	**
GRAPEFRUIT SEED EXTRACT	150 mg	**
ZINC	16 mg	160%
ELDERBERRY SEED EXTRACT	100 mg	**
ASTRAGALUS ROOT EXTRACT	100 mg	**
CISTUS CRETICUS EXTRACT 80%	100 mg	**
BLACK GARLIC EXTRACT	100 mg	**
OLIVE LEAF EXTRACT	100 mg	**
BETA GLYCANS 1/3 & 1/6	50 mg	**
GINGER ROOT EXTRACT	30 mg	**
VITAMIN D3	400 IU	200%

Vitamin C deficiency results in weakening of immunity and the highest sensitivity to infections. It has been proven that vitamin C stimulates both production as well as the function of leukocytes (white blood cells), especially neutrophils, lymphocytes and phagocytes. In addition, several studies have shown that vitamin C increases antibody levels.

ZINC AND IMMUNE SYSTEM

Severe zinc deficiency reduces function of the immune system, while even mild to moderate deficiency can cause damage to macrophage function and neutrophils which are the cells that contribute to natural immunity. The body requires zinc to activate and develop T-lymphocytes. Zinc deficiency causes atrophy of the thymus gland which leads to low number of T cells and creates an imbalance in forces fighting infections.

VITAMIN D3

Vitamin D is essential for proper function of adaptive and innate immunity. When our body comes into contact with some new virus or bacteria, specific white blood cells are recruited, called T-lymphocytes, to fight the invader. Sufficient quantities of vitamin D are essential to activate T-lymphocytes into cells that will kill the microbes. Once the T cells come into contact with a microbial agent, they extend "antennae" to receive vitamin D. According to research, if vitamin D in the blood is not sufficient, our lymphocytes do not start to be activated and thus our immunity cannot respond to the threat from the virus or bacteria. Extensive studies concluded that supplementation with vitamin D protects 1/33 people from infections.

BLACK GARLIC

Black garlic is many times stronger than regular garlic. S-allylcysteine, which is the main component of fresh garlic and derivative of cysteine, is found in larger concentrations in black garlic and protects our body from infections. In addition, it has antimicrobial, antibiotic, anti-inflammatory and antifungal prop-



ESSENTIAL VITAMIN C

More than half a century of research reveals that vitamin C contributes to the strengthening of immunity supporting a multitude of functions at the cellular level. Vitamin C supports the epithelial barrier against pathogenic microbes and strengthening the skin while potentially protecting against environmental oxidative stress. Vitamin C seems to be one of the nutrients which play an important role in times of infection. Research has shown that vitamin C supplementation on a daily basis is effective as it improves the symptoms during the common cold.

erties. In black garlic, S-allylcysteine helps improve absorption of allicin and its easier metabolism by the body, which offers enhanced protection against infections, while it also has strong antiviral properties.

PROPOLIS EXTRACT

Propolis has been associated with antimicrobial, antiviral and anti-inflammatory properties.

Propolis consists of more than 300 substances which

- Activate natural defense
- Stop the proliferation of bacteria and viruses.

Japanese researchers showed that its mechanism of action is the rupture of the bacterial cell membrane.

ELDERBERRY

It is well- established for treating the common cold and strengthening our defense system.

It is considered nature's medicine in dealing with the symptoms of flu, runny nose or cough. Thanks to the anthocyanins it contains, it contributes in strengthening the body's defense. It has expectorant properties and that is why it is used to treat diseases, such as bronchitis and asthma.

ASTRAGALUS ROOT

Its main use is to strengthen the immune system. A review from the Natural Medicine Comprehensive Base Data (NMCD) concluded that taking Astragalus can help prevent colds. According to research at the Milton S. Hershey Medical Center at Penn State University, Astragalus is an adaptogen that helps the body cope with physical, emotional or mental stress that also de-regulates the immune response.

GINGER EXTRACT

It is famous for its antioxidant and immune-regulating properties. It stimulates the body and relieves symptoms of cold, stomach ache and headache. It also has antipyretic and antimicrobial action. Especially when you are sick, you have chills, fever and cold sweat, and ginger may alleviate all the above symptoms.

GRAPE FRUIT SEED EXTRACT

Grapefruit seed extract has strong antibacterial properties due to the high content of polyphenols. Beyond the inhaled

germs and pathogens, the grapefruit seed extract is particularly strong and effective in the neutralization of pathogens and bacteria that enter into the body through food or water and has significant results in combating a variety of common infectious agents.

CISTUS CRITICUS

Cistus has a very strong antiviral effect on avian influenza viruses (H1N1 & H7N7). This was first reported by biologists at the Institute of Molecular Virology at Munster University Hospital. Professor Stefan Ludwig points out that Cistus extract attacks viruses without harming the cells that are affected by the virus. In contrast to treatments with antibiotics, viruses do not develop resistance to the Cistus extract.

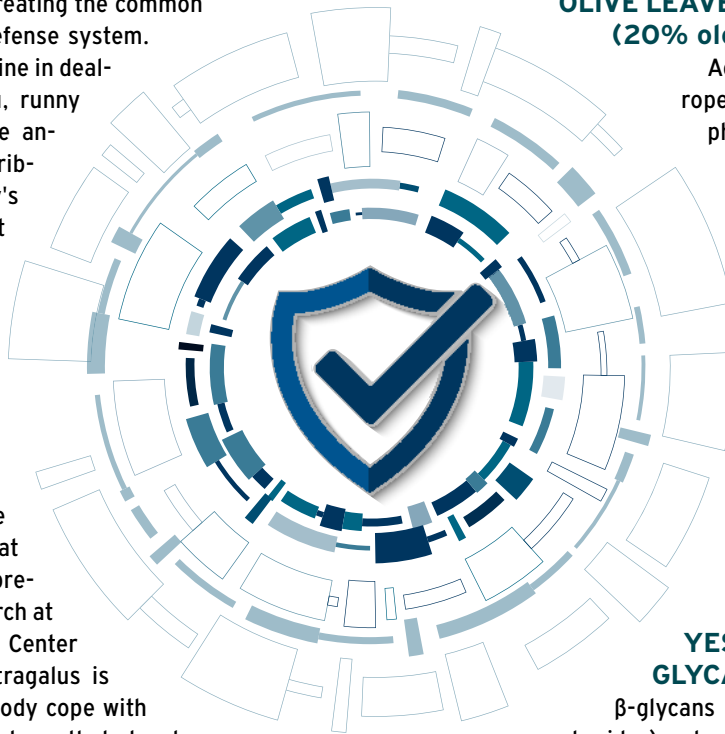
OLIVE LEAVES

(20% oleuropein)

According to clinical studies, oleuropein has antimicrobial and antiviral pharmacological properties. It accelerates recovery due to common cold, flu and pneumonia. Olive leaves have traditionally been used to help manage viral infections (especially when there is a fever). The investigations show that they stimulate phagocytosis (the process by which the cells of the immune system engulf and destroy the invading organisms) and interfere with the ability of bacteria and viruses to multiply and cause infection.

YESTIMUN® β - 1.3-1.6 GLYCANS

β -glycans are plant fibers (natural polysaccharides) and are water soluble. They stimulate the function of the immune system and activate macrophage cells for the body's defense. β -glycans enhance immune function and offer protection against the common cold and infections of any etiology (from viruses, fungi and bacteria). The natural and highly pure β -glycan structure of Yestimun® can be recognized by immune cells in the gut, such as a pathogen. Consequently, a functional, and non-specific immune response, which activates the so-called clearing cells in Peyer's structures. These scavenger cells begin to destroy pathogens or activate other immune cells (B and T cells, dendritic cells). Thus, Yestimun® β -glycan enhances the immune system and allows it to react immediately.



GABA

caps

Food supplement with Aminobutyrate acid.

Herbal - natural - instantly bioavailable.

INGREDIENTS: GABA (gamma aminobutyric acid)(83%), capsule material vegetable cellulose, antioxidant: ascorbyl palmitate (fat-soluble form of vitamin C)

DIRECTIONS: 1-2 capsules per day on an empty stomach.



Nutrition information	per 2 caps	RDA
GABA	1000 mg	**



GABA is a non-protein amino acid that works as an inhibitory neurotransmitter in the brain and directly affects the management of stress. GABA and glutamic acid are the most abundant neurotransmitters in the central nervous system, especially in the cerebral cortex, where human thinking takes place and our senses are interpreted. It works as an inhibitory neurotransmitter - meaning it inhibits nerve impulses; while glutamate is present in the excitatory synapses, GABA is present at the depressant brain synapses.

GABA is administered to relieve anxiety and stress, mood improvement, better response in premenstrual syndrome and nutritional support of attention deficit hyperactivity disorder (ADHD). It is also used to promote lean muscle growth, for burning fat and as a regulator of high blood pressure. In addition, it has diuretic and antidiabetic effects. It plays a role in healthy immune function and endocrine systems of the body, as well as in the regulation of appetite and metabolism. There is interesting emerging research on the role of GABA in gut health and gastrointestinal function, where it supports mobility, controls inflammation and supports immune system function.

GABA is a bioactive component of fruit, vegetables, grains and is believed to play a role in defense against stress in plants. It is naturally found in green, black and tea varieties, as well as fermented foods such as kefir, yogurt and tempeh. Other foods also contain GABA or can increase its production in the body. These include unshelled seeds, fava beans, soybeans, lentils and others beans, nuts, including walnuts, almonds and sunflower

seeds, fish, incl. shrimp and halibut (Atlantic sole), citrus fruits, broccoli, potatoes and cocoa.

WHAT HAPPENS TO OUR BODY WHEN WE LACK GABA?

- our body will be in permanent overstimulation,
- our muscles will be constantly stretched,
- brain function will always be at the extremes, we won't be able to calm down and relax even for a single moment
- we will have poor sleep quality
- the production of growth hormone will decrease, which means that we will age faster.

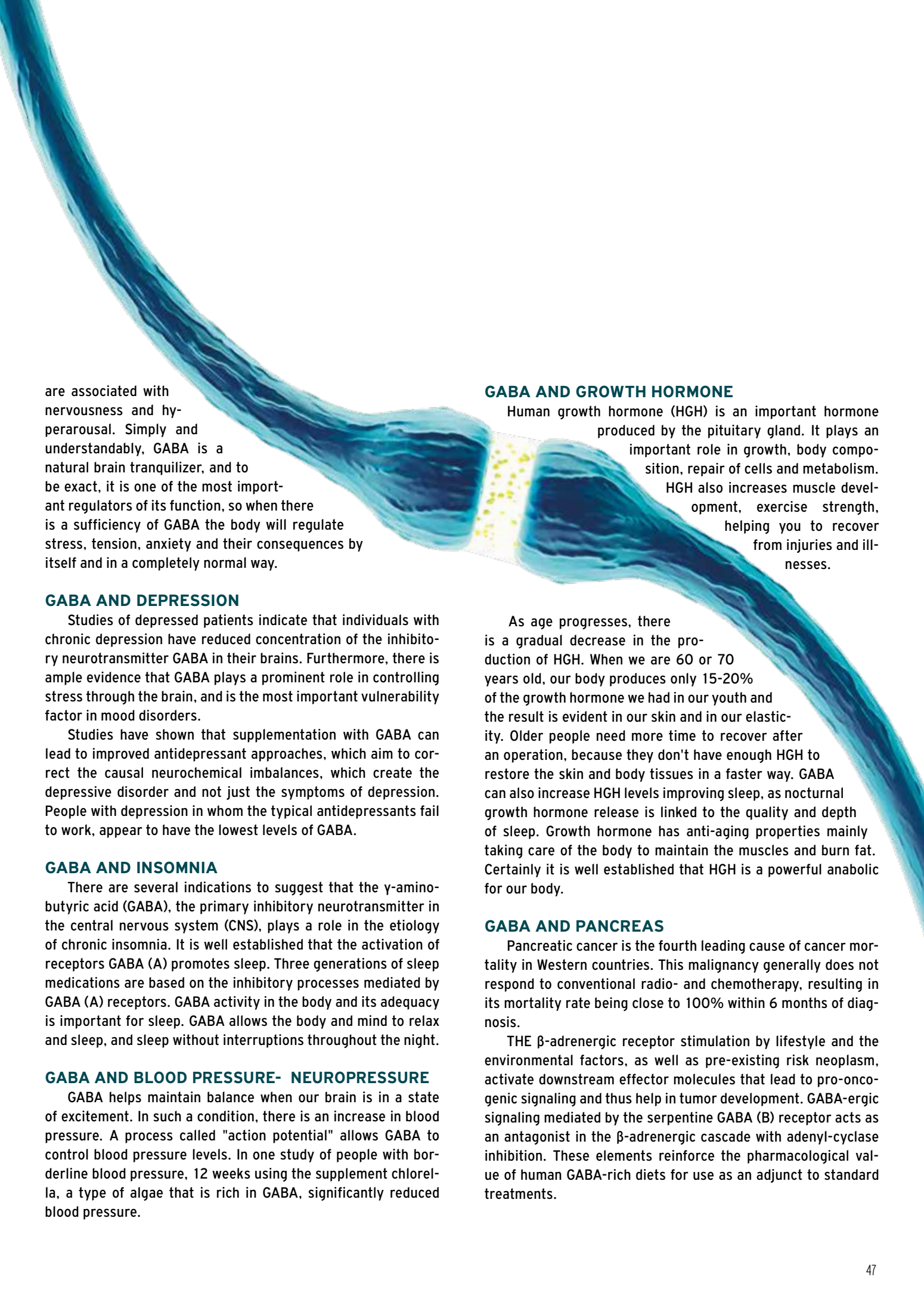
GABA AND BRAIN FUNCTION

Numerous conditions involving addiction to substances, headaches, migraines, Parkinson's syndrome and cognitive impairment are all related to low GABA activity. GABA improves growth hormone and protein synthesis in the brain. It plays an important role in drug and alcohol addiction.

GABA also participates in a person's vulnerability to alcoholism. It also plays a role in other addictions, such as smoking (nicotine) and drug addiction. Lower GABA levels have been found in the brains of adolescents with chronic use, for example, of cocaine or marijuana. The drugs that enhance GABA are commonly used to prevent drug addicts from relapsing.

GABA AND NEUROPSYCHOLOGICAL CONDITIONS

GABA is known to be a critical regulator of the body's normal response to stress through regulating the function of the hypothalamus - pituitary axis (HPA) (Cullinan et al., 2008). When we experience intense stress, physical or even mental, our brain reacts by increasing endogenous production of GABA, which in turn increases the production of alpha brain waves and we know very well how alpha waves are associated with a relaxed and active state and reduce the production of beta brain waves, which



are associated with nervousness and hyperarousal. Simply and understandably, GABA is a natural brain tranquilizer, and to be exact, it is one of the most important regulators of its function, so when there is a sufficiency of GABA the body will regulate stress, tension, anxiety and their consequences by itself and in a completely normal way.

GABA AND DEPRESSION

Studies of depressed patients indicate that individuals with chronic depression have reduced concentration of the inhibitory neurotransmitter GABA in their brains. Furthermore, there is ample evidence that GABA plays a prominent role in controlling stress through the brain, and is the most important vulnerability factor in mood disorders.

Studies have shown that supplementation with GABA can lead to improved antidepressant approaches, which aim to correct the causal neurochemical imbalances, which create the depressive disorder and not just the symptoms of depression. People with depression in whom the typical antidepressants fail to work, appear to have the lowest levels of GABA.

GABA AND INSOMNIA

There are several indications to suggest that the γ -aminobutyric acid (GABA), the primary inhibitory neurotransmitter in the central nervous system (CNS), plays a role in the etiology of chronic insomnia. It is well established that the activation of receptors GABA (A) promotes sleep. Three generations of sleep medications are based on the inhibitory processes mediated by GABA (A) receptors. GABA activity in the body and its adequacy is important for sleep. GABA allows the body and mind to relax and sleep, and sleep without interruptions throughout the night.

GABA AND BLOOD PRESSURE- NEUROPRESSURE

GABA helps maintain balance when our brain is in a state of excitement. In such a condition, there is an increase in blood pressure. A process called "action potential" allows GABA to control blood pressure levels. In one study of people with borderline blood pressure, 12 weeks using the supplement chlorella, a type of algae that is rich in GABA, significantly reduced blood pressure.

GABA AND GROWTH HORMONE

Human growth hormone (HGH) is an important hormone produced by the pituitary gland. It plays an important role in growth, body composition, repair of cells and metabolism. HGH also increases muscle development, exercise strength, helping you to recover from injuries and illnesses.

As age progresses, there is a gradual decrease in the production of HGH. When we are 60 or 70 years old, our body produces only 15-20% of the growth hormone we had in our youth and the result is evident in our skin and in our elasticity. Older people need more time to recover after an operation, because they don't have enough HGH to restore the skin and body tissues in a faster way. GABA can also increase HGH levels improving sleep, as nocturnal growth hormone release is linked to the quality and depth of sleep. Growth hormone has anti-aging properties mainly taking care of the body to maintain the muscles and burn fat. Certainly it is well established that HGH is a powerful anabolic for our body.

GABA AND PANCREAS

Pancreatic cancer is the fourth leading cause of cancer mortality in Western countries. This malignancy generally does not respond to conventional radio- and chemotherapy, resulting in its mortality rate being close to 100% within 6 months of diagnosis.

THE β -adrenergic receptor stimulation by lifestyle and the environmental factors, as well as pre-existing risk neoplasm, activate downstream effector molecules that lead to pro-oncogenic signaling and thus help in tumor development. GABA-ergic signaling mediated by the serpentine GABA (B) receptor acts as an antagonist in the β -adrenergic cascade with adenylyl-cyclase inhibition. These elements reinforce the pharmacological value of human GABA-rich diets for use as an adjunct to standard treatments.

Gluco support

Composition with vitamins, minerals and plant extracts proven to contribute to healthy carbohydrate metabolism

Specially formulated to help effectively treat high blood sugar levels.

OTHER INGREDIENTS: vegetable cellulose (capsule material)

INSTRUCTIONS: 2 capsules per day after main meals



Nutrition information	2 caps	RDA
Gymnema Sylvestre leaf extract 25%	350 mg	**
Stabilised yield 25,65% in gymnamic acids	89,77 mg	**
Bitter Mellon fruit extract (karela fruit)(Mormodica charantia)	300 mg	**
Stabilised yield in bitter substances 0.52%	1.56 mg	**
Stabilised yield in bitter substances 14,36%	43.08 mg	**
Cinnamomum verum bark extract	300 mg	**
Stabilized yield in polyphenols > 10%	>30 mg	**
Banaba leaf extract (lagerstroemia spesioza)	100 mg	**
Stabilized yield of corrosolic acid >1%	>1 mg	**
Berberin extract (berberis aristate)	30 mg	**
Berberine hydrochloride yield stabilized >20%	>6 mg	**
Indian Kino extract (silbinolR) (Pterocarpus marsupium)	50 mg	**
Stabilized yield of pterostilbene 5.4%	2,7 mg	**
Stabilized yield of epicatechins 0.01%	0.005 mg	**
Extract Nopal (opuntia) (prickly pear)	30 mg	**
Vitamin B1 (as thiamine hydrochloride)	10 mg	909%
Vitamin B6 (as pyridoxine hydrochloride)	10 mg	714,28%
Zinc oxide	6,4 mg	**
Delivering elemental zinc	5 mg	50%
Chromium polynicotinate	2 mg	**
Delivering elemental chromium	250 mcg	625%

VITAMIN B6

B6 is important for amino acid metabolism and carbohydrates. Its deficiency is a common phenomenon in diabetics and those who do not control their glucose levels. Studies also show that vitamin B6 deficiency is strongly associated with glucose intolerance and reduced insulin and glucagon secretion. In addition, its deprivation affects insulin secretion, while its supplementation prevents diabetic complications and improves diabetes in pregnancy.

CHROMIUM

Chromium enhances the action of insulin and is involved in the secretion of insulin from the pancreas. According to studies, it contributes to better blood sugar control resulting in an increased sensitivity of the cells to insulin. At the same time, the burning of body fat is facilitating or reducing the desire to consume simple sugars and sweets, thus contributing to the most effective weight control.

GTF chromium "polynicotinate chromium" (chromium combined with vitamin B3 and 3 amino acids) acts as a glucose tolerance factor. The Chromium GTF (polynicotinate) is better absorbed and is more bioavailable compared to other chromium versions. Diabetics always have reduced levels of chromium in the forms and must therefore receive supplementation.

ZINC

Zinc is a component of the insulin molecule whose deficiency causes many problems in completion of metabolic processes. Zinc is required for the production, secretion and activation of insulin receptor cells. Patients with diabetes often have zinc deficiency. It was further shown that Zn deficiency significantly enhances kidney damage caused by diabetes. There are also various observations that support the preventive effect of Zn on the onset of diabetic cardiomyopathy and nephropathy.



INGREDIENTS AND THEIR ACTION

VITAMIN B1-THIAMIN

It is a coenzyme for sugar metabolism and the breakdown of pyruvic acid, a product which is produced during glucose metabolism. Thus, vitamin B1 can help improve the way cells use glucose and lead to a better control of sugar levels.

CINNAMON BARK EXTRACT

The active ingredient in cinnamon, (MHCP) belongs to the class of polyphenols. It mimics insulin, regulates blood sugar levels and prevents bulimic attacks. The cinnamon extract supports the absorption of glucose inside the cells and thus helps regulate glucose levels and blood lipids.

Cinnamon limits enzyme activity that quickly break down carbohydrates. The rapid decay of food carbohydrates creates an increase in its sugar levels after meals. Cinnamon slows down stomach emptying and significantly reduces hyperglycemia after meals (postprandial blood glucose).

BANABA LEAF EXTRACT

Lagerstroemia speciosa has perhaps the highest concentration of corosolic acid. Corosolic acid supports glucose metabolism and has glucose transport-inducing activity, similar to insulin. The chemicals in the extract drastically limit the absorption of carbohydrates from the intestine. Corosolic acid is isolated from the extract of banaba and it has been shown to be a very powerful anti-diabetic compound. Corosolic acid lowers blood sugar levels within 60 minutes, has a hypoglycemic effect and reduces appetite and the desire to consume sugars. The beneficial effects of Banaba and corosolic acid in relation to various aspects of glucose metabolism include multiple mechanisms, such as increased cellular uptake of glucose, impaired hydrolysis of sucrose and starches, reduced gluconeogenesis and regulation of lipid metabolism.

BITTER MELON FRUIT

Rich in vitamins and minerals, it is the most bitter of all fruits and vegetables. Bitter melon lowers blood sugar levels but also helps to maintain healthy glycosylated hemoglobin levels. Researchers believe that bitter melon contains substances (peptides, antioxidants, trace elements and vitamins) that cause reductions in blood glucose and appetite suppression. In this way it behaves similarly to insulin. Its active substance, charantin, is ideal for reducing blood sugar levels, capable of creating a hypoglycemic motion and tendency by itself. This substance consists of natural steroids that mimic the action of insulin inside the body. Mechanisms of action include an increase in the secretion of insulin, the utilization of glucose by tissues, glucose oxidation and reduction of gluconeogenesis that takes place in the liver.

OPUNTIA-NOPAL (PRICKLY PEAR)

Cactus is often used for diabetes and metabolism mainly due to its high content of fiber. Because it can be proven to reduce sugar levels in blood and cholesterol levels by reducing absorption of sugar and cholesterol in the stomach and intestine. The extent of reduction of sugar levels have been reported to reach 48% from peak levels.

GYMNEMA SYLVESTRE

Its Indian name Gur-mar in exact translation means "sugar destroyer".

In summary, five mechanisms of action have been described for this herb:

- increase in the number of islets of Langerhans in the pancreas,
- increase in insulin secretion,
- increase in tissue sensitivity to insulin (reduces insulin resistance),
- reduce the amount of food and calories consumed due to a change in taste of sweet and reducing appetite.

Gymnema can be the main herb for those with diabetes (type I and II). This plant seems to bring about the homeostasis of glucose in the blood. It may also be used to treat metabolic syndrome as well as body weight control.

INDIAN KINO

Known as the "Miracle Cure for Diabetes", it is an absolute choice. The extended anti-glycaemic, antioxidant and anti-inflammatory properties of the Kino bark, not only help manage sugar levels in the blood preventing pancreatic cell damage but also reducing excess fat, while promoting digestion. Finally, Indian kino helps reduce the breakdown of starch to glucose, which in turn leads to low blood glucose levels thereby reducing sugar cravings.

MECHANISMS OF ACTION OF SILBINOL®

- Enhances insulin secretion from existing β -cells and leads to pancreatic β -cell regeneration.
- Increases the number of insulin receptors in peripheral tissues.
- Stimulates glucose-dependent insulin secretion.
- Inhibits the activities of blood sugar regulating enzymes, α -amylase, α -glycosidase and sucrase.

BERBERIS

Berberine has been shown to improve the way which cells respond to insulin, which regulates the amount of sugar in your blood. In turn, this can help reduce sugar levels in your blood. In fact, researchers found that the beneficial effects of berberine on blood sugar and hemoglobin-A1c were comparable to those of conventional medicine for diabetes. Another hypothesis, with some early evidence, is that the glucose-lowering effect of berberine may be related to activity in the gut. A limited trial in animal models of diabetes found that berberine led to reduced enzymatic activity that digest sugars found in intestinal wall cells. They hypothesize that berberine may kill certain intestinal bacteria that contribute to the increase in inflammation and insulin resistance.

Krill oil superba-2™

Dietary supplement with krill oil, fragrance vanilla

INGREDIENTS: SUPERBA-2™ OIL krill (68.9%), gelatin capsule material cattle, moisture stabilizer water, natural vanilla fragrance

INSTRUCTIONS: 1-3 capsules a day with a meal

Nutrition information	1 caps	RDA
SUPERBA KRILL OIL	500 mg	**
Provides natural phospholipids	200 mg	**
Provides natural astaxanthin	50 mcg	**
Provides natural Omega 3	110 mg	**
of which: EPA	60 mg	**
and DHA	27.5 mg	**



Krill is present in most oceans of the world, however, they tend to be present in huge clusters in Antarctica where they feed on tiny algae. This makes harvesting this strong and nutritious small crustacean possible, without disturbing the ecosystem. Living in the pristine and unpolluted waters of the Southern Oceans means they are essentially free from environmental contaminants and toxins.

A PRODUCT WHICH IS ECOLOGICALLY CONCIIOUS

It all begins in Antarctica, the cleanest waters in the world. In order to protect the environment and the environmental ecosystem, AKER BIO MARINE developed its own method to harvest Krill, called Eco-Harvesting®. This fishing method harvests only Krill and no other species. The MSC logo confirms that raw materials for krill oil capsules originate from responsible and sustainable fishing.

In addition, Aker Bio Marine works closely with WWF of Norway. The extensive traceability of the raw material and the final product is a key feature that protects the buyers and the krill fishing itself from commodities with blurred origin. It also helps to protect anyone from the risks arising from marine products that are produced by illegal, unregulated and unreported fishing.

ADVANCED EXTRACTION TECHNOLOGY

The patented Flexitech® technology allows the extraction of Krill oil in a unique way to minimize the processing and preserve



the ingredients which naturally exist in it and which benefit human health. At the same time, this technology ensures:

- phospholipid yield increased by 50%
- amount of DHA & EPA bound to phospholipids increased by 40%

KRILL OIL AND Ω3 : THE MAIN DIFFERENCES:

- Krill oil provides the body with omega-3 acids bound to phospholipids while fish oil in the form of triglycerides. Since all cell membranes in our body have fats in the form of phospholipids, it is expected that krill oil is more efficient and the Omega 3 passes into our cells more readily.
- Krill oil includes astaxanthin naturally. This feature gives our body an incredible antioxidant strength but at the same time ensures its antioxidant protection.
- Krill oil is more bioavailable. Supplementing with Krill oil guarantees the same benefits to our health at lower doses.
- Phospholipids are both water- and fat soluble. So they do not float on the surface of stomach fluids but dissolve completely in the stomach contents. This leads to their rapid absorption by the digestive tract and the lack of the unpleasant aftertaste that fish oils usually have.

BRAIN PROTECTION

Phospholipids are the main component of the ω-3 (EPA & DHA) transporter through the blood-brain barrier. DHA is particularly important in this process, as well as in the structure and maintenance of the brain at all stages of life and represents about 40 percent of all polyunsaturates in the brain. Preclinical studies have shown that omega-3 (specific DHA) with phospholipids can lead to higher levels of integration of omega-3 in the

brain. Consumption of EPA and DHA in the form of phospholipids increases cognitive function scores compared to scores obtained when fatty acids are supplied in the form of triglycerides.

- They can also prevent brain shrinkage associated with age.
- Protect cognitive function.
- Prevent the onset of dementia.
- Prevent depression that is a common companion symptom of brain aging.
- Krill oil enhances neuroprotection in the brain. Brain cells accept support from fatty acids in the form of phospholipids much faster and more effectively. Cell membranes are protected as well as the neurons. Reducing the rate of wear is important.
- Krill oil enhances the prevention of age-associated brain shrinkage (cortical atrophy).
- The adequacy and ease of entry of Omega 3 fatty acids in brain cells offers better cognitive results, larger volume of gray matter and lower dementia rates.
- Krill offers less signs of disturbances in the brain blood flow. This is considered a very important asset to prevent the occurrence of, but also to reduce the risk of ischemia to certain brain regions and provide better oxygen supply to brain cells.
- Krill oil reduces the rate of β -amyloid ($A\beta$) precursor accumulation in the cerebral hippocampus. An important way in which omega-3s protect your brain, is by shielding the main memory processing area, the cerebral hippocampus.

REDUCTION OF INFLAMMATION

Krill oil enhances our toolbox to fight oxidative stress and inflammation which leads to the development of all inflammatory diseases, including arthritis, rheumatoid arthritis and thrombocytopenia or inflammatory conditions in the gut. It is a finding of many studies that krill oil can reduce C-reactive protein even by 30%, reducing pain at the same time.

Participants who used Krill oil in the studies reported a 28.9% reduction in pain, 20.3% reduction in stiffness and the reduction of total functional damage by 22.8%. Krill oil also improves the integrity of the intestinal barrier and repair during inflammation as it controls bacterial adhesion and invasion to cell tissues. Krill oil can represent an innovative tool to reduce inflammation of the bowel.

HEART PROTECTION - HYPERLIPIDAEMIA

It has long been known that higher levels of omega-3 fatty acids such as EPA and DHA are strongly associated with the improvement of cardiovascular health, while the lower Omega-3 blood levels are associated with increased hypertension rates and risk of heart attack.

This relationship continues to strengthen in a number of related areas with heart disease. The best access of $\Omega 3$ to cells, something that krill oil ensures, maximizes these benefits. Adding astaxanthin to that, whose antioxidant power protects the blood vessels, and the heart itself, from oxidation, oxidative stress and inflammation due to oxidative mechanisms, then we clearly understand that krill oil, is a superweapon for:

- reduction of inflammation
- reduction of triglycerides
- lowering of blood pressure,
- improving endothelial function
- significant reduction of oxidized LDL-cholesterol
- reduction of C-reactive protein (CRP)
- decrease of platelet aggregation
- increased elasticity and resistance of arteries
- significant improvement in cell signaling, the communication channel of the brain with the nervous system.

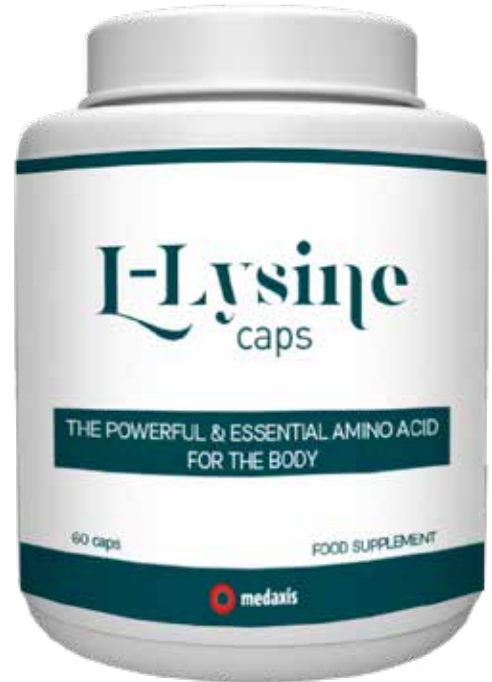
L-Lysine

caps

Dietary supplement with the amino acid lysine in its natural form.

INGREDIENTS: 100% free-form lysine capsule material: vegetable cellulose.

INSTRUCTIONS: Take 1-3 capsules a day on an empty stomach



Nutrition information	per 1 capsule	RDA
L- LYSINE (from l-lysine HCL)	570 mg	***



IMPORTANT ACTIONS OF LYSINE

Lysine is a building block for protein. It is an essential amino acid because our body cannot produce it, so we need to take it from food. It is important for normal growth and tonality and muscle strengthening and is used for the formation of carnitine, a substance found in the tissues of cells in your body. In addition, it helps in the body's fat transport to cells to be utilized for energy.

LYSINE AND HERPES

Herpes is caused by herpes-simplex virus 1 (HSV-1), who can hide in the spine column. In times of stress or in case of weakening of the immune system, HSV-1 may cause pain and inflammation and the development of painful symptoms. Lysine supplements can help in preventing HSV-1 from replication and reduce the risk of hypoglycaemia. Lysine is believed to block arginine, another amino acid which HSV-1 needs in order to multiply thereby weakening the virus.

LYSINE AND STRESS

Lysine can help stabilize emotions and the levels of cortisol-the stress hormone. Preliminary research suggests that it may improve symptoms in people with chronic psychological complications. One study found that it blocks stress receptors. The researchers observed that lysine-treated subjects had lower rates of frequent bowel movements that are indicative of stress and in general less stress somatization.

LYSINE AND CALCIUM BALANCE - BONE HEALTH

Lysine can help you absorb more calcium and reduce calcium loss in the urine. It could even reduce the risk of calcium accumulation in the blood vessels. Lysine seems to protect your bones and it can also play a role in controlling calcium transport in the body.

LYSINE IN WOUND HEALING AND COLLAGEN RECONSTRUCTION

Lysine is essential for the formation of collagen, a key protein that affects the recovery of wounds. Studies show that lysine can speed up wound healing and reduce recovery time. In animal tissues, lysine becomes more active at the site of a wound and helps speed up the repair process. Wound healing is a complex process that requires different minerals, vitamins and other factors.

Lysine appears to have a valuable role and in the presence of insufficient lysine, wound healing is impaired. Lysine itself can also act as a linker, thus increasing the number of new cells in a wound. It can even promote the formation of new blood vessels.

LYSINE AND THE IMMUNE SYSTEM

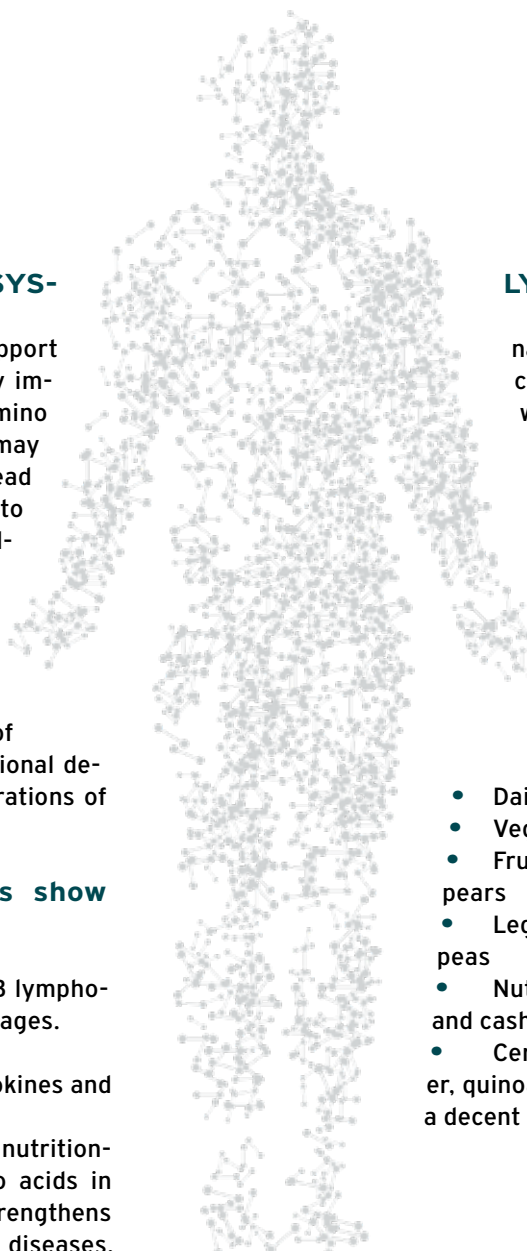
Lysine is very important for its support to the immune function. As a healthy immune system requires adequate amino support, natural lysine supplement may increase enzyme production and lead to immune sufficiency. Lysine helps to strengthen the immune system by adjusting the body chemistry so that it is less welcoming to outside pathogens and supporting the acidic-basic balance of the body. Lysine has been shown to prevent viral outbreaks and reduce the duration and severity of viral infections. Malnutrition or nutritional deficiencies reduce the plasma concentrations of most amino acids.

Findings from recent studies show that amino acids regulate:

(1) the activation of T lymphocytes, B lymphocytes, natural killer cells and macrophages.

(2) the production of antibodies, cytokines and other cytotoxic substances.

Growing evidence shows that nutritional supplementation of specific amino acids in malnourished animals and humans strengthens the immune status against infectious diseases, thereby reducing morbidity and mortality.



LYSINE IN OUR DIET

Lysine is found in foods that are naturally high in protein content, especially in meat and dairy products, as well as in smaller quantities in plant foods.

EXCELLENT SOURCES OF LY-SINE:

- Meat: Beef, chicken and lamb
- Seafood: Mussels, shrimp and oysters
- Fish: Salmon, cod and tuna
- Dairy products: Milk, cheese and yogurt
- Vegetables: Potatoes, peppers and leeks
- Fruits: Avocados, dried apricots and pears
- Legumes: Soya, kidney beans and chickpeas
- Nuts & seeds: Macadamia, pumpkin seeds and cashews
- Cereal is generally a poor source. However, quinoa, or amaranth and buckwheat contain a decent amount of Lysine.

L-Carnosine base

Food supplement with natural and plant-derived carnosine.

The best quality carnosine in the market. It is 100% pure, natural, plant-based L-carnosine at the highest possible laboratory tested purity.

INGREDIENTS: basic-vegetable form of carnosine, capsule: material vegetable cellulose, anticoagulant producing magnesium salts of fats acids (from vegetables)

DIRECTIONS: Take 2 capsules per day.



Nutrition information	ανά 2 κάψουλες	RDA
L-CARNOSINE	1000 mg	**



WHAT IS CARNOSINE

L-carnosine is a dipeptide, which consists of two amino acids, histidine and β -alanine. The content of carnosine in the body is significantly higher in childhood than in the third age.

PROTEIN CARBONYLATION AND GLYCOSYLATION

With aging, advanced glycation end products (AGEs) which are a cluster of heterogeneous molecules which are generated in a non-enzymatic reaction by the binding of sugars to amino groups of DNA, lipids and proteins are found in increasing concentration. These macromolecules have undergone transformation and interfere with the normal tissue function. AGEs inactivate natural antioxidant enzymes and reduce our natural defenses. Carnosine is a naturally occurring dipeptide with antioxidant activity, which inhibits glycation and the formation of AGEs

STOP PRODUCING AGEs, THEREBY AGE LESS - WHAT IS GLYCOSYLATION?

Protein glycosylation is one of the four major destructive

pathways stimulated by oxidative stress in the body. The binding of sugars to protein can also lead to proteins sticking together, a process known as cross-linking. The devastating effects of glycosylation and cross-linking play important roles in the aging process. The formation of AGEs is part of the normal metabolism, but high AGEs levels in tissues may induce pathologies.

CARNOSINE PROTECTS THE BLOOD VESSELS OF THE HEART

In the context of cardiovascular disease, AGEs can cause deterioration of collagen structures, a fact that results in vascular stiffness and particle trapping of low-density lipoproteins (LDL) in arterial walls. AGE'S can also cause glycation of LDL which can promote its oxidation. Oxidized LDL is one glycosilation of the main factors in the development of atherosclerosis.

Finally, AGE'S can be linked to RAGE (receptor for advanced glycosilation end products) and cause oxidative stress as well as activation of inflammatory pathways in vascular endothelial cells. The long-term accumulation and effect of AGE'S on the endothelium of the vessels accelerates the atherosclerosis of the coronary arteries, while adherence to collagen of the vessels causes reduced vascular distensibility.

CARNOSINE INHIBITS TELOMERE LOSS

Telomeres are the end parts of our chromosomes and are responsible for maintaining integrity of our DNA. As we age our telomeres get shorter and shorter changing the stereoscopic structure of our chromosomes. It is the key mechanism behind aging. L-carnosine, delays reproductive aging and expands the lifespan and health of human chromosomes, by maintaining telomere length and preventing their destruction.

CARNOSINE REDUCES ANXIETY

Many anxiety-related and depressive disorders have been shown to be associated with one or more of the following: shortened telomeres -elevated cortisol levels - increased age-related dysfunction.

There is evidence that carnosine can boost cortisol metabolism, suppress telomere shortening and exert anti-aging action.

CARNOSINE IS ANTI-AGING

Cell culture studies show that carnosine can inhibit the growth of transformed cells and delay cellular aging, maintain telomere length and promote creating a more youthful phenotype when added to aging cells.

CARNOSINE PROTECTS THE BRAIN

Ranging from neurological degenerations (Alzheimer's, Parkinson's, depression epilepsy, schizophrenia, mild mental impairment, dementia and stroke). It is claimed that senile dementia and Alzheimer's are related to the formation of plaque in the brain due to lack of carnosine.

Studies on carnosine have shown that it is one of the protective mechanisms in the microvasculature of the brain which prevents the formation of plaque. Delays aging of cells and helps the brain function in preserving memory. Brain tissue needs high concentrations of carnosine as the brain has a special high need to reduce glycosylation via the antioxidant effects provided by carnosine in order to maintain normal neural function. Glycosylation, oxidative stress, the inflammation secondary to oxidant stress and uncontrolled cross-linking of glucose to proteins, are believed to contribute to the progression of Alzheimer's disease.

There is evidence from studies that carnosine can reduce the toxic effects of beta-amyloid protein. Beta-amyloid is the abnormal protein that builds up in the brains of people with Alzheimer's disease and does damage the surrounding brain tissue. For these reasons increasing the levels of carnosine in the brain may have a protective effect against Alzheimer's disease.

CARNOSINE HELPS THE EYES

Carnosine has multiple effects on eye health. Multiple studies have shown that carnosine helps protect the eye from oxidative damage of the lens and retina. Another study showed that carnosine protects the retina from ischemia or lack of oxygenation. Carnosine also has a protective role in eye health when the eye tissue is under increased intraocular pressure, thereby reducing the risk of glaucoma.

Supplementing with carnosine prophylactically can prevent the development of glaucoma, help reduce ischemia and of oxidative stress from increased eye pressure, help treat retinal problems from severe myopia and diabetes.

Cataracts that tend to appear in our eyes as we age, is believed to be mainly due to the cross-linking of proteins caused by glycosylation. This is the reason that cataracts are so common in diabetics. Diabetic cataract is a disease that requires not only biochemical / pharmacological but mainly a holistic approach for its better management.

Natural ingredients, with carnosine as the main component, are both effective and safe as natural inhibitors of unwanted oxidation and glycosylation reactions and have demonstrated promising results as adjuvant therapy.

CARNOSINE HAS MULTIPLE EFFECTS IN DIABETES

Carnosine reduces elevated blood sugar levels, reduces the long-term formation of dangerous AGEs, limits the oxidation stress and increased inflammation and prevents crosslinking of proteins not only in diabetics but also in other healthy people.

Protects kidney cells from the effects of high glucose levels, helping to reduce the risk of diabetic nephropathy. Reduces oxidation and glycosylation of low-density lipoprotein (LDL), which is of key importance in reducing atherosclerotic diabetes

BENEFICIAL FOR THE SKIN

AGEs destroy collagen (responsible for firmness of our skin) and elastin (which allows for our skin to have elasticity). The more AGEs circulating in our blood, the less youthful our skin looks. Research shows that as we age, the amount of AGEs increases, leading our skin to aging and sagging. In addition, the process of glycosylation increases the cortisol levels (stress hormone) and increases inflammation – both cause corresponding hormonal disorders that interfere with glow on our skin. Harmful are the consequences of glycosylation especially on the skin. The endogenous spontaneous reaction of sugars which are carried in the blood, with the dermal fibers (collagen and elastin), turns the latter into rigid and fragile molecules, giving them a "caramelized" form.

The supporting tissues are downgraded so the skin gradually loses its firmness, its elasticity and proper moisture, while fine lines and wrinkles appear on its surface. The weakened skin defense against ultraviolet radiation causes the appearance of signs of photoaging. Finally, carnosine significantly helps in the healing and restoration of wounds that are delayed due to reduced elasticity and brittleness of collagen tissues.

CARNOSINE SUPPORTS MUSCLE RECOVERY AFTER EXERCISE

Carnosine inhibits the production of lactic acid and helps stabilize calcium electrolytes after vigorous exercise. On the other end of the spectrum, people with mitochondrial disorders, other metabolic or muscle disorders or fibromyalgia manifest abnormal accumulation of lactic acid and can therefore benefit from the use of carnosine to regulate lactic acid and improve their muscle tone.

L-Glutathione reduction

Food supplement with glutathione in stabilized form and in enteric soluble – gastro resistant plant capsules.

For 100% absorption of the ideal form of glutathione from the gut directly to blood circulation.
EFFICIENCY: 73.5%

INGREDIENTS: L-Glutathione Reduced (73.5%), capsule material vegetable cellulose and gum gelan, ascorbic acid, anticoagulant agent magnesium salts of fatty acids from vegetables.

DIRECTIONS: take 1 capsule 2 times a day. Do not chew.



Nutrition information	2 caps	RDA
L-Glutathione Reduced	500 mg	**



Oxidative stress occurs when there is an imbalance between the production of free radicals and the body's capacity to remove them. Excessively high levels of oxidative stress may be a precursor to multiple diseases, and adversely affect all organs and body functions. Oxidative stress is silent, it starts without obvious symptoms, and more often when detected, it is so strong that our body can hardly recover.

Biological tissues require oxygen to meet their energy requirements. However, oxygen consumption also results in the generation of free radicals which can have harmful effects on cells. The brain is particularly vulnerable to the effects of reactive oxygen species due to the large oxygen demand and the abundance of peroxidase substrates. Oxidative stress is caused by an imbalance in the redox state of the cell, either by overproduction of reactive oxygen species or by dysfunction of antioxidant systems. Oxidative stress has been detected in a number of neurodegenerative diseases and emerging evidence from in vitro and in vivo models indicate that oxidative stress may play a role in important pathogens.

ITS BASIC FUNCTIONS INSIDE THE BODY

It is the main endogenous antioxidant produced from the cells, participating directly in the neutralization of free radicals and active forms of oxygen. At the same time, it preserves oth-

er antioxidants, such as vitamins C and E in their active forms. Adjusts the nitric oxide cycle, which is critical for life. It affects metabolic and biochemical reactions such as synthesis and repair of DNA, protein synthesis, prostaglandin synthesis, amino acid transport and of enzyme activation. Every body system can be affected by the state of the glutathione system, in particular the immune, nervous, gastrointestinal and respiratory.

It plays an important role in immune function:

- Promotes T-cell function.
- Protects from environmental toxins
- Helps eliminate toxins which are by-products of metabolism.
- Discourages cancer progression.
- It is a cofactor ("helper molecule") for some important enzymes such as its peroxidase glutathione (which protects you from oxidative damage).
- Reduces peroxides (natural oxidizing agents which are harmful to the body).

GLUTATHIONE PROTECTS THE LIVER AND PROMOTES HEPATIC CELL DETOXIFICATION

Alcoholic liver disease (ALD) is one of the most serious consequences of chronic alcohol abuse. Cirrhosis of the liver, the culmination of the disease, is one of the leading causes of death in Western countries. The mitochondria are a target for ethanol poisoning, mainly because of the toxic effects of acetaldehyde, a by-product of ethanol metabolism. The morphological and functional changes in mitochondria are one of the key features of chronic ethanol exposure in chronic alcoholics. The functional changes observed are translated to an overall decrease in ATP levels resulting from lower rate of ATP synthesis.

Mitochondrial glutathione (GSH) plays a critical role in maintaining cellular functions and viability and in their physiology mitochondria through free radical metabolism of oxygen produced in the respiratory chain. In chronic liver disease, a decrease in liver glutathione function is observed and therefore the detoxifying effect on hepatocytes.

This results in the acceleration of cell deaths and mutations and it weakens the ability of the liver to eliminate toxins. The administration of high dose glutathione in patients with chronic liver disease significantly improves certain liver indices (bilirubin, GOT, GPT, GT).

IT HELPS THE BODY GET RID OF HEAVY METALS

In your body, glutathione is the dominant factor, which binds and helps remove from tissues mercury and other heavy metals. In today's toxic world full of heavy metals, plastics, synthetic chemicals, there is ONE

UNIQUE SUBSTANCE that works :

- Meet glutathione!! A master detoxifier for your body!
- No other nutrient works more effectively to eliminate mercury, lead, aluminum, mycotoxins, parabens, phthalates and hundreds of other toxic substances.
- It is equally effective in removal and neutralization of heavy metals in the brain.

IMPROVES INSULIN RESISTANCE

As people age, they produce less glutathione. Baylor School of Medicine researchers used a combination of animal and human studies to investigate the role of glutathione in weight management and insulin resistance in the elderly population.

The findings of the study showed that low levels of glutathione were associated with less fat burning and higher rates of body fat storage. In elderly subjects adding cysteine and glycine to their diet increased glutathione levels, improving insulin resistance and fat burning within two weeks.

ABSOLUTE SHIELD AGAINST NEURODEGENERATIVE DISEASE

Aging has been established as the most important risk factor for common neurodegenerative diseases, like Alzheimer's (AD) and Parkinson's disease (PD). Most theories are based on the assumption that the cumulative oxidative stress leads to mitochondrial mutations, mitochondrial dysfunction and oxidative damage.

Oxidative stress is an epiphenomenon of dysfunctional and dead neurons or does the oxidative stress itself cause dysfunction and death of neurons? Whatever the answer, glutathione is the essence of "key". Its presence will not allow aging and degeneration of neurons and at the same time will not allow the oxidation of the cells, which will trigger and maintain degeneration. There is evidence of the effect of oxidative stress and the reduced state of GSH for Lou Gehrig's disease (ALS), Parkinson's disease and Alzheimer's.

IMPROVES LOWER LIMB MOBILITY

Peripheral arterial disease is a disorder of lower extremity circulation due to narrowing & obstruction of the arteries of the limbs. It often occurs in the legs. A study reported that glutathione improved circulation, increasing participant ability to walk without pain for longer distances.

THE ROLE OF GLUTATHIONE IN HYPERTENSION

The risk of developing chronic hypertension increases with age. Among other factors, increased oxidation stress is a well-recognized causative factor. The co-existence of oxidative stress and hypertension can occur as a consequence of antioxidant depletion activity of the defense system or the increased generation of reactive oxygen species. Glutathione is a major intracellular redox regulator of thiol-disulfide which serves as a cofactor for many antioxidant enzymes.

Related glutathione parameters are altered in hypertension, a fact that indicates that there is a direct relationship between the redox system and hypertension. In particular, we discuss the role of glutathione in antioxidant stress and the maintenance of nitrate oxide bioavailability. The general conclusion of the studies carried out in elderly hypertensive patients were that the disorders of glutathione metabolism may explain the age-related increase in blood pressure.

GLUTATHIONE AND CANCER

One of the most promising areas of GSH research is the role it plays in cancer. "By providing resistance to a series of chemotherapy drugs.

An important study, published in Cell Biochemistry and Function in 2004, concluded: Increased glutathione levels are able to protect healthy cells in the bone marrow, breast, colon, in the larynx and lung from the effects of chemotherapy drugs while glutathione depletion of cancer cells will enhance the anti-cancer activity of chemotherapeutic agents.

Magnesium chelated

Supporting all our body needs

MAGNESIUM CONTRIBUTES:

- in reducing tiredness and fatigue
- in normal muscle function and electrolyte balance
- in normal metabolic function processes aimed at energy production
- in normal central nervous system function
- in normal protein synthesis
- in maintaining bone health
- in maintaining teeth health
- in the process of cell division

INGREDIENTS: magnesium bisglycinate chelate (88%), material capsule vegetable cellulose, antioxidant agent ascorbyl palmitate (fat-soluble form of vitamin C)

DIRECTIONS: Take up to 3 capsules per day



At this point, the great value of supplements containing chelated metals (chelated minerals) becomes evident. If we take into consideration that metals are toxic to the body in their atomic state and that all metals present in human tissue are in the form of chelates, then we can realize the importance of a food supplement containing minerals chelated with amino acids. A fully chelated metal can now pass through the intestinal walls without being retained due to its negative charge and reach the circulation, i.e. become bioavailable. Extensive clinical research and laboratory studies have shown that the amino acid glycine is the ideal size and type of binder.

ESSENTIAL MAGNESIUM

One of its most important functions is that it plays a key role in energy production. This is of vital importance for all cellular functions and processes. It helps maintain normal muscle and nerve function, keeps a normal heart rate, supports a healthy immune system and keeps bones strong. The wide range of positive effects for health and biological activity make it effective in treatment of some common disease and conditions, such as fibromyalgia, chronic pain, diabetes, osteoporosis, cardiovascular disease and headaches. Many studies have shown that magnesium supplementation and its deficiency correction has improved the aforementioned conditions.

MAGNESIUM AND THE HEART

One of the most important effects of magnesium on health is better blood pressure regulation. Helps maintain heart rate. The heart as muscle is negatively affected by magnesium deficiency. It has been found that magnesium inhibits smooth muscle muscle fibers contraction. People who are deficient in magnesium are prone to arrhythmia, or abnormal heart rhythm.

Nutrition information	3 caps	RDA
Magnesium chelated	2680 mg	**
Which yields magnesium	375 mg	100%



Minerals are absorbed in the small intestine, the walls of which have a negative charge. When metals enter the body, they acquire a positive charge. So when they arrive in the small intestine, they cannot be absorbed by passing through its walls, but adhere to the walls instead, as they are attracted by the negative charge. The result is accumulation of metal ions, unable to pass through the intestinal walls remaining in the same position for a long period of time; then to be swept away en masse by the food that descends from the stomach. So they are lost in the body, since it is not possible to absorb them into other lower parts of the intestine. But what remains attached should be joined with amino acids derived from digestion, so they can pass the intestinal walls in the form of chelated compounds and reach the circulation. If this doesn't happen, either because the right amino acids are not present, or because their quantity is insufficient, then metal ions can not be absorbed and can cause adverse effects, which is not unusual with mineral supplements.

Experts believe that magnesium deficiency may be the key factor in the relationship between heart disease and risk factors for heart problems, such as high blood pressure, accumulation of fat in the abdominal area, diabetes and stress.

MAGNESIUM AND THE MUSCLE SYSTEM

Magnesium helps relax muscle and prevents the accumulation of lactic acid, while contributing to treating a range of joint and muscle problems, such as fibromyalgia, osteoporosis, restless legs syndrome and other inflammatory conditions.

MAGNESIUM AND ENERGY: ITS ROLE IN THE ADRENALS

The role of magnesium in reducing stress levels and the restoration of hormones is extremely important. Magnesium helps regulate cortisol levels, the stress hormone. If you notice that you are constantly in a state of fatigue and agitation, you may have a magnesium deficiency. Magnesium limits release of stress hormones, while acting as a filter for hormones entering the brain. When the body is in a state of stress, it uses available magnesium reserves to neutralize it and often leads to more stress, as there is not enough magnesium to block the release of cortisol.

MAGNESIUM AND CHRONIC FATIGUE

A study published in the prestigious Medical Journal Lancet reported that out of hundreds of people with chronic fatigue syndrome, half of them had inadequate amounts of magnesium while following magnesium administration a great improvement in their health was reported.

MAGNESIUM AND DIABETES

People with risk factors for the onset of type 2 diabetes – for example those who have pre-diabetes – need to get enough magnesium through their diet. Several studies have indicated that magnesium preventively acts against diabetes, while in individuals who have already been diagnosed with the condition, it contributes to better regulation of their blood sugar. In a big study group (5,000 people) over 15 years who received higher magnesium levels showed a reduced risk for metabolic syndrome.

A similar study published in the American Journal of Epidemiology observed more than 1,000 healthy adults for 5 years and found that magnesium intake improved insulin resistance. Diets with higher amounts of magnesium were associated with a significantly reduced risk of diabetes, probably because of the important role of magnesium in glucose metabolism.

Hypomagnesemia can worsen insulin resistance, a condition that often precedes diabetes, or could be the consequence of insulin resistance. Diabetes leads to increased urinary loss of

magnesium and its subsequent deficiency could impair secretion and the action of insulin, as a result of which diabetes control deteriorates.

MAGNESIUM AND BONE PROTECTION

Calcium and vitamin D are well established for their benefits on skeletal health, but magnesium is just as important. In particular, adequate magnesium intake is essential for the absorption of calcium from the bones.

MAGNESIUM AND THE NERVOUS & NEUROMUSCULAR SYSTEM

It reduces neuronal excitability and neuromuscular transmission. Magnesium has been shown to stabilize the central nervous system and especially the nerve fibers that transmit information from nerve cells to the rest of the body. When the amount of magnesium drops, the result is excessive neuromuscular activity, which can lead to muscle tremor, convulsions and generalized weakness. Spasms and cramps in the legs and other parts of our bodies are not really rare – they are the most common signs of magnesium deficiency. In addition, supplementing with magnesium has been shown to ease period cramps and other premenstrual symptoms. So it is important that women get enough magnesium supplementation.

MAGNESIUM AND MOOD

Magnesium deficiency has been associated with increased risk of depression, while taking magnesium has shown to improve symptoms of common mental illness. The relationship between magnesium and depression is probably explained by the effect of the metal on the production of neurotransmitters in the brain – the “chemical messengers” that control our mood.

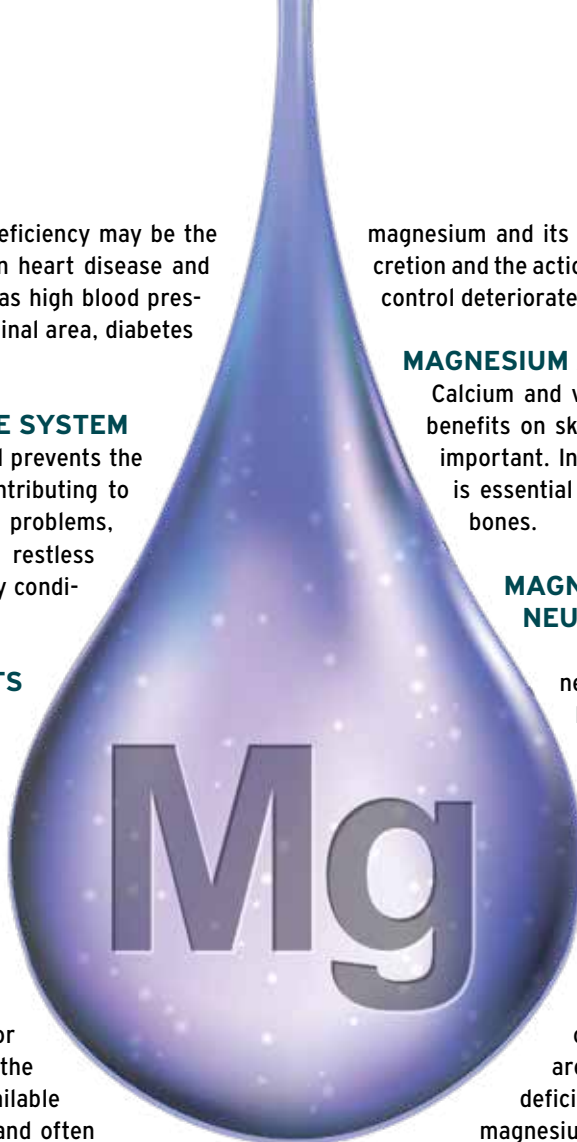
MAGNESIUM AND MIGRAINES

Research has shown that 50% of patients who suffer from migraines have a concomitant magnesium deficiency. It was found that 60% of people with chronic migraines present with genetic changes that reduce the ability of their body to metabolize magnesium, which relaxes the blood vessels in the brain.

Magnesium deficiency is associated with factors that promote headaches, including neurotransmitter release and the vasoconstriction effect. According to updated data based on the Guidelines of the American Academy of Neurology and the American Headache Society concluded that magnesium therapy is “probably effective” for migraine prevention.

MAGNESIUM AND RESPIRATORY SYSTEM

Major scientific investigation carried out in Scotland showed that people who do not eat enough magnesium rich foods have a higher rate of asthma. One reason could be that magnesium makes healthy bronchodilation easier.



Magnesium oxide powder

Magnesium oxide powder, pharmaceutical grade purity.

INGREDIENTS: 100% Magnesium Oxide powder without any other additives.

ALUMINUM FREE - GLUTEN FREE

DIRECTIONS: Take about 1/4 tsp in enough water before dinner, or 1 hour before sleep, or as directed by a Healthcare Professional (1/4 tsp = 1 g)

Nutrition information	1 δόση (περίπου 1γρ)	RDA
MAGNESIUM ACID	1000 mg	**
Delivers magnesium 60,3%	603mg	160%



MAGNESIUM CONTRIBUTES:

[EFSA 2010;8(10): 1807]

- in reducing tiredness and fatigue
- in normal muscle function and electrolyte balance
- in normal metabolic function processes aimed at energy production
- in normal central nervous system function
- in normal protein synthesis
- in maintaining bone health
- in maintaining teeth health
- in the process of cell division

A MODERN PLAGUE: CONSTIPATION

Most people have experienced constipation at some point in their lives. Although it is usually not serious, constipation can be painful and a challenging disappointment. Constipation occurs when bowel movement becomes difficult or less frequent than normal. The frequency or the time between bowel movements varies widely from person to person.

Causes of constipation include insufficient exercise, stress, various drugs and a diet poor in fiber. Constipation is due to reduced peristalsis of the intestine and leads to hard stools in the rectum or large intestine, resulting in a patient's feeling of



bloating. If constipation persists it can cause coprostasis. Constipation and coprostasis should be prevented so that stretching or pain does not occur. After all, cardiac, pulmonary or gastrointestinal conditions may worsen due to the pressure caused by coprostasis.

WHAT IS MAGNESIUM OXIDE AND HOW DOES IT BENEFIT YOU?

Magnesium oxide is truly an amazing substance. When mixed with water and consumed, its unique properties allow the release of large quantities of water in the gastrointestinal tract. Alternative Medicine professionals understand the benefits of intestinal cleansing for maintaining overall health and wellness. Magnesium oxide is a safe and very effective method to achieve this goal. When the compound is mixed with water it essentially frees blocked ions of oxygen along the intestinal tract.

At the same time, the additional oxygen combines with hydrogen to create water that softens wedged or hardened fecal materials, thus creating the decisive, cleansing action. One of the best things about using magnesium oxide for cleansing is the mild and natural effect compared to chemical laxatives, proven by the fact that the use of magnesium oxide as a laxative, eliminates the cramps or pains that accompany conventional laxative use. By adjusting the dose it allows everyone to choose the level or rate of cleansing that covers their needs and lifestyles. Since it is consumed orally, magnesium has the ability to clean the intestinal tract from "Above Downwards". Knowing that good bowel function and especially a "clean" gut affects the whole

body, as well as the feeding but also the cleansing process and detoxification, we can claim that magnesium oxide may have a profound effect on many aspects of health, in addition to the constipation that it fully restores.

IT IS A VERY GOOD SOURCE OF MAGNESIUM

Although this is not the main goal of the product, the additional benefit of this is significant if we consider the importance of magnesium for the whole body.

DOSAGE - PROTOCOLS - INSTRUCTIONS

A typical cleansing process will take thirty days and the first two weeks will be more intensive. It is not unusual for a person to experience 4 to 10 movements of the bowel daily during this initial period, although even 2-3 can still provide adequate cleansing at the end. If this rate is unpleasant simply reduce the dose. Start by taking 1/4 teaspoon with one large glass of water at night before bed.

If the dose is not effective, you can increase progressively until the bowels function, but no more than 2 teaspoons. During the treatment and especially the days you take magnesium oxide make sure you drink a lot of water. Parallel administration of vitamin C, maximizes the results.

We would also recommend sufficient consumption of herbal hydrophilic fibers such as psyllium or oat bran. It is important to take the mixture at least an hour before meals or before bedtime. You can accompany the mixture with a glass of lemon juice or a glass of water with apple cider vinegar, as the increased acidity supports and promotes the procedure. It is recommended that after the initial stage and following restoration of the intestinal function to continue supplementation at a minimal low dose (1/2 teaspoon) for a while longer or long-term, 1-2 times weekly.

We are reminded of the importance of water!!! It is not addictive, has no toxicity and can be used without fear for long periods of time.



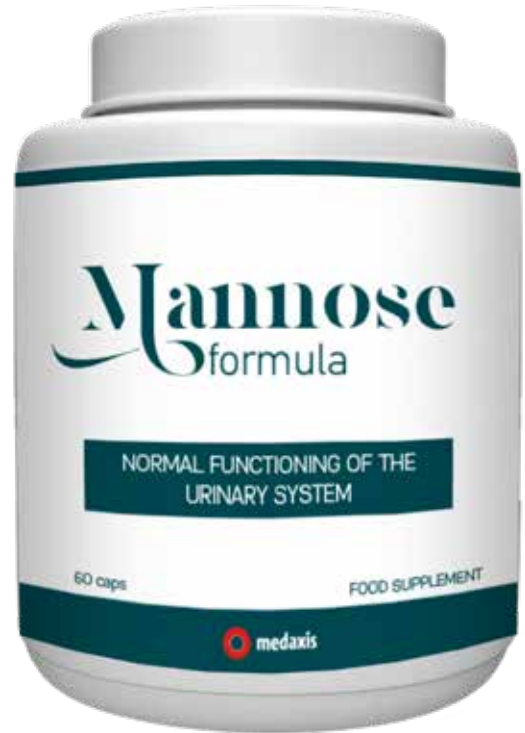
Mannose formula

Mannose formula with plant extracts that contribute to normal urinary system function.

INGREDIENTS: mannose, cranberry extract, gooseberry, parsley leaf extract, Taraxacum officinale (dandelion plant) extract, Solitago extract, Orthosiphon extract, hibiscus leaf extract, (Patented as ELIROSE®).

OTHER INGREDIENTS: capsule material vegetable cellulose

DIRECTIONS: Take 2-4 capsules per day or as instructed by a Healthcare Professional.



Nutrition information	1 cap	RDA
D-MANNOSE	500 mg	**
CRANBERRY EXTRACT CONCENTRATE (vaccinium macrocarpon)	80 mg	**
UVA URSI EXTRACT (arctostaphylos uva ursi)	15 mg	**
PARSLEY LEAF EXTRACT (taraxacum officinalis)	30 mg	**
GOLDENROD EXTRACT (solidago virgaurea)	10 mg	**
HIBISCUS FLOWER EXTRACT ELIROSE® (hibiscus sabdariffa)	40 mg	**
JAVA ROOT /ORTHOSIFON EXTRACT (clerodendranthus spicatus)	30 mg	**
DANDELLION ROOT EXTRACT (taraxacum officinalis)	40 mg	**

D-MANNOSE

The most common cause of UTIs is E-Coli. The basic mechanism through which specific bacteria cause UTI is adhesion of special substances on their surface that allow them to attach to the urinary system mucosa. After attachment they enter cells and cause tissue damage. Mannose mechanism of action is the inhibition of bacterial adhesion to epithelial cells of the urinary tract. D-mannose is absorbed quickly and then excreted by the urinary system, not stored in our body.

Mannose has no adverse effects and can be used for a long time while it is worth pointing out that because its action on bacteria is "mechanical" and not biochemical, bacteria do not acquire resistance and this makes it always effective.

CRANBERRY EXTRACT CONCENTRATE

In recent years several scientific studies showed that certain substances found in these berries (proanthocyanidins or PAC) prevent the attachment of bacteria responsible for cystitis and urinary tract infections on the epithelium of the lower urinary tract. Proanthocyanidins type-A, found mainly in cranberries and not in the rest of the berries, are essentially responsible for the antibacterial activity.

Studies highlight the action of cranberry not directly on the treatment when the disease is in progress, but in preventing recurrences of the infection.

UVA URSI

It is a traditionally used remedy for the treatment and prevention of urinary tract infections based on its antimicrobial activity. This herb can work in urinary tract pathways only when the urine has an alkaline reaction. This can be achieved in parallel with the alkaline food we eat, we use sodium bicarbonate to strengthen the action of the herb, when urine is acidic. Arbutin contained in the plant is a natural urinary antiseptic and as such considered the herb of choice in cases of urinary tract infections. The antimicrobial action of Uva-Ursi was attributed to its ability to change the microbial cell surface characteristics.



Urinary tract infection (UTI) is reported in the presence of clinical symptoms originating from the genitourinary tract and which are due to the presence of one or more pathogens. Infections are detected in the bladder (cystitis), in the renal parenchyma (pyelonephritis) in the prostate (acute or chronic bacterial prostatitis). Occurrence of urinary tract infection is very common and unfortunately repetitive. The mannose formula targets ALL urinary problems particularly urinary tract infection. The natural extracts selected will give definite, safe and lasting results!!

A study in 1997 showed that in the development of clinical isolates of E-Coli, the presence of Uva-Ursi extracts increased hydrophobicity of the microbial cell surface, thereby reducing their ability to adhere to host cells. Arbutin remains unchanged, it is absorbed and excreted by the kidneys entrapping and removing the neutralized bacteria in the process.

DANDELION ROOT EXTRACT

Dandelion (dandelion) is a strong diuretic with an important role in the increase of fluid expelled from the body; in this way a "rinse" and wider cleansing of the urinary tract is accomplished. Furthermore, its content of bitter substances inhibits bacterial survival in the urinary tract. Finally, an important contribution is the significant amount of potassium it gives to the body, which is necessary when there is increased diuresis.

GOLDENROD-SOLIDAGO

In Germany, it is used as a supportive natural treatment for bladder infections, irritation of the urinary tract and gallbladder/renal stones. Goldenrod is believed to "flush out" bacteria and kidney stones by increasing urine flow and additionally soothes inflamed tissues by reducing muscle spasm in the urinary system. Traditional herbal product to increase diuresis and as an adjuvant in the treatment of urological pathologies - European Medicines Agency (EMA).

JAVA ROOT

Java tea or orthosiphon (*Orthosiphon stamineus*) strengthens the flow of urine due to its diuretic action. It also contributes to the detoxification of the body by increasing the excretion of sodium chloride and nitrogenous substances. Java can also stop convulsions and help fight bacteria. The phytochemicals isolated from the herb include terpenes, flavonoids, caffeic acid derivatives and essential oils. Sinensetin is a polyphenol found in Java root. Sinensetin promotes nitrogen removal waste through the kidneys (renal excretion of water, urea and uric acid chlorides). Two more substances of the herb, orthosiphon and orthosiphon, have been shown to be extremely effective in dealing with all bacterial infections and inflammatory conditions of the urinary tract.

Antimicrobial action: clinical research has shown effective action against *Bacillus subtilis*, *B. Cereus*, *Staphylococcus aureus*, *Listeria monocytogenes*, *Escherichia coli*, *Vibrio parahaemolyticus*, *Salmonella enteritidis*, *S. Typhimurium*, *Streptococcus mutans* and *Klebsiella pneumoniae*.

Java is an effective natural treatment for bacterial and inflammatory disease of the lower urinary tract, for cystitis, for bacterial infections of the urinary system and nephrolithiasis.

PARSLEY EXTRACT

Parsley has been shown to act as a natural diuretic, which can increase urination and prevent the formation of kidney stones. Its mechanism of action appears to be mediated through inhibition of the Na⁺/K⁺ proton pump, which will lead to a decrease in reabsorption of Na⁺ and K⁺, thus leading to osmotic flow of water and diuresis. Due to its natural diuretic properties it helps eliminate any infectious pathogens from the bladder accelerating the process of fighting the infection and the associated discomfort that include itching, burning and pain when urinating. Parsley's active ingredient, apigenin, was shown to have anti-inflammatory properties. Parsley oil shows antibacterial activity against *Escherichia coli*, *Staphylococcus saprophyticus* and *Klebsiella spp.* which are the most common pathogens in UTI. Another ingredient with an antimicrobial effect are the coumarins which are known to activate macrophages by disrupting replication and thus inhibiting growth and colonization of bacteria.

THE UNIQUE ELLIROSE™

ELLIROSE™, is a patented, standardized *Hibiscus sabdariffa* extract. *Hibiscus* is rich in anthocyanins, proanthocyanidins, polysaccharides and organics acids. Its active substances led the scientific community to investigate its ability to prevent and treat UTIs further. The analysis showed that ELLIROSE™ achieved these results through several modes of action:

- Inhibition of pathogenic bacterial flora
- Inhibition of *E. Coli* adhesion
- Strong antimicrobial activity against a wide range of pathogens

Hibiscus extracts contain compounds that have antibacterial, antifungal and antioxidant properties (Maganha 2010). Gossypetin has been shown to have antibacterial activity against common bacteria that cause UTIs, including *E-Coli* and *Pseudomonas aeruginosa* (Mounnissamy 2002).

N-Acetyl Cysteine Selenium

Dietary supplement with acetylated cysteine and selenium.

INGREDIENTS: N-acetylcysteine (herbal/vegan), selenomethionine, plant cellulose.

DIRECTIONS: Take 2 capsules per day

Nutrition information	1 cap	RDA
N-ACETYL-CYSTEINE	600 mg	**
SELENOMETHIONINE	10 mg	**
Which yields selenium	50 mcg	90,2%



N-acetylcysteine (NAC) is a form of the amino acid cysteine that is more readily absorbed. Selenium helps in enhancing the antioxidant effects of cysteine.

It is a precursor molecule of glutathione, one of the most powerful antioxidant molecules of the body. Cysteine is present in foods such as oats, corn, cheese, yogurt, white meats and eggs, however not in its NAC form. Once NAC enters the body it is converted to glutathione.

NAC AS AN ANTIOXIDANT

The body can synthesize cysteine from methionine, an essential amino acid or produce it through NAC breakdown. An abundant supply of cysteine leads to increased production of glutathione that is one of the most important antioxidant mechanisms of cells. Specifically glutathione helps protect cells and the genetic information from oxidative damage that is caused by oxygen free radicals every day.

NAC AND THE RESPIRATORY SYSTEM: CHRONIC BRONCHITIS- CYSTIC FIBROSIS- CHRONIC OBSTRUCTIVE PULMONARY DISEASE

These are three difficult pathologies that N-acetylcysteine will help you cope with. Traditionally used to treat respiratory problems as a mucolytic. N-acetylcysteine has been found to have strong mucolytic properties. Helps reduce chronic symptoms of bronchitis, as it liquefies phlegm and helps its expulsion.

It is suitable to take it as prevention but also to reduce flare-ups and worsening of symptoms of bronchitis and chronic obstructive respiratory disease (COPD). It helps expectorate and



reduces heavy coughing. COPD is a lung disease caused by long-term oxidative damage to the important tissues of lungs.

This damage results in lung tissue inflammation. Inflammation is caused in smaller airways and this leads to shortness of breath and coughing. With the lung glutathione replenishment, NAC tries to reduce oxidative damage and damage of tissues. This, in turn, reduces the likelihood of occurrence of COPD. The main form of treatment for COPD is treatment with oxygen. This involves providing extra oxygen to the patient, so that the blood can take up normal oxygen levels.

However, this extra oxygen increases the production of toxic oxygen radicals. Administration of acetylcysteine will reduce the concentration of these radicals and will contribute to the effectiveness of the treatment. Also, N-acetylcysteine helps in the treatment of collapsing lungs caused by the obstruction of mucus (atelectasis). Chronic bronchitis is caused by inflammation of the bronchial tubes. This inflammation is often caused by oxidation damage. Chronic bronchitis causes the creation of cough and mucus production in the lungs. NAC will reduce the symptoms in patients with chronic bronchitis acting for the reduction of the free radicals in the bronchial tubes.

NAC AND IMMUNE

NAC has been shown to alleviate flu symptoms, as well as protecting against the flu. The NAC reduces the body's inflammatory response when the flu develops and this reduces the symptoms that appear. NAC also lowers influenza virulence as it replicates in cells. Not possessing the ability to reproduce quickly, the virus is often eliminated before it develops. Because

cysteine has been shown to stimulate the production of T4 white blood cells, it is considered an ideal supplement for immune boosting. Its antioxidant activity alongside contributes to the same goal, as the more toxins our body accumulates the more our natural defenses weaken.

NAC AND TOXINS

Studies have shown that NAC can help protect lungs from carcinogenic substances found in cigarette smoke, protect the liver from the toxic effects of alcohol and reduce the toxic side effects of certain drugs that are used to treat cancer. NAC is also taken orally for protection from environmental pollutants including carbon monoxide, chloroform, urethanes and herbicides and the support of detoxification and cleansing of the body from opiates and narcotics.

NAC has been used successfully for the treatment of arsenic and mercury poisoning. Hepatoprotective properties of NAC are due to the increased ability of liver cells to metabolize toxic drug derivatives. Similar hepatoprotective action also presents in alcoholics.

NAC AND THE LIVER

NAC helps protect against liver damage. NAC is usually used for treatment of liver failure caused by agents, such as excessive alcohol consumption or environmental pollutants. By replenishing glutathione in the body, NAC helps fight oxygen radicals and prevents cellular damage to liver cells.

NAC AND AIDS/HIV

High levels of NAC in the body can help in preventing the reproduction of a strain of HIV, the HIV-1. This suggests that cells with high levels of NAC are able to resist HIV infection. NAC is a good nutritional supplement for people who are HIV+ and are taking other medications.

NAC AND INSULIN RESISTANCE

NAC has been shown to reduce resistance to insulin in obese patients. High blood sugar and obesity can cause fat tissue inflammation. This inflammation initiates a signaling pathway that eventually leads to the destruction of insulin receptors. This destruction leads to type-2 diabetes in obese patients.

NAC has been shown to reduce inflammation in adipose tissue cells. This means fewer insulin receptors are damaged and the cells become more sensitive to insulin. This reduces the risk of developing type-2 diabetes.

NAC AND NEURO-CEREBRAL DISEASE

NAC's ability to replenish glutathione and regulate glutamate levels in the brain can boost brain health. Glutamate, an important factor in neurotransmission, involved in a wide range of learning, behavioral activities and memory, while the antioxidant glutathione contributes to reducing oxidative damage to brain cells that is related to aging. Specifically for Parkinson's, N-acetylcysteine according to many studies improves dopamine effectiveness and the symptom of essential tremor.

Effects on neurotransmission: In addition to effects on oxidative balance, changes in cysteine levels have been demonstrated to regulate neurotransmitter pathways, mainly of glutamate and dopamine. More specifically, NAC helps regulate intracellular and extracellular exchanges of glutamate, preventing the dangerous rise in its concentration through the cysteine-glutamate compensation system.

NAC AND THE HEART

It has also been shown to increase the production of nitrogen monoxide, which helps to dilate the vessels and improves blood flow. This makes it easy to transport blood back to your heart and can reduce your risk of heart attacks.

Nutrition support

Balanced multivitamin with all essential trace elements, minerals and vitamins that the body needs. Enriched with powerful antioxidants.

DIRECTIONS: 1 capsule daily with a meal



Nutrition information	1 cap	RDA
VITAMIN C (as ascorbic acid)	125 mg	150%
CALCIUM (as calcium carbonate)	50 mg	2,5%
VITAMIN B3 (as nicotinamide)	40 mg	250%
CHOLINE (as choline bitrate)	36,5 mg	**
D-calcium pantothenate	36,22 7 mg	555,5%
MAGNESIUM (as magnesium oxide)	33.35 mg	5,33%
VITAMIN A (as beta carotene 10 %)	24 mg	50%
VITAMIN B6 (pyridoxine hydrochloride)	15.2 mg	892,8%
PANAX GINSENG ROOT EXTRACT	15 mg	**
INOSITOL	15 mg	**
VITAMIN B1 (As thiamine hydrochloride)	14.015 mg	1136,3%
RAVA	12.65 mg	**
IRON (as fumarate)	12.5 mg	28,57%
VITAMIN B2	714,28%	
GRAPE SEED EXTRACT(95% OPC)	10 mg	**
COQ10	10 mg	**
ZINC (as zinc oxide)	6.3 mg	50,35%
LUTEIN 10 %	**	
VITAMIN K2 (MK7)	50 mcg	66,66%
MANGANESE (as manganese citrate)	4.95 mg	75,25%
BORON (as sodium tetraborate)	0.5 mg	**
VITAMIN D3 (cholecalciferol)	400 IU	100%
LYCOPENE	10 mg	**
COPPER (as copper sulphate)	650 mcg	25,5%
Astaxanthin	1 mg	**
CHROMIUM (as chromium picolinate)	420 mcg	126%
BIOTIN	155 mcg	303,8%
FOLIC ACID	150 mcg	75%
VITAMIN B12 (as methylcobalamin)	26 mcg	998,4%
MOLYBDENUM (as sodium molybdate)	0.002 mg	1,59%
SILICON (as silicon dioxide)	10 mg	**
SELENIUM (as selenomethionine)	50 mcg	91%

The majority of foods today provide a large amount of calories, with a very low nutritional value. So, although we consume a large number of calories, we starve in nutrients. The finding that the majority of individuals, even ones fed a high quality diet show nutritional deficiencies, has its explanation in many causes. One of the more basic is the alteration of our own quality food, the use of fertilizers, modified varieties, element-poor soil and also poor water. In our times, few foods have retained their nutritional value and our diet to a large extent is not substantial. Just for this reason, there is an urgent need for a good quality, balanced supplement. NUTRITION aid provides just that.

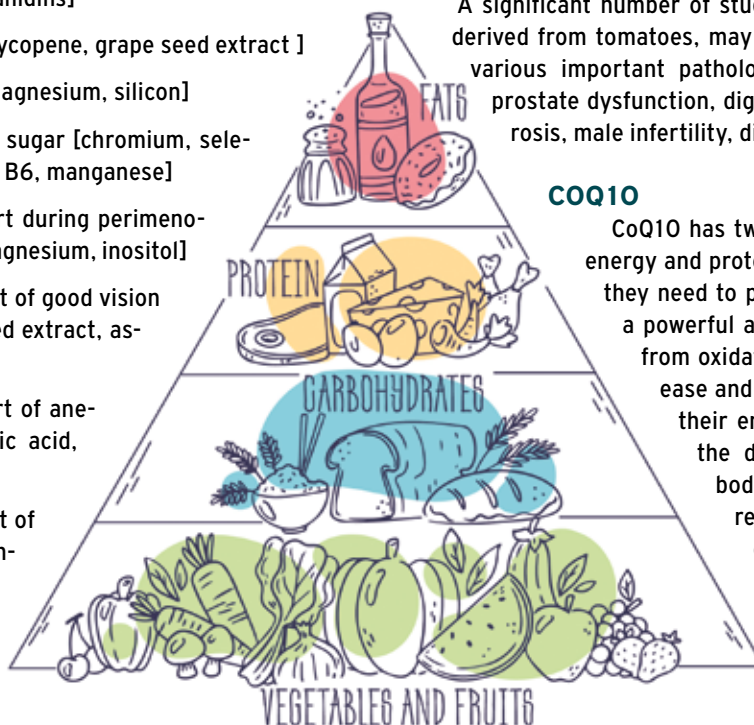
INGREDIENTS NOT INCLUDED IN NUTRITION aid & THE RATIONALE FOR THAT:

- Potassium and sodium, so that it can be used by people with hypertension or hyperkalemia and heart disease that requires moderation on specific trace elements.
- Phosphorus, so that it can be used by people with kidney dysfunction.
- Sulphur, because there is ambiguity in the scientific research as to whether daily supplementation of sulfur is safe long-term. Some adverse effects may include nausea, dizziness and diarrhea.
- Iodine, so that it can be used by people with thyroid dysfunction.
- Vitamin E, because it was replaced with astaxanthin, whose proven ability to absorb free radicals turns out to be up to 550 times higher than vitamin E.



A COMPREHENSIVE FOOD SUPPLEMENT MADE ESPECIALLY FOR ANYONE:

- Who does not eat properly, that your living and work conditions have turned you to food devoid of nutritional ingredients, and you definitely need a complete and balanced multivitamin that will replenish what's missing.
- Who works hard, does sports or exercises and is overruled by fatigue [coenzyme Q10, pantothenic acid, iron, Korean ginseng, B vitamins].
- Who is nearing 40 years and beyond in whom absorption of nutrients from food has decreased [vitamins of complex B, coenzyme Q10, choline].
- Who wants to boost their immune system [vitamin C, zinc, vitamin D3, beta carotene, selenium, ginseng]
- Who is looking for a healthy and beautiful skin, strong hair and nails and a more youthful appearance [beta carotene, silicon, astaxanthin, B2, biotin, RABA, zinc]
- Who experiences anxiety, insomnia, mental stress, fatigue and want to strengthen their central nervous system [magnesium, inositol, pantothenic acid, B1, B12]
- Who wants to get rid of free radicals and to ensure antioxidant protection in your cells [vitamin C, selenium, astaxanthin, proanthocyanidins, lutein, lycopene]
- Looking for the right ingredients to shield your blood vessels and protect your heart [B3, folic acid, magnesium, coenzyme Q10, proanthocyanidins]
- For men [zinc, selenium, lycopene, grape seed extract]
- For women [vitamin B6, magnesium, silicon]
- For nutritional support of sugar [chromium, selenium, grape seed extract, B6, manganese]
- For the nutritional support during perimenopause and beyond [B6, magnesium, inositol]
- For the nutritional support of good vision [beta carotene, grape seed extract, astaxanthin, lutein]
- For the nutritional support of anemia [vitamin C, iron, folic acid, vitamin B12]
- For the nutritional support of the joints and reducing inflammation [vitamin D3, vitamin K2, calcium, magnesium, silicon, boron]



CONTAINS STRONG ANTIOXIDANTS

LUTEIN

It acts as an antioxidant and as an anti-inflammatory. Lutein intake slows down cognitive decline, and improves mental health. Lutein is present in high concentrations in the retina, more specifically in the macula, and is valuable for eye health as it absorbs solar radiation (the blue visible light but also the ultraviolet UV), fighting the harmful effects of free radicals in the eyes, such as in cases of macular degeneration and cataracts.

ASTAXANTHIN

The antioxidant abilities of astaxanthin go beyond those of all other carotenoids. Astaxanthin has the highest antioxidant activity (many times more than vitamins E & C); it has the ability to recycle others antioxidants, such as glutathione and to enhance their action. Results from current scientific research are spectacular regarding the neuroprotective properties of astaxanthin including anti-inflammatory, anti-apoptotic and antioxidant effects; it further possesses the ability to promote or maintain nerve plasticity.

GRAPE SEED EXTRACT

Rich source of proanthocyanidins, with a strong antioxidant effect. Specifically for vascular protection and stimulation of microcirculation in the body. It has cardioprotective properties and improves blood flow to the extremities and the heart.

LYCOPENUM

A significant number of studies have shown that lycopene derived from tomatoes, may contribute in the fight against various important pathologies, such as: heart disease, prostate dysfunction, digestive system cancer, osteoporosis, male infertility, diabetes.

COQ10

CoQ10 has two important roles in the body: energy and protection. It gives cells the energy they need to perform their functions. And as a powerful antioxidant it protects the body from oxidation and by extension from disease and aging. All cells need CoQ10 for their energy requirements. Among all the different types of cells in our body, brain, heart and nerve cells require more energy than any other cell.

Olive leaves extract

Olive leaf extract (Olea europea L.) fixed to yield 20% Oleuropein.

INGREDIENTS: Olive leaf extract (Olea europea L.) standardized for content in min. 20% oleuropein, stabilizer - hydroxypropyl methylcellulose (ingredient capsule shell).

DIRECTIONS: Take 1 capsule 2 times a day



Nutrition information	2 caps	RDA
OLIVE LEAF EXTRACT	870 mg	**
Yielding oleuropein	174 mg	**



Olive tree leaves, as well as the fruit, olives, and olive oil, contain several phenols and their derivatives as well as other nutrients. Oleuropein and hydroxytyrosol are considered to be the most important of the compounds they contain. Oleuropein is extracted from olive leaves and can be used as a broad-spectrum natural antibiotic. It has a positive effect on the immune system and when taken in combination with other antioxidants, its therapeutic properties multiply.

According to clinical research, it has several pharmacological properties including antioxidant, anti-inflammatory, anti-atherogenic, anti-cancer, antimicrobial and antiviral. In addition, it has been shown to exhibit anti-ischemic and hypolipidemic actions. For these reasons, it is readily available at trade as a food supplement in Mediterranean countries. Medaxis hopes to widen its use worldwide.

HOW DO OLIVE LEAVES BENEFIT US AND MORE SPECIFICALLY HOW DO PHENOLS BENEFIT US?

They protect against viruses and bacteria.

They accelerate healing in the common cold, flu and pneumonia. Olive leaves contain great nutritional value antioxidant substances, the most important being oleuropein. Because of these substances, olive leaves preparations, are among other properties, also strong and very effective broad spectrum microbicides.

Most importantly they fight viruses of almost all types. These viruses include influenza viruses. When Oleuropein enters the bloodstream, it hydrolyzes and forms elenolic acid; this has been proven to be a very powerful germicide and to detoxify the human body. In fact, many believe that the salt of elenolic acid with calcium, calcium helonate, will become the antibiotic of the 21st century. This is very important because almost all germs are now resistant to existing antibiotics.

Since 1977, calcium elenolate has been known to work as a powerful broad-spectrum antiviral "drug", because it reacts with the protein coat of viruses and destroys them. Olive leaves have traditionally been used to strengthen immune function and help manage viral infections (especially with fever). These traditional practices appear to be supported by laboratory findings in which oleuropein (widely regarded as one of the most important ingredients of olive leaves), hydroxytyrosol and other compounds found in olive leaves have been shown to be effective against many causative microbial disease, including some viruses that cause flu and similar respiratory infections.

Research shows that olive leaves strengthen the body's innate efforts to combat incoming pathogens through two different processes. First, they seem to stimulate phagocytosis (the process in which the cells of the immune system devour and destroy the invading pathogens); and second by interfering with the ability of bacteria and of viruses to replicate and cause infection.

It lowers blood pressure and improves blood circulation.

Olive leaf extract has, according to many studies, a strong vasodilator and antithrombotic effect and contributes to the reduction of LDL and triglycerides.

As published in the scientific journal "Phytomedicine" researchers created a pill from olive leaf extract and then examined its beneficial properties in 180 hypertensive patients, divided into two groups. In the first group, the participants received the

olive leaves extract for a period of eight weeks. The rest of the participants received conventional high blood pressure medication, whose active medicinal substance is accompanied by adverse events such as severe dizziness, cough, etc.

According to the experts, the people who received the food supplement extract showed a mean reduction in systolic pressure by 11 mmHg. Those who received the prescribed conventional medicine against hypertension, showed a mean reduction in the order of 13.7 mmHg. In the case of diastolic pressure the results showed that people who received the food supplement extract showed a mean reduction in diastolic pressure by an average of 4.8mmHg while those who received the conventional medicine against hypertension, showed a drop of 6.4mm. "The hypotensive effect of the olive leaf extract was similar to that of the drug", the researchers emphasized".

The phenol oleuropein contained in olive leaves, has anti-ischemic and antioxidant action and is a shield for the heart, both in coronary disease and in cases of chemotherapy related cardiotoxicity.

"Along with hypertension medications, it is not far when treating physicians will be able to supplement patients with olive leaf extract", says Dr. Skaltsunis, Director of the Department of Pharmacognosy and Physical Chemistry Products of the School of Pharmacy, National Kapodistriako University of Athens]

It has a strong anti-inflammatory effect

Oleuropein is known to cause anti-inflammatory effects by inhibiting cyclooxygenase activity and leukotriene B4 production.

Oleuropein: A weapon against cancer

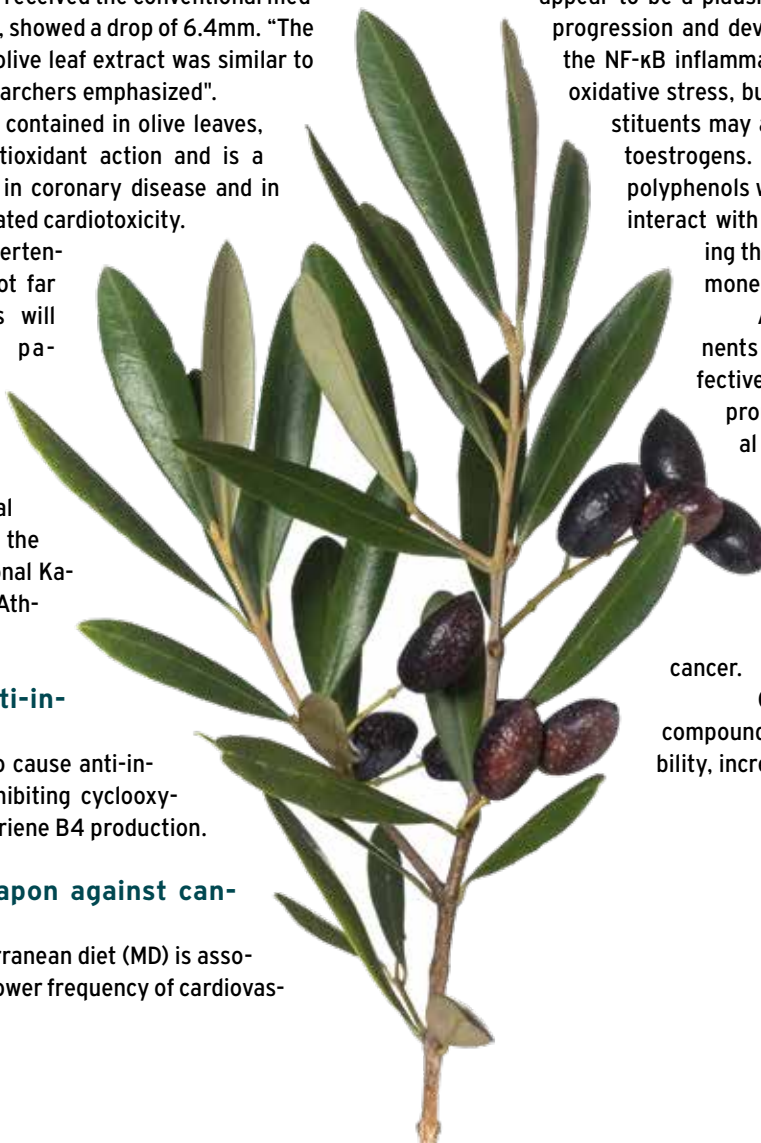
The traditional Mediterranean diet (MD) is associated with longevity and lower frequency of cardiovascular disease and cancer.

The main ingredients of this diet is the high intake of fruits, vegetables, red wine, extra virgin olive oil and fish, low intake of dairy products and red meat. Olive oil has gained support as an important health promoting food for health and there are indications that this is related to its content in polyphenols. Olive polyphenols play an important protective role in cancer and in other inflammation-related diseases. In inflammation models as well as cancer cells research has shown that olive leaf polyphenols are anti-inflammatory and protect against DNA damage caused by the free radicals.

The various bioactive properties of olive leaves polyphenols appear to be a plausible explanation for the inhibition of progression and development of cancer. Routes include the NF-κB inflammatory response and the response to oxidative stress, but the effects of these bioactive constituents may also result from their action as phytoestrogens. Due to the similar structure of olive polyphenols with estrogen, these are supposed to interact with estrogen receptors, thereby reducing the prevalence and progression of hormone-related cancers.

A multitude of secondary components in olive oil has been identified as effective mitigation agents in the initiation, promotion and development of perennial carcinogenesis. Studies reported on the anticancer activity of oleuropein and offer support in many types of cancer such as: glioblastoma, erythroleukemia, adenocarcinoma, melanoma, colon cancer colon, breast cancer, bladder cyst cancer.

Oleuropein is the strongest phenolic compound in reducing breast cancer cell viability, increasing cell death and apoptosis.



Omega 3 complex

Dietary supplement with $\Omega 3$ fatty acids from fish oil. Bio-active polyunsaturated $\Omega 3$ EPA and DHA fatty acids.

For the normal functioning of heart, brain and vision as well as the preservation of normal triglyceride levels and of normal blood pressure.

INGREDIENTS: $\Omega 3$ fatty acids from cod liver oil-DHA-EPA-Mugil cephalus egg mass extract, Vitamin A Retinol, Vitamin D3, Vitamin E, Aloe powder 200:1 extract, Vitamin K2, Vitamin B12.

DOSAGE: Take 10 ml 1 time a day, preferably in the morning.

The supply of 1000mg $\Omega 3$ fatty acids to everyone, across the board, children and adults alike is essential.



COMPOSITION PER DAILY DOSE 10ml

Active substance	quantity	RDA*
Premix 3	1452 which contains:	1895mg
Total	3 fatty acids from	
cod liver oil		815 mg -**
DHA		300 mg- **
EPA		200 mg -**
Mugil cephalus egg mass extract		-**
Vitamin A Retinol	(2300 iu) 700 µg	86%
Vitamin D3	(184 iu) 4,6 µg	92%
Vitamin E (as Vitamin E acetate)	6mg	25%
Aloe powder 200:1 extract	10mg	-**
Vitamin K2	11,25µg	15%
Vitamin B12	0,375µg	15%

* RDA: Recommended Daily Dose.

MEDAXIS OMEGA3

- ensures the daily dose of DHA and EPA which your body needs to provide the beneficial as validated and determined by the European Health Claims Regulatory Body
- offers a German product, which has passed all the required purity and safety controls
- free of heavy metals and environmental pollutants
- free of genetically modified materials
- free from irradiation
- free of colors and flavors
- with natural vitamin E for antioxidant protection of fatty acids
- from free sea anchovies.
- extraction of fish oil onboard the fishing vessel which ensures freshness and quality
- quality control and compression by reputable scientific laboratories
- Ideal ratio of DHA and EPA 1 / 1.5

BENEFICIAL FATTY ACIDS

In recent years many studies have dealt with the beneficial effects of omega-3 fatty acids. Although they may have variable effects, they are more widely known for those related to cardiovascular disease. However, certain omega-3 fatty acid effects are equally important and beneficial albeit not so widely recognized.

- they reduce the production of triglycerides in the liver.
- they reduce the production of substances involved in inflammation.



- They reduce platelet aggregation, not facilitating potential clot formation.
- They reduce blood viscosity and increase the supply of oxygen to the tissues.

They have a beneficial role in prevention – support of:

- Coronary artery disease
- Hypertension
- Diabetes mellitus II
- Nephropathy (CKD and autoimmune)
- Autoimmune diseases (Rheumatoid arthritis, SLE)
- Ulcerative colitis
- Crohn's disease
- Chronic Obstructive Pulmonary Disease
- Mental disorders
- Dry skin

[EFSA 2009; 7(9):1263 & 2010; 8(10):1796]

DHA and EPA contribute to normal blood pressure maintenance. DHA and EPA support normal blood triglyceride levels maintenance. The beneficial effects are ensured by a daily intake of 3 g of EPA and DHA. Administration should not exceed a daily intake of 5 g of EPA and DHA in combination.

[EFSA 2010-8(10):1796 & 2011-9(4):2078]

EPA and DHA contribute to normal function of the heart. The beneficial effects are ensured with the daily intake of 250 mg EPA and DHA.

[EFSA 2010-8(10):1734 & 2011-9(4):2078]

DHA contributes to the maintenance of normal vision. It also supports normal brain function. These beneficial effects are ensured by a daily intake of 250 mg DHA & EPA.

Ω3

They have extremely positive cardiovascular effects as they reduce triglycerides, blood pressure and platelet aggregation, resulting in reduction of arteriosclerosis and a concomitant reduction in the predisposition for clot formation. The heart remains protected from cardiovascular disease such as heart arrhythmias, the possibility of a heart attack and coronary disease.

Ω3 has a strong anti-inflammatory effect.

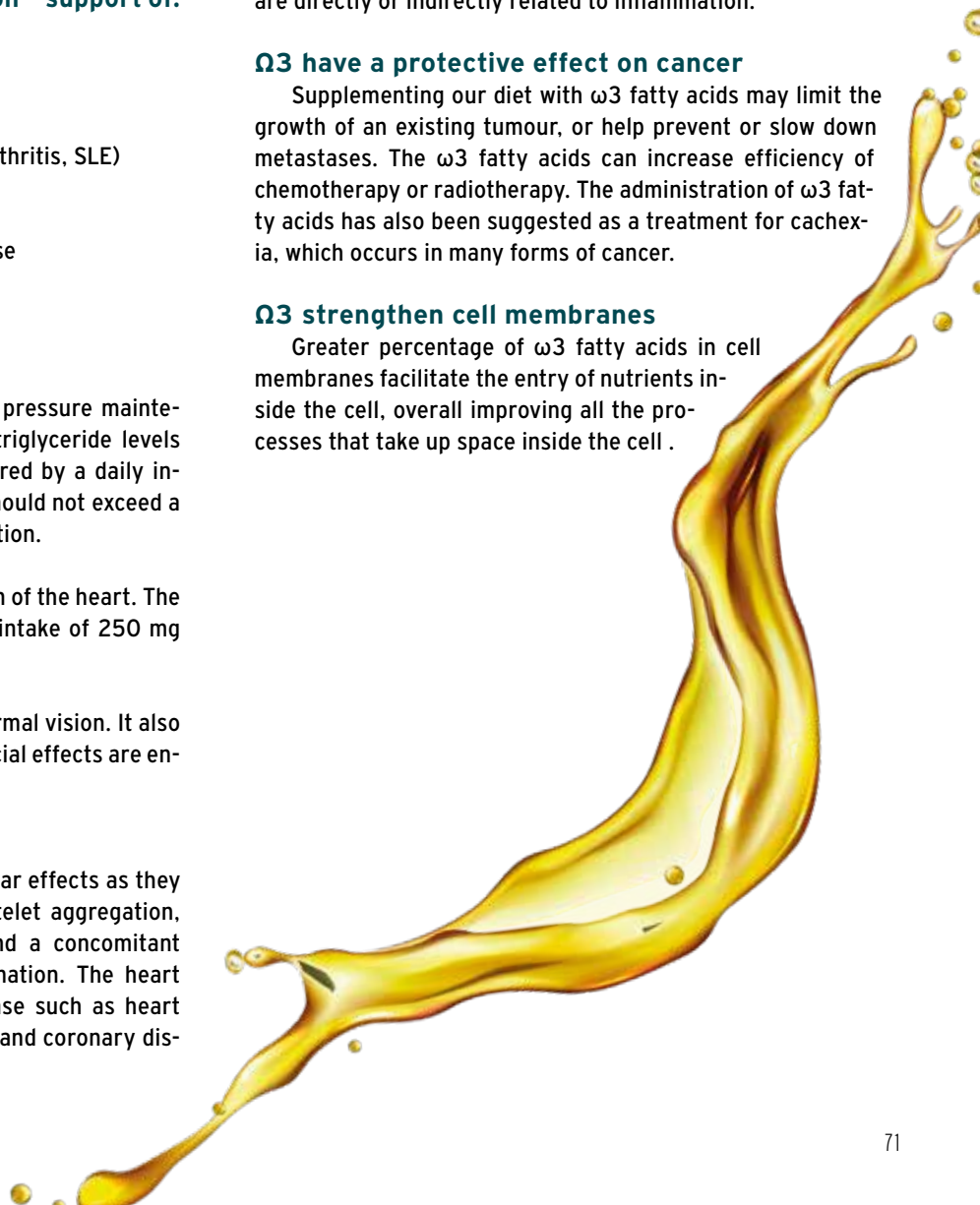
As such, they significantly help with pain and joint stiffness. They also improve health of the lungs by reducing inflammation in diseases such as asthma and bronchitis. Taking fish oils on a daily basis has a positive effect in more than 1000 genes that are directly or indirectly related to inflammation.

Ω3 have a protective effect on cancer

Supplementing our diet with ω3 fatty acids may limit the growth of an existing tumour, or help prevent or slow down metastases. The ω3 fatty acids can increase efficiency of chemotherapy or radiotherapy. The administration of ω3 fatty acids has also been suggested as a treatment for cachexia, which occurs in many forms of cancer.

Ω3 strengthen cell membranes

Greater percentage of ω3 fatty acids in cell membranes facilitate the entry of nutrients inside the cell, overall improving all the processes that take up space inside the cell .



Pain shield

Food supplement with vitamin B12, patented folic acid, uridine and plant extracts

OTHER INGREDIENTS: CAPSULE MATERIAL hydroxy-propyl-methyl-cellulose (vegetable cellulose)

DIRECTIONS: Take 1 capsule daily with meal



Nutrition information	2 caps	RDA
BOSWELLIA SERRATA EXTRACT 5:1 Indian frankincense extract yielding > 65% boswellic acid (HPLC)	250 mg	**
Quatrefolic® [6S-5-METHYLTETRAHYDROFOLIC ACID] Delivering folic acid	162,5 mg	**
UMP [URIDINE-5-MONOPHOSPHATE DISODIUM SALT] Pure concentration 98%(HPLC)	0,66 mg	**
VITAMIN B12 [methylcobalamin]	0,35 mg	175%
WHITE WILLOW BARK EXTRACT [Salix Alba] Willow bark extract yielding salicylic acid > 15% (HPLC)	60 mg	**
	150 mg	**
	>22.5 mg	**

Damaged nerves can be repaired to some extent. However, the body requires sufficient building blocks for this. Only then can it activate repair mechanisms.

THE CHOICE OF QUATREFOLIC®

Increasing evidence has been found in recent years for the advantages of reduced folic acid over simple folic acid. The rational use of reduced folate acid (particularly reduced and methylated such as Quatrefolic®) comes from the genetic polymorphism in a part of the population to assimilate and metabolize folic acid from food or supplements. Quatrefolic® solves this problem. Quatrefolic® is the glucosamine salt of (6S)-5-methyltetrahydrofolate salt and is structurally analogous to the reduced and active form of folic acid, so that Quatrefolic® is able to bypasses the "damaged" MTHFR conversion step completely and provides an end product folate that the body can immediately use without any kind of further metabolic process.

URIDINE MONOPHOSPHATE (UMP)

UMP is a nucleotide that is a structural element of DNA and RNA of the cell nucleus of neurons. As a structural element, it is composed by the body itself and its deficiency creates destruction in the myelin sheaths of neurons. Conversely, possible destruction, from other damages, of nerve fibers leading to conduction disturbances and accompanied by pain, require increased levels of UMP from the body, leading to the necessity (of UMP) to be further supplemented. PAIN SHEILD provides the required extra amount of this substance in the neurons for their regeneration, resulting in smooth nerve operation and the drastic reduction in pain intensity.



Nerve pain occurs when the nerves are irritated or damaged. Mechanical pressure on nerves can result from wear and tear of the spine, injuries, metabolic disorders (such as diabetes), alcohol consumption, viral infections or inflammation.

Back pain is due to disturbing the balance between nerves, muscles and bones for example, from bad posture, lack of exercise or mental stress. Irritated or damaged peripheral nerves almost always result in persistent pain. If non-elastic or strained back muscles exercise pressure on the nerves, this eventually leads to permanent irritation of the nerves and thus to pain. In many of these cases, the choice is painkillers, but they do work only in the inflammation phase and they do not affect the wear and tear and the permanent neuromuscular pressure.

Therefore it is recommended for:

- peripheral neuropathy
- displaced spinal disc
- neuralgia
 - sciatica (nerve pain in hips and legs)
 - discectomy
 - chest and lumbar pains (dorsalgia)
 - lumbar syndromes
 - trigeminal neuralgia
 - postherpetic neuralgia (phn)

Uridine has many functions throughout the body and the brain. Supplementation with uridine, in bioavailable forms such as uridine monophosphate, may have significant positive effects on overall health. A uridine supplement may support pain management. Uridine supplementation seems to be particularly effective in dealing with the discomfort that is related to pains of neurological origin. This seems to be due to uridines' interaction with Nerve Growth Factor, a feature common to all supplements that are of benefit for neuritic pain.

BOSWELLIA SERRATA AS A NATURAL PAIN REMEDY

In addition to being an effective anti-inflammatory, Boswellia (Indian Frankincense), can be an effective natural pain relief and it can also prevent cartilage loss in the joints. A study published in 2008 showed that Boswellia can reduce pain and enhance physical ability of people with osteoarthritis of the knee. A previous report in 2006 showed that it can be useful in the treatment of rheumatoid arthritis. Four acids in the Boswellia resin contribute to the anti-inflammatory properties of this herb. These acids inhibit the 5-lipoxygenase (5-LOX). The result of this mechanism is a down regulation of pro-inflammatory mediators called leukotrienes. Along with inhibiting the release of inflammatory enzymes and compounds in the body, boswellic acid affects the activation of pain receptors in the joints and muscle.

Many studies on the effect of Boswellia on osteoarthritis have reported it to be effective in the treatment of pain and inflammation. In general, the strong anti-inflammatory activity of Boswellia helps reduce mediators of inflammation, such as leukotrienes, tumor necrosis factors and other pro-inflammatory cytokines, thus degrading the generalized pain sensation. By reducing the influx of white blood cells in the fluid surrounding the joints (and the unpleasant effect it causes), Boswellia works to relieve pain effectively.

BARK OF WHITE WILLOW - SALICYLATES

White willow bark's analgesic properties have been documented since the 4th century in Greece, when they chewed on the bark for quick pain relief. The bark of *Salix alba* is used for pain due to its content in salicylates. It contains an ingredient called salicin, which the body converts into another chemical called salicylic acid. Similar to acetylsalicylate, salicylic acid reduces the produc-

tion of certain prostaglandins (hormonal substances that control the immune system and fight joint inflammation) to your nerves and this eases pain and suffering. Salicin, when converted to salicylic acid, inhibits the activity of cyclo-oxygenase 1 (COX-1) and cyclo-oxygenase 2 (COX-2). These are the same enzymes that NSAIDs target to relieve pain and inflammation. White willow bark extract is gentler on the stomach, less toxic to the body and has no blood thinning properties when compared to aspirin. It is characterized, rightly so, as the "herbal aspirin" but without the gastric irritation and risk of bleeding that complicates aspirin use.



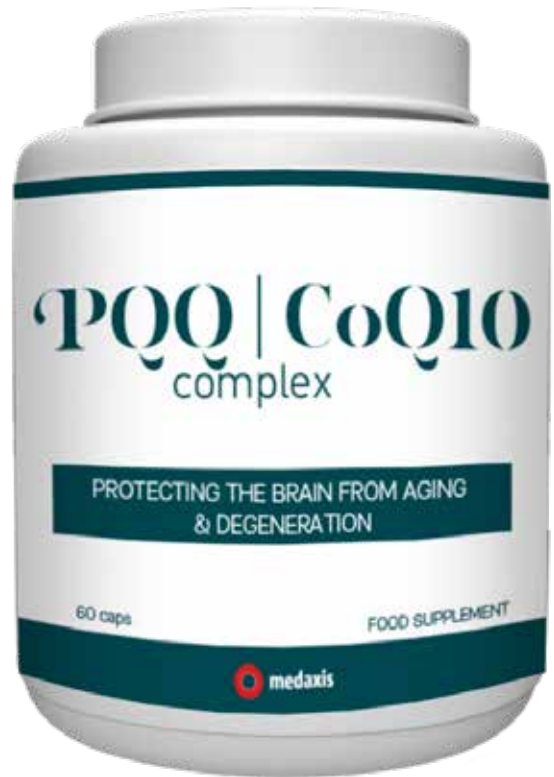
PQQ | CoQ10 complex

Two powerful ingredients to ensure a product that works effectively:

- To protect the brain from aging and degeneration
- To enhance brain functions such as memory, mental focus, motivation and creativity
- For good energy levels
- For multifaceted cellular protection
- For a central nervous system that is not vulnerable
- For strong antioxidant protection
- To reduce and fight oxidative stress
- For protection and true regeneration of mitochondria

OTHER INGREDIENTS: anticoagulant agent: cellulose, stabilizer: vegetable cellulose (capsule shell).

DIRECTIONS: Take 1 capsule daily. Suitable for vegetarians and vegans.



Nutrition information	1 caps	RDA
PQQ pyrroloquinoline quinone	20 mg	**
Coenzyme Q10 (as ubiquinone)	100 mg	**



A PRODUCT WITH A PURPOSE

As we age, changes occur in many areas of our brain - mainly in the prefrontal cortex and hippocampus - which can negatively affect levels of neurotransmitters, proteins, glucose metabolism, brain cell energy and blood flow to the brain. These changes may affect processes such as memory recall, mental work ability, emotional well-being and overall quality of life. Science recognizes mitochondrial dysfunction as a key biomarker of aging that almost always leads to degenerative disease. And everyone agrees on the beneficial effects of two important enzymes: coenzyme Q10 and pyrroloquinoline quinone (PQQ).

Coenzyme Q10 has two important roles in the body: energy and protection. It gives cells the energy they need to do their job properly. As a powerful antioxidant it protects the body from

oxidation and by extension from disease and aging. All cells need CoQ10 for their energy needs. Of all the cell types in our body, it is the brain, heart and nerves cells that need the highest amounts of energy. In fact, coenzyme Q10 is particularly useful to those who exercise or do prolonged aerobic activity. Coenzyme Q10 basically transports oxygen and energy from the blood to the body and the components of these cells.

MEET PQQ

Pyrroloquinoline quinone (PQQ), also called methoxatin, is a redox cofactor, a natural nutrient found in foods such as parsley, kiwi, peppers, beans, green tea and in breast milk. PQQ supplements are produced through a unique bacterial fermentation process by some bacteria that produce it as a by-product of their metabolism. PQQ has antioxidant activity, with broad spectrum benefits for the brain and the whole body. It promotes cognitive health and memory by fighting mitochondrial dysfunction and protecting neurons from oxidative damage. Supports energy metabolism and healthy aging.

It protects mitochondria, but not only that.

An exciting revelation about PQQ emerged in early 2010, when researchers found that not only does it protect mitochondria from oxidative damage - but it also stimulates and triggers the fresh mitochondria growth!

PQQ has the ability to reverse cellular aging by activating genes that cause mitochondrial biogenesis—the spontaneous formation of new mitochondria in senescent cells!

Preclinical studies reveal that when deprived of dietary PQQ, all organisms develop impaired immunity, reduced reproductive capacity and most importantly, fewer mitochondria that degenerate much faster. The rate of reproduction and cell survival are significantly reduced with PQQ deficiency. Introducing PQQ back into the diet reverses these effects, restoring systemic function while mitochondrial number and energy efficiency increase at the same time.

Powerful antioxidant

PQQ's excellent ability to scavenge free radicals provides mitochondria with superior antioxidant protection. At the core of this skill is an extraordinary molecular stability. As a bioactive coenzyme, PQQ actively participates in the transfer of energy to the mitochondria which supplies the body with most of the bio-energy (such as CoQ10). Unlike other antioxidant compounds, the excellent stability of PQQ allows it to perform thousands of such electron transfers without undergoing molecular dissociation. It has proven to be highly effective in neutralizing ubiquitous peroxide and hydroxyl radicals. According to the most recent research, PQQ is 30 to 5,000 times more effective in maintaining redox circulation (mitochondrial energy production) compared to other compounds e.g. ascorbic acid.

Prevents oxidative stress

Oxidative stress occurs when there is a build-up of oxidative radicals in the body and can lead to chronic and degenerative disease. PQQ protects cells in the body from oxidative damage and supports food metabolism, energy production and strong anti-aging. PQQ is known to promote nerve growth factors and thus affect multiple cellular pathways, including nerve growth factor (NGF). Nerve growth factor, or NGF, belongs to a small group of protein-like molecules which are key to nerve maintenance and cell development. By protecting neurons and stimulating nerve growth in the brain, PQQ also supports cognitive performance, including memory, concentration and attention.

Protects mitochondrial function

Like CoQ10, PQQ has a variety of benefits for mitochondrial function. Mitochondria are the energy producers of cells and play an important role in overall health. PQQ and CoQ10 have been shown to prevent mitochondrial oxidative stress while PQQ has the excellent ability to stimulate mitochondrial biogenesis. Mitochondrial dysfunction is a key factor in the development of numerous health conditions, especially those related to aging. Researchers extensively examined the impact that PQQ has on mitochondria and reported that PQQ can increase the number of mitochondria and even improve their efficiency. That's an important reason why PQQ is so beneficial.

Protection in the brain in challenging conditions

Studies also indicate that PQQ can have an anti-inflammatory effect, it provides effective neuroprotection (reducing brain damage during a brain stroke and protecting brain cells against intraoperative hyperarousal); it upregulates nerve growth factor, an essential protein involved in growth and survival of nerve cells).

It stops degeneration

A growing body of evidence suggests PQQ as a powerful intervention in Alzheimer's and Parkinson's disorders; both are caused by accumulation of abnormal proteins that initiate a cascade of oxidative events resulting in brain cell death. PQQ inhibits the growth of a protein (alpha-synuclein) associated with Parkinson's disease. It has also been shown to protect the Parkinson's disease gene, DJ-1, from autoxidation – which is the key cause of the disease. It also protects nerve cells from oxidant destructions of the β -amyloid precursor associated with Alzheimer's.

TWO TOGETHER - BETTER RESULTS

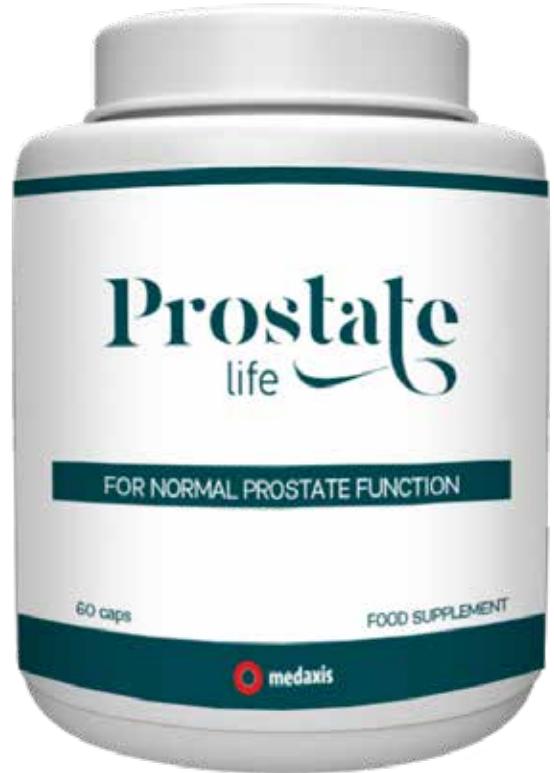
While CoQ10 optimizes mitochondrial function, PQQ activates genes that govern mitochondrial reproduction, protection and repair. PQQ also provides strong cardioprotection and defense against the neuronal (cerebral) degeneration.

Prostate life

- IMPROVED PROTECTION FUNCTION
- GREAT REDUCTION IN SYMPTOMS
- REDUCTION OF INFLAMMATION
- MALE PROTECTION AND SEXUAL HEALTH
- IMPROVED ENDOCRINE BALANCE

INGREDIENTS: zinc, stinging nettle, lycopene, histidine, beta sitosterol, selenium, grass pollen extract, vitamin D3, quercetin, epilobium, boron.

DIRECTIONS: Take 2 capsules a day with the meals



Nutrition information	2 caps	RDA
ZINC (as zinc gluconate)	20 mg	200%
LYCOPENE	10 mg	**
L-HISTIDINE	100 mg	**
BETA SITESTEROL	250 mg	**
NETTLE ROOT EXTRACT	150 mg	**
SELENIUM (as selenomethionine)	0.1 mg	181.8%
FIXED EXTRACT		
PROSTAPHIL®-2 POLLEN	100 mg	**
BORON	2 mg	**
QUERCETIN	150 mg	**
VITAMIN D3	600 IU	300%
EPILOBIUM	200 mg	**

ZINC

Zinc plays an active and important role in maintaining prostate health. Prostate cells accumulate more zinc than the cells in any other human tissue. It has been confirmed multiple times that the higher the zinc levels in prostate cells, the more remote the possibility of malignancy. To accumulate such high levels of zinc, cells of the peripheral prostate zone possess a specialized zinc transporter protein that is called ZIP1. The basis of this protein is the amino acid histidine. The combination of histidine with zinc guarantees zinc efficacy.

LYCOPENE

Its main role in the tissues is effective neutralization of free radicals. In that way, it prevents DNA damage. According to the findings, lycopene slows down the swelling of the prostate and the onset of hyperplasia.

QUERCETIN

Quercetin is one of the components of phytotherapy, combined with pollen extracts. Research shows that quercetin is effective both for bacterial and nonbacterial forms of chronic prostatitis.

B- SITOSTEROLS

They inhibit the action of the enzyme, 5-alpha reductase, which converts testosterone to di-hydrotestosterone, but they do it in a cellularly gentle way; without interfering with the endogenous production of hormones, without disturbing the balance of androgens and especially their expression in the body.



β -sitosterol can help men handle symptoms such as frequent urination, urinary urgency and urine flow. β -sitosterol can bind to the prostate and help reduce swelling and inflammation.

HISTIDINE

Histidine binds to zinc and transports it in the cells with the greatest demand. People who don't get enough L-Histidine in their diet are prone to zinc deficiency. Histidine protects nerve myelin, binds heavy metals by chelation, mainly nickel, which is coexisting in prostate tissue as a carcinogen. L-histidine is a "nickel scavenger". It actually creates links with nickel and eliminates it. What does Nickel do in the prostate? It is actually an ideal environment for the development of bacteria.

SELENIUM

The body needs small amounts of selenium. However, blood levels decrease with age, placing the middle-aged and elderly men at risk of an actual deficiency. The lowest levels of selenium in the blood may correspond to an increased risk for prostate enlargement but also progressing to malignancy. This risk increases when the person is a smoker or has hereditary history of cancer, or even if prostatitis has not been treated for a long time. Selenium is an antioxidant and as such protects the body from oxidation and cell mutations. It also inhibits cell proliferation and reduces cell cycle progression by reducing cyclin in prostate cancer cell lines.

PROSTAPHIL POLLEN – Prostaphil-2®

Pollen extracts such as Prostaphil-2® contain pollen from specific plants and the final product is standardized. This means that it contains the same amount of active ingredients in each batch and nothing else. Prostaphil-2® is a product designed for the relief of the symptoms of benign prostate hyperplasia (BPH) and for protection of normal prostate function.

- Reduces prostate size and eliminates inflammation.
- Reduces discomfort associated with hyperplasia (nocturia, pain, inflammation, incomplete urination).
- Eliminates bacterial prostatitis.
- It is also a powerful anti-inflammatory, bringing relief to those suffering from painful conditions such as prostatodynia and prostatitis.

Prostaphil-2® has been clinically proven to reduce prostate and PSA levels (specific for the prostate antigen). PSA is an indicator of both hyperplasia as well as prostate cancer. Pollen extracts have been shown to provide both anti-inflammatory properties as well as urinary bladder and urethra relief.

NETTLE

Nettle has been used for centuries in cases of inflammation (especially lower urinary tract and prostate). The roots contain tannins and significant amounts of β -sitosterol. It is used as a safe treatment option for hyperplasia specifically for reduction of irritating symptoms and complications.

BORON

Boron affects human steroid level hormones. We all know that prostate cancer is directly related to androgen levels. Many studies have reported that boron kills prostate cancer cells selectively, at the same time leaving healthy cells without damage. Adequate levels of boron are associated with a reduction in the risk of prostate cancer by as high as 64%, but taking protective levels of boron through food sources is difficult.

VITAMIN D3

Human prostate cells contain receptors for 1 α , 25-dihydroxyvitamin D, the active form of vitamin D. Epidemiological data show that signaling vitamin D may be important for prostate cancer treatment and prevention. Considerable evidence-based studies suggest that vitamin D works to stop the growth of PCa through the regulation of cell proliferation and cell differentiation. Prostate cancer cells respond to vitamin D3 with increases in differentiation and apoptosis and reduce proliferation, invasiveness and metastasis.

EPILOBIUM

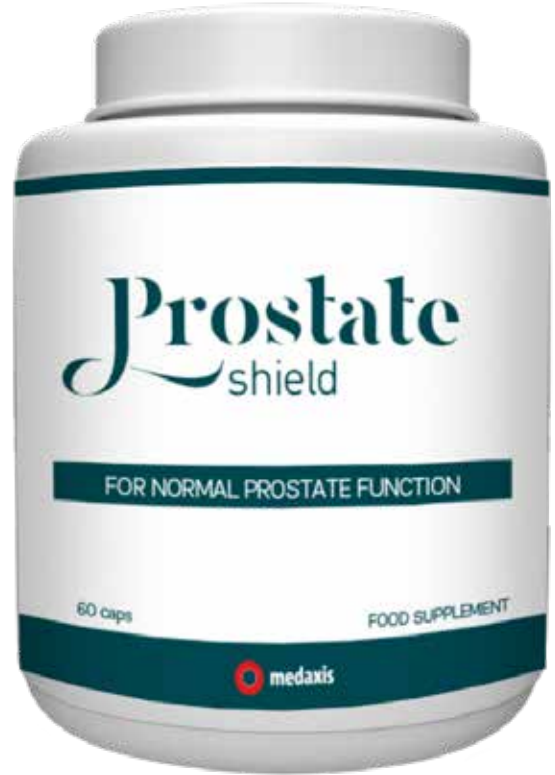
Laboratory findings at the Prostate Research Center in Vancouver, have indicated that low concentrations of this herb negatively affect the action of 5- α reductase and aromatase involved in the onset of prostate hyperplasia. It is used for urinary problems, inflammations of the urinary system, for prostate bloating and prostate cancer, even in advanced stage, with metastases. It rapidly lowers PSA levels. The main active substances in epilobium are oenothien B & oenothien A;

- they are strong inhibitors of cell proliferation of prostate cancer and their apoptotic activity is related through activation of the mitochondrial pathway
- reduce the secretion of the prostate specific antigen (PSA)
- inhibit the activity of arginase
- reduce adenomas
- inhibit the activity of the two main enzymes which are responsible and trigger prostate hyperplasia and malignancy: that of 5 α -reductase and aromatase.

Prostate shield

A product based on scientific research and clinical studies as well as long term use in treatment regimens across Europe. It has been established as the most natural, most effective and at the same time most powerful weapon for normal prostate function.

INGREDIENTS: Prostaphil-2® - hydrophilic and lipophilic extracts from pollen: rye (*Secale cereale*) 92%, meadow grass (*Phleum pratense*) 5% and corn (*Zea mays*) 3%. Stabilizer - (capsule shell), hydroxypropyl methylcellulose, anticoagulant agent - calcium hydrogen phosphate, calcium gluconate.



Nutrition information	3 caps	RDA
pollen Prostaphil-2 R	660 mg	**
of which hydrophilic extract	264 mg	**
of which lipophilic extract	13.2 mg	**



WHAT IS Prostaphil-2® Pollen

It is not pollen in its classical sense, that is, it is not the pollen found on bees and it is not collected at beehives, but directly from the plants that are visited by bees.

In its raw form, bee pollen is covered with a tiny crust, which prevents complete assimilation by the human body. The defined pollen extract uses a precise fraction isolation procedure of pollen, incorporating a specific ratio of 20:1 of fat-soluble and water-soluble components extracted under low temperature conditions, without the crust and their tiny grains and is allergen-free. There is a difference between bee pollen and pollen extracts. Bee pollen contains pollen, but it also contains nectar and bee saliva, so is not standardized.

Pollen extracts such as Prostaphil-2® contain pollen from specific plants and the final product is standardized. This means

that it contains the same amount of active ingredients in each batch and nothing else. Prostaphil-2® is a product designed for the relief of the symptoms of benign prostate hyperplasia (BPH) and for protection of normal prostate function.

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Prostaphil-2® has been clinically proven to reduce prostate and PSA levels (specific for the prostate antigen). PSA is an indicator of both hyperplasia as well as prostate cancer. Pollen extracts have been shown to provide both anti-inflammatory properties as well as urinary bladder and urethra relief. Anti-inflammatory properties help in managing and treating prostatitis and other prostate conditions, such as benign prostatic hyperplasia (BPH).

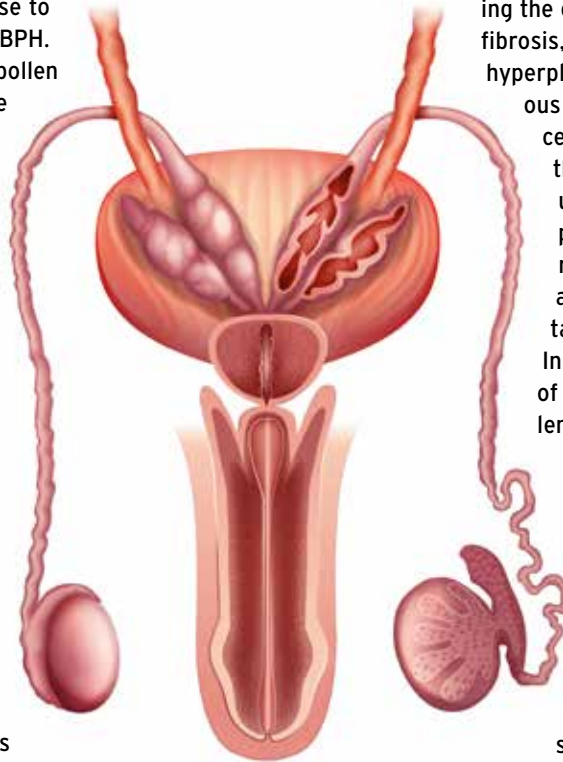
Some men with prostatitis experience urinary tract symptoms similar to those in BPH, so it is important to understand that pollen extracts may help both prostatitis and BPH, even in men with a normal size prostate.

Pollen extracts have been found to cause bladder contraction while at the same time relaxing the urethra. Pollen has been well researched and used in treatment of prostatitis and symptoms of BPH in Europe for over 35 years. Several double-blind

clinical studies on the management of BPH have found that it is quite an effective therapeutic and supportive agent with an overall success rate of 70% in BPH patients. The patients who respond to pollen usually show about 70% reduction in nocturia (nighttime urination), normal frequency during the day as well as significant reduction in the volume of residual urine.

THE MECHANISMS OF ACTION

- Published studies reported that pollen extracts are powerful allies in the fight against an enlarged prostate due to BPH or prostatitis.
- Pollen extracts offer strong anti-inflammatory properties. This is important as it is generally accepted that inflammation and excessive response to the DHT hormone are heavily involved in BPH.
- Laboratory studies show that the pollen extracts inhibit enzymes that produce pro-inflammatory signaling molecules such as cyclo-oxygenase (COX) and 5-lipoxygenase (5-LOX).
- The biosynthesis of these inflammatory mediators is initiated by two enzymes: cyclo-oxygenase and 5-lipoxygenase. The activities of both cyclo-oxygenase and 5-lipoxygenase are noticeably reduced following pollen extract use, as well as the total amount of arachidonic acid.
- Pollen extract use also inhibit 5-alpha-reductase which converts testosterone to DHT, which in turn promotes the proliferation of prostate cells and swelling of the gland.
- Pollen extracts have shown the ability to affect alpha-1 adrenergic receptors which keep smooth muscle tone elevated in the prostate and bladder, thus reducing pain and suffering.
- Pollen extracts have also been shown to induce apoptosis (programmed cell death) in prostate cancer cells, where they cause a decrease in prostate-specific antigen, or PSA.
- In vitro and in vivo studies showed that both fractions have anti-inflammatory properties derived from the inhibition of the synthesis of prostaglandins and leukotrienes.
- The water-soluble fraction has been shown to reduce size of the abdominal and dorsal prostate and inhibit testosterone-induced hyperplasia.



- Both fractions (hydrophilic and lipophilic) have shown that they can relax the smooth muscle in the prostate and urethra, increase bladder muscle contractions and reduce the size of the prostate.
- It can also retard prostate cancer cell growth.

THE RESULTS OF CLINICAL STUDIES SPEAK FOR THEMSELVES

The use of standardized pollen is able to lead to a significant reduction in the volume of the prostate gland. The extract helps prevent the swelling that occurs in the middle lobe and later develops into fibrosis. It provides adequate protection of epithelial cells from non-bacterial inflammation. By reducing the circumference, the internal swelling and fibrosis, significant reduction of symptoms of hyperplasia occurs, inhibiting the precancerous action and slows down prostate cancer cell growth. It helps reduce nocturia and the feeling of residual urine (incomplete urination). Finally, it reduces chronic pain in non-bacterial prostatitis. Laboratory studies show that pollen extracts act in a unique way on cells of the prostate selectively inhibiting their growth. Initial human studies showed that 80% of hyperplasia patients who received pollen extracts for four to 12 weeks showed improvements in subjective symptoms (such as the feeling of residual urine in the bladder, frequency, hesitancy, dribbling or weak urine stream). 66% of patients showed improvements in objective endpoints (such as volume of urine and urine flow rate). They did not mention significant adverse events. In a study of men with severe enough hyperplasia to cause obstruction in the flow of urine, 69% of patients who received the pollen extract had a significant improvement in symptoms compared to only 30% of patients who received a placebo. In addition, supplemented patients had significantly less urine left in the bladder following urination; as well as in the measured diameter of the prostate gland with ultrasound. These latest findings are important in a remarkable way, because residual, metaphenic urine in the bladder may be a cause for serious bladder infections.

Quercetin powder

Food supplement with 100% natural plant quercetin from the sophora japonica plant

OTHER INGREDIENTS: capsule material vegetable cellulose

DIRECTIONS: Take 1 capsule daily

Nutrition information	1 caps	RDA
QUERCETIN (Quercetin Dihydrate)	316 mg	**



WHAT IS QUERCETIN

Quercetin is a flavonoid, and as such it is an important phytonutrient. Flavonoids have been recognized as powerful antioxidants with multiple health benefits. Quercetin is a very common flavonoid found in many plants, fruits and vegetables. It is present in large quantities in capers, onions, apples, in berries, but also in green tea (*Camellia sinensis*). The Japanese pagoda tree, *Sophora japonica*, is one of the richest sources of vegetable quercetin.

QUERCETIN AND ALLERGY

Quercetin is known for its antioxidant action on free radicals and anti-allergic properties characterized by stimulation of the immune system, antiviral effect, inhibition of histamine release, reduction of inflammatory cytokines, creation of leukotrienes and suppression of interleukin IL-4 production. It may improve the Th1 / Th2 balance and restrain the formation of the antigen-specific IgE antibody. It is also effective in inhibiting enzymes such as lipoxygenase, eosinophilase and peroxidase and the suppression of inflammatory mediators.

All mentioned mechanisms of action contribute to the anti-inflammatory and immunomodulatory properties of quercetin that can be used effectively in treating bronchial response asthma and slow phase, allergic rhinitis and limited anaphylactic reactions caused from peanuts. The plant extract of quercetin is the main ingredient of many potential anti-allergy drugs, supplements and fortified products.



Quercetin has the ability to control the cells that release histamine and therefore acts as a natural antihistamine. It is the reason why many use it to relieve allergy symptoms such as runny nose, watery eyes, hives and swelling.

QUERCETIN AS ANTI-INFLAMMATORY

As a flavonoid, quercetin contributes to the reduction of oxidative stress in the cells and in this way reduces and weakens the flare-up of inflammatory factors. Quercetin has been clinically tested for its effectiveness especially in inflammations caused by rheumatoid arthritis. Five hundred milligrams of daily supplement of quercetin for 8 weeks resulted in significant improvements in clinical symptoms, disease activity, hs-TNFa and HAQ in women with RA.

QUERCETIN AND IMMUNE FUNCTION

By reducing inflammation in the body, the body regains strength, and the immune system is strengthened. The rule is that any substance that reduces inflammation, reduces the oxidation level of cells and protects cells from oxidative stress, always works for the better response of the body to pathogenic insults.

QUERCETIN PROTECTS THE HEART IN VARIOUS WAYS

During the last few years, several investigations have reported results consistent with applications of quercetin in cardiovascular diseases, such as atherosclerosis, ischemia-reperfusion, and hypertension. It is widely accepted that like most antioxidants, flavonoids and quercetin prevent accumulation of atherosclerotic plaque in the blood vessels and this alone

protects heart function. Antioxidants also protect against the increase of cholesterol. Quercetin prevents damage to LDL cholesterol particles and it seems that people who eat foods rich in flavonoids usually have healthier and lower cholesterol levels and fewer cases of hypertension. Flavonols have been shown to enhance the body's natural nitric oxide supply. Nitric oxide is a supermolecule that allows arteries to relax and expand, thus promoting "healthy flow" of blood throughout the body. Healthy blood flow means that the vital organs, all muscle and tissue, the brain and the heart get the oxygen and nutrients they need for optimal performance.

QUERCETIN AND THE PROSTATE

Flavonoids are also associated with reduced symptoms of prostatitis (inflammation of the prostate), reduction of prostate viral load and protection from disorders accompanying prostatitis (swelling).

QUERCETIN IN THE BRAIN

The recently described effects of dietary factors in neuronal function and synaptic plasticity revealed some of the vital mechanisms responsible for the action of nutrition in brain health and mental function. Neurodegeneration, characterized by progressive deterioration of the structure and function of neurons, is basically accompanied by severe cognitive deficits.

Aging is the main risk factor for neurodegenerative disease in Alzheimer's disease (AD), Parkinson's disease (PD) and Huntington's disease (HD). Oxidative stress and the mitochondrial dysfunction are the main factors causing neurodegeneration. The increased frequency of neurodegenerative drugs not working is always scary as there is a shortage of effective therapeutic means. Studies in recent years support the mechanisms through which quercetin boosts brain health in many aspects, including cognitive production improvement.

QUERCETIN IN HYPERTENSION

A review of 9 studies in 580 people found that taking more than 500 mg of quercetin supplements daily reduces systolic and diastolic blood pressure an average of 5.8 mm Hg and 2.6 mm Hg, respectively.

A VERY INTERESTING ARTICLE

In 2015 an interesting finding was published in Greece that "Healthy elongation of life can be achieved by combining two already known drugs, Quercetin and Dasatinib".

When cells get older, they grow in size, get wider, increase their β -galactosidase content and stop multiplying and studies have shown that when one succeeds in removing these senile cells then a healthy lifespan is achieved, i.e. increasing age without disease. The older cells resemble cancer cells in one key feature: they don't die easily because they have developed special biological networks that protect them from apoptosis or from programmed cell death and they are particularly resistant to external stressful stimuli.

A team of researchers from the Mayo Clinic, also managed to identify among existing drugs, some which have the possibility when administered to mice in combination, for just 5 days, to kill senescent cells and achieve a very significant prolongation of healthy life. These drugs were called senolytics and among them were the anticancer drug Dasatinib and a natural substance administered as a food supplement, Quercetin, which has antihistamine and anti-inflammatory properties.

These substances in laboratory animals have the ability to: improve cardiovascular function, reduce osteoporosis, the degenerative changes in the spine and muscle weakness. Human clinical studies are already underway, in an attempt to find the ideal dose that will have the same effect, without any adverse reactions.

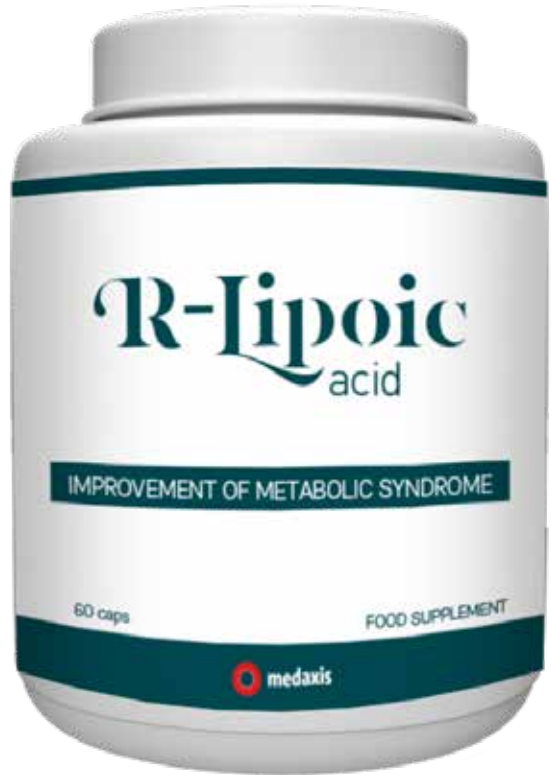
R- Lipoic acid

FOOD SUPPLEMENT WITH R(+) LIPOIC ACID

INGREDIENTS: 100% RALA in its sodium salt (Na-RALA) form, Capsule material: vegetable cellulose.

DIRECTIONS: Take 1 capsule daily.

Nutrition information	1 cap	RDA
R -ALPHA-LIPOIC ACID	250 mg	***



What is R-Lipoic Acid

Research shows that (R)-lipoic acid is a more biologically active ALA form of lipoic acid that offers greater antioxidant and neuroprotective benefits at significantly lower doses than synthetic forms of lipoic acid that are currently commercially available. The alpha-lipoic acid consists of a 50/50 mixture of R-(natural or clockwise) and S- (non-natural or anti-clockwise) enantiomers that are "mirrors" of each other and it is called "racemic mix". It is the most widely available commercial form of alpha lipoic acid.

R-lipoic acid is naturally formed in the mitochondria of living plant and animal cells. R-lipoic acid R (+) enantiomer is the lipoic acid form found in plants, animals and the human body and is responsible for the special beneficial effects of alpha-lipoic acid. R-lipoic acid (RLA) is the only form that acts as a cofactor for mitochondrial enzymes that are involved in energy production.

S-lipoic acid was actually synthesized in the laboratory in the 1950s. The S (-) enantiomer does not occur in nature. S-Lipoic Acid (SLA) is a by-product of the chemical synthesis of the racemate Alpha-lipoic acid and can inhibit most essential properties of the R format, including interactions with proteins, enzymes and genes.

Stability and absorption

R-lipoic acid, despite its health benefits, when separated from the S form, it is naturally unstable, it weakens relatively quickly and turns into one sticky insoluble polymer, even

during encapsulation. Without special treatment, R-lipoic acid is extremely unstable and difficult to absorb. R-lipoic acid in the form of the sodium salt (Na-RA-LA) contains 8-9% sodium and is formed using a patented stabilization process to ensure its maximum stability and absorption. The main benefit of this form is that high levels of RALA may be achieved quickly in the body. R-Lipoic Acid in the form used by the company "Full Health" can deliver all the benefits of lipoic acid safely and efficacy without the presence of S-ALA.

THE BENEFITS OF R-LIPOIC ACID

Based on evidence from animal and human studies, the lipoic acid offers the following key benefits.

- Improves various parameters in the metabolic syndrome, a combination of risk factors that increase the risk of diabetes, but also obesity
- Increases insulin sensitivity
- Improves lipid profile
- Improves diabetic neuropathy
- Improves visual function in glaucoma
- Removes toxic metals from the body
- Protects against the formation of cataracts
- It is a powerful antioxidant, promotes and maintains action of vitamins E, C and endogenous production and action of glutathione
- Supports normal blood pressure
- Regulates insulin resistance

- Supports the maintenance of normal body weight
- Reduces oxidative stress in the body with strong antioxidant action.
- Protects the brain by limiting the effects of ischemic events

POWERFUL ANTIOXIDANT

Lipoic acid is an unusual antioxidant because it can act on both water soluble and fat soluble fields in cells and tissues. It is easily absorbed and transported to many organs and systems within the body, for example, in the brain, liver and nerves. Other antioxidants, compared to R-LIPOIC ACID are clearly at a greater disadvantage.

For example vitamin C is not very fat soluble (so it is not able to penetrate the lipid cell wall membranes) or vitamin E, which is not very water soluble. When lipoic acid is combined with these antioxidants, the body's ability to fight free radicals increases significantly. In fact, lipoic acid helps in the regeneration of vitamins C and E.

In addition, lipoic acid helps enhance the positive effects of other antioxidants in the body such as glutathione and coenzyme Q10. It also works with the B-vitamin family supporting energy production by converting ingredients of food, i.e. carbohydrates, proteins and fats, into stored energy for future use.

MAINTAINS AND STRENGTHENS CELLULAR ENERGY

Lipoic acid protects the mitochondria, the factories of cell energy production, from being damaged from oxidative stress, thus ensuring that the production of energy in the body remains effective. It acts immediately into the mitochondria where it helps enzymes to convert nutrients into energy.

The biggest source of free radicals in our body is our own "cellular power generation units", the mitochondria. It is both the origin and the target of most free radical damage in the body.

As we age, our mitochondria become less efficient, produce less energy, generating more free radicals. R lipoic acid makes the mitochondria more efficient, so they produce more energy and create fewer free radicals.

ANTI-AGING

Human aging is characterized by a decrease in concentration, synthesis and recycling of central antioxidants, such as vitamin E, vitamin C, coenzyme Q-10 and glutathione. This loss of antioxidant function seriously reduces the body's ability to control free radicals. Free radicals - dangerous, unpaired electrons - multiply throughout the body, destroying cell membranes and organs, damaging immune function, disrupting DNA fibers and contributing to the progression of cancer and other degenerative disease. In recent years researchers have shown that lipoic acid recycles vitamins E and C to prevent free radical damage. In addition, this powerful anti-aging nutrient has been shown to mimic some of the effects of caloric restriction, the only proven life extension method.

PROTECTS THE HEART AND THE BRAIN

Lipoic acid is able to pass easily through the blood-brain barrier. Some of the protective effects that lipoic acid provides in promoting healthy nerve function may be related to its ability to regenerate the antioxidant glutathione, which is often depleted significantly from the harmful oxidative stress associated with vascular events such as stroke. New evidence suggests that lipoic acid may help prevent one of the most dreaded conditions associated with aging-Alzheimer's disease. In addition, lipoic acid may be useful to those who suffer from multiple sclerosis. Lipoic acid is known for its ability to protect the brain and nerve cells from free radicals and toxins. The excessive levels of "transitory metals" such as iron, copper and cadmium are believed to play an important role in many neurological disorders.

NEUTRALIZATION OF HEAVY METALS

Lipoic acid can protect the body from toxic metal impurities present in the environment and in foods. This multi-functional ingredient works by chelating these risk factors, such as arsenic, cadmium, lead and mercury, making them inactive so they can be removed from the body.

SUPPORTS HEALTHY BLOOD SUGAR LEVELS

Lipoic acid has been used to support healthy blood sugar metabolism. The resistance to insulin, in which cells stop responding properly to insulin, occurs to some degree in almost all people as age progresses.

Reishi extract

Food supplement with 16:1 extract of the Reishi mushroom Ganoderma Lucidum.

Fixed to yield 30% polysaccharides and 2% triterpenes

INGREDIENTS: Fruit (body) extract Reishi mushroom (*Ganoderma lucidum*) standardized for 30% polysaccharides and 2% triterpenes, stabilizer - hydroxypropyl methylcellulose (ingredient of the capsule shell)

DIRECTIONS: Take up to 2 capsules a day



Nutrition information	1 cap	RDA
GANODERMA LUCIDUM	220 mg	**
Which yields 30% polysaccharides	66 mg	**
Which yields 2% triterpenes	4.4 mg	**



The Reishi mushroom (*Ganoderma lucidum*), a medicinal fungus that has been used for its medicinal properties for thousands of years, is a true "superfood". Also known as "Ling Zhi" in Chinese, it has strong anti-inflammatory action and enhances longevity, improves immune and mental function clarity. Perhaps for these reasons it has been given the nickname "king of mushrooms." In all holistic medical practices, Reishi is considered an adaptogenic herb, i.e. substance that helps deal with the negative effects of stress in the body and our spirit.

ITS ACTIVE INGREDIENTS:

It contains many active ingredients including triterpenoids (such as ganoderic acids) and polysaccharides (such as β -glycans) which have an effect on the immune system. Specifically, polysaccharides, known as beta-D-glycans, strengthen the immune system by increasing macrophage activity (white blood cells) that destroy harmful microorganisms, viruses, fungi, bacteria. Triterpenes have anti-inflammatory properties and relieve the symptoms of asthma and other respiratory problems. They also inhibit histamine release in the body. Finally, triterpenes are attributed to have a calming effect on the central nervous system and stress relief by strengthening the adrenal glands.

Acting as an "immunizer", the reishi mushroom helps in the restoration of hormonal balance, restores the body in the state of homeostasis and regulates immunity, helping to fight tumors and cancer cells. According to research, reishi mushrooms act as normalizing substances, regulating various cellular functions and systems, such as the endocrine (hormonal), the immune, cardiovascular, central nervous and digestive.

One of the best things about using the Reishi mushrooms is that they are capable of doing so much but at the same time they are non-toxic and have almost zero adverse effects. In practice, most people notice a rapid improvement in their energy levels, in their mental ability and disposition while at the same time experience a reduction in pain, allergies, digestive problems and infections.

REISHI AND THE IMMUNE - INFECTIONS

Reishi mushrooms have been used to help in dealing with the symptoms of urinary system infections, respiratory system infections, hepatitis, bronchitis, even HIV & AIDS. Triterpenes provide protection against microbial infections, viruses and fungi. In various studies, they have been shown to boost the digestive system, they fight against "bad bacteria", they help reconstitute good bacteria and protect against cellular mutations.

REISHI AND RESPIRATORY ALLERGIES

One of the active ingredients of Reishi are triterpenes, a type of ganoderic acid linked to reduction in allergies and histamine-related reactions with asthma. It is the reason why the Reishi mushroom is used as a natural remedy for asthma. Triterpenes are capable of reducing allergic reactions, because of the way they affect the immune system, strengthen the digestive organs, protect the intestinal mucosa, reduce inflammation, inhibit the release of histamine, and improve utilization of oxygen.

REISHI AND THE CARDIOVASCULAR SYSTEM

The triterpenes in the Reishi mushroom seem to have blood pressure lowering properties as well as benefits to blood clotting and cholesterol, probably because they help in reducing inflammation inside the blood vessels and arteries, while at the same time they restore hormonal balance and the stress that creates cardiovascular pressure. High blood pressure or high cholesterol can sometimes be caused by hormonal issues, including thyroid disorders or high levels of stress, but Reishi mushrooms help to restore optimal hormone levels. Research in early stages indicates that taking Reishi supplements reduces the symptoms of blocked arteries, chest pain and shortness of breath.

REISHI AND FATIGUE

Reishi mushroom reduces the amount of toxins or heavy metals that accumulate in the body and cause sluggishness, and this is also the main reason that mushrooms are connected with improved energy levels, better concentration, improved memory and even better sleep quality.

REISHI AND BALANCE IN THE BODY

Research shows that many antioxidants and anti-inflammatory compounds found in Reishi mushrooms change the way in which nerves transmit messages to the brain, improve the various functions within the endocrine and central nervous system and balance hormones naturally. The Reishi mushroom is used to reduce diabetes, fatigue and hormonal imbalances, while improving fertility and reproductive health. Adaptogenic herbs like Reishi mushrooms are a piece of the puzzle when it comes to keeping proper balance within the body (other important aspects include a healthy diet & exercise because it is believed that they contribute to the strengthening of the digestive system, where the breakdown and absorption of nutrients takes place; by extension to the most complete nutrition and provision of cells with the necessary nutrients/ingredients).

REISHI AND DIABETES

Some research shows that taking Reishi for 12 weeks reduces the severity and complications of type II diabetes. A Chinese study, which was conducted by researchers at the University's Department of Pharmacology of Beijing specifically examined the effects of reishi in diabetic nephropathy. The researchers concluded that Reishi mushroom can prevent or stop the progression of diabetic renal complications.

REISHI AND CANCER

Reishi mushrooms have been used with success in the fight against breast cancer cells, ovaries, prostate, liver and lungs and are sometimes combined with other treatments. For patients in remission or undergoing chemotherapy and radiation, Reishi mushroom has protective effects that may increase chemotherapy drugs efficacy. Research in cancer patients shows that the Reishi mushroom has antiproliferative and chemopreventive properties, helps relieve side effects of chemotherapy, such as low immunity and nausea, and enhances the effectiveness of radiation therapy – making the Reishi mushroom one of the most potent available foods that fight cancer cells. Polysaccharides (also found in other beneficial plant foods such as sweet potatoes or beets) along with triterpenoids are immune-modulating substances that appear to protect DNA and stop mutations in cells, while protecting healthy cells.

According to some studies medicinal mushrooms fight cancer cells because polysaccharides have important biological properties. Some of the mechanisms of action by which the Reishi mushroom achieves this action include:

- activation of cytotoxic receptors (NKG2D / NCR)
- inhibition of cell proliferation
- suppression of vascular endothelial growth factor
- increase antioxidant plasma capacity
- enhance the immune response

WARNING: Patients receiving cancer treatment, especially those receiving chemotherapy should consult their physician before using Reishi.

REISHI AND THE LIVER FUNCTION

Adaptogenic herbs can improve liver function and the prevention of liver disorders, resulting in many benefits to the body because this allows toxins and other harmful substances to be removed more effectively, improving the fight of the immune system against diseases that can develop with time. A study published in 2013 in the International Journal of Medicinal Mushrooms showed mushroom Reishi's hepatoprotective effects even in acute liver damage, because it contains antioxidant properties and fights harmful immune responses that slow down liver function.

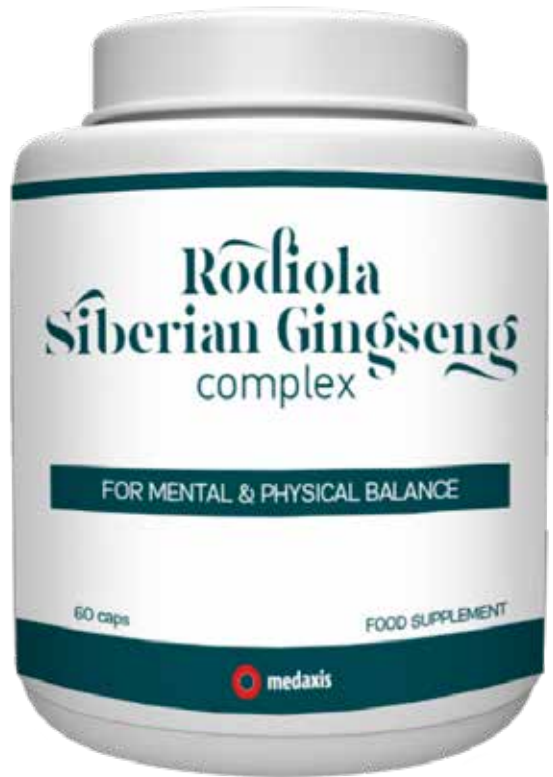


Rhodiola Siberian Ginseng complex

Innovative combination of two strong herbal adaptogens for mental & physical balance.

INGREDIENTS: Root extract (Rhodiola rosea L.) standardized to min. 3% Rosavine, root extract of Siberian Ginseng (Eleutherococcus senticosus Maxim.) Standardized in 2% Eleutheroside, stabilizer - hydroxypropyl methylcellulose (ingredient of the capsule shell).

DIRECTIONS: Take 1 capsule daily



Nutrients	1 caps	SID
RHODIOLA ROOT EXTRACT	140 mg	**
Yielding 3% rosavins	4.2 mg	**
SIBERIAN GINSENG EXTRACT	85 mg	**
Which yields 2% eleutherosides	1.7 mg	**

immune systems. The adaptogens (as they are otherwise called) have balancing properties that help neutralize these effects. They work at the molecular level by regulating a stable balance in the hypothalamus, pituitary gland and adrenal glands. They were originally defined as substances that enhance “non-specific resistance” to stress, a normal state associated with various disorders of the neuroendocrine-immune system. To understand their importance we should understand what exactly stress does to our body.

When we are in a state of stress we go through three stages:

The alarm stage - The resistance stage - The exhaustion stage

Initially our body “sounds the alarm” and responds releasing hormones such as adrenaline that improve muscle performance and increase our ability to perform physically and/or mentally. At this stage we are resisting stress. But as long as the stressful causes persist we eventually transition to the exhaustion phase, adaptogens prolong the resistance phase and delay the exhaustion phase.

Working at the molecular level, they create antidepressant protection, neuroprotective shields, stimulate the central nervous system, enhance attention and improve yields. In addition, several clinical trials prove that adaptogens exert an anti-fatigue effect which increases the ability to work mentally in the context of stress and fatigue, tolerance to mental exhaustion and increased attention. Indeed, recent pharmacological studies of a number of adaptogens provided a rationale for these effects at the molecular level as well.



The combination RHODIOLA ROSEA + SIBERIAN GINSENG, with excellent quality stabilized herbal extracts built to work:

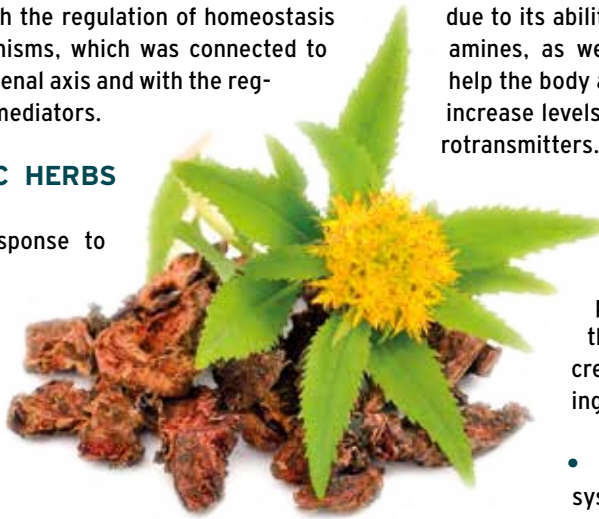
- Adjusting the body’s response to its real needs every moment
- Helping in the treatment and management of “toxic” chronic stress
- Balancing each cell function ensuring homeostasis
- Improving mood, energy, endurance physically and psychologically

Stress causes very significant physical changes in the body, including damage to the neurological, the endocrine and im-

It was discovered that the stress-protective activity of adaptogens was associated with the regulation of homeostasis through various action mechanisms, which was connected to the hypothalamus-pituitary-adrenal axis and with the regulation of key stress response mediators.

USE THE ADAPTOGENIC HERBS TO:

- Improve your body's response to stress.
- Be more efficient and more focused.
- Reduce fatigue and negative mood.
- Improve hormonal balance.
- Reduce uncontrolled cortisol secretion and inflammations.



RODIOLA

Rhodiola Rosea contains a wide range of phytochemical active ingredients, the most important of which are rosavins,

- Rhodiola exhibits an admirable ability to support cellular energy metabolism by promoting higher levels of ATP (adenosine triphosphate) and CP (phosphate creatine) in the mitochondria.
- Strengthens resistance to physical exertion.
- Enhances physical adaptation to extreme temperatures and environmental conditions.
- Improves cognitive function, increases mental energy.
- Strengthens thinking, audio-visual perception and the calculation ability
- Supports levels of key brain chemicals that are involved in mood regulation.
- Contributes to the smooth oxygenation of brain cells.

Traditional uses of the plant include stimulating the nervous system, improving depression, improving work performance, improving sleep, and the elimination of fatigue. The adaptogenic effect of Rhodiola, as well as its protective properties for

the heart, lungs and the central nervous system, are mainly due to its ability to influence the levels and action of monoamines, as well as beta-endorphins. Rhodiola's ability to help the body adapt to stress is possibly due to its ability to increase levels of serotonin, dopamine and other brain neurotransmitters.

SIBERIAN GINSENG

Siberian ginseng does not work on the body like the Korean ginseng; it possesses different active substances. While the Korean ginseng mainly aims at energy increase, Siberian ginseng aims mainly at achieving homeostasis and balance.

- Significantly improves the body's defense system by increasing WBCs.
- Supports the production of adrenaline, resulting in better resistance to stress.
- In times of stress and anxiety the body produces various acidic substances (e.g. lactate or pyruvate) which accumulate in cells creating a toxic load. Siberian ginseng acts catalytically, promoting metabolism of these acids.
- Strengthens the immune system and fights viruses - including flu, respiratory infections and genital herpes.
- Supports the body to achieve a natural balance between vitality and calmness, enhancing energy and relieving stress.
- Reduces physical, emotional and biochemical imbalances.
- Improves concentration and memory.
- Improves performance, coordination and endurance.

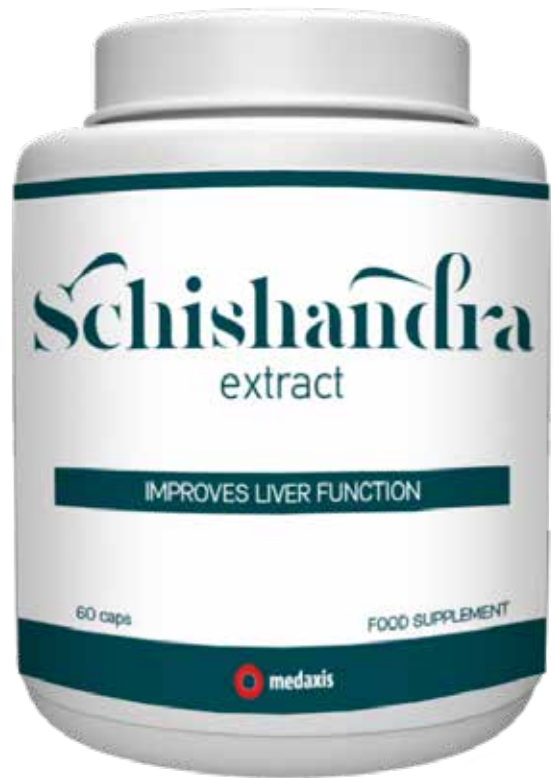


Schishandra extract

Stabilized Schisandra chinensis (magnolia or five flavor) berry extract. One of the most well thought out herbs that are proven to strengthen liver function and protect multiple functions in our body. Guaranteed quality product that yields 9% schizandrin.

INGREDIENTS: Extract from fruits of schisandra (*Schisandra chinensis*), standardized in 9% schizandrin, stabilizer - hydroxypropyl methylcellulose (shell capsule).

DIRECTIONS: Take 1 capsule daily.



Nutrition information	1 caps	RDA
SCHISANDRA BERRY EXTRACT	220 mg	**
Yielding min 9% schizandrin	19.8 mg	**



CHINESE WISDOM

The Chinese say that within 100 days of using “Wu Wei Zi” (*Schisandra* in Chinese), the blood is cleansed, a more youthful appearance is evident and vision is restored. And all of that is thanks to the special effects of *Schisandra* in detoxification and revitalizing the liver (according to Chinese tradition, the liver is associated with aging). *Schisandra* is also used to prevent premature aging and increase life span, normalize blood sugar and blood pressure, stimulate the immune system and speed up post-operative recovery.

THE ACTIVE INGREDIENTS OF SCHISANDRA

Laboratory analysis showed that the *Schisandra* berry contains schizandrin, deoxyschizandrin, schisanol, schizandrol, essential oils, vitamins C and A. Recent studies in China showed that these active substances, especially the schizandrins, are effective in treatment of jaundice and hepatitis.

Professor James Duke, author of “The Green Pharmacy” predicts that *Schisandra* may soon become an effective herbal remedy for liver problems.

THE STUDIES ON THE ACTION OF SCHIZANDRINS

Published clinical studies on the beneficial effects of schizandrins in the body all agree about the antioxidant, anticancer, antiviral, anti-inflammatory, hepatoprotective and regulatory role schizandrins have.

SCHISANDRA BERRIES IN THE LIVER- RENEWAL AND DETOXIFICATION

Schisandra fruit extracts reduce levels of an enzyme called glutamate-pyruvate transaminase (SGPT) in the blood of people with hepatitis. The SGPT level is an indicator of liver damage. Recent research has shown that the main components of this herb have action in both acute and chronic hepatitis, in hepatitis due to drug abuse, and in liver cirrhosis. The administration of high doses of berry extracts restores liver enzymes to normal levels in as much as 70% of cases within a month! It also prevents histological changes in the liver such as fibrosis, prevents degradation of tissues and cells, cellular necrosis and cell infiltration in inflamed tissues.

Today, *Schisandra* is widely used to improve the liver function as a whole but also to offer protection to patients undergoing chemotherapy. On the other hand, it has been shown that the hepatoprotective mechanism of action of *Schisandra* is based on an increase in mitochondrial glutathione concentration. *Schisandra* has also been shown to increase concentration of vitamin C in the liver, which may also have an impact on its protective effect on hepatocytes and in lipid peroxidation.

SPECIFICALLY SCHISANDRA BERRY EXTRACT

- Inhibits lipid peroxidation in hepatic cells
- Increases bile flow and contributes to the removal of liver toxins
- Increases and improves liver blood flow
- Raises liver ascorbic acid levels
- Increases mitochondrial glutathione concentration
- Maintains liver cell and membrane integrity
- Reduces liver carbon monoxide levels
- Reduces transaminases and improves indicators of fatty liver disease
- Protects against hepatotoxicity factors (alcohol, drugs)
- Accelerates multiplication, regeneration and recovery of hepatocells, of the endoplasmic network in the liver and improves hepatic flow.

SCHISANDRA AS AN ANTIOXIDANT AGAINST CANCER

Finally, it is worth noting that Schisandra has also been studied in cancer patients, its anti-inflammatory properties are chemoprotective, while at the same time active schisandrins are reported to help tissue repair. Schisandra has been used as an antioxidant because its powerful antioxidant effects. It has all the antioxidant properties that berries have. Based on the study, long-term treatment with Schisandra could enhance the antioxidant status of mitochondria and improve their integrity. This means that Schisandra helps fight free rad-

icals, which constitute one of the reasons for serious disease such as cancer.

WARNING : patients receiving anticancer chemotherapy should consult their physician prior to using Schisandra

SCHISANDRA IMPROVES SEXUAL HEALTH

Our overall sexual health is the result of hormonal balance. Regardless of whether fertility is your goal, or you want to just maintain a healthy and happy sex life, Schisandra can keep you sexually active and healthy.

It helps in the production of estrogens that may prove to be particularly effective in maintaining a healthy sexual life for women and is also suggested for sexual dysfunction prevention both in men and women.

In addition, Schisandra has been shown to enhance vasodilatation, a fact that in itself improves sexual performance and enjoyment both in men and women alike.

SCHISANDRA IS AN ADAPTOGENIC HERB ...

by promoting hormonal balance. This is achieved mainly by lowering elevated cortisol levels due to stress. Lowering cortisol levels doesn't just benefit us in the short term, eliminating our response to stressful situations; but also in the long term, improving brain function, immune function, physical endurance and even metabolic health. In fact, one of the most common chronic effects of elevated cortisol is adrenal fatigue. Schisandra, like all adaptogenic herbs, helps adrenal glands "rest".



Serrapeptase caps

Dietary supplement with the systemic, proteolytic enzyme serrapeptase in enteric soluble form.

INACTIVE INGREDIENTS: vegetable cellulose, Hydroxypropyl methylcellulose

DIRECTIONS: Take 1 capsule daily with empty stomach



Nutrition information	1 caps	RDA
SERRAPEPTASE (serratiopeptidase)	150 mg	**
E C GRANULES (enteric coated)	300.000 SPU	**

- Bacteria, viruses, fungi are protected by proteins
- Almost all food allergens are proteins
- Cancer cells are protected by proteins

Proteolytic enzymes have the ability to destroy the protein defense shield of pathogens and allergens, leading to their final elimination.

Cancer cells reprogram enzyme production in the body to accelerate their own growth and to be protected by the immune system.

In addition, in autoimmune illnesses there may be CIC's (Circulating Immune Complexes). CICs begin as very large protein molecules which undergo partial digestion in the small intestine and are absorbed in the bloodstream. Once they are in the blood, the immune system treats them as invaders because they are too large to metabolize thus causing an immune reaction. Antibodies pair with the protein invaders to form CICs. Initially, CICs may be neutralized by the immune system and then be eliminated via the lymphatic system and the kidneys. But over time, as CICs are created more abundantly, the ability of the body to eliminate them is overwhelmed.

At this point, the body does not have a choice but to "store" them in its own tissues, where the immune system continues to fight them as allergens, leading to chronic inflammation and ultimately to autoimmune disorders. This is where proteolytic enzymes come into play. Entering the bloodstream they break down CICs in the soft tissue – and the body then expels them. A wonderful way to reduce chronic inflammation!

SERRAPEPTASE AND FIBROUS TISSUE

Serrapeptase suppresses fibrinolysis activity and increased permeability of the vessels, suppresses inflammation



WHAT IS SERRAPEPTASE?

It is a natural enzyme commonly used against inflammation. Since its discovery, many studies have been conducted that demonstrated its potent anti-inflammatory action. Serrapeptase is produced by the bacterium Serrata (Serratia E-15) that lives in the gut of the silkworm.

ITS MAIN MODE OF ACTION

It is the catalyst that initiates chemical and biochemical reactions in the body. Serrapeptase makes proteins break down much faster. It breaks down the dense proteins that most enzymes cannot touch. Its main action is its ability to "digest", that is, to degrade fibrous formations in our body - eg: blood clots, arterial plaque, fat in the bloodstream, water cysts, sebaceous cysts, mucus, any other type of clots and/or cellular waste.

PROTEOLYTIC ENZYMES

Almost anything that makes us sick is due either to a protein or an abnormality of a protein.

DNA is in essence a protein production blueprint. Genetic disease is the result of DNA not being able to produce proteins and enzymes accurately or to do so insufficiently or excessively.

oedema, strongly hydrolyzes bradykinin and breaks down fibrin and fibrinogen without any negative effects on the body's proteins (albumin, α - and γ -globulins). Serrapeptase is proven to dissolve fibrous tissue and remove it from the body. This web is a protein and is formed by our body every time there is injury or inflammation in some group of cells. This web covers the affected area so that new cells can be created there. After the completion of this process the fibrous layer is removed by resorption and is eliminated. If the body cannot do this by itself, serrapeptase does.

SERRAPEPTASE, INFLAMMATION AND OEDEMA

Serrapeptase reduces inflammation, possibly because it soothes fluids so they can drain away easily from inflamed areas and prevent the excessive accumulation of proteins. If injured, the serrapeptase can help in faster recovery. Serrapeptase reduces oedema after surgery and injuries and accelerates tissue repair. Serrapeptase is effective in regulating the immune cell migration from the lymph nodes to inflamed and injured tissues. Both are beneficial for restoring tissue to normal conditions and maintaining homeostasis. This enzyme appears to work in part by cleaving Cyclo-oxygenase. Cyclo-oxygenase is an enzyme responsible for the production of different inflammatory molecules. It can also reduce pain by blocking the release of bradykinin in damaged tissue, which leads to a pain response.

SERRAPEPTASE AND THE CARDIOVASCULAR SYSTEM

Serrapeptase can be beneficial in improving atherosclerosis, a condition where plaque builds up inside your arteries. It is thought to act by breaking down dead or damaged tissue and dissolution of fibrin (the hard protein that forms clots). Serrapeptase has the ability to clean blood vessels and thereby improve blood circulation, to help the body oxygenate fully and to feed more efficiently. Serrapeptase does not prevent the biosynthesis of cholesterol, which in its pure form is an antioxidant and is required by all body organs to function properly. Finally, Serrapeptase is able to dissolve fibrin and other dead or damaged tissue without harming the healthy, living tissues. This could allow dissolution of atherosclerotic plaques without causing damage to the interior of the arteries.

SERRAPEPTASE AND THE RESPIRATORY SYSTEM

Serrapeptase can increase mucus dissolution rate and reduce inflammation in the lungs in people with chronic respira-

tory diseases. The reduction of mucus in the airways is really beneficial in cases of bronchitis, asthma, lung infection, rhinitis, pharyngitis. The clinical use of serrapeptase during allergic disease was studied and proved that it reduces mucus thickness and viscosity and improves its elimination through bronchopulmonary secretions.

SERRAPEPTASE AGAINST PATHOGENS: VIRUSES BACTERIA

Pathogenic invaders in the body unite and form a protective barrier around their group, the so-called biofilm. This acts as a shield against antibiotics, allowing bacteria to grow rapidly and cause infection. Serrapeptase inhibits the formation of biofilm, thus reducing the force of action of pathogens and increasing the effectiveness of antibiotics. Research has shown that serrapeptase improves effectiveness of antibiotics in treatment of even the most resistant pathogens, such as for example *Staphylococcus aureus*. In addition, the combination of serrapeptase and antibiotics was also effective in treating infections that had become resistant to antibiotics.

SERRAPEPTASE AND THE BRAIN

It has significant ability to dissolve the amyloid plaque, wherever it accumulates in the body. This plaque accumulates throughout the body and is the source of chronic pain in the elderly. Alzheimer's is also a build-up of amyloid plaques in the brain.

WHEN TO TAKE SERRAPEPTASE?

- CHRONIC INFLAMMATION
- TO REDUCE PAIN AND SWELLING
- CYSTS
- COPD
- CYSTIC FIBROSIS
- BRONCHITIS
- PROTECTION OF VESSELS FROM DAMAGE
- AUTOIMMUNE DISORDERS
- ALLERGY AND RESPIRATORY INFECTIONS
- CARPAL TUNNEL SYNDROME
- SPORTS INJURIES
- PROTECTION OF THE BRAIN

Shilajit extract

Food supplement with Mumijo – shilajit (asphaltum punjabianum). Stabilized to yield 20% fulvic acids.

INGREDIENTS: 81% shilajit, 19% cellulose

OTHER INGREDIENTS: anticoagulant agent: cellulose 60 mg/capsule, stabilizer: hydroxypropyl methylcellulose (shell capsule) (50 mg/capsule)

DIRECTIONS: Take 1 capsule daily 30 minutes before a meal.



Nutrition information	1 caps	RDA
SHILAJIT EXTRACT (10:1) which yields minimally	220 mg	**
Fulvic acids	44 mg	**



WHAT IS SHILAJIT?

The average age of the mumijo is 700-900 years! Shilajit (asphaltum punjabianum) is a type of mineral resin that seeps from fissures in the mountains and can be found mainly in the Himalayas, Caucasus, Altai and other mountainous regions. The word Shilajit means "conqueror of mountains and killer of weaknesses". It is known to mankind for its medicinal properties for more than 3000 years. Shilajit is surprisingly rich in nutrients, antioxidants, amino acids and phytochemicals.

It's an effective and safe supplement that can have a positive effect on your overall health and well-being. It contains more than 85 minerals, most of them in ionic bioavailable form, triterpenes, selenium, phospholipids, dibenzo-alpha-pyrones, humic and fulvic acid. The main active ingredient in Shilajit, is fulvic acid macromolecules, carboxylic acid, humic acid, fulvic acid, phenolic acids, iron, calcium, copper, zinc, magnesium, manganese and phosphorus. In its organic part it contains carbon, oxygen, hydrogen and nitrogen in the composition of various acids, resins and albumins.

In its inorganic part it contains calcium, sodium, potassium magnesium and aluminum minerals. Apart from these, there are also 30 rare trace elements and micronutrients: rubidium, cesium, barium, strontium, lead, chromium, antimony and more.

The amount of each of them is in traces, but these are exactly the substances missing from our body and mumijo fully meets those needs. All substances included in its composition are in an easily digestible form. The ancient Persian doctor Avicenna (perhaps the most important personality of Arabic medicine) and Biruni describe methods of its mining and use.

WHY USE IT

Shilajit (mumijo) is a complex formulation. Each of its components can affect important processes of the body and achieve tissue regeneration.

Micronutrients have an essential effect on metabolism of albumins, carbohydrates, fats and minerals, at redox processes and in rejuvenation. The main and most valuable component of shilajit is fulvic acid. Fulvic acid restores the body's optimal pH levels. Optimal pH levels help improve the body's defenses against microorganisms and promote toxin neutralization that could otherwise cause disease, degeneration and aging. One of the best known nutritional benefits of fulvic acid is supporting gut health as well as strengthening metabolism.

Given the small MW of fulvic acid, it gets transported easily through membranes thus helping to transport nutrients into the cell. With its action, it enhances the permeability of cell walls, allowing the absorption of larger particles! This greatly aids assimilation of nutrients and helps equip cells with everything they need to make the enzymes that are necessary for digestion. Another benefit of fulvic acid is that it creates an optimal environment for the growth of probiotic bacteria.

SHILAJIT:

- Boosts metabolism
- Protects cognitive function and promotes thinking wellness. Shilajit has shown significant potential in prevention of self-aggregation of pathological filaments in the brain. This plays an important role in age-related mental decline and the development of Alzheimer's. Fulvic acid helps reduce the length of τ -fibrils (tau) and their morphology, weakening this specific protein and slowing disease progression.
- Supports urinary system health. It is useful in the treatment of painful urination, cystitis, of stones, incontinence and glycosuria, as well as prostatitis.
- Contributes to the shielding of the immune system by strengthening the respiratory and digestive epithelial system to prevent the entry of pathogenic factors.
- Contributes to the creation of strong bones and joints, accelerates recovery after injuries or intense physical exercise. Strengthens the metabolism of mineral components, accelerates the healing of fractures and wounds thanks to the rapid formation of bone callus. It helps in the treatment of osteoporosis, due to its content in strontium.
- Supports the rate of fat metabolism. Useful in metabolic syndrome (overweight, high cholesterol, low thyroid and diabetes). Studies have shown that shilajit causes a significant reduction in glucose levels and improves lipid profile.
- Increases energy levels and stamina thereby acting in an anti-aging manner. Shilajit is an antioxidant (Acharya, 1988) and fights aging. In addition, fulvic acid facilitates the balance of electrolytes in cells, which accelerates the flow of electrons that mitochondria use when they produce energy. In other words, fulvic acid encourages the body to produce greater amounts of energy at a much faster rate than it normally does!
- Enhances sexual energy and promotes fertility. It is traditionally considered a powerful aphrodisiac. Its spermatogenic properties are evident in a study of oligospermic patients.
- It is effective in improving thrombophlebitis. In the treatment of hemorrhoids it stabilizes the epithelium, stops itching and has an anti-inflammatory effect.
- Protects the skin. Ideal choice for eczema, psoriasis, acne. Increases skin tone, contributes to the smoothing of wrinkles, protects the skin from adverse effects of the environment, stimulates the processes of skin regeneration; for this reason it is included in the composition of agents that reduce and eliminate scars.
- Protects breathing, improves the function of lungs. It has a favorable effect on the body in bronchial asthma, bronchitis, and pneumonia.
- For all inflammations in the digestive tract. Quick response of stomach-duodenal ulcer symptoms. Shilajit has activity against *Helicobacter pylori*. In addition, it has spasmolytic properties with very good activity against colic, indigestion and colitis.
- Ideal for lymphedema. Benzo-pyrones reduce high protein edemas, including lymphedema and elephantiasis, increasing the number of macrophages and normal proteolysis. Thus they remove excess protein, and the swelling caused by it.



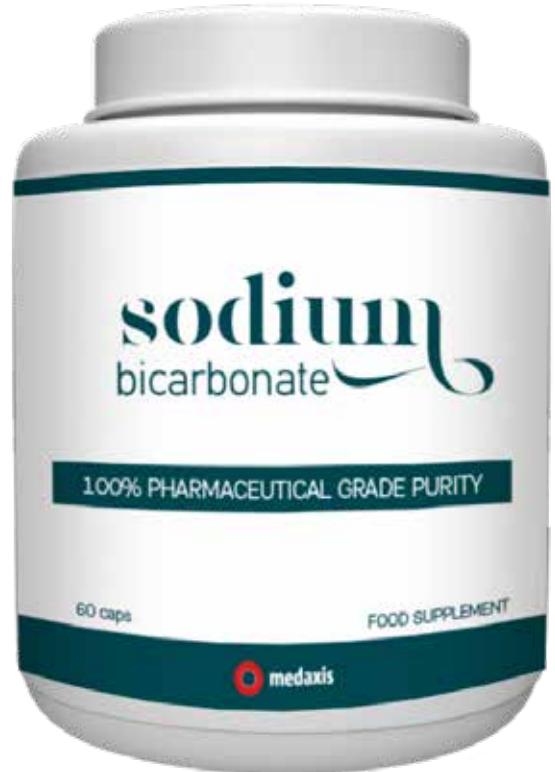
Shilajit has been studied to address male fertility. In a study of 60 subfertile men shilajit was administered two times a day for 90 days. After the examination period, nearly half of the men who completed treatment showed an increase in total sperm count and in sperm motility, how many and how well spermatozoa move towards the egg; these are key properties in male fertility. Another study looked at shilajit's ability to increase testosterone levels in healthy volunteers. Men between 45 and 55 years were given shilajit for 90 days. At the end of this period, the researchers noticed a significant increase in total testosterone levels.

Sodium bicarbonate

100% sodium bicarbonate without other additives.

Edible - suitable for cooking, confectionery and external use. Pharmaceutical grade purity sodium bicarbonate.

INGREDIENTS: 100% sodium bicarbonate



Sodium Bicarbonate increases the content of bicarbonate ions in the plasma, regulates the excess of hydrogen ions and increases blood pH, reversing in this way the manifestations of acidosis. Sodium bicarbonate, known to all as “cooking baking soda” is a salt made up of sodium and bicarbonate ions. It has a white crystalline form, slightly salty, alkaline taste and high solubility in water.

WHY IS IT IMPORTANT TO KEEP OUR BODY IN AN ALKALINE pH?

The body's enzymes are affected by its pH. If the pH is not right, the food we eat is not absorbed and our health is poor. The pH of the body is very important, so much so that in order to maintain it our body sacrifices nutrients, such as bone calcium. When blood becomes too acidic it is suitable for development of acute or chronic illness, especially arthritis or cancer. All degenerative disease in addition to that caused by pathogens mainly appear in an acidic environment. Foods are not classified as acidic or alkaline before consumed, but after digestion, when they are absorbed and metabolized. When food is metabolized, it leaves chemical residues and forms acidic or alkaline products. Alkaline products are healthy while acidic products lead to degeneration, oxygen deprivation and illnesses.

Most people consume processed foods that cause acidification of the body, such as meats, sugars, flour, milk and cheese. Eating too much acidic food saturates our body with acids, elimination of toxins slows down, leading to the accumulation of foul-smelling gasses such as sulfur and phosphorus, which are associated with other chemical substances and form acids. Many experts believe that the excessive acidity is responsible for a number of diseases, including rheumatoid arthritis, arthritis, headaches, and kidney and gallstones.

PH BALANCE

The body should have a pH of 7.4 slightly on the alkaline side of neutral. When oxidation occurs, the body reacts using water and minerals, such as calcium, magnesium, potassium, sodium and iron to regain the alkaline balance. If the body is already dehydrated, it has no choice but to use these metals by removing them from organs and tissues in order to restore the alkaline balance. In any case this is achieved automatically. The main thing is what, and how much of it, will our body "sacrifice" to achieve its acid-base balance.

SODIUM BICARBONATE DOESN'T MAKE US ALKALINE AUTOMATICALLY. IT JUST SUBTRACTS OXIDATION FROM CELLS

It is almost impossible to permanently change the cellular environment of the human body in order to create a less acidic and less cancer-friendly environment by means we use externally; we can strengthen it and make this balance easier though.

OXIDATION - ALKALINITY AND CANCER

No disease, including cancer, can exist in an alkaline environment. For his work on aerobic and anaerobic metabolic processes in cells, Dr. Otto Warburg was awarded the Nobel Prize in Medical Physiology in 1931. He suggested that cancer cells “thrive in hypoxic environments with very low oxygen and acidic conditions and absorb energy from sugar fermentations”.

As cancer progresses, the body becomes more acidic as its pH falls below 7.35. His discoveries were revolutionary for his time and have contributed significantly to what we know about cancer.

FUNGI - BACTERIA AND PATHOGENS NEED AN ACIDIC ENVIRONMENT TO GROW

Shifting the blood pH into the alkaline range creates an inhospitable environment for bacteria, viruses and fungi, which prefer an acidic environment. Unfortunately, the average diet in modern societies does not contribute to our intestinal tract health or proper and efficient digestion of food; this makes us vulnerable to pathogen growth thus burdening our immune system.

SODIUM BICARBONATE AS PROTECTION OF THE DIGESTIVE SYSTEM OR AN ANTACID

Offers significant help in cases of indigestion, heartburn, and high acidity in the stomach. Its action lies in the partial neutralization of hydrochloric acid in the stomach when the stomach is empty. In this way it reduces symptoms of gastritis. Mixed with water, it can be consumed at least an hour after meals.

We don't use sodium bicarbonate in close proximity to our meal because during the digestion process an acidic environment is necessary in the stomach. Sodium bicarbonate reduces hydrochloric acid excess in the intestine. Its combination with gastric acid creates a chemical reaction that has a neutralizing effect on the acid, reducing stomach pain.

SODIUM BICARBONATE AND THE KIDNEYS, URIC ACID AND URINARY ARTHRITIS

Chronic kidney disease increases the risk for a condition called metabolic acidosis. Sodium bicarbonate can be used to make urine less acidic. This helps kidneys get rid of accumulated uric acid crystals, thus preventing gout and reducing risk of kidney stones.

SODIUM BICARBONATE AND ORAL HYGIENE

Sodium bicarbonate is a natural buffer that maintains a healthy pH in your mouth to promote a clean and fresh oral environment. It effectively neutralizes volatile sulfur compounds, which cause bad breath. It also possesses antibacterial properties, and is effective in periodontitis. Use a warm solution containing ½ teaspoon of sodium bicarbonate in a glass of water to create an effective natural solution with antiseptic properties.

When used in combination with toothpaste, it significantly increases teeth whitening. For those wishing to avoid fluoride in toothpastes, sodium bicarbonate is free of fluoride. Because sodium bicarbonate is alkaline, it helps neutralize acid caused by bacteria in the oral cavity. Reducing this acidity can help dental decay prevention.

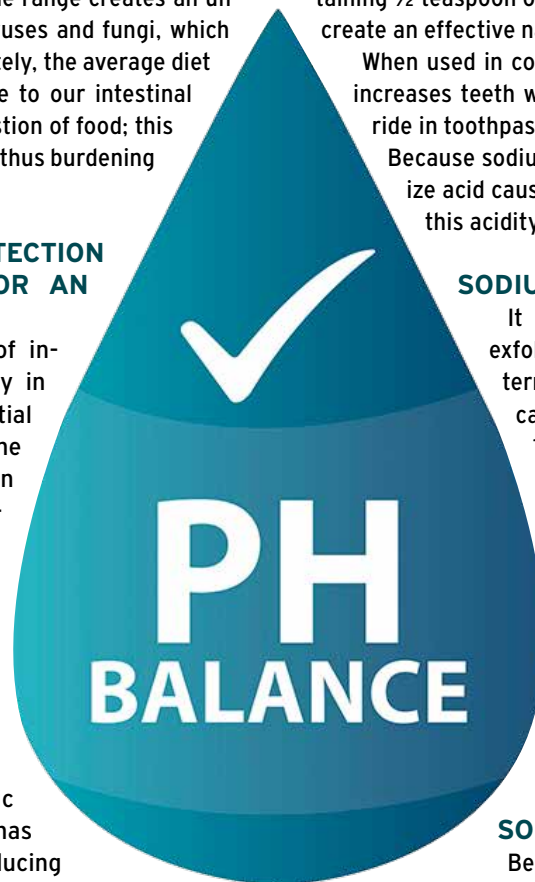
SODIUM BICARBONATE AND THE SKIN

It can be used as a natural and very mild exfoliating or even as acne treatment. One alternative recipe for oily and acne-prone skin calls for 1 tbsp of sodium bicarbonate and 1 teaspoon of lemon or orange juice. Mix these ingredients well and use the mixture to gently exfoliate the skin with your fingers.

A second recipe: Place 2 tablespoons of sodium bicarbonate in a small bowl and mix with 1 tsp honey and half a lemon juice. Put the mixture on your face in a thin layer and let it act for 15 minutes. Repeat no more than once a week on oily skin.

SODIUM BICARBONATE IN COOKING

Because baking soda is alkaline, it reacts with acidic ingredients in foods, such as citrus fruits, yogurt, lemon juice and honey, creating carbon dioxide bubbles as a by-product. These bubbles cause yeast to rise.



Super Vitamin C complex

We manufactured a vitamin C supplement to meet all body requirements.

It's 100% natural, herbal and 100% bioavailable.

Multi-systemic action, great bioavailability, excellent quality of raw materials.

OTHER INGREDIENTS: microcrystalline cellulose, magnesium stearate, vegetable cellulose

DIRECTIONS: Take 1 capsule daily.



Nutrition information	1 caps	RDA
CALCIUM ASCORBATE (provides vitamin C)	502 mg	562,5%
ALPHA FATTY ACID	450 mg	50 mg
QUERCETIN	50 mg	
CITRATE BIOFLAVONOID MIXTURE	50 mg	
RUTIN	50 mg	
WILD ROSE LEAF EXTRACT (provides vitamin C)	25 mg	
ZINC OXIDE (provides zinc)	12,5 mg	15,625%
ZINC OXIDE	6,4 mg	
Inactive ingredient: RICE BRAN	5 mg	50%
GRAPE SEED EXTRACT	10mg	
	30 mg	

BENEFICIAL FOR THE SKIN

The supply of vitamin C to the skin contributes significantly to wound healing and minimizes scar formation. Also, vitamin C provides protection from UV radiation, and reduces the signs of aging.

PROTECTION AGAINST MELANOGENESIS

Agents that reduce melanogenesis are used for the treatment of hyperpigmentation of the skin in conditions such as mel-anosis or age spots.

BENEFICIAL FOR THE CONNECTIVE TISSUE IN JOINTS

Vitamin C deficiency equals collagen deficiency. Vitamin C acts as a cofactor for the hydroxylases proline and lysine and the creation of procollagen. Procollagen is used to make each of the types of collagen found in the body.

NATURAL IMMUNE STIMULATOR

Vitamin C enhances the function of phagocytes, the production of cytokines, the production of interferons and production of β -lymphocytes. All of these are the weapons that our immune system uses to face pathogens and threatening invaders.

VITAMIN C HAS A STRONG ANTIOXIDANT ACTION

The main function of vitamin C is as an antioxidant. Experts emphasize that vitamin C is the "key" to repair, rebuild and maintain healthy cells throughout the body. New evidence supports that high doses of vitamin C may have significant actions of suppression and destruction of cancer cells while at the same time leaving normal cells unaffected. The main role of vitamin C is to regulate redox reactions and to protect against oxidation of fat-soluble vitamins.



VITAMIN C CONTRIBUTES:

- To maintain a normal immune system function, during and after intense physical exercise
- To form collagen for blood vessel, bone, cartilage, gum, skin function and dental health
- To normal central nervous system function, to normal functioning of all metabolic processes that are aimed at energy production and physiological & psychological function
- To normalize the immune system function, in the protection of cells from oxidative stress, in fatigue reduction and iron absorption.

CLEANSSES THE BODY OF HEAVY METALS

It lowers lead levels in the blood. This is important for children living in urban areas, as studies have shown that lead toxicity can result in developmental and behavioral problems, such as learning difficulties.

IMPROVES IRON ABSORPTION AND ENHANCES BLOOD FORMATION

Vitamin C therapy can improve hemolytic anemia and iron absorption from foods.

PROTECTS THE EYES

Vitamin C intake has been shown to help fight cataract formation, increasing blood flow to the eyes.

PROTECTS THE HEART AND THE VESSELS

It ensures the proper dilation of blood vessels resulting in better blood circulation that in turn reduces the risk for atherosclerosis, congestive heart disease and angina pectoris.

ALPHA FATTY ACID AND VITAMIN C: ANTIOXIDANT PROTECTION, CELLULAR NUTRITION AND ENERGY

Alpha lipoic acid works as a powerful antioxidant in the aqueous and fatty parts of the cells. It also recycles vitamin C and keeps it active for longer, thus maximizing its benefits. Alpha lipoic acid helps absorb food nutrients. It helps transform nutrients into usable forms of nutrition and energy of the cells.

QUERCETIN AND VITAMIN C: ANTIHISTAMINE ACTION, PROTECTION OF LUNGS, REDUCTION OF INFLAMMATION

Quercetin is a powerful antioxidant that protects vitamin C and keeps it active. Quercetin itself as a substance has a strong antihistamine and anti-inflammatory effect and its action is magnified and intensified through synergy with vitamin C. It can help protect against heart disease, cholesterol, cancer (breast, colon, intestine, prostate, ovaries, endometrium and especially lung) and has proven to be very useful in the treatment of infections.

GRAPE SEED EXTRACT AND VITAMIN C: PROTECTION OF THE VESSELS AND THE HEART

Grape seed extract is a powerful antioxidant that protects the vessels and by extension the heart and circulation. At the same time it works as a cholesterol oxidation inhibitor, preventing atherosclerosis and protecting the smooth flow of blood to the cells. Its synergy with vitamin C increases its antioxidant action and creates a wider protection network against free radicals. In a study it was shown that the combination of grape seed

extract and vitamin C significantly improved the antioxidant response and overall vascular function in patients with clinically proven cardiovascular disease (CVD).

WILD ROSE EXTRACT AND VITAMIN C: PROTECTION AGAINST VIRUSES

According to the University of Maryland Medical Center, taking high amounts of vitamin C can reduce the severity and frequency of colds. Wild rose fruits have a high vitamin C, vitamin A, calcium and iron content. They are also rich in flavonoids, pectin, vitamin E, selenium, manganese, other minerals and vitamins of the B complex. Wild rose fruits have been shown to reduce respiratory problems and help prevent asthma, reduce symptoms of wheezing, chronic cough, shortness of breath, even a runny nose in children. The presence of many vitamins reduces the duration of colds. It also helps in prevention of both bacterial and viral infections, fever and the duration and strength of the viruses.

ZINC AND VITAMIN C

Zinc supports the immune system and synergy with vitamin C offers multiple effects in protection against viruses, the common cold and the flu. Another important action of zinc along with the vitamin C: initially it improves irritation and swelling, and then the overall appearance of acne-prone skin. Finally zinc together with vitamin C offer adequate protection of cells from oxidative stress. This combination helps in normal development of children, in maintaining normal levels of testosterone in the blood, in normal fertility and reproduction, prostate health, taste, vision and the sense of smell, in maintaining the physiological state of our bones, skin, hair and nails.

RUTIN AND VITAMIN C

Rutin, in addition to its antioxidant activity and recycling of vitamin C in the body, is particularly effective in protecting the capillaries by protecting and strengthening the walls. This offers effective treatment of varicose veins, phlebitis and hemorrhoids.

CITRATE BIOFLAVONOIDS AND VITAMIN C

Bioflavonoids in general such as for example wild rose, quercetin, citrate bioflavonoids are all powerful allies of vitamin C. They control its concentration in tissues, recycle it, enhance its action and maximize its results. Flavonoids can also affect the ability of vitamin C to be absorbed and used by the body. The bioflavonoids have been used in alternative medicine not only as an aid to enhance the action of the vitamin C, but also to support blood circulation, as antioxidants, and for the treatment of allergies, viruses, arthritis and other inflammatory conditions.

Vitamin D3

drops

Vitamin D3 supplement for maintenance of the normal bone and muscle health as well as normal immune system function.

INGREDIENTS: MCT OILS (medium chain fatty acids) from coconut oil, cholecalciferol (vitamin D3), antioxidant medium [tocopherols]

DIRECTIONS: Take 1 drop per day in water or according to a healthcare professional's instructions.

Nutrition information	1 drop	RDA
VITAMIN D3 (cholecalciferol)	25 mcg 1000 IU	500%



Vitamin D contributes to the normal absorption / utilization of calcium and phosphorus, in conservation of the normal state of bones and teeth. It plays a role in the process of cell division. It contributes to maintaining normal blood calcium levels, maintaining normal muscle function and normal immune system function. Vitamin D is undoubtedly one of the most interesting objects of scientific research nowadays.

Older, well-established vitamin D uses are already incorporated in current scientific practice. However, new well-documented research keeps adding relevant data indicating the significance of adequate vitamin D in all organic systems.

WHAT ARE THE RESULTS OF VITAMIN D DEFICIENCY?

Lack or deficiency of vitamin D is associated with:

- Osteoporosis in adults.
- Nervous and muscular function disorders.
- Disorders of the immune system (predisposition to infections).
- Predisposition to cancer.
- Predisposition to hypertension and cardiovascular diseases
- Disorders of glucose metabolism (predisposition to metabolic syndrome and diabetes mellitus).



- Predisposition to Alzheimer's Dementia and epilepsy.
- Predisposition to serious skin diseases, such as scleroderma, vitiligo, systemic lupus erythematosus and psoriasis.
- Predisposition to rheumatoid arthritis and muscle atrophy.
- Predisposition to Multiple Sclerosis (MS)
- Predisposition to Asthma, Chronic Obstructive Pulmonary Disease, cystic fibrosis.

SKELETAL DISEASE

Vitamin D promotes calcium absorption in the intestine and keeps its blood levels stable. Deficiency of Vit D3 results in bone demineralization which in turn leads to abnormally low calcium (hypocalcemia) thus causing hyperparathyroidism. This leads to increased bone loss, osteopenia, osteomalacia, osteoporosis and increased risk of fracture. In addition, the increase in parathyroid hormone (PTH) may promote resistance to insulin, weight gain, hypertension (high blood pressure) and left ventricular hypertrophy.

IMMUNE SYSTEM

Vitamin D supplements protect people from pneumonia, flu and common colds, according to new scientific research.

Evidence shows that vitamin D, in addition to being vital for bone and muscle health, also strengthens the immune system. The study focused on the relationship of vitamin D to infections of the respiratory system, ranging from common colds to the most severe (pneumonia). It was reported that the vitamin D supplementation protects 1 out of 33 people (or about 3%) against such infections. This ratio is even better than flu shots, reported to prevent an average of one flu infection for each 40 people vaccinated. When our body comes into contact with a new virus or bacteria, specific white blood cells, the T-lymphocytes, are recruited to fight the invader. Each of these cells is programmed to recognize one specific virus or bacterium. So for each 100,000 T-lymphocytes, probably only one will match the pathogen. These few cells must immediately multiply so as not to allow the invader to cause disease. However, in order to be activated, T-lymphocytes must be transformed into cells that will kill the pathogen, killer cells and helper cells (Natural Killers Cells, NK – Helper Cells, Th). Sufficient quantities of vitamin D are essential for this process. Once the T-lymphocytes come into contact with some microbial agent, they extend "antennae" to receive vitamin D. According to research, if there is vitamin D deficiency in the blood, T-lymphocytes don't even start getting activated; thus our immune system cannot respond to the virus or bacteria threat.

PREVENTS THE RISK OF HEART DISEASE

Low levels of vitamin D3 are associated with increased incidence of cardiovascular problems and is common in patients who have suffered a stroke. There is a correlation between low levels of 25-hydroxy-vitamin D3 or 25(OH)D3 in serum with stroke risk factors, especially in the presence of hypertension.

On the other hand vitamin D3 deficiency was found to be associated with increased arterial stiffness, endothelial dysfunction in the conductivity and resistance of blood vessels. **CONCLUSION:** The existence of ideal vitamin D3 levels in adults should be included in stroke prevention guidelines.

PROTECTS DNA

A collaborative study between two world famous universities, Harvard and UCLA, reported that vitamin D is necessary for cells to have access to a substantial part of the DNA library. Sim-

ply put, vitamin D is essential for the action of more than 2,500 genes, that is approx. 10% of the human genome. These are genes that synthesize many proteins, which play an important role in the regulation, differentiation and multiplication of cells. Vitamin D receptors are located in the gut, bone, brain, prostate, breast, colon, in cells of the immune system, in the heart and in vascular muscle.

ESSENTIAL FOR A SAFE PREGNANCY

Valid studies have shown that severe vitamin D deficiency is probably associated with increased incidence of gestational diabetes, preeclampsia, low weight fetus births, and intrauterine deaths. Due to osteomalacia, vitamin D deficiency, may lead to an increased likelihood of cephalopelvic disproportions often leading to pregnancy interruption or increased cesarean section rates.

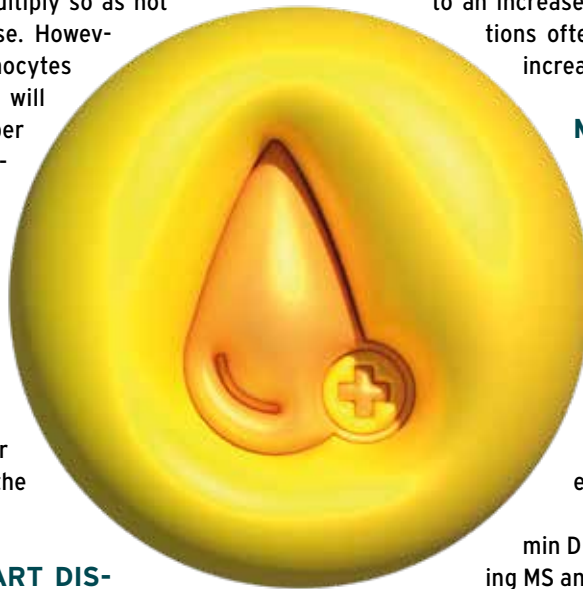
MULTIPLE SCLEROSIS AND VITAMIN D

Based on research conducted by Robin Lucas and colleagues at the Australian National University, patients who had early symptoms of the disease had lower exposure to sunlight and to lower levels of beneficial UV rays. This was an epidemiologic study based on how long they were exposed to the sun and how close to the equator they had lived.

Current evidence supports that vitamin D deficiency increases the risk of developing MS and affects the rate of disease progression in people with MS. Higher incidence of MS has also been observed in geographical areas far from the equator, where people are exposed to less sunlight. Low levels of exposure to sunlight appear to be an important factor to disease onset and progression. A review of the various studies reports that fewer relapses occur in MS patients with adequate levels of vitamin D, with lower risk of developing new brain lesions, lower rate of disability and improvement of long-term memory.

ITS ROLE IN DIABETES

In order to manifest as disorders in glucose tolerance and type 2 diabetes, β -cell function reduction, resistance to insulin and systemic inflammation must occur. There are now several experimental data showing that vitamin D and calcium affect all three of these mechanisms. Vitamin D deficiency inhibits insulin secretion and promotes glucose intolerance.



Vitamin K2

(MK7)

Nutritional supplement with microencapsulated vitamin K2 that contributes to the normal bone health

[EFSA: 2009*7(9): 1228]

OTHER INGREDIENTS: Microcrystalline cellulose (vegetable)

DIRECTIONS: Take 1 capsule daily after a meal



Nutrition information	1 caps	RDA
VITAMIN K2 as MK7-	150 mcg	202.2%



MK-7 is always found in its trans form, both in nature and in foods. The cis form is not found in nature and does not provide the same benefit. The cis form of MK-7 is L-shaped in contrast to the straight shape of the trans MK-7. The unique shape of these molecules dictates what they do to the body. Like a lock and key, K2 and receptors work when the body has trans MK-7.

Most MK-7 found in supplements is a mixture of Cis and Trans. In most cases, it's impossible to say how much of the 100 mcg is in the biologically active and beneficial trans form. Most are probably in trans form. However, the K2 supplements analyzed at the University of Oslo suggest that several products contain only 15% MK7 in trans form. Most of the manufacturers of K2 products do not specify how much cis and trans are present in their product.

MICROENCAPSULATION

Microencapsulation is a process in which tiny particles or droplets are surrounded by a coating to give small capsules, with many useful properties. Generally, it is used for embedding food components, enzymes, cells or other materials in micrometric scale. Microencapsulation can also be used to enclose solid, liquid or gaseous media in a micrometric wall made of hard or soft soluble film, in order to reduce the frequency dosage and to avoid degradation of pharmaceuticals products.

The reasons for microencapsulation are countless. It is mainly used to increase the stability and shelf life of the product contained in a capsule, for facilitating product handling and control of its release in sufficient time and place of intervention. Microencapsulation is a process in which tiny particles or droplets are surrounded by a coating to give the micromolecules of the substance in order to reduce dosing frequency and avoid degradation of activity and effectiveness.

VITAMIN K2 (MK7)

K is a group of fat-soluble vitamins with similar chemical structure. MK-7 is obtained by fermentation using the bacterium *Bacillus subtilis natto*, which is also responsible for the production of traditional Japanese soy fermentation Natto.

WHAT ARE THE CONSEQUENCES OF K2 DEFICIENCY?

Vitamin K deficiency significantly increases the risk of bleeding. Symptoms of vitamin K deficiency are: easy bruising, frequent nosebleeds, bleeding of the gums, heavy menstruation, the presence of blood in the urine and/or feces. Laboratory findings include a clinically increased prothrombin time (PT/INR).

OSTEOPOROSIS - CALCIUM MANAGEMENT

K2 activates a protein called osteocalcin, which adds calcium to the bones and teeth. In vitamin K2 deficiency, osteocalcin becomes useless because it remains inactive and the calcium circulates in the blood without purpose resulting in it not being placed in the bones. Instead, it is accumulating in the arteries increasing the risk of heart attack. Vitamin K2 is the key for calcium to enter the bones and not in the arteries. The unregulated deposition of calcium in the body when K2 is missing can create other small but painful complications such as: heel spurs and calluses.

VITAMIN K2 AND ATHEROSCLEROSIS

Coronary calcification is one of the most important causes of cardiovascular aging and the occurrence of cardiovascular problems. Scientific studies have shown that vitamin K2 can prevent calcification of coronary heart vessels.

VITAMIN K2 AND CHOLESTEROL

(mainly in statin users)

Statins may cause calcification of the coronary artery and can act as mitochondrial toxins that interfere with muscle function in the heart and blood vessels through its depletion of coenzyme Q10. Statins inhibit vitamin K2 synthesis, the cofactor for the activation of matrix GLA-protein, which in turn protects the arteries from calcification.

VITAMIN K2 AND CANCER

Vitamin K2 in particular is being researched for its potential protective action against specific forms of cancer. A large European survey of more than 11,000 men over 9 years revealed a reduced risk of prostate cancer in men who had a higher intake of vitamin K2.

Vitamin K2 shows:

- (a) wide range of toxicity towards a variety of human cancer cells of different origin.
- (b) induces apoptosis by interfering with multiple mechanisms that are considered central to development and cancer progression.
- (c) may inhibit multiple signaling pathways which are often dysregulated in human cancer and are associated with drug resistance.

VITAMIN K2 AND INSULIN RESISTANCE

Researchers found that those who received high amounts of vitamin K were 20% less likely to develop diabetes mellitus type 2. There is information that the people taking vitamin K showed improvement in tissue resistance to insulin.

Studies have shown that osteocalcin plays an important role in insulin regulation. Through hormone release from adipose tissue, it increases the sensitivity of cells to insulin. It has been found that higher blood levels of vitamin K2 are associated with increased levels of osteocalcin. So vitamin K2 can reduce insulin resistance and the metabolic syndrome.

VITAMIN K2: SKIN AND WRINKLES

The same hardening calcification problems that affect arteries, can also affect the connective tissue elastin, which keeps skin soft and delicate. Without enough vitamin K in your diet, calcium can be deposited in the elastin fibers of the skin and harden them causing wrinkles. Vitamin K is still necessary for creation of specific proteins that keep skin cells healthy and can be a determining factor for skin problems, such as acne.

Actually, there are many reports of treatments with topical use of the vitamin K, which help acne prevention and healing of skin affected by acne scars. Research has shown that vitamin K protects the skin from aging thus protecting its elasticity from wrinkles; while in combination with retinol (vitamin A)

it improves the dark circles under the eyes.

VITAMIN K2 AND PREGNANCY

K2 plays an important role during pregnancy for the development of the fetus's teeth, the appropriate form of the face, for the formation of strong bones. It also helps prevent dental decay during childhood and in the correct development of the skeleton in adolescence. Vitamin K2 is also necessary during breastfeeding.

K2 is extremely helpful for women trying to conceive as well as in pregnant women for the healthy development of the fetus (teeth development, correct facial shape, strong bones). It is also necessary throughout childhood and adolescence (primary teeth, dental decay prevention and correct skeleton formation).



Zinc | Copper complex

Dietary supplement with zinc and copper.

OTHER INGREDIENTS: Vegetable cellulose (material capsule)

USE: take 1 capsule a day

Nutrition information	1 caps	RDA
ZINC (as L- Optizinc® Monomethionine)	30 mg 150 mg	300% **
COPPER (as copper chelate)	1 mg 4 mg	100% **



L-OptiZinc® ZML-200

L-OptiZinc® is a unique chelated mineral that combines zinc with the amino acid L-methionine. Research shows that L-OptiZinc® is absorbed better than other forms of zinc and that its levels in the plasma remain higher compared to other forms of zinc. Zinc is an essential metal involved in many cellular functions, including muscle function, aging, skin and immune health.

L-OptiZinc® is zinc mono-L-methionine with superior absorption and retention, antioxidant and cell protective properties compared with other zinc forms tested. L-OptiZinc® is a 1:1 complex of zinc and methionine, an amino acid that is well absorbed by the body. Zinc methionine is better absorbed and is retained for a longer time in the tissues compared to other conventional zinc supplements. The superior absorption and retention of L-OptiZinc® may contribute to increasing health-promoting benefits, as these benefits are highly zinc dose dependent on the amount that is actually absorbed and utilized by our body. Preclinical research shows that L-OptiZinc® has superior antioxidant properties than many other forms zinc.

- Superior absorption and retention
- Superior antioxidant properties
- Superior cellular protection
- Multiple health benefits - from immune function to skin health



THE ACTIONS OF ZINC

As the body does not possess a mechanism to store zinc, we must either take it with food or as a food supplement daily. Although zinc is present in lots of foods, the World Health Organization estimates that over 1/3 of the population is Zinc deficient. The RDA for Zinc differs in men and women and is about 5.5-9.5 mg for men and 4-7 mg for women. Too much zinc in the diet may reduce the body's ability to absorb copper, which is also an important micronutrient. For this reason, almost always Zinc food supplements combine small doses of copper.

OFFICIAL CLAIMS FOR ZINC

[EFSA 2009; 7(9):1229 & EFSA 2010; 8(10):1819]

Zinc contributes to normal:

- acid and base metabolism
- carbohydrate metabolism
- cognitive function
- DNA synthesis
- fertility and reproduction
- metabolism of macronutrient components
- metabolism of fatty acids
- metabolism of vitamin A
- protein synthesis
- bone health
- hair, nail and skin condition
- testosterone levels in the blood
- vision
- immune system function
- protection of cells from oxidative stress
- process of cell division

ADDITIONAL ZINC EFFECTS

HERPES INFECTION:

It helps deal with it through strengthening of the immune system.

DIABETES:

Research showed that the supplemental zinc intake can enhance the action of insulin, especially in obese people who have resistance to insulin.

High blood sugar levels lead to frequent urination: diabetics with insufficient adaptation excrete a lot more zinc in their urine.

Office of Dietary Supplements - Zinc, <https://ods.od.nih.gov/factsheets/Zinc-Consumer/>

ALCOHOLISM

When a Zinc deficiency occurs in the body, it reduces the ability to produce alcohol dehydrogenase. This enzyme breaks down alcohol. Without alcohol dehydrogenase, any amount of alcohol, would result in alcohol poisoning.

Elmadfa, I.: Ernährungslehre. Verlag Eugen Ulmer Stuttgart (2015)

INDICATIONS OF ZINC DEFICIENCY

Zinc deficiency is not a particularly common condition. Symptoms of zinc deficiency include loss of appetite, immune disorder function, hair loss, diarrhea, slow wound healing, taste abnormalities. Zinc has an antagonistic action against Cu^+ through the activation of metallothionein synthesis by Zn in intestinal mucosal cells. Metallothionein binds to copper strongly, so the metal is not available for transport in the circulation and it is eventually lost in the feces when the mucosal cells fall out.

COPPER AND ITS ACTIONS

[EFSA 2009; 7(9):1211 & EFSA 2011; 9(4):2079]

Copper contributes to normal:

- connective tissue integrity
- hair color
- iron transport in the body
- central nervous system function
- metabolic process function intended to produce energy
- skin color
- immune system
- protection of cells from oxidative stress

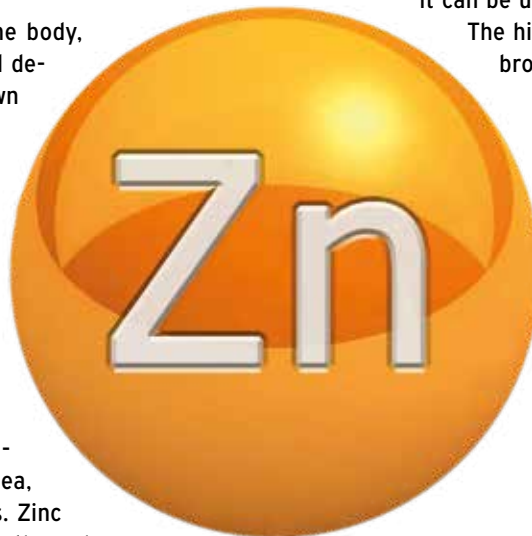
ADDITIONAL COPPER EFFECTS - FAT METABOLISM

Copper is essential for the breakdown of fat so that it can be used as energy. Copper acts as a regulator.

The higher its levels in the body, the more fat is broken down.

ENZYME SYNTHESIS

Copper has an antioxidant effect and is a component and prerequisite for the production of the peroxidase enzyme dismutase (SOD). This enzyme protects cells from damage caused by free radicals. Furthermore, it is used to synthesize cytochrome C peroxidase, uricase and tyrosinase.



Fisiodrops

herbal extracts

The Fisiodrops herbal extracts series offers the wealth of Greek nature concentrated in bottles. Herbs mainly from Cretan crops are extracted by natural methods through a combination of alcohol, water and vegetable glycerin using methods developed by and with the support of the University of Athens, with the ultimate goal of getting 100% of both oily and aqueous ingredients.



Pau D'Arco

Pau D'Arco is a natural antimicrobial rich in a variety of useful natural vitamins and minerals. It was one of the main herbs used by the Incas. Having observed its effectiveness in a wide range of diseases, they called it "a tree blessed by God". In the four centuries following the Spanish invasion of the Americas, the herb was transported and cultivated in Europe. Tsar Nicholas II and Mahatma Gandhi started their day with a cup of tea. For many centuries, this herb has been used to treat asthma, bronchitis and respiratory infections.

In 1882 one of the components of lapacho, lapachol, an antimicrobial chemical, was isolated and identified. Today, according to scientific data, raw lapachol extracts are more powerful than processed ones and offer effective protection against a wide range of bacteria, fungi and germs. Lapacho plays a helpful role in recovery from illness due to its positive effect on the immune system. It is invigorating and is the ideal solution after a long day or for people who feel permanent fatigue and exhaustion.

Hypericum Perforatum (St John's wort)

Balsam (hypericum perforatum) is said to have been named the "herb of St. John the Baptist" by the knights of St. John of Jerusalem who used the herb to heal their wounds in the Crusades. It was also believed that the balm "exorcised" the evil spirit (and for this reason, the insane were often forced to drink its infusion). Due to its color (yellow) it was associated with the "choleric" mood and was given to people who had jaundice and hysterical mood. The characteristic of this herb is bittersweet, cold and drying. Its ingredients are: glycosides, flavonoids and rutin (volatile oils, tannins and resin). Balsam has been known since ancient times to heal wounds and burns, relieves pain (an-



algescic), soothes inflammation (anti-inflammatory) and acts as an aid in cases where there are problems in the nervous system as a sedative and tonic to restore the nervous system.

Glycyrrhiza Glabra /Liquorice

Liquorice has been known since antiquity for its valuable therapeutic uses. Its presence has been confirmed in clay vessels of the Assyrians (2500 BC), it is mentioned in Egyptian papyri, the Arabs used it as an antitussive, while to the Greeks it seems that it became known by the Scythians. Theophrastus presents it as useful for asthma and for those with dry cough and with chest pain". Dioscourides describes it in detail and mentions its various healing properties.

According to research:

- has anti-arthritic and anti-inflammatory action when decomposed in the intestine
- against inflammatory diseases of the digestive system, such as gastritis, hyperacidity and stomach ulcer
- has good results in the treatment of hepatitis & cirrhosis of the liver
- Alcoholic liquorice tinctures are effective antimicrobials
- improves mouth ulcers & respiratory problems, such as asthma, cough and bronchitis, pneumonia and pleurisy, as it has expectorant and antispasmodic properties.

White Willow /Salix alba

The name Salix comes from the Celtic words sal and lis, meaning near and water. Its healing properties have been known since ancient times. Hippocrates had prepared from its bark a medicine for fever, physical pain and fatigue and Dioscorides an infusion for the treatment of female infertility. In the 19th century, the French chemist Leroux exported an active ingredient called salicin, which was the precursor to aspirin. The bark and leaves contain glycosides (salicylic acid, sacillin, salicortin), tannin, itylic acid, which have antipyretic, antirheumatic, anti-inflammatory and tonic properties. Salix alba is used in fevers, febrile colds and flu, is recommended for arthritis, gout,



diarrhea, rheumatic and muscular pains, joint pains, waist and menstruation and has analgesic effect (neuralgia), headache.

Sideritis syriaca. Ironwort

Malotira is the tea of the mountain of Crete, the endemic plant that grows only in its mountains, the White Mountains and Psiloritis, at an altitude of 800 to 2000 meters near places where marjoram grows. Malotira was traditionally a morning drink for the inhabitants of Western Crete and an herb against colds, stomach and respiratory diseases. After all, its name, "maletira", comes from combining the Italian words male (disease) and tirare (crawl) in order to indicate its special medicinal properties. Contains flavonoids with important action in stimulating heart function, lowering blood pressure, diuresis and protection against colds. In addition it has antimicrobial properties. Unfortunately, in the last twenty years, the natural populations of this plant have decreased dramatically.

Rosemary

The name of the plant "rosemary" is a combination of the words tree and frankincense, while its Latin name Rosmarinus means sea rose. Rosemary (*Rosmarinus officinalis* L.) belongs to the family Lamiaceae. It is an aromatic, shrubby plant and is a typical species of Mediterranean flora. According to folklore, it took its name from the Virgin Mary, who left her cloak on the bush. By the next morning, the flowers of the bush had turned blue and since then it has been called the rose of Mary. The ancient Greeks considered it a gift of Aphrodite. The students wore rosemary wreaths when they had exams, because it helped concentration and memory. Rosemary is warming and stimulates blood circulation to the brain and improves concentration and memory. It is useful for nervous headaches and migraines. It enhances the growth of hair, enhancing blood circulation to the scalp. It lifts the mood and is useful in cases of mild depression. It is expectorant and helps with coughing, bronchitis and flu. It is generally considered antibacterial, antifungal and anti-rheumatic, tonic for the heart and vision but also against diabetes.

Crithmum maritimum (Sea fennel)

The crithmum maritimum, grows on the beaches, on the rocks where there is a little sand, enduring the force of the wind, watered with the salt of the sea. An herb known since antiquity. The ancient Greeks according to one version named it because of the similarity of the seeds of the plant with those of barley. Since the years of Hippocrates it is considered a plant with diuretic, emmenagogue, detoxifying properties and was used to treat liver, intestinal and renal dysfunction. Pliny mentions similar properties of the plant. It was typical of seafarers to carry large quantities of kritamo as an antidote to scurvy. The plant contains numerous nutrients: iodine (necessary for the synthesis of thyroid hormones), minerals, small concentrations of vitamins E, C and K. It acts as an appetizer, diuretic, digestive, antimicrobial, blood cleanser. Kritamo is a good diuretic and activates kidney function. It has a high content of vitamin C and acts against flatulence.

Origanum Majorana

Marjoram has been known since antiquity to the Greeks, Romans, Egyptians and Arabs, for whom it was the symbol of happiness. Marjoram (scientific name *Origanum majorana*) is a perennial plant that belongs to the family of heifers. It is native to the Mediterranean and is related to oregano. Hippocrates used it as an antiseptic. It is best known for its digestive properties as a digestive and soothing for stomach aches. But it is also calming. For diseases of the respiratory system it is considered expectorant, diaphoretic and beneficial for nervous cough, colds, tonsils, bronchitis, asthma.

Olive leaves

The olive tree is a tree that thrives in the stony and barren area of the Mediterranean. It produces fruit under adverse conditions of drought, strong winds and high temperatures while its longevity and productivity, wrote the history of the Mediterranean peoples. The olive is a hardy tree and survives many centuries. This is due to the active substance oleuropein. It is the substance that is found in all parts of the tree, but in greater

concentration in the leaves, and which protects it from diseases. Oleuropein is extracted from olive leaves and can be used as a broad-spectrum antibiotic. It has a very positive effect on our immune system. Elenolic acid, a derivative of oleuropein, is thought to play a key role in boosting the immune system. Many studies have been done on the extract of olive leaves and its effect on the human body:

- Detoxifies, protects against viruses and bacteria
- Lowers blood pressure and improves blood circulation.
- Lowers cholesterol and sugar.
- Accelerates healing of common colds, flu and pneumonia.
- It has a diuretic effect, facilitates digestion.
- Helps with chronic diseases such as arthritis and psoriasis.
- Gives energy and is administered to chronic fatigue syndrome.

Thymus vulgaris

Its ancient name "Thymos" comes from the verb "thio - thysiazō" which is justified since among the incense that was burned on the altars, as an offering to the gods, in antiquity were the fresh branches of thyme and according to the legend, was born from the tears of the Helen of Troia. Since the time of Homer, thyme has been a symbol of strength and courage. The poor in ancient Greece ate an invigorating mixture of thyme, honey and vinegar while the elderly consumed large amounts of thyme "tea" to stimulate the function of their mind. Roman soldiers bathed in water flavored with thyme to gain vigor and energy.

Systematic use of thyme helps to relieve the symptoms of many diseases, such as rheumatoid arthritis, chronic thyroiditis, lupus, fibromyalgia, vertigo, fibromyalgia and/or vertigo. Thyme is an excellent source of vitamins and minerals. It is rich in B vitamins, vitamin A, vitamin C and folic acid, iron, calcium and potassium and therefore helps regulate blood pressure, red blood cell production and treat the symptoms of inflammation and cell oxidation. It has antimicrobial, antiseptic and antifungal and anti-rheumatic properties thanks to two oils it contains, thymol and carvacrol. It works as an expectorant relieving cough, shortness of breath and asthma and treats inflammation, such as laryngitis, pharyngitis, etc. It acts against anxiety, depression and insomnia.

Satureja thymbra

In the old days it was said that the monks did not have the right to plant *Satureja thymbra* Thrubbi in their garden, because it was an erotic herb!

The ancient Greeks dedicated it to Dionysus, the lord of the beasts and satyrs, and performed orgies in his name. In modern times, thymus is known mainly for its healing properties in the digestive system. It works as a digestive, stimulates the appetite, stimulates the body, helps treat diarrhea, intestinal cramps, colic pain, gastric atony, indigestion, nausea and sourness. It is also used as an expectorant. Soothes cough and is suitable for bronchitis and asthma.

Origanum Dictamnus/ Dittany of Crete

Dittany (scientific name: *Origanum dictamnus*, *Origanum dittany*) is an endemic plant found in Crete. The name comes from the mountain Dikti (Lassithiotika) where it used to be abundant. Rheumatism, arthritis, as a healer, emmenagogue,

tonic and antispasmodic. Hippocrates used it against diseases of the stomach and digestive system, in rheumatism, arthritis, as a healing, emmenagogue, tonic and antispasmodic. In ancient times the dittany was considered capable of repelling arrows from wounded bodies. This became known from the wild goats of Crete which when they were wounded and the arrow remained inside their body, they consumed dittany and the arrow was removed easily. The ancient belief inside confirmed 3,000 years later by the professor of pharmacology at the University of Athens, Fotios Theodosiou, when he announced in 1972 that he isolated in the dittany and identified for the first time various polyphenols that have healing, antispasmodic, antihemorrhagic and estrogenic effects. Current studies have shown that dittany extracts and essential oil are rich in lipids, flavonoids and terpenoids, mainly carvacroils and thymol.

Arctium Lappa

Burdock is also known as *arctium lappa* or plantain handkerchief or bear herb. The name *arctium* comes from the Greek word "arktos" meaning bear. The active substances it contains are: Flavonoids, glycosides (arctin), bitter agents, alkaloids, essential oil (45% inulin), minerals (iron, magnesium, zinc, copper, titanium), vitamins C, E, K and acid, choline, sterols, palmitic acid. Burdock is a very powerful diuretic and detoxifying herb. Helps detoxify and cleanse the blood, is one of the strongest diuretic herbs that helps eliminate waste products from the body and one of the strongest sweating herbs. Burdock is the herb that increases bile secretion to better digest fatty foods. Along with thistle it is one of the most powerful tonic herbs for the liver. It is a powerful antioxidant, anti-inflammatory, immunostimulant, antibacterial, antifungal and antiviral and increases lymphatic secretions. As one of the most powerful diuretic herbs it is used in a number of diseases related to the retention of body fluids such as gout.

Cynara scolymus

The main indications of artichoke are that it acts as a detoxifier, tonic for the liver and gallbladder and helps reduce high cholesterol and triglyceride levels. Its two components, cynarin and scolymoside, have been shown to stimulate bile secretion, which is consistent with its traditional use in the treatment of liver failure and incomplete digestion. Cynarin has been shown to lower blood cholesterol and triglyceride levels. It also has strong antioxidant activity which helps reduce the oxidation of LDL cholesterol that causes atherosclerosis. Artichoke, like thistle, can protect the liver from the harmful effects of alcohol while helping to digest fatty foods.

Salvia Pomifera / Cretan sage

Sage is associated with longevity and has a reputation for restoring impaired memory. The Chinese valued it so much that when the British and Dutch began importing tea from China, they offered two tea bags for a box of dried herbs. In the East they drank Sage and called it "Greek tea". The plant has a strong aromatic odor. The leaves, which are the most used part of the plant, are collected shortly before or at the beginning of flowering in dry and sunny weather, in May or June and dried in the shade.

It contains as main substance essential oil, sage oil, colorless or red-yellow, saponins, bitter substances, terpenes, resins, bitter diterpenes, tannins, triterpenes, flavonoids and thujone (thujone, a monoterpene).

The leaves have antiseptic, expectorant and antispasmodic properties. The plant has stomach, tonic and cardiogenic properties while it is also used against neuralgia. Sage is also used as an antiperspirant (especially against night sweats). It causes a heat in the stomach, facilitates digestion, increases diuresis, speeds up circulation, has a significant effect on the brain and mitigates the irritation of the nervous system, as an antispasmodic and sedative.

Vitex Agnus Castus

Chasteberry is a widespread shrub in the Greek countryside. Its name is due to its flexible branches. The term agnus – castus comes from the Greek "gnos" and the Latin castus. The action of Agnus castus is due to the effect of certain substances contained in the plant, such as agnusides, flavonoids, alkaloids, camphor, diterpenes, and steroid hormone precursors. The above substances affect the production as well as the levels of hormones, which concern the menstrual cycle of a woman.

This effect is mainly found in the last weeks of the cycle, affecting progesterone levels and egg preparation. The effect of its action is to be able to relieve symptoms related to menstruation or the menopausal period. Conditions that benefit and recommend taking agnus castus are:

- Premenstrual Syndrome (PMS)
- Chest pain on menstrual days (mastodynia)
- Dysmenorrhea
- Menopause symptoms (emotional and hormonal balance)
- Premenstrual syndrome migraine
- Infertility problems

Echinacea

Echinacea is a plant native to North America and is cultivated in Europe. It belongs to the Asteraceae family. The plant has been used by the American Indians for centuries for its healing properties. The use concerns all parts of the plant, the root, the flowers and the whole aboveground part. Echinacea is considered to be the main ingredient in echinacea, a glycoside that strengthens the immune system by helping to reduce the symptoms of the flu and cold.

PROPERTIES

- Antiviral. Extracts from the aerial parts of the plant may increase resistance to influenza, herpes and chickenpox viruses.
- Antibacterial. Echinacea acts against *Staphylococcus aureus* (*Staphylococcus aureus*) which causes skin infections and carbuncle - pussy skin sores but also *Proteus mirabilis* (responsible for urinary tract infections).
- Immune System Stimulant. Regarding the immune effect, findings show that echinacea plays a regulatory role in the innate immune system and is able to both stimulate and inhibit the immune response.

Milk Thistle

Milk Thistle (thistle, *Silybum marianum*) grows in the rocky soils of southern and western Europe and parts of the United States. Historically, this herb has been used to aid milk production in breastfeeding mothers and to treat liver disorders. Thistle is an herb that has traditionally been used for liver health and detoxification. It contains the active ingredient silymarin, which is considered one of the most effective substances to protect the liver.

Used in cases of hepatitis, cirrhosis, jaundice and degeneration of the liver by fatty infiltration. It may help people on treatment with drugs that may damage the liver. The herb can also be used to digest and treat psoriasis.

- Liver Protection and Rehabilitation
- Antioxidant
- Digestion
- Anti-inflammatory
- Psoriasis

Propolis

Propolis is found in the bee community. It is a sticky substance that is synthesized by bees in order to fortify and defend their hives. The bees themselves collect propolis from the shoots of various plants and process it by adding wax, pollen, enzymes and various other substances until they bring it to its final sticky form. Then, they use it as a glue to smooth and cover any cracks or holes in their cells, in order to protect them from enemies or adverse weather conditions. They also use it for its antiseptic properties, to disinfect the inside of the hives where the bee brood will be housed and the honey and pollen will be stored.

Propolis has bacteriostatic and bactericidal properties that act selectively on various bacteria. The natural microflora of the human stomach is not affected by the consumption of propolis. It is used to treat wounds of the respiratory organs, oral cavity, and other areas of the human body. It contains large concentrations of flavones, flavonols and flavonones which affect the body in different ways. These substances have anti-inflammatory action on the joints, skin and mucous tissues, protect vitamin C from oxidation. In general, propolis, due to the abundance of organic and inorganic compounds it contains, helps to strengthen our overall immune system. It's a great choice for those who want to shield their body against viruses, infections and seasonal allergies.

Mugil Cephalus (eggmass)

Roe is stuffed fish eggs, just as the etymology of the word (egg + stuff) states. The product comes from the ovaries of the mullet (*Mugil cephalus*), the bafa as it is called in the area, which the locals treat with salt, then subject to light drying and then dip them in wax to keep them intact. Messolonghi roe has been characterized as a product of Protected Designation of Origin (PDO), the only PDO fish by-product in Greece. The tradition of preserving roe from tuna or mulberry has its roots in the ancient Greeks and Egyptians.

Rich in protein of high biological value, fatty acids and vitamins, such as vitamin E and vitamin A, roe offers not only special taste but also nutrition. It is rich in monounsaturated and polyunsaturated fatty acids, including valuable omega-3 fats, mainly Eicosapentaenoic acid (EPA) and Docosahexaenoic acid (DHA). Numerous, scientifically substantiated studies suggest that EPA and DHA play a central role in brain and retinal development, promote immune function, improve cognitive ability, and have been linked to the prevention of cardiovascular disease. Roe also contains significant amounts of squalene (a substance also found in olive oil) and phytosterols (substances that, under certain conditions, lower cholesterol levels). Another important finding of this study is that roe contains significant amounts of the antioxidant vitamin E.

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Natural supplement from a mixture of herbal extracts with Ginkgo Biloba, Rosemary & Siderite to enhance memory and concentration, physical stimulation and mental clarity. It helps to



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Against Respiratory Infections

Natural supplement from a mixture of herbal extracts with Thyme, Licorice, Oregano & Salvia Pomifera to strengthen the body's defenses and the natural treatment of the symptoms of seasonal flu and the common cold. Helps the respiratory system, acts against coughs and softens the throat, while reducing runny nose.



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