

# UNER PHARMA

## Product Catalogue



www.unienpharma.com

Sept 2023

# Your Health Is our priority

Healthy, Reliable, Supplementary Products

UNIEN PHARMA (F)

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#### About Us

**UNIEN Pharma** started its work in Ankara/TURKEY in 2022. It continues its activities with long-term content studies of medical doctors and pharmacists who are experts in their fields.

UNIEN Pharma, which continues its way with the aim of preparing quality and effective products in principle, aims to produce vitamins and supplements in all medical fields.

On the other hand, although there is already a staff of expert consultants, it is also aimed to establish an R&D center among the 2023 targets.

As UNIEN Pharma, in addition to product content studies on a wide range of products, effective content studies continue in many areas that are still in progress. The product range will be further developed in the future, and field-oriented vitamin and supplement production will be developed.

In addition, as a company, it is aimed to establish a single facility in 2023 where products in all kinds of molds and dosages can be produced.





Humanity.

— Hippocrates

## Wherever the art of Medicine is loved, there is also a love of



#### **Gynecology Based Supplements**

During pregnancy and breastfeeding, dietary requirements rise, particularly for micronutrients like folate, iron, iodine, and copper. Clinicians and nutritionists commonly counsel or prescribe prenatal vitamins to avoid nutritional deficiencies. The US Preventive Services Task Force advises 400-800 mcg of folic acid per day for women considering or capable of pregnancy, and various health organizations acknowledge the necessity of dietary supplements to particular satisfy nutrient requirements. As a result, the incidence of dietary supplement usage among pregnant women is significantly greater than in the overall population.

Nonetheless, a recent report on total usual nutrient intakes (from both foods and supplements) among pregnant women in the United States that used data from the National Health and Nutrition Examination Survey (NHANES) 2001-2014 concluded that a significant proportion (more than 10%) of pregnant women are not consuming enough of some nutrients (e.g., vitamins A, B6, C, D, and E, folate, calcium, iron, magnesium, and zinc), despite the fact that 70% reported using dietary supplements. Although almost no pregnant women had intakes of some nutrients above the Tolerable Upper Intake Level from food alone, dietary supplement use increased the proportion of those with intakes of some nutrients above the Tolerable Upper Intake Level (ie, potentially at risk of adverse effects due to excessive intakes), particularly iron and folic acid.



Gynecology Based Supplements

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	A CARLES	
<u>Fish Oil</u>	477	mg
<u>(286 mg Omega 3, 200 mg DHA,42 mg</u>		
<u>EPA)</u>		
<u>Choline</u>	82.5	mg
<u> Magnesium (Magnesium Taurat)</u>	65.0	mg
Zinc	17.4	mg
<u>Iron (Ferrroz Bisglisinat)</u>	17.0	mg
<u>Vitamin B3</u>	15.0	mg
<u>Vitamin E</u>	13.0	mg
<u>Vitamin B5</u>	6.0	mg
<u>Vitamin B6</u>	2.0	mg
<u>Vitamin B2</u>	1.5	mg
<u>Vitamin B1</u>	1.2	mg
<u>Folic Acid (5-MTHF)</u>	400.0	mcg
<u>lodine</u>	150.0	mcg
<u>Biotin</u>	50.0	mcg
<u>Vitamin D3</u>	10.0	mcg
<u>Vitamin B12</u>	3.5	mcg
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Food Supplement

including blood coagulation, gastrointestinal functions, and synthesis.

Certain forms of prostaglandins A sufficient intake of Omega-3 may be created in great numbers fats is required to sustain the depending on the type of fatty normal synthesis of hormone- acids in the diet, while others may like compounds known as not be formed at all. This prostaglandins. Many critical prostaglandin imbalance has the physiological activities are potential to cause illness. The regulated by prostaglandins, significance of omega-3s in the blood pressure, production of good prostaglandins nerve may explain why they have been transmission, inflammatory and linked to so many health allergic reactions, renal and advantages, including as the system prevention of heart disease, hormone improved cognitive function, and inflammatory management.





#### Choline

+ 8

CHOLINE

Low amounts of choline are The placenta need choline to quite uncommon if you are not remain healthy. A pregnant pregnant. However, your body woman is more likely to develop more choline during need high blood pressure pregnancy. More than 90% of (preeclampsia) if the placenta is mothers don't get enough unhealthy. You can reduce your During daily. choline chance for these issues by pregnancy, you need enough consuming enough choline while choline to nourish both you and your unborn child. pregnant. A significant amount of choline is transferred to the placenta and developing fetus during pregnancy. Choline levels in the mother's body may decrease as a result. Pregnant women who consume insufficient choline run the risk of liver and muscle damage.

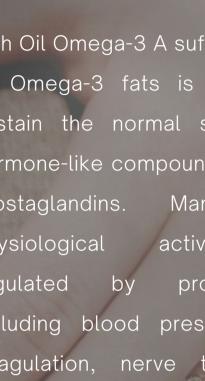


Your body's blood volume increases by about 50% during pregnancy. Anaemia, or a lack of red blood cells, affects certain women. You might not have much energy and feel exhausted if you have anemia. Your usual prenatal blood tests will reveal to your doctor or midwife if you have anemia. You are more likely to be iron deficient if you are expecting twins or more children.









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Fish Oil Omega-3 A sufficient intake of Omega-3 fats is required to sustain the normal synthesis of hormone-like compounds known as prostaglandins. Many critical physiological activities are prostaglandins, regulated including blood pressure, blood coagulation, nerve transmission, inflammatory and allergic reactions, renal and gastrointestinal system functions, and hormone synthesis. Certain forms of prostaglandins may be created in great numbers depending on the type of fatty acids in the diet, while others may not be formed at all.



**10** 



This prostaglandin imbalance has the potential to cause illness. The significance of omega-3s in the production of good prostaglandins may explain why they have been linked to so many health advantages, including as the prevention of heart disease, improved cognitive function, and inflammatory management. Red blood cell production depends on vitamin E. Body cells use it as well to communicate with one another and carry out essential tasks. Vitamin E shields eye cells from free radicals, unstable chemicals that damage healthy tissue, according to the American Optometric Associates. Additionally, it supports immune system development to better defend the body against germs and viruses.



#### Magnesium

Maintaining your health throughout pregnancy is crucial for both you and the unborn child. It is thought that because of the physical changes occurring during pregnancy, your body uses more magnesium, thus it's crucial to keep your levels healthy.

Those who don't have enough magnesium in their bodies may benefit from taking a supplement. According to a National Institutes of Health research, many pregnant women, especially those from underprivileged homes, consume less magnesium than is advised. According to the results of the same study, pregnant women who took a magnesium supplement had better pregnancies than those in the placebo group.

According to this study, magnesium citrate at a dose of 300 mg can assist pregnant women avoid high blood pressure, which in turn can help them avoid additional pregnancy issues. Additionally, it has been demonstrated to promote a healthy uterine and good embryonic growth in addition to maintaining strong bones, robust muscle and nerve function, and ideal blood sugar levels (already within the normal range).







Pregnancy-related hypertension or preeclampsia development showed no supplementation discernible changes. Trials including women with low incomes accounted for the majority of the 14% relative reduction in preterm birth for zinc compared with placebo. In several studies, iron, folate, vitamins, or combinations of these were also given to all the women. All pregnant women in impoverished nations are currently encouraged by UNICEF to take numerous micronutrient supplements, including zinc, before giving birth. The health of mothers and newborns will be improved more by finding strategies to enhance women's overall nutritional status than by just giving pregnant controlled trials women additional zinc, especially in low-income communities. Addressing anemia and diseases like malaria and middle-income nations.

Prenatal zinc helps to marginally lower preterm births but does not shield against other issues like low birthweight infants. A mild to moderate zinc deficiency may be present in many women of reproductive age. Low zinc levels may delay labor or contribute to premature delivery. Additionally, a zinc shortage may have an impact on a baby's development. Although zinc supplementation has a small effect on reducing preterm births, it does not help to prevent low birthweight babies when compared to not giving zinc supplements before 27 weeks of pregnancy, according to this review of 21 randomised involving more than 17,000 women and their babies. Data from one study were not contributed. In half of the trials, the total risk of bias hookworm is also crucial in low- to remained undetermined.

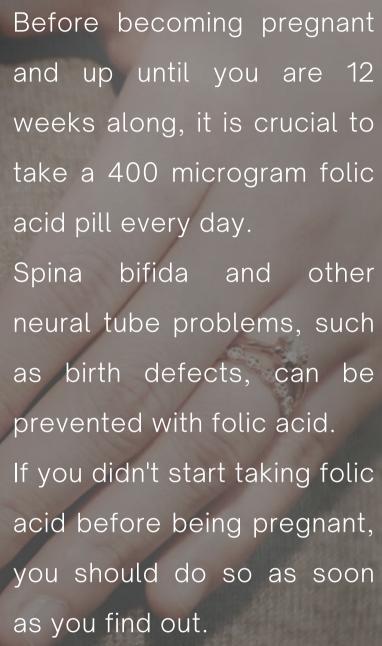
#### **Vitamin B Complex**

While eating a healthy, balanced diet is vital at all stages of life, being pregnant gives you an extra incentive to look for your body so that your unborn child will develop into a strong, happy baby! During pregnancy, B vitamins—often referred to as the vitamin B complex—are extremely crucial for your diet, notably vitamins B6, B9, and B12. These three in particular reduce the chance of birth abnormalities and ease some pregnant discomfort.

Because of this, taking high-quality prenatal vitamins is a terrific method to ensure that you and your unborn child are getting all the vitamins required for a healthy pregnancy. Prenatal vitamins are obviously intended to supplement a healthy diet rather than to replace it.









### Folic Acid (4th Gen)

Try to consume green leafy vegetables, which are rich in weeks along, it is crucial to folate (folic acid's natural form), take a 400 microgram folic as well as folic acid-fortified morning cereals and fat other spreads. as birth defects, can be Because it's challenging to obtain the required quantity of folate for a healthy pregnancy from diet alone, it's crucial to

take a folic acid supplement.



#### lodine

Iodine supports the thyroid, a gland located at the base of your neck, in maintaining proper function. The hormones that control your metabolism, heart rate, body temperature, and other essential bodily activities are regulated by the thyroid.Getting adequate iodine ensures that your child's thyroid grows normally and healthfully. A fetus's undeveloped thyroid may, in extremely rare circumstances, cause developmental delays, deafness, stunted growth, cognitive deficits, and other issues later in life.







Due to its critical role in fetal growth, which is of highest relevance during that time, biotin is especially required during pregnancy. Your unborn child runs the danger of premature labor and reduced growth if you don't get enough biotin while you're pregnant. abnormalities, Congenital commonly known as teratogenesis, can occur in newborns.

Biotin is essential for your baby's embryonic development and speeds up cell division so that DNA can be replicated. It is therefore an essential vitamin during pregnancy. Our immune system depends heavily on biotin to be healthy. In order to protect our body, it aids in the battle against illnesses and infections. Due to the increased demand by both the mother and fetus during pregnancy, biotin insufficiency is a natural consequence of being pregnant.



#### Vitamin D3

You can benefit from vitamin D for your own health. There is now a wealth of evidence to support vitamin D's contribution to bone health, good cell division, and immunological function.

For calcium and phosphorus to be absorbed and used in metabolism, vitamin D is required. Low blood vitamin D levels are linked to an increased risk of several malignancies, autoimmune diseases, neurological disorders, insulin resistance, and cardiovascular diseases, according to numerous research. Vitamin D contributes to your baby's wellbeing by promoting strong bone growth. Preeclampsia and vitamin D deficiency are linked conditions.





Neurology patients frequently seek about vitamins and natural supplements for the treatment of significant neurological diseases. While nutritional factors have not been shown to have a causal relationship to most neurological disorders that are currently considered incurable, such as motor neuron disease and degenerative nervous system disease, vitamin and nutritional deficiencies, as well as nutritional toxicities, have been detected in some neuropathy patients.

Neuropathy is the most significant link between dietary deficits and neurological disorders. According to a research conducted at Weil Cornell Medical Center in New York, nearly onequarter of individuals with neuropathy had dietary deficiencies. The most common anomalies found were high levels of mercury or pyridoxal phosphate. Vitamin B1, B6, and B12 deficiencies were also seen in individuals with neuropathy. In the setting of attentive medical care, bariatric surgery creates a physiological state in which patients endure acute and reasonably predictable dietary shortages. Thus, examining bariatric surgery patients provides a controlled environment in which neuropathy and its putative link with dietary variables may be recorded. Neuropathy is a danger for people who have undergone bariatric surgery. It is also hypothesized that dietary deficiencies are at least largely responsible for the development of new neuropathic illness following bariatric surgery.

Patients who have undergone bariatric surgery are known to suffer from a variety of nutritional deficits as a result of post-surgery stomach absorption difficulties. Vitamin B 12 insufficiency is the most prevalent nutritional shortfall discovered after bariatric surgery.

# Neurology Based Supplements

Neurology Based Supplements

#### INGREDIENTS

Pasiflora Extract	200	mg
Valeriana Officinalis Extract	50	mg
<u>Melissa Extract</u>	50	mg
Matricaria Chamomilla Extract	50	mg
<u>Vitamin B6</u>	10	mg
<u>Melatonin</u>	3	mg
<u>Calcium</u>	63	mg



Vesese



Passionflower (Passiflora incarnata) was long used as a soothing plant in the Americas and later in Europe for anxiety, sleeplessness, convulsions, and hysteria. It is still used to treat anxiety and sleeplessness today. Passionflower is thought to function by boosting levels of a neurotransmitter called gamma aminobutyric acid (GABA) in the brain. GABA reduces the activity of some brain cells, making you feel calmer. Passionflower has a gentler impact than other plants used to relieve anxiety, such as valerian (Valeriana officinalis) and kava (Piper methysticum). Passionflower is frequently used in conjunction with valerian, lemon balm (Melissa officinalis), and other relaxing plants. However, few scientific research have been conducted to investigate passionflower as a therapy for anxiety or sleeplessness. Because passionflower is frequently coupled with other relaxing herbs, it is difficult to determine its effects on its own.

Studies of people with generalized anxiety disorder show that passionflower is as effective as the drug oxazepam (Serax) for treating symptoms. Passionflower didn't work as quickly as oxazepam (day 7 compared to day 4). However, it produced less impairment on job performance than oxazepam. Other studies show that patients who were given passionflower before surgery had less anxiety than those given a placebo, but they recovered from anesthesia just as quickly.



### UNIEN MelPlus

#### Passiflora

### UNIEN MelPlus

#### **Valeriana Officinalis**

Sleep disorders are common and are linked to a variety of comorbidities, including anxiety. Valerian (Valeriana officinalis L.) is a common herbal remedy used as a sleep aid, however past clinical investigations have had inconclusive results. The purpose of this study was to update and re-evaluate the existing data in order to understand the rationale for the inconsistent outcomes and to present a more comprehensive picture of the usage of valerian for related illnesses. Publications related to the efficacy of valerian as a therapy for sleep disturbances and associated disorders were found by searching PubMed, ScienceDirect, and the Cochrane Library.



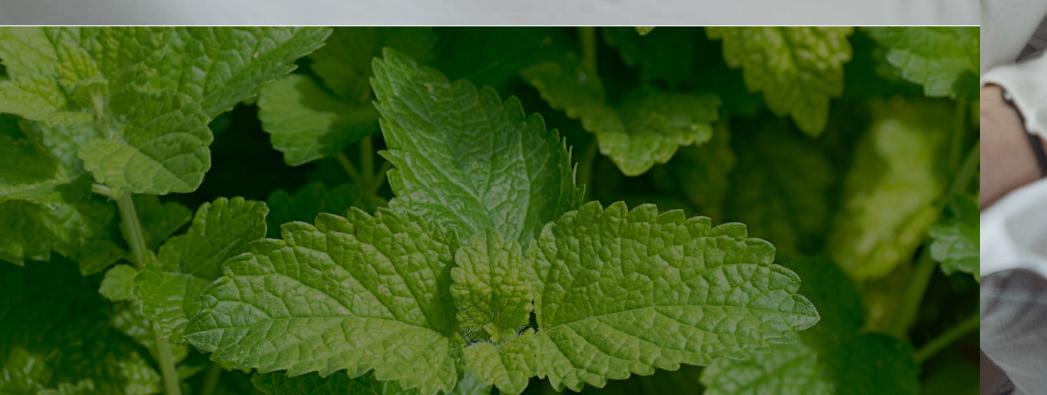
The findings showed that varied results might be attributed to the different quality of herbal extracts, and that the complete root/rhizome could provide more consistent results. Furthermore, therapeutic advantages might be enhanced when paired with appropriate herbal partners. There were no serious adverse outcomes related with valerian use in participants aged 7 to 80 years. Finally, valerian may be a safe and useful herb for promoting sleep and preventing related problems. However, due to the existence of many active elements and the rather unstable nature of some of the active constituents, the quality control systems, including standardization techniques and shelf life, may need to be revised.





Coronary artery disease is common and has a high morbidity, and one of the most significant therapies is coronary artery bypass grafting. Anxiety and sleep difficulties are prevalent following surgery and require adequate management. The current study sought to assess the effectiveness of Melissa officinalis L. (Lemon Balm) in the treatment of this condition. A double-blind randomized placebo controlled clinical study with 80 in-patients undergoing coronary artery bypass surgery was done. Patients were randomly assigned to either the herbal treatment or placebo groups.

Three times each day, capsules containing 500 mg of Melissa officinalis L. dry leaf powder as herbal medication or wheat starch as a placebo were supplied. The major outcomes were sleep quality and anxiety measurements, and St Mary's Hospital Sleep Quality and Hospital Anxiety Depression Scale questionnaires were employed. There were no significant variations in anxiety levels between the two groups at the start. Following the intervention, anxiety levels in the herbal medication and placebo groups were 7.15 1.2 and 10.18 3.1, respectively (P = 0.001). Furthermore, the herbal medication group had considerably larger mean improvements in sleep quality than the placebo group; 14.40 5.1 vs 7.52 4.4 (P 0.001).

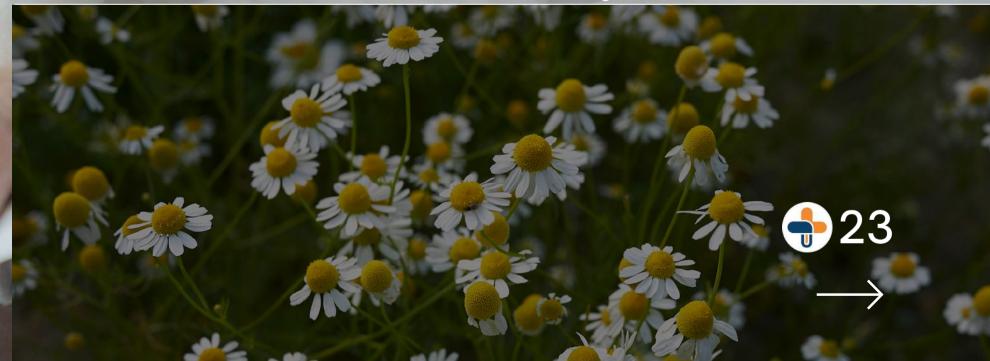


### UNIEN MelPlus

#### Melissa

### UNIEN MelPlus

Matricaria Chamomilla The most common sleep complaint in primary care is insomnia, which is defined as the inability to begin or sustain sleep or a lack of restorative sleep. Insomnia is linked to a worse quality of life, limits at work, and greater healthcare usage. There is currently no medication for chronic insomnia that is easily accessible, inexpensive, free of substantial side effects, and proven to be safe for long-term usage. As a result, therapies that bridge this gap are required. Herbalists have employed chamomile (Matricaria recutita) as a light sleep aid for hundreds of years. Its sedative function has been tested in animals, and it shows promise for treating insomnia. The sedative mechanisms of action of chamomile are currently unclear, but are considered to be via the primary inhibitory neurotransmitter in the central nervous system, aminobutyric acid (GABA).



However, no research has been conducted to investigate the efficacy and safety of chamomile for the treatment of insomnia. The researchers propose a randomized, double-blind, placebocontrolled study of chamomile in primary care patients with persistent insomnia. Thirty-four patients will be randomly assigned to either Chamomile High Grade Extract, three 5 mg tablets standardized to 0.4% (-)--bisabolol twice daily, or placebo and will be monitored for changes in a sleep diary (sleep efficiency, total sleep time, sleep-onset latency, and sleep quality), insomnia severity, and sleep disturbances for 28 days. Secondary objectives include monitoring for symptoms of toxicity and analyzing changes in daytime functioning (measures of global quality of life, sadness, and anxiety). The researchers will also assess the viability of launching a bigger experiment with this drug



Vitamin B6 is engaged in a variety of processes that are critical to good physiological functioning. Nonetheless, B6 and sleep are linked through a few of pathways, including its role in neurotransmitter production.

As previously stated, B6 is essential in the synthesis of three major neurotransmitters / hormones in the brain involved in sleep: tryptophan, serotonin, and GABA.

Tryptophan is an amino acid that serves as a precursor to serotonin, the "happy hormone" that regulates mood and is also turned into the sleep hormone melatonin. It is a cofactor in the tryptophan-serotonin pathway, and the body cannot convert tryptophan to serotonin or enable melatonin synthesis without adequate B6 (together with other vitamins).

GABA is another amino acid found naturally in the brain that functions as an inhibitory neurotransmitter, preventing excitatory impulses from entering the brain and so decreasing nervous system activity. GABA is a "calming" neurotransmitter that may aid in brain relaxation, stress reduction, and sleep promotion.

In layman's words, proper B6 levels support the hormones and neurotransmitters required to lower brain activity and promote sleep.



### UNIEN MelPlus

#### Vitamin B6

### UNIEN MelPlus

#### Melatonin

Insomnia is a sleep condition that causes difficulties falling or staying asleep and affects people of all ages. Melatonin is being utilized as a therapeutic therapy for insomnia in children, adults, and the elderly.

Melatonin is a complementary therapy that can be used to treat sleeping issues. According to the data, it did not exhibit toxicity, significant adverse effects, or dependency even when supplied at large dosages, suggesting that it is a safe medicine for treating individuals of all ages suffering from sleeping problems.



Melatonin was observed to shorten sleep latency in the majority of the reviewed papers. Melatonin dosages that were beneficial for each age group ranged from 0.5 to 3 mg in children, 3 to 5 mg in adolescents, 1 to 5 mg in adults, and 1 to 6 mg in the elderly. When using the recommended doses, the side effects are minimal.





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INGREDI	ENTS
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1	<u>Phosphatidylserine</u>	150	mg
5	<u>Krill Oil</u>	150	mg
	<u>Inositol</u>	100	mg
	<u>Magnesium</u>	100	mg
	<u>Fish Oil</u>	100	mg
	<u>Ginkgo Biloba Extract</u>	60	mg
	Iron (Ferroz Bisglisinat)	8	mg
	<u>Zinc</u>	7	mg
	<u>Vitamin B12</u>		mg
	1 States (3)	10	mg
2	<u>Vitamin D3</u>	10	mcg
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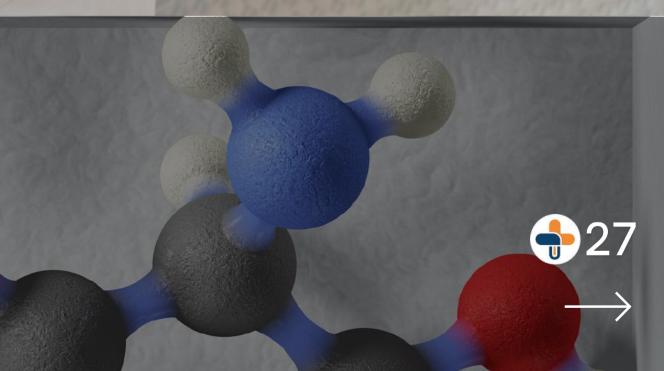
### UNIEN Krill

#### **Phosphatidylserine**

PS (Phosphatidylserine) is a kind of phospholipid. Phosphatidylserine is made up of three parts: two long fatty acid chains, a glycerol backbone, and a phospholipid headgroup. PS is found in all animals', higher plants', and microbes' biofilms and is a key component of cell membrane phospholipids. It makes up 10%-20% of all phospholipids in the human brain and has a critical function in regulating numerous cellular metabolic processes.

As a result, determining PS levels can reveal fresh insights into illness pathophysiology. PS levels can be compared to dietary supplements to aid in quality control.

PS, as one of the primary neurological components of the brain, may nourish and activate the action of numerous enzymes in the brain, slow the process of neurotransmitter reduction, aid in the repair and renewal of damaged brain cells, and eliminate hazardous chemicals. It is very crucial for maintaining the brain's memory and emotional stability, and it considerably lowers the amount of stress hormones in the bodies of people who work under stress, lowering tension and relieving brain fatigue.





Neptune Technologies & Bioresources Inc. published extremely favorable final results from their study on the efficacy of Krill Oil on adult Attention Deficit Hyperactivity Disorder (ADHD). The International Organization of ADHD initiated the non-randomized Phase I open label clinical study, "Evaluation of the Effect of Krill Oil on Attention Deficit Hyperactivity Disorder (ADHD)," which was carried out by Barry University in Miami Shores, FL, USA, and private naturopath Clinics in Montreal, Quebec, Canada. The study's goal was to see how Krill Oil affected adult ADHD as evaluated by Barkley's Executive Function score of behavior inhibition, everyday functional ability, and social conduct. Thirty (30) otherwise healthy persons with a verified diagnosis of ADHD were initially enrolled in the trial, with 25 (83.3%) completing the 6month treatment period. Five patients (16.7%) who did not finish the research were lost to follow-up. During the duration of their therapy, no adverse events were documented among the 30 patients recruited at baseline.

## UNIEN Krill

#### Krill Oil

### UNIEN Krill

#### Inositol

Inositol pills are recommended by alternative health practitioners for a variety of health concerns, including mood disorders, anxiety, ADHD, and PTSD. However, while examining such statements, it is critical to use care. While there is some evidence that inositol may be beneficial in some circumstances, additional study is required. Inositol should not be used as a stand-alone treatment or in place of other therapies for certain illnesses. According to some study, inositol may help with a variety of conditions, including mental health issues, PCOS, and metabolic abnormalities. Here's a closer look at the science underlying inositol's various applications.

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Some evidence suggests that inositol may play a role in the development of some mental health issues, while the precise processes are unknown and additional research is required. It has been proposed that inositol may have an effect on sadness, anxiety, and other mental diseases by influencing the "feel-good" neurotransmitters serotonin and dopamine. Several studies have looked into using inositol as

a supplement to selective serotonin reuptake inhibitors (SSRIs), which are used to treat a range of depression and anxiety disorders. However, the data did not show an antidepressant effect.



There are several primary reasons for this phenomenon. To begin with, magnesium plays a crucial role in over 300 enzyme systems, which act as biochemical catalysts that drive cellular functions. For instance, when magnesium levels are insufficient, so is ATP (adenosine triphosphate), the essential energy source that fuels every cell. This leads to improper blood sugar regulation and a weakened immune system. However, most significantly, it impacts the brain of a child with ADHD. Inadequate magnesium levels can impair brain function because this mineral is instrumental in the production of neurotransmitters, which are substances that facilitate communication between brain cells. When magnesium levels are not optimal, your child is likely to have imbalanced levels of two neurotransmitters: dopamine, which regulates attention, and serotonin, which governs mood. Additionally, insufficient magnesium can hinder the functioning of glutamate receptors, which are regions on brain cells that aid in the transmission of neurotransmitters. The outcome of a magnesium-deficient brain often manifests as ADHD symptoms in children and adolescents.



### UNIEN Krill

#### Magnesium

## UNIEN Krill

#### Fish Oil - Omega 3

Attention-deficit/hyperactivity disorder (ADHD) is a prevalent neurodevelopmental condition. Traditional treatment involving the use of stimulant medications for ADHD has been associated with significant side effects and intolerance. Consequently, there has been a growing demand to explore alternative treatments. When comparing the levels of omega-3 polyunsaturated fatty acids ( $\omega$ -3) PUFAs) in the blood of ADHD patients to those in age-matched individuals without ADHD, lower  $\omega$ -3 PUFA levels have been observed in ADHD patients. These  $\omega$ -3 PUFAs are essential nutrients crucial for proper brain function and development. Moreover, there is substantial suggesting that  $\omega$ -3 PUFA evidence supplements may have positive effects on ADHD.

However, studies investigating the supplementation of  $\omega$ -3 PUFAs have shown considerable variability in their results. Therefore, we conducted a review of recent studies published between 2000 and 2015 to identify effective treatment combinations, assess study design quality, and evaluate the safety and of  $\omega$ -3-containing tolerability dietary supplements. We conducted searches on databases like MEDLINE, PubMed, and Web of Science using keywords such as "ADHD" and "w-3/6 PUFA" and identified 25 studies that met our criteria for inclusion and exclusion. The findings from these  $\omega$ -3 PUFA studies are inconsistent but, on the whole, provide evidence supporting the effectiveness of  $\omega$ -3 PUFA treatment for alleviating ADHD symptoms.





Various forms of Ginkgo biloba products, including tablets, granules, pills, injectable distillates, oral solutions, extracts, and dissolving pills, have been authorized for commercial distribution. Ginkgo products are among the topselling botanical dietary supplements globally. Clinical studies have indicated that Ginkgo biloba is generally safe and doesn't exhibit more side effects than a placebo when used for cognitive impairment and dementia. However, the evidence regarding its effectiveness is inconclusive. Ginkgo preparations have been found to help conditions such as autism, depression, and neuropsychiatric symptoms like anxiety. These preparations may also have an impact on the behavioral and cognitive aspects of ADHD. The primary behavioral effects observed include a calming effect and improved tolerance for frustration. Ginkgo biloba can enhance intentional thinking, selective attention, and reduce irritability.

### UNIEN Krill

#### Ginkgo Biloba

### UNIEN Krill Iron (Ferroz Bisglisinat)

In many cases, psychosocial interventions are employed to manage ADHD. Medications such methylphenidate and amphetamine as compounds may also be used to stimulate dopamine and noradrenergic pathways in the brain, which can lead to improved attention and focus. However, these medications often come with side effects, including increased heart rate, elevated blood pressure, abdominal discomfort, headaches, reduced appetite, sleep disturbances, weight loss, restlessness, and constipation. If left unaddressed, these side effects can hinder performance and potentially pose risks to athletes.

Both iron and zinc deficiencies can affect neurological functions, causing issues like poor memory, inattention, impulsiveness, erratic appetite, and mood changes like sadness and irritability. Therefore, ensuring proper nutrition is especially crucial for individuals with ADHD. Insufficient levels of iron and zinc can make individuals more susceptible to developing or worsening ADHD symptoms. In children, the severity of iron deficiency has been associated with a 30% increase in inattentiveness, impulsivity, and hyperactive behaviors. Research indicates that individuals with ADHD may have lower levels of iron stored as ferritin in the liver. This is believed to be linked to higher

levels of hepcidin in individuals with ADHD.





An excess of copper combined with a lack of zinc can be especially detrimental to individuals with ADHD. Zinc is another crucial trace mineral that plays a fundamental role in the central nervous system and the production of neurotransmitters. It participates in more than 300 enzymatic reactions in the body, contributing to regular growth and development. Scientists have associated zinc deficiencies with the development of various neuropsychiatric disorders, including ADHD. Numerous studies have consistently shown that both children and adults with ADHD tend to have insufficient levels of zinc. Several studies have provided evidence that zinc levels are not only lower in children with ADHD but also that the degree of zinc deficiency is linked to the severity of ADHD symptoms. In a recent case-control study involving 20 ADHD cases aged 6 to 16, 70% of them were found to have a deficiency in zinc. Those with lower levels of zinc in their hair exhibited more pronounced hyperactivity, inattention, oppositional behavior, and impulsivity, as indicated by scores on the Conners' parent rating scale. In a larger group of 118 children diagnosed with ADHD, those with the lowest blood zinc levels were reported by their parents to have the most severe conduct problems, anxiety, and hyperactivity.



### UNIEN Kriu



### UNIEN Krill

#### Vitamin B12

Vitamin B12 plays a crucial role in maintaining normal brain function, and its deficiency is linked to developmental delays, irritability, and poor growth in children. Various studies have explored the potential connection between B-12 deficiency and ASD/ADHD in children, but the results have been inconsistent. This review summarizes the existing literature on B12 deficiency, supplementation, and their relationship with ASD/ADHD in children. Most of the observational studies suggest a link between B-12 deficiency and Autism. However, there are fewer studies on ADHD, and the association appears to be less strong.

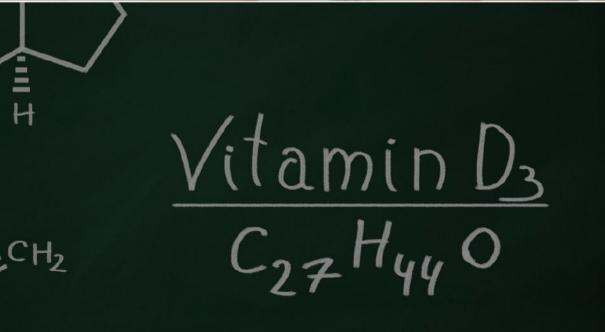
VITAMIN B12

Intervention studies were only available for ASD, and three of them reported improvements in biochemical markers and/or clinical behavior ratings for children with ASD, while one study did not show any improvement in either aspect. Observational data clearly indicate a relationship between B-12 deficiency and ASD, but there is less conclusive evidence for ADHD. Intervention studies using B-12 in children with ASD show biochemical improvements, but there is a lack of trial literature regarding the clinical impact of B-12 supplementation in ASD, particularly in terms of behavior assessments.

**+**35



ADHD, or attention-deficit hyperactivity disorder, affects approximately 7.2% of children worldwide, and in some communities, this figure can go as high as 15.5%. As a result, it stands as the most prevalent neurodevelopmental disorder in childhood. ADHD during childhood is linked to negative academic and social outcomes, and its impact can extend into adulthood, affecting overall quality of life. To better comprehend the potential genetic, biological, and epigenetic factors contributing to ADHD development, as well as the influence of diet, lifestyle, and potential therapeutic approaches, researchers have been exploring various avenues. One recent area of investigation revolves around the potential role of vitamin D in ADHD. Vitamin D is believed to have implications for brain function, central nervous system (CNS) function, and mental well-being. It's considered a developmental neurosteroid and plays a role in regulating calcium levels in the brain. Additionally, it participates in processes such as neuronal migration, growth, differentiation, neurotransmission, cell interactions, and synaptic function. Vitamin D also has a significant role in the development of the dopaminergic system, which may have relevance to ADHD.



### UNIEN Krill

#### Vitamin D3

# Neurology Based Supplements

INGREDIENTS	1 and	
<u>Fish Oil</u>	500	mg
<u>Radiola Extract</u>	50	mg
<u>Saffroon Extract</u>	20	mg
<u>Ademetionine</u>	20	mg
<u>Zinc</u>	5	mg
<u>Vitamin B5</u>	3	mg
<u>Vitamin B3</u>	3	mg
<u>Vitamin B1</u>	1	mg
<u>Vitamin B6</u>	1	mg
<u>Vitamin B2</u>	500	mcg
<u>Vitamin B12</u>	500	mcg
<u>Folic Acid (5-MTHF)</u>	500	mcg
<u>Vitamin D3</u>	20	mcg
<u>Vitamin K2</u>	20	mcg





Depression is a condition characterized by feelings of fatigue, irritability, guilt, difficulty concentrating, a lack of joy in life, mood swings, and sometimes even thoughts of suicide. It affects hundreds of millions of people worldwide, leading to a significant economic burden due to the substantial expenditure on pharmaceutical drugs each year. Unfortunately, these medications are often not very effective and can come with additional side effects, compounding the problem. Several studies have suggested that omega-3 fatty acids offer a alternative for treating major promising depression disorder and other psychiatric conditions.

However, the research data on the effectiveness of omega-3 fatty acids in treating depression are conflicting. This article examines recent research exploring the link between omega-3 fatty acids and depression. The role of these fatty acids in depression treatment has gained increased attention in the last decade due to the rising prevalence of depression. Importantly, it is highlighted that omega-3 fatty acids have a track record of minimal associated side effects, which underscores the need for further research in this



area.

## UNIEN Depth

#### Fish Oil - Omega 3



### UNIEN Depth

#### Rodiola

Rhodiola rosea is often recognized for its reputation as an adaptogen, which is a substance believed to help the body adapt to stress. However, its specific capabilities and attributes have not yet been sufficiently supported by scientific research with well-designed studies.

According to a report published in Alternative Medicine Review, there is potential for Rhodiola rosea as an adaptogen. The author points to evidence from several small studies suggesting that extracts from this plant may offer mental health and heart-related benefits.



Another article from 2005 describes Rhodiola rosea as a versatile adaptogen and suggests that it can enhance the body's resistance to stress. The authors specifically mention its potential to reduce stress hormone levels and address stress-related heart issues as a possible treatment.

....



Saffron, scientifically known as Crocus sativus (from the Iridaceae family), is a perennial herb renowned for its dual role as both a medicinal substance and a spice. It is native to various mountainous regions, ranging from Asia Minor to Greece, Western Asia, Egypt, and India. Saffron has a well-documented reputation for its antidepressant properties. Through chemical analysis, researchers have identified nearly 150 volatile and nonvolatile compounds in saffron. However, only fewer than 50 constituents have been fully characterized with known phytochemical properties. Among these, the key bioactive compounds responsible for saffron's aroma and bitter taste include safranal, crocin, and picrocrocin.



## UNIEN Depth

### Saffroon



### UNIEN Depth

#### Ademetionine

S-Adenosylmethionine (SAMe), also known as ademetionine, is a naturally occurring compound that exists in virtually all living organisms. It plays a significant role as a primary supplier of methyl groups in the brain, offering these groups to various molecules, including hormones, neurotransmitters, nucleic acids, proteins, and phospholipids. SAMe is crucial in numerous intracellular metabolic pathways.

Additionally, combining SAMe with conventional antidepressants could potentially hasten the time it takes to see a positive treatment response compared to using antidepressants alone. Some reports also suggest that SAMe may have utility in treating dementia. Importantly, SAMe is known to be well-tolerated and is associated with minimal severe adverse effects.

One of the most frequently observed effects of SAMe is its ability to improve mood in individuals with depression. Several relatively small clinical studies have indicated that SAMe administered through injection is more effective than a placebo and at least as effective as standard antidepressant medications. Moreover, SAMe might lead to a relatively rapid improvement in mood.

#### ••••

# Methionine 0 -41



In a review conducted in 2017, it was noted that several studies had identified a connection between lower zinc levels and depression. Additionally, the review suggested that incorporating zinc supplementation alongside other treatments might lead to an improvement in depressive symptoms.

Another review from 2011 proposed that zinc could have a positive impact on depression or mood disorders due to its ability to reduce inflammation, which can impair brain function and cognitive abilities. Zinc plays a crucial role not only in the functioning of our immune system but also in influencing our neural processes, as indicated by a study from 2017. This study establishes a connection between zinc and specific hormones or neurotransmitters, specifically our "happiness" hormones, serotonin, and dopamine.

A study conducted in 2021 reveals that zinc achieves this by promoting the elevation of brainderived neurotrophic factor (BDNF) levels in the regions of our brain responsible for regulating our emotions. When zinc levels are low, BDNF levels decrease, which can have a negative impact on our mood.



## UNIEN Depth





### UNIEN Depth

#### Vitamin B5

Vitamin B5, also known as Pantothenic Acid, is one of the eight water-soluble B-vitamins that play a crucial role in maintaining optimal brain function and are essential for all forms of life. Vitamin B5 can be found in every cell of your body, including your brain. Its name, "Pantothenic," is derived from the Greek word "pantothen," which means "from everywhere." This reflects the fact that small amounts of pantothenic acid are present in nearly every type of food.

Foods rich in pantothenic acid include animal organs like liver and kidney, fish, shellfish, dairy products. eggs, avocados. legumes, mushrooms, and sweet potatoes. Avocados, in particular, contain the highest amount of pantothenic acid among commonly consumed foods, with one avocado containing approximately 2 mg of this vitamin.

Pantothenic Acid serves as a precursor in the production of Coenzyme-A (CoA), a vital enzyme involved in various chemical reactions necessary for sustaining life.

CoA, in its form as Acetyl-CoA, plays a critical role in generating energy from fats, carbohydrates, and proteins. This energy, in the form of glucose, serves as the fuel source for every cell in your body.

Additionally, Acetyl-CoA is involved in processes like the citric acid cycle (Krebs cycle), the synthesis of essential fats, cholesterol, steroid hormones, as well as vitamins A and D, and the neurotransmitters acetylcholine (ACh) and serotonin.

Coenzyme A derivatives are also essential for producing melatonin, which regulates your circadian rhythm and sleep-wake cycle, and for metabolizing drugs and toxins in your liver.





Depression is a mood disorder characterized by intense feelings of sadness and hopelessness, which can significantly disrupt your daily life. Some individuals who have experienced depression have claimed that vitamin B-3, also known as niacin, has been beneficial. They report that it reduces feelings of sadness and hopelessness, and in some cases, it has alleviated their depression entirely. Depression can have various causes and treatment options, but based on current scientific research, there is no conclusive evidence to support the use of niacin as a treatment for depression.

However, there is some evidence suggesting that individuals with depression might have deficiencies in B vitamins. If you are dealing with depression, it's advisable to discuss the possibility of taking supplements or incorporating niacin-rich foods into your diet with your healthcare provider.



## UNIEN Depth

#### Vitamin B3



### UNIEN Depth

#### Vitamin B1

Given the relatively slow action of antidepressant medications (ADs) and the desire to expedite their therapeutic effects while minimizing side effects, there is growing interest in thiamine, also known as vitamin B1. Thiamine is an essential nutrient, and its deficiency can lead to various disorders, including irritability and symptoms resembling depression. We conducted a study to investigate whether adding thiamine as an adjunct therapy would reduce depression compared to a placebo.

Significantly, these improvements were observed within 6 weeks of starting treatment, indicating that thiamine may have the potential to counteract the delayed onset of antidepressant effects associated with ADs.



Notably, compared to the placebo, the group receiving adjuvant thiamine experienced an improvement in depression symptoms after 6 weeks of treatment, and these improvements remained relatively stable until the end of the study. However, the differences in mean symptoms at week 12 were no longer statistically significant. Importantly, there were no reported adverse side effects in either group. These results suggest that among younger patients with MDD, adjuvant thiamine expedited the alleviation of depression symptoms when compared to a placebo.



Anxiety and depression are prevalent medical conditions that have negative impacts on a person's body, mood, and thoughts. They are among the most pressing public health concerns in today's world, affecting approximately 14% of the global population. Currently, around 480 million people worldwide are dealing with depression, and a quarter of them also experience anxiety. These conditions are typically managed through cognitive and dialectical behavioral therapy, along with medications such as benzodiazepines and buspirone.

Recent findings have revealed that taking high doses of vitamin B6 supplements can significantly reduce feelings of stress, anxiety, and depression. A study carried out by a team of researchers at the University of Reading and published in the well-regarded journal, Human Psychopharmacology: Clinical and Experimental, showed that young adults who were given an elevated dose of vitamin B6 for over a month reported a reduction in their anxiety levels. This study contributes to the growing body of evidence supporting the use of such supplements to enhance cognitive function, address mood disorders, and ultimately improve mental well-being.



## UNIEN Depth

#### Vitamin B6



### UNIEN Depth

#### Vitamin B2

Earlier research on the link between dietary riboflavin (vitamin B2) intake and psychological disorders has yielded conflicting results. Therefore, a study was conducted to investigate the association between dietary riboflavin intake and depression, anxiety, and psychological distress in Iranian adults.

To assess depression, anxiety, and psychological distress, validated questionnaires known as the Hospital Anxiety and Depression Scale (HADS) and General Health Questionnaire (GHQ) were used, which are commonly used among Iranians. These findings suggest an inverse relationship between dietary riboflavin intake and the risk of psychological disorders in Iranian adults. Higher riboflavin intake was linked to a lower likelihood of depression and anxiety in men and reduced psychological distress in women. However, further prospective studies are needed to confirm these results.

In this cross-sectional study, dietary habits of 3,362 middle-aged adults were assessed using a validated dish-based food frequency questionnaire. For each participant, their daily riboflavin intake was calculated by adding up the riboflavin content of all foods and dishes they consumed.

#### •••





Depression is a prevalent mental health condition that affects people of all ages, genders, and backgrounds. It is a complex issue with various possible underlying causes, including metabolic disorders, endocrine disorders, cardiovascular diseases, inflammatory conditions, nutritional deficiencies, and neurodegenerative disorders. Despite the availability of different treatment options for depression, it remains a significant global health challenge that requires more attention. This review article examines the relationship between Vitamin B12 and depression by analyzing relevant data and studies. The review encompassed multiple studies, and the findings suggest that early supplementation of Vitamin B12 may potentially delay the onset of depression and enhance the effectiveness of antidepressant treatments when used in combination with Vitamin B12.

While other vitamins like Vitamin B6 and folate are also known to influence depression, this review primarily focuses on Vitamin B12. The aim is to provide healthcare providers with a foundation for addressing depression in patients who are prone to it or have experienced major depressive episodes in their lives.



# **UNIEN Depth**

#### Vitamin B12



### UNIEN Depth

#### Folic Acid (5-MTHF)

Supplementing with folate may have a positive impact on reducing symptoms of depression. Folate, which is a natural B vitamin, plays a crucial role in the brain's ability to produce norepinephrine, serotonin, and dopamine. There are three common forms of folate: folic acid, 5methyltetrahydrofolate (5-MTHF), also known as methylfolate or l-methylfolate, and folinic acid. The bioavailability of these forms may vary, particularly in individuals with genetic variations, those taking specific medications, or those who consume alcohol.

In depressed patients, augmenting treatment with folic acid may help alleviate remaining symptoms. The 5-MTHF formulation has shown effectiveness as an additional therapy or standalone treatment for reducing depressive symptoms in individuals with normal and low folate levels. ....



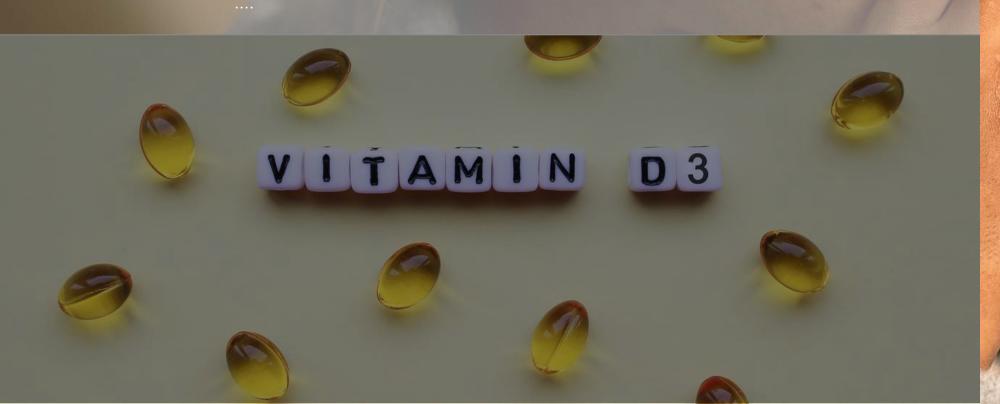
It has also been found to improve cognitive function and reduce depressive symptoms in elderly patients with dementia and folate deficiency, as well as reduce both depressive and somatic symptoms in patients dealing with depression and alcoholism. Additionally, adjunctive folinic acid has been shown to reduce depressive symptoms in patients who had a partial or nonresponsive reaction to a selective serotonin reuptake inhibitor.

While the evidence regarding the effectiveness of folate in improving cognitive symptoms is inconclusive, most studies have used folic acid. Despite past concerns about folate potentially increasing cancer risk, masking B12 deficiency, or exacerbating depressive symptoms, it is generally well-tolerated.



Depression is a debilitating condition that affects various aspects of an individual's life. When people with chronic medical conditions also experience depression, it can complicate the management of their ongoing health issues. In recent times, vitamin D has gained attention in both scientific and popular discussions as a potentially valuable factor for preventing and treating many chronic diseases. It's worth noting that a significant number of individuals, including those with depression and other mental disorders, have insufficient levels of vitamin D. This insufficiency may arise from factors such as inadequate dietary intake, limited exposure to sunlight due to lifestyle choices, or other related factors.

This paper explores the reasons behind insufficient vitamin D levels in individuals, including those with depression, and proposes potential solutions. It also discusses groups of people who are at greater risk of vitamin D deficiency and suggests strategies for addressing this deficiency. Detecting and effectively treating insufficient vitamin D levels in individuals with depression and other mental disorders may offer a straightforward and costeffective therapy that could enhance their longterm health outcomes and overall quality of life.



## UNIEN Depth

#### Vitamin D3



### UNIEN Depth

#### Vitamin K2

A limited number of studies have examined the potential links between the intake of dietary vitamin K and the presence of depressive symptoms. We aimed to explore this association in a substantial group of North American individuals. For our analysis, we included 4,375 participants ranging from 45 to 79 years old, all part of the Osteoarthritis Initiative. Information on dietary vitamin K consumption was collected using a semi-quantitative food frequency questionnaire and categorized into quartiles. Depressive symptoms were assessed based on a diagnosis of a Center for Epidemiologic Studies-Depression (CES-D) score of  $\geq$ 16 on a 20-item scale. To investigate the potential relationships between vitamin K intake and depressive symptoms, we conducted logistic regression analyses while adjusting for possible influencing factors.

In summary, out of the total participants, 437 (approximately 10%) displayed depressive symptoms. After accounting for 11 potential influencing factors, we observed that individuals with the highest dietary vitamin K intake had reduced odds of experiencing depressive symptoms (OR = 0.58; 95% CI: 0.43-0.80). Notably, this effect was evident among those who were not taking vitamin D supplements. To conclude, there appears to be a significant association between higher dietary vitamin K intake and a lower likelihood of experiencing depressive symptoms, even after considering potential influencing factors. Future research should focus on longitudinal studies to better understand the direction of this association.





#### **Orthopedy Based Supplements**

should not be used with particular beneficial for orthopedic pathology. foods or supplements.

In the medical arena we appear to Some foods and supplements include However, when looking at the Omega 3 fatty acids, which are resort to medicine for the treatment chemicals that can interfere with how research, there are a number of present in fish oil supplements and of pathology. Many drugs are the body metabolizes drugs. Kale, for supplements that might be beneficial cold water fish (such as salmon and valuable, but they might have negative example, should not be consumed by for orthopedic pathology. Almost all mackerel), have been demonstrated effects and interact with other persons using blood thinners, orthopedic injuries, at least at first, to lessen inflammation. A diet strong medications. In certain circumstances, antibiotics should not be consumed include some sort of inflammation. in fruit (strawberries, blueberries, nutritional supplements may be with milk, and black licorice should Diets that can help regulate the oranges) and vegetables (spinach, available to aid in the rehabilitation of not be consumed by those taking inflammatory response could be kale, collard greens) has also been injuries without some of the adverse glycosides. Similarly, ginkgo may beneficial. Adhesive capsulitis, for linked to reduced inflammation. effects or interactions associated with raise bleeding risk when used with example, can produce stiffness and Probiotic-rich foods such as yogurt, prescription treatments. Of course, warfarin, and St John's wort may discomfort that lasts for weeks. kombucha, kefir, and cultured supplements are not without risk. A reduce the efficiency of several birth Osteoarthritis may be guite painful. A vegetables should be included in an supplement's efficacy cannot be control methods. However, when diet high in anti-inflammatory anti-inflammatory diet. Alternatively, guaranteed due to its lack of looking at the research, there are a prostaglandins (PGE1, PGE3) and low reducing diets high in simple carbs regulation. Furthermore, certain drugs number of supplements that might be in

prostaglandins (PGE2) might be cause inflammation, may beneficial.

inflammation-causing and saturated/trans fats, which can be beneficial



Å

## UNIEN UNIEN Calsio-D

Supported with Boron. Vitamin K2 and Methyl Sulfonyl Methane

> and Supplementary Products

> > Food Supplement

#### INGREDIENTS

**Orthopedy Based** 

Supplements

<u>Calsium</u>	900	mg
Methyl Sulfonyl Methane	300	mg
<u>Magnesium</u>	210	mg
<u>L-Lysine</u>	75	mg
<u>Curcuma Longa Extract</u>	60	mg
Vitamin C	60	mg
<u>Bromelain</u>	30	mg
<u>Fish Oil</u>	30	mg
Zinc	9	mg
Boron	6	mg
<u>Manganese</u>	750	mcg
<u>Copper</u>	600	mcg
<u>Vitamin K2</u>	30	mcg
<u>Vitamin D3</u>	1200	UI
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#### UNIEN UNIEN Calsio-D

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Healthy, Reliable and Supplementary Products

90 Food Supplement Tablets

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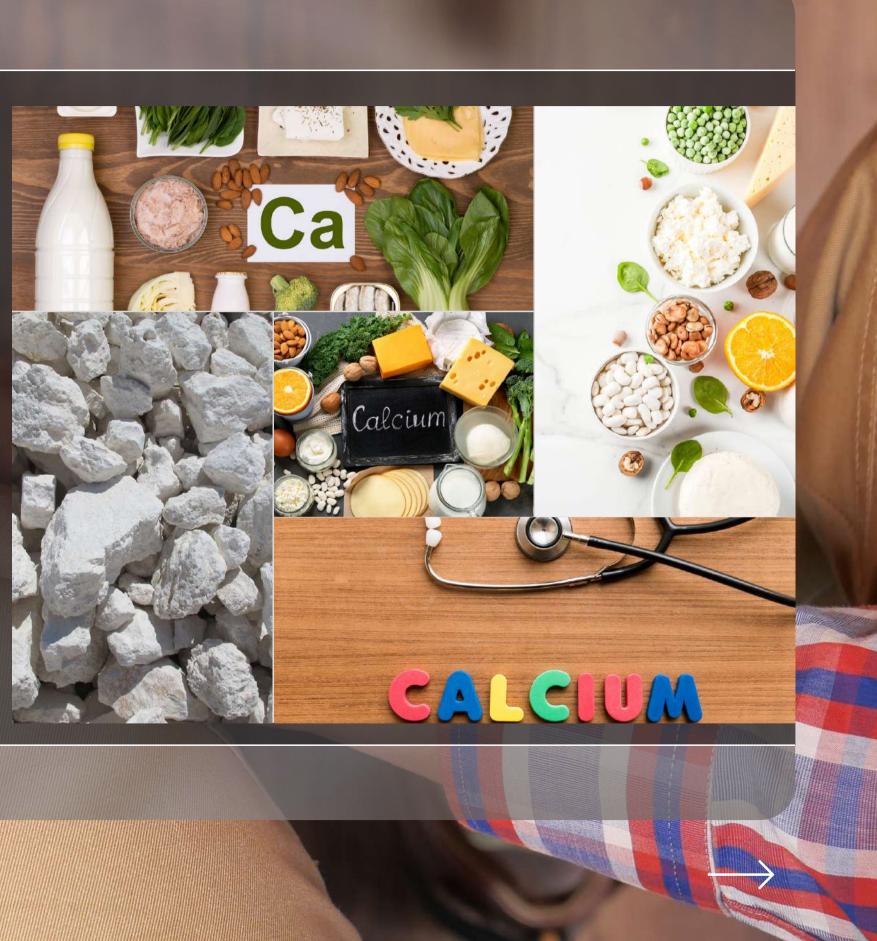
ING Calsin Magn L-Lys Curcu Vitam Fish ( Flavo Zinc Boror Mang Cupp Vitam Vitam

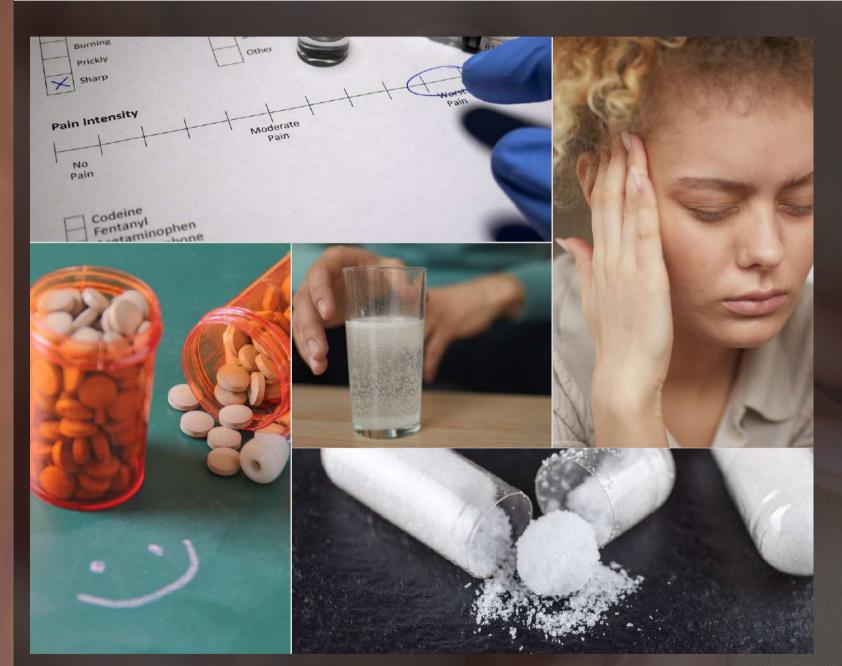


#### Calsium

the health bones. for of Approximately 99% of the body's calcium is stored in the bones and teeth, where it plays a crucial role in making them sturdy and resilient. The remaining 1% serves various functions that are essential for maintaining normal bodily functions. Calcium is responsible for facilitating the contraction and expansion of blood enabling vessels. muscle contractions, aiding the in transmission of nerve signals, and assisting glands in the secretion of hormones.

The process of bone remodeling is Calcium is an essential mineral vital ongoing, with calcium constantly moving in and out of bones. In children and adolescents, the body builds new bone at a faster rate than it breaks down old bone, resulting in an increase in overall bone mass. This process continues until around the age of 30, at which point the formation of new bone and the breakdown of old bone occur at a roughly equal pace. However, in older adults, particularly post-menopausal women, bone breakdown outpaces bone formation. In cases where calcium intake is insufficient, this imbalance can contribute to the development of osteoporosis.





#### Methyl Sulfonyl Methane

In the mandibles, the MSM-treated Methylsulfonylmethane (MSM) is a mice displayed an elevated bone naturally occurring compound known density with a corresponding for its anti-inflammatory properties, and it has been effective in treating reduction in the marrow cavity. Immunohistochemical analyses of the various degenerative diseases like osteoarthritis and acute pancreatitis. mandibles demonstrated an increase in cells positive for the osteoblast-Prior research has shown that MSM specific marker OCN and a decrease in cells positive for the mesenchymal stem cell-specific marker CD105. In can encourage the differentiation of stem cells from human exfoliated deciduous teeth into cells resembling osteoblasts. In this study, the impact of MSM on aging female mice was control mice, areas of bone loss were observed in the inter-radicular region of the mandibles, but this loss was examined by administering MSM injections for a duration of 13 weeks significantly reduced due to enhanced bone formation triggered by MSM when they were 36 weeks old. injections. The analysis of serum samples In summary, this study has shown that MSM has the ability to promote the revealed that the mice injected with MSM exhibited increased levels of formation and function of osteoblasts markers associated with bone in vivo, leading to increased bone formation, such as osteocalcin (OCN) formation in the mandibles. Therefore, and procollagen type 1 intact Nthe combination of MSM and specific terminal propeptide (P1NP), while markers related to bone resorption, stem cells may hold promise for alveolar bone regeneration in cases of tartrate-resistant acid including periodontal disease or other related phosphatase (TRAP) and C-terminal conditions characterized by bone telopeptide of type I collagen (CTX-I), loss. decreased.

-55



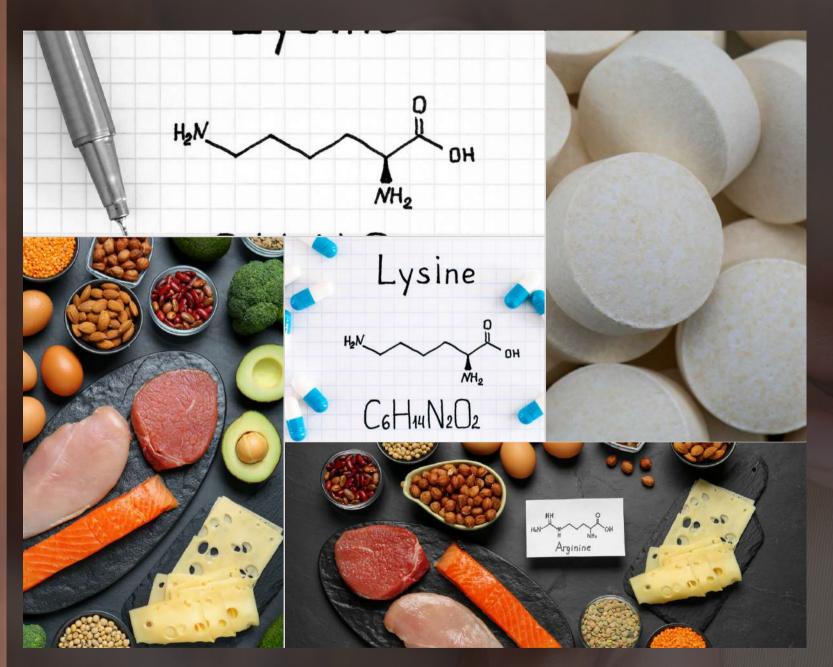
#### Magnesium

Magnesium is a mineral that plays a A general guideline is to aim for a crucial role in maintaining healthy calcium-to-magnesium ratio of 2:1. removed during processing.

an appropriate balance of both throughout the day. minerals for them to be effective.

bones. It contributes to increasing The recommended daily intake of bone density and helps prevent the magnesium falls between 300mg to development of osteoporosis. 500mg. When it comes to absorption, Unfortunately, many people do not chelated forms of magnesium are the get an adequate amount of most readily taken up by the body. magnesium in their diets, especially if Magnesium oxide is another option they consume a lot of processed and is often more affordable, but it is foods, as much of the magnesium is less effectively absorbed. Since high doses of magnesium can lead to Magnesium and calcium work closely diarrhea, it's advisable to split your together, so it's essential to maintain daily dose and take it with meals





#### **L-Lysine**

A deficiency in calcium can contribute to age-related bone loss, making it an important factor to address in preventing osteoporosis. It's crucial to find a calcium supplement with high bioavailability for optimal results. Research in animals has shown that certain amino acids, especially Llvsine. can enhance calcium Therefore, absorption. we might impact calcium

In a second study involving 45 investigated how this essential amino osteoporotic patients, we compared acid the effects of short-term dietary metabolism in humans. supplementation with L-lysine, L-In one study, we compared the valine, or L-tryptophan (at 800 immediate effects of an oral calcium mg/day) on the absorption of 47Ca load (3 g as CaCl2) administered with fraction. The results showed that Lor without 400 mg of L-lysine in 15 lysine, but not L-valine or Lhealthy women and 15 osteoporotic tryptophan, significantly increased the women. absorption of calcium in the intestines.

In all cases, the oral calcium load led to a gradual increase in total calcium and Ca2+ levels in the bloodstream, accompanied by a decrease in neophrogenous cAMP. As expected, urinary calcium excretion also increased progressively, except in the healthy subjects who received Llysine. They exhibited a reduced response in urinary calcium levels to the calcium load.

-57



#### **Curcuma Longa**

Curcuma Longa, commonly known as turmeric, is a vibrant yellow spice frequently used in various culinary traditions, especially in India and other parts of Asia. Beyond its culinary appeal, turmeric has a long history of use in traditional medicine systems like Unani, Chinese medicine, and Ayurveda to address a wide range of health issues. With the backing of scientific research in recent years, modern medicine has also recognized and supported the numerous health benefits associated with turmeric. Consequently, turmeric has earned may offer benefits for our bones and the title of "superfood" and is highly regarded worldwide.

The key factor responsible for turmeric's rise to prominence is its compound called curcumin. Curcumin is one of the primary active components in turmeric and is accountable for many of its health advantages. It's also responsible for giving turmeric its distinctive yellow hue. Among all the compounds found in turmeric, curcumin stands out as the most well-known and potent, possessing robust anti-inflammatory, antioxidant, antibacterial, antiviral, and potentially anti-cancer properties. As a result, curcumin or turmeric has been highly esteemed for its natural healing properties from ancient times to the present day.

Recent scientific research has suggested that turmeric, primarily due to its potent curcumin compound, joints. In this article, we delve into how curcumin in turmeric can positively impact our skeletal health.





#### Vitamin C

Vitamin C plays a crucial role in the effects by lowering the risk of formation of collagen fibers, which are osteoporosis in individuals with lower vital for building strong bones. It also physical activity levels. Additionally, contributes to the mineralization С vitamin process that occurs on these absorption, a critical mineral for collagen frames, essential for bone building sturdy bones (Kim, 2016). strength (DePhillipo, 2018). Vitamin C also acts as a cofactor for Research indicates that vitamin C may vitamin D, another essential nutrient have a positive impact on bone for bone health, by aiding in its conversion into calcitriol, which density, particularly in the spine (New, regulates calcium levels and bone 1997). Another study suggests that calcification. Recent research has nutrients from fruits and vegetables, even suggested that vitamin C may including vitamin C, can help establish support bone regeneration by and maintain bone health in inhibiting osteoclasts (cells that break premenopausal women, reducing the down bone) and promoting the risk of bone loss even after formation of osteoblasts (cells menopause, particularly in the femoral responsible for bone growth) (Choi, neck (Macdonald, 2004). 2019).

Furthermore, some studies suggest that vitamin C might offer protective enhances calcium

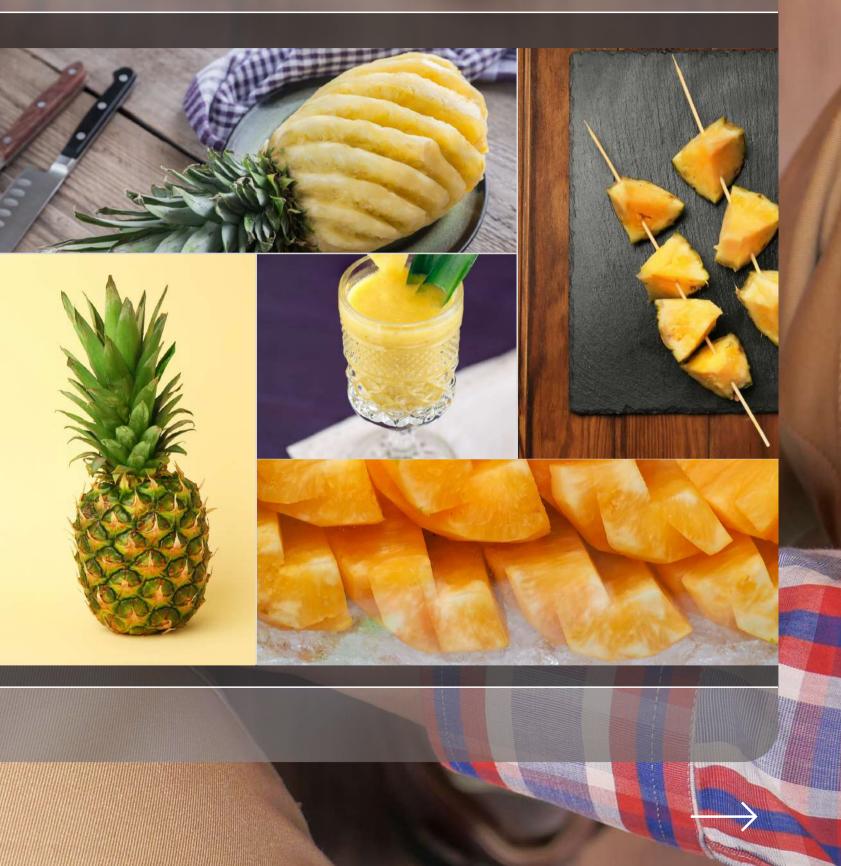
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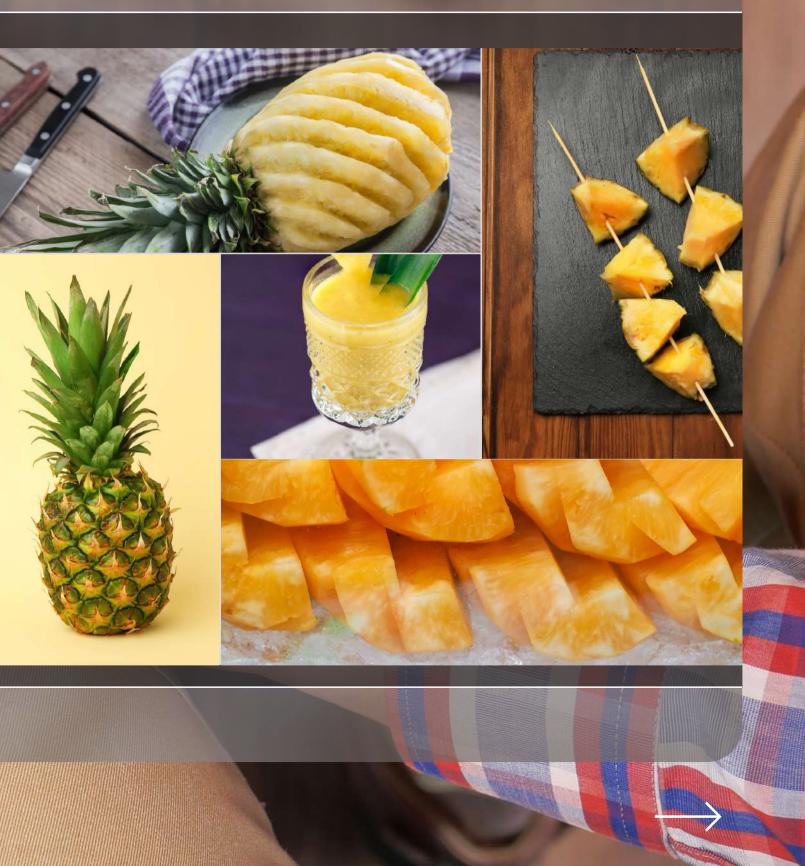


#### Bromelain

Bromelain, derived from pineapples, It also discusses the current has demonstrated anti-inflammatory evidence on the appropriate dosage pain-relieving properties, and suggesting it could serve as a safer treatment or supplement for Previous studies, osteoarthritis. though mostly uncontrolled or bromelain's efficacy and determine comparative, indicate its potential the optimal dosage for osteoarthritis. effectiveness in osteoarthritis. This paper examines how bromelain may work as a treatment, reviews the existing clinical trials exploring its use in osteoarthritis, effects in chronic conditions like and considers its safety for this osteoarthritis. condition.

for treating osteoarthritis. Presently, the available data highlight the need for further research to confirm managing Additionally, it emphasizes the importance of comprehensive monitoring of potential adverse







Fish Oil - Omega 3 Joint Health In recent scientific reviews, Omega-3 EPA and DHA Research has indicated that diets rich supplementation shown have in Omega-3 fatty acids, particularly potential benefits for individuals with EPA and DHA, can have positive conditions like Rheumatoid Arthritis (RA) and other joint disorders effects on bone health. These effects associated with inflammation. RA, are primarily attributed to their anticharacterized by chronic joint inflammatory properties and their inflammation, presents symptoms like pain, swelling, stiffness, and reduced influence on processes like bone joint mobility. Typical treatments for formation, resorption, and serum RA involve prescription medications calcium levels. Aging often leads to nonsteroidal antias such increased fragility of bones due to inflammatory (NSAIDs). druas heightened activation of inflammatory corticosteroids. and diseasepathways. Omega-3 EPA and DHA, antirheumatic modifying drugs (DMARDs). Clinical trials involving along with the lipid mediators derived EPA DHA Omega-3 and from them, play crucial roles in bone supplementation in RA patients have Studies metabolism. have reported reduced morning stiffness, demonstrated that supplementing decreased joint pain, and a lower with EPA and DHA can enhance bone need for NSAIDs. Some indications suggest that adding Omega-3 EPA mineral density, reduce the risk of hip and DHA supplements to other RA fractures, and positively impact bone therapies can be even more beneficial turnover markers in humans. for patients.

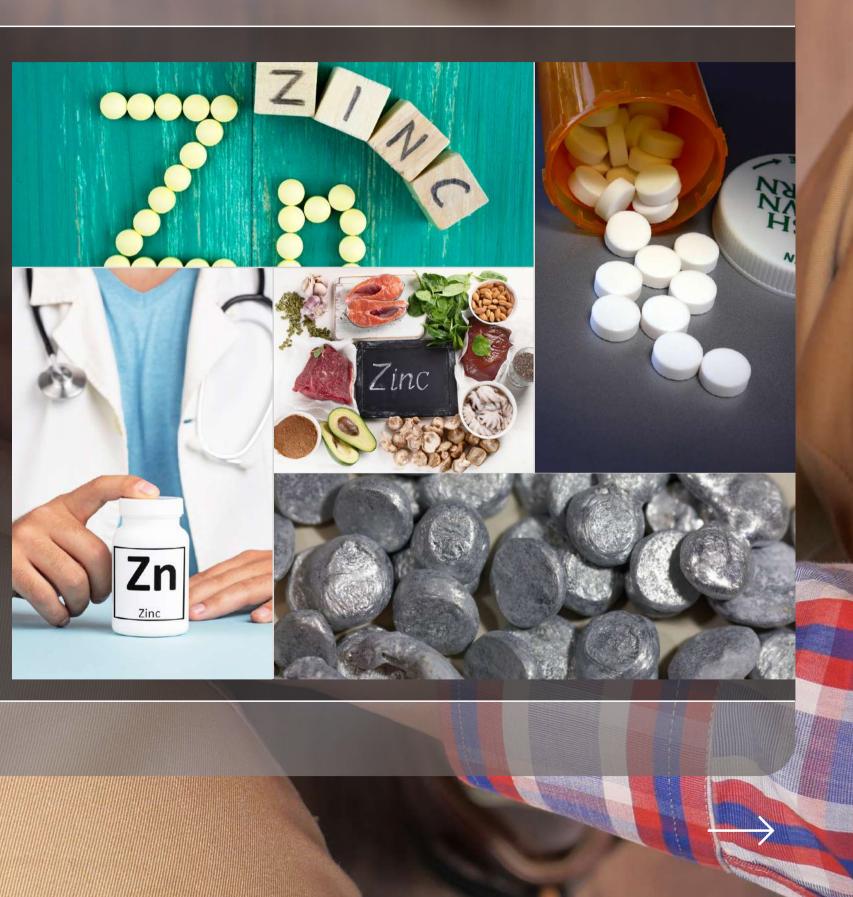
61



#### Zinc

development and maintaining bone balance. Additionally, zinc has the potential support to bone regeneration. However, the exact growth, maintenance, and regeneration remain relatively unclear. Zinc has been observed to have a positive impact on the functions of chondrocytes and osteoblasts, while it can inhibit osteoclast activity.

Zinc, an essential mineral, plays a These effects align with zinc's crucial role in normal skeletal potential to benefit bone stability and regeneration. Researchers are exploring therapeutic approaches that leverage zinc to enhance bone cellular and molecular pathways regeneration. This review centers on through which zinc influences bone zinc's involvement in bone growth, equilibrium, and regeneration, offering insights into relevant studies utilizing zinc for bone regeneration therapies.



#### Boron

Boron plays a crucial role in the Research conducted on animals formation of bones, and its absence discovered that boron-deficient rats bone experienced inhibited healing of the negatively affect can development and repair. This mineral alveolar bone, which is the dense influences the production and function bone ridge housing tooth sockets in of steroid hormones, which are vital the maxillae and mandible. In for preventing calcium loss and comparison to rats with adequate maintaining bone mineralization. Boron boron intake (3 mg/kg/d of boron in supplementation has consistently the diet), those with boron deficiency shown to reduce the excretion of (0.07 mg/kg/d of boron in the diet) calcium and magnesium in urine and exhibited significant reductions in increase estradiol levels and calcium osteoblast surface after 7 and 14 and days (57% and 87% reduction, absorption periin postmenopausal women. Additionally, respectively). This deficiency also led boron enhances the utilization of to increases in quiescent surface vitamin D. When animals deficient in (120% and 126% increase after 7 and vitamin D were given boron 14 days, respectively), indicating that supplements, it promoted bone boron deficiency can impair bone growth and alleviated mineral healing by significantly reducing metabolism issues associated with osteogenesis. vitamin D deficiency.

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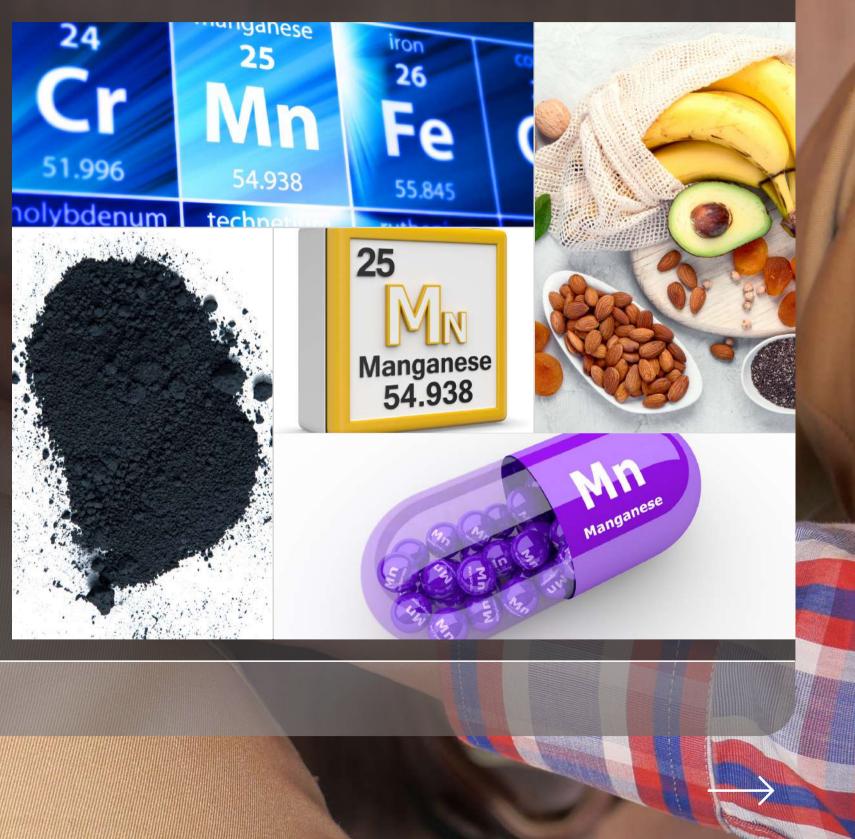




#### Manganese

There is limited evidence concerning (Mn) manganese humans, prompting this narrative review to examine the current knowledge regarding the relationship between manganese and human bone health, as well as the potential benefits manganese of supplementation, either alone or in combination with other micronutrients, on bone mineralization. This review encompassed four relevant studies. All available literature consistently demonstrates that women with exhibit osteoporosis lower manganese levels in their blood compared to women with normal bone mineral density. This finding underscores manganese's vital role in the synthesis of cartilage and bone collagen, as well as in bone mineralization, which aligns with results from animal studies.

Regarding human trials assessing the deficiency in impact of long-term manganese supplementation (over 2 years) on mineral density bone in postmenopausal women, both clinical studies showed that the placebo significantly aroup experienced greater bone loss compared to the receiving manganese group supplementation. In one study led by Strause, supplementation consisted of 5.0 mg Mn/day, while in the study by Saltman, it was 2.5 mg Mn/day. It's important to note that the supplementation in Saltman's study included combination а of micronutrients (manganese, copper, and zinc) along with calcium.





#### Copper

Despite numerous in vitro and animal between osteoporotic and healthy studies indicating positive effects of women, but these differences were and limited to women aged 45 to 59 and on osteoblastic copper osteoclastic activity, as well as bone not those aged 60 to 80. Daily copper strength, human research in this area intake, assessed in a single study with is limited. This narrative review aimed a small sample, did not demonstrate to explore the relationship between any significant differences between blood copper levels, daily copper women with or without osteoporosis. intake, copper supplementation, and Regarding copper supplementation, bone mineral density. A total of 10 two studies showed promising relevant studies were included in this outcomes by slowing down bone review: five focused on blood copper mineral loss and reducing markers of levels, one examined daily copper bone resorption. These findings intake, and four investigated the suggest the potential effectiveness of effects of copper supplementation. copper supplementation in influencing The analysis of blood copper levels bone metabolism. However, further revealed that in four of the studies, research is needed to delve deeper into this topic and provide more there were no statistically significant comprehensive insights. differences observed.

Only one study reported differences

-65



#### Vitamin K2

Prior research has suggested the beneficial impact of vitamin K2 (VK2) supplementation on bone turnover markers and bone mineral density (BMD). However, these studies have employed varying VK2 doses, and there's a limited focus on comparing VK2 supplementation alone with combinations of calcium and vitamin D3. This study aimed to identify an effective low dose of VK2 for enhancing BMD and assess whether the concurrent use of VK2, calcium, and vitamin D3 would yield greater benefits.

The results of some examine showed that postmenopausal women in the two groups receiving 90 µg/day of VK2 experienced significantly lower bone loss in the femoral neck compared to those in the placebo group. However, these effects were not observed in men. Additionally, serum biomarkers indicated an increase in the cOC/ucOC ratio in the intervention groups. Notably, VK2 supplementation at a dose of 90 µg/day had a significant impact on reducing bone loss in postmenopausal women.



#### Vitamin D3

Calcium and vitamin D are crucial for maintaining strong bones and reducing the risk of osteoporosis. Osteoporosis is a common bone condition characterized by a gradual decline in bone density and mass. This leads to thinner, weaker bones that are more susceptible to fractures. In the United States alone, there are over 1.3 million osteoporosis-related fractures each year, primarily involving the spine (vertebrae), hip, and wrist. Various treatments are available to prevent bone loss and manage low bone density. However, the initial step preventing or addressing in osteoporosis is to include foods and beverages rich in calcium, a mineral essential for bone health, and vitamin D, which aids in the absorption and breakdown of calcium.



When combined with calcium, it also helps prevent and manage osteoporosis. Efficient calcium absorption relies on having sufficient vitamin D, which the body typically produces in the skin when exposed to sunlight.

Here are some recommendations for vitamin D intake:

- It is essential for overall bone health for individuals of all ages.
- Experts advise that men aged 70 older, as well as and postmenopausal women, should aim for a daily intake of at least 800 international units (equivalent to 20 micrograms) of vitamin D.
- Lower levels of vitamin D consumption may not suffice, while very high doses, especially over extended periods, can be harmful.
- While the ideal intake for premenopausal women and younger men with osteoporosis hasn't definitively been determined, a general suggestion is to aim for 600 international units (equivalent to 15 micrograms) of vitamin D daily.

-67



# Urology Based Supplements



Urinary tract wellness supplements are undertaking exciting growth as urologists and gynecologists progressively acknowledge them as an option to or support for traditional procedures. Our sales statistics and customer comments demonstrate that supplements are making inroads into the urinary tract sector through advertising to doctors and pharmacists in locations as diverse as the CIS [Commonwealth of Independent States], Western Europe, and the Middle East.

The Food and Drug Administration does not closely regulate supplements, which means there is limited data on whether they are effective. And, without results from large-scale clinical trials, it's unclear whether U.T.I. pills and powders actually prevent infection. (Uqora started a clinical trial for its U.T.I. supplement, but canceled the study in March 2020 because of the pandemic, a representative from the company said. The company has plans to reinstate the study.) Still, there is some evidence that the individual ingredients in these supplements may provide a slight benefit, especially for people with frequent U.T.I.s – and they're unlikely to have significant side effects, said Dr. Monica Woll Rosen, an OB-GYN at University of Michigan Medical School.

The American Urogynecologic Society issued a Best Practice Statement for recurrent urinary tract infection in adult women that states "the preponderance of evidence does not support routine use of cranberry products in the care of women with" recurrent U.T.I.s. Vitamins, especially vitamin C, are also present in many of the supplements that claim to protect against urinary tract infections. Some doctors think that vitamin C can combat bacterial growth, in combination with other supplements, by theoretically acidifying the urine, said Dr. Jerry Lowder, a urogynecologist at Washington University in St. Louis School of Medicine.

Acceptance by health care specialists and widespread public knowledge of components like cranberries are driving demand. The pandemic may also have an impact since access to doctors remains difficult in many parts of the world—the emphasis on natural alternatives may increase in 2020 and beyond. Google searches for the keyword "cranberry supplement," for example, increased by 24% year to date in 2020 compared to the same period in 2019.

### 5 Ippleme 60 0

<u>L-Carnitine</u>	2000	mg
<u>Fructose</u>	200	mg
<u>Asetyl L-Carnitine</u>	1000	mg
<u>Vitamin C</u>	225	mg
<u>Citric Acid</u>	115	mg
<u>Coenzyme Q10</u>	50	mg
Zinc	7	mg
<u>Vitamin B12</u>	3000	mcg
<u>Folic Acid (5-MTHF)</u>	500	mcg
<u>Selenium</u>	60	mcg

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INGREDIENTS	
L-Carnitine	1000 mg
Fructose	1000 mg
Aset IL-Carnitine	466 mg
V tamin C	113 mg
Citric Acid	58 mg
Coenzim 010	25 mg
Zirc	7 mg
Selenium	57.5 mc
Vitamin B12	1.88 mc
Foll o Acid	250 mcg



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#### **L-Carnitine**

L-Carnitine is a natural antioxidant found in mammals that plays a vital role in transporting long-chain fatty acids within cells, particularly across the inner mitochondrial membrane. It is often used as a dietary supplement, with athletes using it to enhance performance and recovery after exercise. Additionally, researchers have explored its therapeutic applications, particularly in male infertility, where it may serve as a defense against the harmful effects of excessive reactive oxygen species (ROS) production in the testes, which can damage sperm.

L-Carnitine achieves this by boosting the expression and activity of enzymes with antioxidant properties. However, the precise mechanisms behind L-Carnitine's benefits are not yet fully understood. This review aims to compile existing knowledge regarding the potential advantages of L-Carnitine and its role in male fertility. By considering studies conducted with Sertoli cells in laboratory settings, pre-clinical investigations, and studies involving infertile men, a comprehensive understanding of L-Carnitine's effects has been established.

In vitro research suggests that L-Carnitine directly impacts somatic Sertoli cells, thereby enhancing the development of germ cells. Overall, the evidence supports the idea that L-Carnitine can have a positive impact on male fertility, even at a relatively low daily dose of 2 grams. This supplementation leads to improvements in sperm characteristics, hormonal balance, reduction in ROS levels, and consequently, enhanced fertility rates.

However, further research is required to uncover the underlying mechanisms and establish optimal dosage levels. In conclusion, L-Carnitine shows promise in the realm of male reproductive health, offering the potential to enhance sperm quality and overall fertility.





Seminal plasma contains high concentrations of fructose, which serves as an energy source for sperm. This fructose level is associated with sperm motility and viscosity. Measuring fructose concentration can reveal the condition of seminal vesicles, hormonal imbalances, and potential ejaculatory duct obstruction.

Citric acid is another essential component in seminal plasma. Its primary role is to regulate pH and assist in converting proteins, fats, and sugars into carbon dioxide. Citric acid is crucial for prostate health and contributes to the coagulation and liquefaction of semen. It plays a significant role in sperm motility and hyaluronidase activity.

The significance of citric acid in influencing sperm quality during periods of abstinence has been underestimated. Therefore, assessing citric acid levels in seminal plasma can help identify potential causes of male infertility.

To determine the factors affecting sperm viability, motility, and morphology, a comprehensive approach involving medical history, physical examination, imaging, semen analysis, and biochemical evaluation of seminal plasma is essential.

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#### Fructose





# UNIEN Sperior

#### **Acetyl L-Carnitine**

Acetyl-L-carnitine is a beneficial amino acid for addressing low sperm count. It aids in the maturation and mobility of sperm while protecting them from oxidative damage. This amino acid naturally exists in human sperm and seminal fluid, making it essential for male fertility.

Acetyl-L-carnitine is present in high concentrations in the epididymis, a section of the spermatic ducts responsible for storing, maturing, and transporting sperm from the testes to the vas deferens before ejaculation. Insufficient carnitine levels are associated with reduced sperm count (oligospermia) and poor sperm motility. It's notably lacking in infertile semen and sperm samples.

Propionyl-L-carnitine, a related amino acid naturally produced in the body, plays a crucial role in providing fatty acids to cell mitochondria for energy production. This extra energy support is vital for sperm cells as they have to travel a considerable distance to fertilize an egg.

Typical sperm motility ranges from 55% to 75%, with a gradual decrease of 5% to 10% per hour. Carnitine is instrumental in helping sperm swim effectively, making it a vital nutrient for men with suboptimal sperm quality. This is particularly significant because poor sperm motility (asthenospermia) is a major factor in male infertility.

# Carnitine $C_{z}H_{15}NO_{3}$



The majority of research on the impact of Vitamin C on fertility has typically involved combinations of various supplements, making it challenging to pinpoint specific benefits solely attributable to Vitamin C.

Nonetheless, despite this limitation, there is evidence suggesting that Vitamin C supplementation may have the potential to mitigate certain aspects of ovarian aging, leading to the production of a greater number of higher-quality eggs.

For individuals attempting to conceive, ensuring an adequate intake of Vitamin C, either through diet or supplements, could enhance the likelihood of successful conception.

This might be particularly valuable for those facing reproductive health issues. For instance, one study discovered that two months of daily Vitamin C supplementation improved both egg and embryo quality in women with endometriosis.

Furthermore, Vitamin C isn't exclusively advantageous for women. The incorporation of specific multivitamin-rich foods has been demonstrated to offer benefits for sperm health and mobility.

# UNIEN Sperior

#### Vitamin C





# UNEN Sperior

#### **Citric Acid**

which has an impact on the activity and shape of sperm. studies have linked these biomarkers, sperm parameters, and body mass index (BMI).

While our study's results align with existing theories by emphasizing the importance of these biomarkers and accessory glands for male fertility, they also challenge other theories that suggest significantly lower biomarker concentrations among men with normal and abnormal sperm parameters.

These discrepancies may be attributed to differences in study design, sample size, reagents, equipment, and analysis methods. Furthermore, the calculation of total fructose, which includes volume, could contribute to these variations. Additionally, changes in accessory gland function caused by microorganisms might affect their epithelia without necessarily impacting sperm density, motility, or morphology, leading to inconsistencies between sperm parameters and biomarker levels.

Practically, this suggests that future studies should consider bacteriological testing of seminal fluid samples, standardized sample handling, and equipment usage. To assess male fertility accurately, it's advisable to analyze two to three sperm samples over a three-month period. It's worth noting that fructose and citric acid levels can also be influenced by factors like nutrition, particularly body mass index, as observed in a 2017 study.



- fertility. It has also been noted that the secretions from the prostate gland help maintain the osmotic balance of semen,
- Similar correlations have been found between fructose and semen parameters in previous research. Additionally, some

# COENZYME (

Sperm and egg cells are highly energy-dependent and susceptible to oxidative damage. Coenzyme Q10 (CoQ10) acts as an antioxidant and plays a crucial role in the energy production processes within cells. As individuals age, their CoQ10 levels naturally decrease. However, taking CoQ10 supplements can help increase CoQ10

levels in both the blood and tissues.

Numerous studies have demonstrated the positive effects of CoQ10 supplementation on egg quality, sperm quality, and pregnancy rates.

Since sperm and eggs undergo approximately 90 days of development, fertility experts recommend taking CoQ10 and other fertility supplements for at least 90 days for optimal results.

The level of CoQ10 in the bloodstream has been found to have a connection with important semen parameters such as sperm concentration, motility, and morphology. This correlation is believed to be a result of CoQ10 supplementation, which enhances the overall antioxidant capacity of the body.

In a study from 2015 involving 60 men, improvements in several aspects of male fertility were observed. Sperm count increased by 53%, and there was a 26% boost in total sperm motility following supplementation. Numerous other studies have also yielded similar results, consistently showing enhancements in sperm concentration, motility, progressive motility, and sperm morphology.

# UNIEN Sperior

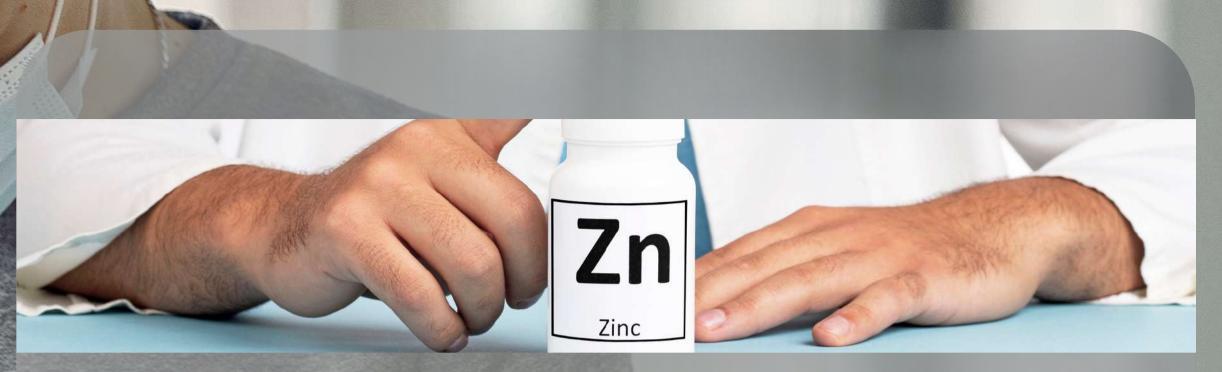
#### **Coenzyme Q10**





# UNIEN Sperior

Zinc



Zinc possesses antioxidant properties, particularly noteworthy for its impact on male reproductive health. Elevated levels of reactive oxygen species in the seminal plasma of infertile men, especially smokers, can influence zinc levels in seminal fluid. This, in turn, can affect the physiology of sperm.

Zinc plays a pivotal role in hormone regulation, including testosterone, which is essential for prostate health and overall sexual well-being. It contributes to hormonal balance in men. Within the male urea system, zinc serves as an antibacterial agent, contributing to a healthy environment and preventing bacterial infections that could compromise fertility.

Zinc is indispensable for preserving the integrity of the epithelial lining within the male reproductive organs. It may also play a regulatory role in processes like capacitation and acrosome reaction, both critical for successful fertilization. Zinc deficiency can impede spermatogenesis, leading to sperm abnormalities. Additionally, it negatively affects serum testosterone levels.

In summary, zinc emerges as a crucial micronutrient for male fertility. Its diverse properties and functions position it as a vital nutrient marker with significant potential applications in the prevention, diagnosis, and treatment of male infertility.



Research indicates that vitamin B12 plays a significant role in enhancing sperm motility, increasing sperm concentration, and preventing DNA damage in sperm cells. There are also suggestions from studies that B12 deficiency might be linked to issues like premature ejaculation and a decrease in libido.

It's important to note that B12 is a water-soluble vitamin, meaning the body cannot store it. Therefore, ensuring an adequate intake of B12 is crucial, especially for individuals attempting to conceive. Those at a higher risk of B12 deficiency include the elderly, diabetics, strict vegans, and individuals who have been using antacid medications for an extended duration to manage heartburn.

Foods rich in vitamin B12 include chicken, eggs, milk, beef, and various seafood such as mussels, crab, and salmon. While supplements are an option, it's essential to exercise caution and not exceed the recommended daily dosage, as excessive intake can have both benefits and potential risks.

Fertility First recommends maintaining a healthy diet and lifestyle when undergoing fertility treatments, and consulting with your fertility clinic or referring to guidelines from health authorities when in doubt about supplementation.

# UNIEN Sperior

#### Vitamin B12





# UNIEN Sperior

#### Folic Acid (5-MTHF)

Some studies have hinted at a connection between folic acid intake and male fertility. For instance, a study conducted by Dr. Wai Yee Wong at the University Medical Center Nijmegen in the Netherlands focused on men dealing with male factor infertility. Their research found that those who took folic acid and zinc supplements for 26 weeks experienced a 74% increase in normal sperm count, suggesting that folic acid could enhance sperm quality and reduce the risk of abnormalities that might hinder conception.

On the other hand, a larger double-blind study published in the Journal of the American Medical Association in 2020 examined couples planning infertility treatments and found no evidence of increased live birth rates among men taking zinc/folic acid supplements.

In summary, male fertility is a complex issue, and it's advisable to begin with a semen evaluation to pinpoint the specific causes of fertility challenges. Your doctor can then recommend appropriate treatments or management strategies based on their findings.

While the direct impact of folic acid on male fertility remains uncertain, it's worth noting that folic acid is essential for overall health and represents a cost-effective preventive measure. Therefore, your doctor may still suggest folic acid supplements if you have nutritional deficiencies or issues with sperm quality, even if the direct effect on fertility is not clearly established.





Selenium deficiency is a common issue in various parts of the world, especially in regions where the soil and food sources lack an adequate amount of selenium. Research has indicated that low selenium levels are linked to reduced fertility in both men and women. In men, insufficient selenium can lead to impaired sperm production, motility, and sperm shape, while women may experience irregular menstrual cycles and reduced follicle production.

Additionally, selenium plays a critical role in the development and functioning of the reproductive system. It is involved in DNA synthesis and shielding cells from oxidative damage, which is crucial for the well-being of reproductive cells. Selenium also contributes to the regulation of thyroid hormones, which are vital for reproductive health. Hence, individuals attempting to conceive should ensure they maintain sufficient selenium levels through their diet or supplementation.

Numerous studies consistently demonstrate that selenium significantly influences male fertility, as higher selenium levels are associated with enhanced sperm quality and motility. Selenium is believed to safeguard sperm cells from oxidative harm, preventing DNA damage and increasing the likelihood of successful conception. Furthermore, research shows that supplementing with selenium can markedly improve sperm count and lower the risk of infertility.

Beyond its positive impact on male fertility, selenium offers various other health benefits. As an essential mineral and antioxidant, selenium helps protect cells against damage caused by free radicals. Additionally, selenium has been linked to a reduced risk of specific cancers, including prostate cancer. Nevertheless, it's crucial to bear in mind that excessive selenium intake can be harmful. Therefore, it is advisable to adhere to the recommended daily intake and avoid exceeding it.

# UNIEN Sperior

#### Selenium





#### INGREDIENTS

Active Hexose Correlated Compound	200	mg
<u>Camellia Sinensis Extract</u>	150	mg
<u>Quercetin</u>	150	mg
<u>Diindolylmethane</u>	100	mg
<u>Vitamin C</u>	80	mg
<u>Cinnamomum Zylanicum Extract</u>	50	mg
<u>Glycyrrhiza Glabra Extract</u>	50	mg
<u>Vitamin A</u>	800	mcg
<u>Folic Acid (5-MTHF)</u>	400	mcg
<u>Selenium</u>	200	mcg

Quercetin





The study, led by Dr. Judith A. Smith, demonstrated that treating cervical cancer cells with AHCC resulted in the elimination of HPV and a reduction in tumor growth rates in vitro (in a controlled environment) and in vivo (in live subjects), as presented at the 45th Annual Meeting on Women's Cancer by the Society of Gynecological Oncology in Tampa, Florida.

In the research, cervical cancer cells underwent treatment with AHCC and were incubated for 72 hours, with samples collected every 24 hours. The study was then replicated in two orthotopic mouse models: one with HPV (human papillomavirus) and the other as an HPV-negative control. HPV expression was effectively eradicated by administering AHCC once daily for 90 days, with a sustained response observed after a 30-day observation period following treatment cessation. Smith subsequently replicated the study to validate the findings and included sample collection for correlational testing of immune markers to understand how AHCC eliminates the HPV virus.

Dr. Smith expressed her optimism about the results, noting that this study, initiated in 2008, indicates that AHCC alone has the potential to treat HPV infections. Her previous research involved assessing the integration of AHCC with standard chemotherapy agents used for ovarian cancer treatment to evaluate potential drug interactions and treatment enhancements.

AHCC is a widely used and well-tolerated nutritional supplement with a long history of use in Japan. Dr. Smith is enthusiastic about exploring a nutritional approach to addressing HPV infections through her research, which focuses on drug development for gynecologic cancers and conditions, emphasizing drug interactions, drug resistance, and the integration of herbal and nutritional supplements for cancer treatment.

# UNIEN Quercetin

### Active Hexose Correlated Compound





# UNIEN Quercetin

#### **Camellia Sinensis**



Green Tea, scientifically known as Camellia sinensis, contains polyphenols, natural plant compounds with health benefits. These polyphenols, particularly epigallocatechin gallate (EGCG) and polyphenol E, are effective in enhancing the immune system's response to HPV (human papillomavirus). They have been found to be particularly useful in treating cervical lesions and warts caused by HPV.

Research into the mechanism of action of green tea extract on HPV cells has revealed that EGCG and polyphenol E can inhibit the growth and spread of HPV-related cancer cells, particularly those in cervical epithelial tissue. This inhibition effect is more pronounced in squamous cells than in adenocarcinoma cells, with EGCG showing a stronger growthinhibiting effect than polyphenol E.

A South Korean study involving 51 patients with varying degrees of cervical dysplasia investigated the use of green tea extracts, including polyphenol E and EGCG, administered as either an ointment or capsules. The ointment was applied topically to half of the participants twice a week, while the other group received oral capsules containing 200 mg daily for 8-12 weeks.

The results indicated a significant reduction of 69% in cervical dysplasia lesions among patients treated with green tea extracts, in contrast to only a 10% improvement in the group that did not receive green tea treatment. The participants who used the ointment showed slightly better responses.

## Quercetin

Flavonoids are a group of natural phenolic compounds found in plants, fruits, and vegetables. They are known for their potential as anticancer agents due to various properties such as inducing apoptosis (cell death), reducing oxidative stress, inhibiting angiogenesis (blood vessel formation), and enhancing DNA repair. Quercetin, a prominent flavonoid, has shown promise in therapeutic applications, particularly in combating human papillomavirus (HPV)-related cancers by inhibiting the E6 oncoprotein.

HPV is a virus known for causing proliferative lesions on the skin and mucous membranes, primarily linked to cervical cancer, which accounts for a significant number of cancer-related deaths in women. Despite the availability of preventive vaccines against HPV, challenges in their distribution in less developed countries and anti-vaccination movements have led to cervical cancer remaining a major health concern.

The oncogenic role of HPV is closely associated with two viral oncoproteins, E6 and E7, which inhibit tumor suppressor pathways, including p53 and pRb. This inhibition results in the transformation and immortalization of infected cells. Current cervical cancer treatments, such as surgery, radiation, and chemotherapy, have limited success rates and significant side effects, especially in severe cases, making them less accessible in resource-constrained settings.

Quercetin, in particular, has shown the ability to interact with the E6 oncoprotein, inhibiting its function, increasing p53 protein levels, and inducing apoptosis. However, quercetin faces limitations related to its low solubility, stability, intestinal permeability, and susceptibility to degradation in acidic environments, resulting in poor bioavailability. Consequently, researchers are exploring various delivery systems to enhance quercetin's bioavailability and therapeutic potential.

# UNIEN Ouercetin

#### Quercetin





# UNIEN Quercetin

#### Diindolylmethane

Indole-3-carbinol (I3C) and its derivative 3,3'-diindolylmethane (DIM), which are naturally found in cruciferous vegetables, possess various beneficial properties. Both compounds have shown clinical effectiveness in treating precancerous cervical lesions and laryngeal papillomas, which involve the human papillomavirus (HPV).

To understand the early effects of DIM treatment, researchers used cDNA microarrays to analyze changes in gene expression in cervical cancer cells (C33A and CaSki), an immortalized human epithelial cell line (HaCat), and normal human foreskin keratinocytes (HFK). Cells were treated with DIM for different durations.

The results consistently revealed that DIM altered the expression of over 100 genes by at least twofold. These genes primarily encoded transcription factors and proteins involved in signaling, stress responses, and growth. Notably, DIM induced the expression of several bZip proteins, including the stress-associated gene GADD153 and nuclear factor-interleukin 6 (NF-IL6 or c/EBPβ). NF-IL6 is known to reduce the expression of HPV oncogenes. Western analysis confirmed the induction of GADD153, NF-IL6, and ATF3.

Functionally, DIM not only suppressed the transcription of a luciferase gene driven by the HPV11 upstream regulatory region (URR) in various cell types but also reduced endogenous transcription of HPV16 oncogenes to undetectable levels in CaSki cells. Ectopic expression of GADD153 or NF-IL6 effectively suppressed transcription driven by the HPV11 URR in multiple cell types. These findings suggest that dietary I3C and DIM can elicit cellular responses and potentially have antiviral effects on keratinocytes, although they do not explain why transformed keratinocytes exhibit varying sensitivity to DIM-induced apoptosis.





Human papillomavirus (HPV) is highly prevalent and can often be cleared by the immune system, but persistent HPV infection is linked to more than 5% of cancer cases. While there are effective HPV vaccines, preventing HPV infections remains a challenge. Vitamin C is a natural nutrient known for its ability to prevent, shorten, and alleviate various infections. Previous research has shown that a diet rich in vitamin C is associated with a reduced risk of persistent HPV infection, while low dietary vitamin C intake increases the risk of HPV infection.

This cross-sectional study, conducted on a larger sample size, aimed to explore the relationship between vitamin C levels and cervicovaginal HPV infection. The study involved 2,174 women aged 18 to 59. Researchers collected and measured serum vitamin C levels and assessed HPV infection by extracting HPV DNA from self-collected vaginal swabs. Various factors, including age, race, education, marital status, income, health status, insurance, alcohol consumption, sexual activity, BMI, and other vitamin levels, were considered in the analysis.

After adjusting for these factors, the study found that the relationship between vitamin C and HPV infection was not straightforward but rather showed a U-shaped curve. In women under 25, vitamin C levels were not associated with HPV infection, while in women over 25, higher vitamin C levels were negatively linked to HPV infection. This may be due to a higher prevalence of HPV infection and better clearance in those under 25. Overall, there was no significant association between serum vitamin C levels and HPV infection risk.

While this study did find some association between adequate vitamin C levels and HPV infection risk reduction in women aged 25-59, these results were not statistically significant. Further research is needed to investigate the link between vitamin C and HPV persistence and to better understand the biochemical mechanisms through which vitamin C may protect against HPV infection.

# UNIEN Ouercetin

#### **Vitamin C**





# UNIEN Quercetin

Cinnamomum Zeylanicum Dr. Milton Schiffenbauer, along with colleagues from the New York School of Career and Applied Studies, conducted a study comparing Saigon and Ceylon cinnamons, both varieties grown in South Asia, to various other botanical extracts like onion, garlic, cloves, peppermint, cocoa, and Spanish saffron.

Their research revealed that cinnamon had the ability to deactivate viruses in certain organisms, while the other extracts did not exhibit any antiviral effects. The team tested these extracts against Phi X, a virus that infects bacteria and shares similarities with viruses that affect animals and humans.

They found that an extract containing 10 percent cinnamon could deactivate 99.9 percent to 100 percent of the virus after just 10 minutes of intermittent mixing. These results were confirmed after 24 hours of incubation.

Dr. Schiffenbauer explained that the evidence suggests cinnamon works by damaging the structure of the Phi X virus. He believes this study validates the idea that including a tablespoon of cinnamon in one's daily diet, once or twice a day, can be an effective way to eliminate or prevent viral infections in humans, such as the common cold, flu, and even herpes.





Licorice, a herb with a long history of use, serves various purposes today. It is employed to alleviate conditions such as acid reflux, hot flashes, and viral infections. In addition to its potential in treating these issues, licorice has demonstrated anti-inflammatory and antimicrobial properties beneficial for certain skin conditions. Research has indicated that topical application of licorice root extract can improve eczema. Moreover, licorice has shown antiviral activity against HSV-1 in laboratory settings.

Cervical Cancer: Isoliquiritigenin (ISL), a flavonoid found in licorice, has demonstrated promise in cell line studies by reducing cancer cell growth and promoting apoptosis (cell death). ISL may hold potential for treating cervical cancer. Breast Cancer: Globally, breast cancer is a significant cause of mortality in women. ISL has shown the ability to inhibit the development of breast cancer by enhancing apoptosis in cancer cells and inhibiting proteins like vascular endothelial growth factor receptor 2/vascular endothelial growth factor that are active in cancer cells.

Liver Cancer (in Adults): ISL has displayed anticancer benefits in liver cancer among adults. It has exhibited chemoprotective effects in animal models and reduced the risk of liver cancer. ISL's antioxidant properties help reduce oxidative stress caused by cancer cells and impede their growth.

Colon Cancer: Administration of licorice extract has led to a significant reduction in tumor development in colon cancer cells in animal trials. Licorice extract may serve as a chemoprotective agent in managing colon cancer.

While preliminary studies have suggested the possible utility of licorice in addressing different types of cancer, particularly in laboratory-scale experiments, further research is essential to confirm its effectiveness against human cancer. Therefore, it is crucial to follow medical advice and treatments diligently.

In summary, licorice shows promise in potentially addressing various types of cancer, but further research is necessary to validate its efficacy for human cancer treatment. Always follow medical guidance and treatments for cancer management.

# UNIEN Ouercetin

#### **Glycyrrhiza Glabra**





# UNIEN Quercetin

#### **Vitamin A**



Oncogenic human papillomavirus (HPV) infection is the primary cause of cervical neoplasia, but it typically requires additional factors, such as nutritional elements, to progress to disease. Previous studies have hinted that increased intake and levels of specific micronutrients could offer protection against cervical neoplasia. This study aimed to investigate the influence of vitamin A and carotenoids on HPV persistence by comparing women with intermittent and persistent HPV infections.

The study assessed oncogenic HPV infections using the Hybrid Capture II system at baseline, approximately 3 months, and around 9 months post-baseline. Multivariate logistic regression analysis was employed to determine the risk of persistent HPV infection associated with each tertile of dietary and circulating micronutrients.

It is common for women with HPV and/or dysplasia to have a deficiency in vitamin A, which is known for its antiviral properties. Vitamin A is also crucial for promoting healthy cell function, particularly when trying to generate new, normal cells on the cervix. While many individuals attempt to obtain their vitamin A from beta-carotene supplements, some people may have genetic factors that hinder the effective conversion of beta-carotene into Vitamin A. This explains why, in clinical nutrition and naturopathic medicine, vitamin A is often directly utilized. However, it's essential to be aware that vitamin A is a fat-soluble hormone, similar to vitamin D, meaning it can accumulate in your system over time. This is why you may come across warnings about vitamin A.

It's important to understand that there is a safe and effective approach to use vitamin A to combat HPV and support the healing of your cervix or vaginal cells.

Human Papillomavirus has become a significant cause of cervical changes in young women, with its prevalence continuously increasing, reaching epidemic proportions, and millions of new cases reported annually. For the best results, it is advisable to collaborate with a practitioner who can guide you in using clinical doses for a short period, typically 3 to 6 months, and to consistently monitor how you feel, making adjustments as necessary.





Folate is a vital nutrient that has been extensively studied in its relation to HPV

Folate's significance in the context of HPV is likely linked to the methylation cycle, which is responsible for ensuring the normal functioning of our genes.

Current research has shed light on the connection between low blood folate levels and high-risk HPV infections, particularly in the development of cervical dysplasia.

Studies have shown that individuals with a deficiency in folate face an elevated risk of testing positive for HPV and a higher likelihood of progressing to cervical and oral cancers. Conversely, women with higher plasma folate and B12 levels who tested positive for HPV-16 were found to be 60-75% less likely to be diagnosed with moderate cervical dysplasia.

Key research findings on the role of folate in HPV include:

- A 2003 study by Hernandez et al. indicated that women with the highest blood folate levels, whether from dietary sources or supplements, had lower rates of cervical dysplasia caused by HPV.
- A 2016 case-control study by Zhao et al., involving 271 controls and 214 women with both high and low-grade HPV lesions, revealed that low blood folate levels were associated with a higher risk of cervical cancer resulting from HPV.

Scientific evidence strongly suggests that folic acid plays a protective role in preventing HPV progression to cervical cancer.

Papillex, a dietary supplement, contains folate among other essential nutrients. A daily serving of Papillex provides the equivalent of the folate content in 5 ounces of poultry liver, 4 cups of chickpeas, or 40 spears of asparagus.

# UNIEN Ouercetin

### Folic Acid (5-MTHF)





# UNIEN Quercetin

#### Selenium

Cervical cancer is a common form of cancer in women, and its development is strongly associated with human papillomavirus (HPV) infection. However, HPV infection alone is not enough to trigger cervical cancer; it requires the presence of various factors that enable the virus to evade the host's immune system. These factors encompass an individual's genetic background, environmental influences, and even dietary factors, including selenium intake.

Selenium, a crucial trace element with antiviral properties and demonstrated anti-tumor effects, has not been extensively studied in the context of cervical cancer, unlike in some other cancer types. In this summary, we have compiled existing experimental data on selenium and its potential role in cervical cancer. This information can be valuable in assessing the significance of this nutrient in treating cervical cancer and in guiding future research in this field.

Numerous studies have explored the relationship between dietary factors and cervical cancer, either identifying them as promoters or inhibitors of carcinogenesis. Selenium, an essential trace element and a component of the intracellular antioxidant enzyme glutathione peroxidase, has shown protective effects against cancer development. Recent investigations have suggested that a decreased serum antioxidant system activity and lower serum levels of micronutrients like selenium and Vitamin E are associated with an increased risk of premalignant cervical conditions.

In Sub-Saharan Africa, where there is widespread poverty (a risk factor for micronutrient deficiency) and the highest global incidence of cervical cancer, the implementation of a population-based screening and treatment program for cervical cancer control has been hindered due to resource shortages and a fragile healthcare infrastructure. Similarly, there is a lack of published data on the relationship between HPV infection, micronutrients such as selenium, and the development of cervical cancer in the African context.



#### **Complex & Basic Vitamin Supplements**

Vitamins are organic chemicals that your body need in order to function. Varied vitamins perform different functions, ranging from boosting your immune system to strengthening your bones. Vitamins are most often found in food, which is why a well balanced diet contains a range of foods that you should eat each day. However, if there are some items you don't want or can't have in your diet, or if you have a health condition that causes your vitamin levels to drop, you can take vitamin supplements. All human bodies require 13 key vitamins to function properly. Each has a distinct purpose and metabolizes differently. Despite their differences, each is essential for your body's growth and wellbeing.

#### Aging Process

As we age, our bodies may become less efficient at absorbing and utilizing vitamins from food. Additionally, older adults may have reduced appetites or dietary restrictions that make it challenging to obtain sufficient nutrients from food alone. Supplements can help address these issues and support overall health in aging populations.

#### Specific Health Conditions

Vitamins are involved in a wide range of bodily processes, including energy production, immune function, bone health, and skin maintenance. They act as coenzymes, which means they assist enzymes in catalyzing essential reactions in the body. Without adequate vitamins, these processes can be compromised, leading to various health issues.

#### Nutrient Gaps

In an ideal world, everyone would consume a balanced diet that provides all the necessary vitamins in the right quantities. However, due to busy lifestyles, dietary restrictions, and food preferences, many people fail to meet their vitamin requirements solely through diet. Vitamin supplements can help fill these nutrient gaps and ensure you get the vitamins your body needs.

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#### Why Vitamins Matter

Certain medical conditions can interfere with nutrient absorption or increase the body's demand for specific vitamins. For example, individuals with celiac disease may have difficulty absorbing vitamin D and B12. Pregnant women often need more folic acid, while the elderly may require additional vitamin B12. In such cases, vitamin supplements prescribed by a healthcare professional can be vital to maintaining health.





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INGREDIENTS	100	
<u>Vitamin C</u>	50	mg
<u>Sambacus Nigra Extract</u>	20	mg
<u>Colostrum</u>	10	mg
<u>Thymus Extract</u>	10	mg
<u>Beta Glukan</u>	10	mg
<u>Vitamin B5</u>	3	mg
<u>Vitamin B3</u>	3	mg
<u>Zinc</u>	2.5	mg
<u>Vitamin B1</u>	1	mg
<u>Vitamin B12</u>	1	mg
<u>Vitamin B6</u>	1	mg
<u>Vitamin B2</u>	500	mcg
<u>Selenium</u>	100	mcg
<u>Folic Acid</u>	80	mcg
<u>Vitamin D3</u>	10	mcg

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## UNIEN StroPlus

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Supported with Colostrum, Beta Glukan, Vitamin C and Sambucus Nigra

#### Healthy, Reliable and Supplementary Products

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INGREDIEN

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Supported with Colostrum, Beta Glukan, Vitamin C and Sambucus Nigra

## Vitamin C

- Antioxidant Properties
- Immune System Support
- Collagen Production
- Iron Absorption
- Brain Health

## Sambacus Nigra

Sambucus nigra, or European elder, is a versatile plant with both culinary and potential medicinal uses. Its berries are known for their unique flavor and are used various culinary applications. in Additionally, elderberries have a history of traditional use for their potential health benefits, but precautions should be taken when using parts of the plant that contain potentially toxic compounds.

### Colostrum

- Rich in Nutrients
- High in Antibodies
  - (Immunoglobulins)
- Growth Factors
- Low in Fat
- Laxative Properties

#### Thymus

Thymus extract supplements are marketed as immune-boosting products, but their efficacy and safety are not wellestablished. While some individuals may choose to explore these supplements as part of their health regimen, it is essential to consult with a healthcare professional to weigh the potential benefits and risks and to consider alternative approaches to immune health that have stronger scientific support.





#### **Beta Glucan**

Beta-glucans are complex carbohydrates found in various natural sources, known for their potential health benefits, particularly in supporting the immune system and cardiovascular health. They are commonly found in oats, barley, mushrooms, and yeast and are available as supplements. As with any dietary supplement or dietary change, it's advisable to consult with a healthcare provider for personalized guidance based on your individual health needs and goals.

## Vitamin B5

- Energy Metabolism
- Fatty Acid Synthesis
- Synthesis of
  - Acetylcholine
- Cellular Metabolism
- Skin Health

### Vitamin B3

- Energy Metabolism
- DNA Repair
- Cell Signaling
- Skin Health
- Cholesterol Regulation

### Zinc

- Enzyme Cofactor
- Immune Function
- Growth and
  - Development
- Wound Healing
- Reproductive Health

## Vitamin B1

- Energy Metabolism
- Nerve Function
- Heart Health
- Brain Health
- Digestive Health

## Vitamin B12

- Red Blood Cell
  - Formation
- DNA Synthesis
- Nerve Function
- Energy Metabolism
- Homocysteine

Regulation

## Vitamin B6

- Metabolism
- Neurotransmitter Synthesis.
- Hemoglobin Production
- Immune Function
- Hormone Regulation
- Brain Development and Function

## Vitamin B2

- Energy Metabolism
- Antioxidant Activity
- Cell Growth and Repair
- Eye Health
- Skin Health





### Selenium

- Antioxidant Defense
- Thyroid Function
- Immune System
- Support
- DNA Repair
- Reproductive Health

## Folic Acid

- DNA Synthesis
- Cell Division
- Red Blood Cell Formation
- Homocysteine
  - Regulation

### Vitamin D3

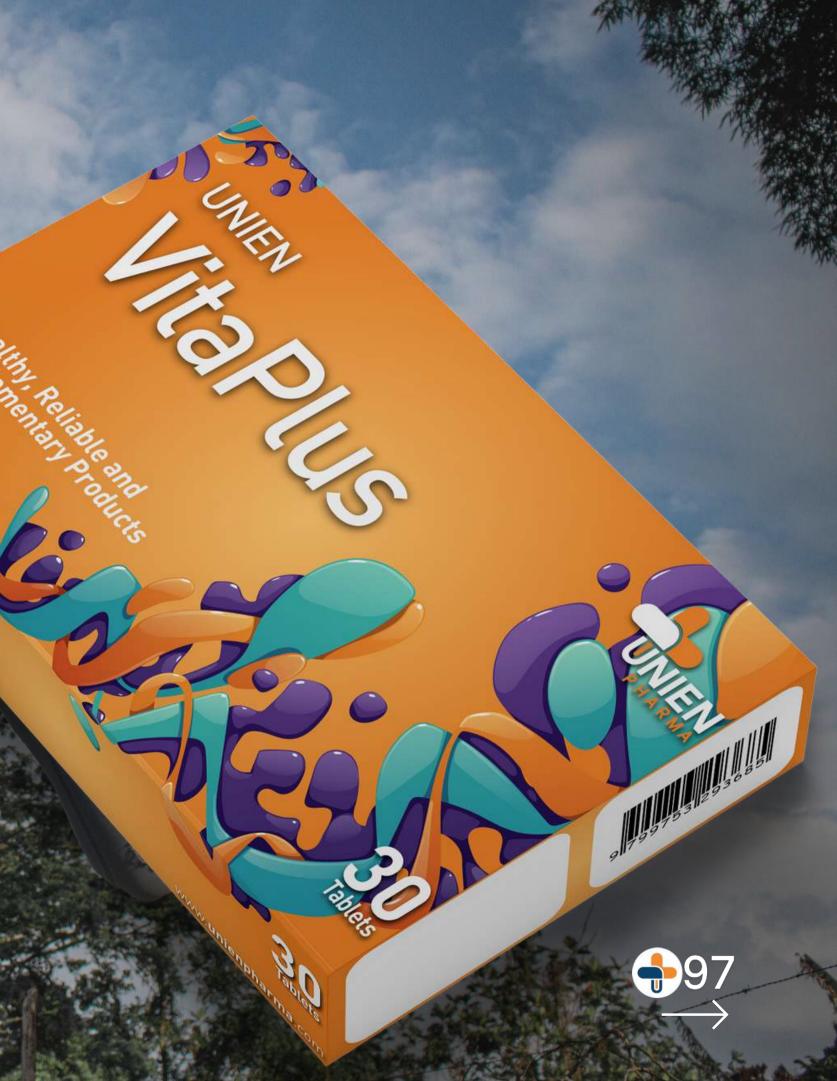
- Bone Health
- Immune System Support
- Calcium and Phosphorus Regulation
- Cell Growth and Differentiation
- Mood and Mental Health

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INGREDIENTS		
<u>Panax Ginseng</u>	300	mg
<u>Magnesium (Magnesium Taurat)</u>	60	mg
Vitamin C	50	mg
<u>Sambacus Nigra Extract</u>	20	mg
<u>Colostrum</u>	10	mg
<u>Beta Glukan</u>	10	mg
<u>Iron (Ferroz Bisglisinat)</u>	10	mg
Zinc	8	mg
<u>Vitamin E</u>	5	mg
<u>Vitamin B5</u>	3	mg
<u>Vitamin B3</u>	3	mg
<u>Vitamin B2</u>	2	mg
<u>Vitamin B1</u>	1	mg
<u>Vitamin B6</u>	1	mg
<u>Vitamin B12 (Methylkobalamin)</u>	1000	mcg
<u>Folic Acid (5-MTHF)</u>	400	mcg
<u>Vitamin A</u>	300	mcg
<u>Selenium</u>	100	mcg
<u>Vitamin K2</u>	60	mcg
Vitamin D3	20	mcq

Food Supplement





## Panax Ginseng

Ginseng is an herbal remedy with a long history of traditional use and potential health benefits, including adaptogenic properties, improved energy and stamina, immune support, and antioxidant effects. However, individual responses to ginseng can vary, and it's important to consult with a healthcare provider before using ginseng supplements, especially if you have specific health concerns or are taking medications. Additionally, more research is needed to fully understand the extent of its benefits and potential side effects.

## Magnesium Taurate

It's important to note that while magnesium taurate may offer potential health benefits, individual responses to supplements can vary. If you are considering magnesium taurate supplementation, it's advisable to consult with a healthcare professional, especially if you have specific health concerns or are taking medications, to ensure it is appropriate for your needs and to determine the correct dosage. Additionally, a balanced diet that includes magnesium-rich foods, such as leafy greens, nuts, and whole grains, is a good way to maintain adequate magnesium levels in the body.

### Vitamin C

- Antioxidant Properties
- Immune System Support
- Collagen Production
- Iron Absorption
- Brain Health

## Sambacus Nigra

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- High in Antibodies (Immunoglobulins)
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- Laxative Properties

## Beta Glukan

Beta-glucans are complex carbohydrates found in various natural sources, known for their potential health benefits, particularly in supporting the immune system and cardiovascular health. They are commonly found in oats, barley, mushrooms, and yeast and are available as supplements. As with any dietary supplement or dietary change, it's advisable to consult with a healthcare provider for personalized guidance based on your individual health needs and goals.

## Iron (Ferrous **Bisglycinate**)

Ferrous bisglycinate is a chelated form of iron that is known for its improved absorption and reduced gastrointestinal side effects compared to other iron supplements. It is commonly prescribed to address iron deficiency and irondeficiency anemia under the guidance of a healthcare provider. It is important to follow healthcare provider recommendations regarding iron supplementation to ensure safe and effective use.

## Zinc

- Enzyme Cofactor
- Immune Function
- Growth and
  - Development
- Wound Healing
- Reproductive Health





### Vitamin E

- Antioxidant Protection
- Immune System Support
- Skin Health
- Heart Health
- Eye Health
- Neurological Health

## Vitamin B5

- Energy Metabolism
- Fatty Acid Synthesis
- Synthesis of
- Acetylcholine
- Cellular Metabolism
- Skin Health

## Vitamin B2

- Energy Metabolism
- Antioxidant Activity
- Cell Growth and Repair
- Eye Health
- Skin Health

## Vitamin B1

- Energy Metabolism
- Nerve Function
- Heart Health
- Brain Health
- Digestive Health

## Vitamin B6

- Metabolism
- Neurotransmitter Synthesis.
- Hemoglobin Production
- Immune Function
- Hormone Regulation
- Brain Development and Function

## Vitamin B12

- Red Blood Cell Formation
- DNA Synthesis
- Nerve Function
- Energy Metabolism
- Homocysteine Regulation

## Folic Acid (5-MTHF)

- Active Folate Form
- Role in Methylation
- Neural Tube Development
- Homocysteine Regulation
- Mood and Mental Health

## Vitamin A

- Vision
- Immune Function
- Skin Health
- Cell Growth and
  - Differentiation
- Reproduction





## Selenium

- Antioxidant Defense
- Thyroid Function
- Immune System Support
- DNA Repair
- Reproductive Health

## Vitamin K2

- Blood Clotting
- Bone Health
- Cardiovascular

Health

## Vitamin D3

- Bone Health
- Immune System Support
- Calcium and Phosphorus Regulation
- Cell Growth and Differentiation
- Mood and Mental Health

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#### INGREDIENTS

<u>Vitamin C</u>	1000	mg
Sambacus Nigra Extract	150	mg
Zinc	25	mg
Stevia Rebudiana Extract	30	mg



# UNIEN Vit C+





### Vitamin C

- Antioxidant Properties
- Immune System Support
- Collagen Production
- Iron Absorption
- Brain Health

## Sambacus Nigra

Sambucus nigra, or European elder, is a versatile plant with both culinary and potential medicinal uses. Its berries are known for their unique flavor and are used various culinary applications. Additionally, elderberries have a history of traditional use for their potential health benefits, but precautions should be taken when using parts of the plant that contain potentially toxic compounds.

### Zinc

- Enzyme Cofactor
- Immune Function
- Growth and Development
- Wound Healing
- Reproductive Health

Vit C+

## Stevia Rebudiana

- Natural Sweetener
- Zero Calories
- Low Glycemic Impact
- Non-Cariogenic
- Heat-Stable
- Safe for Most People

# **Basic Vitamin Supplements**

#### INGREDIENTS Biotin

2

mg



## UNIEN Biotin

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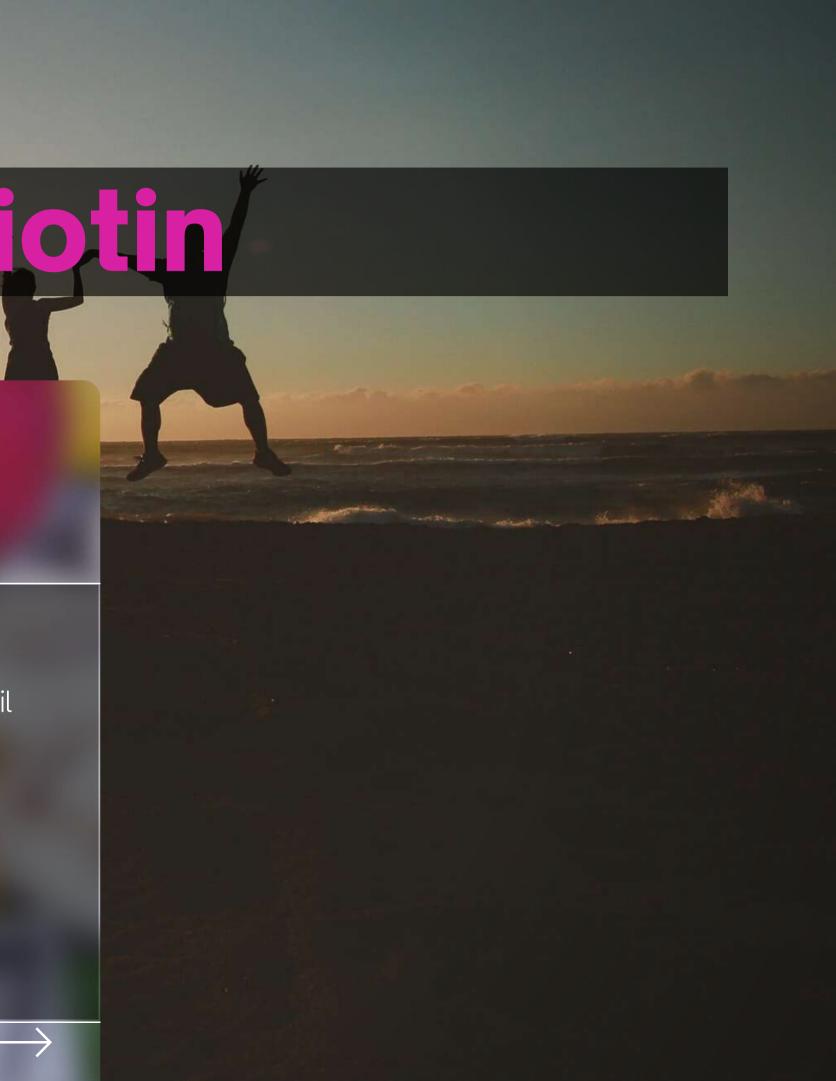
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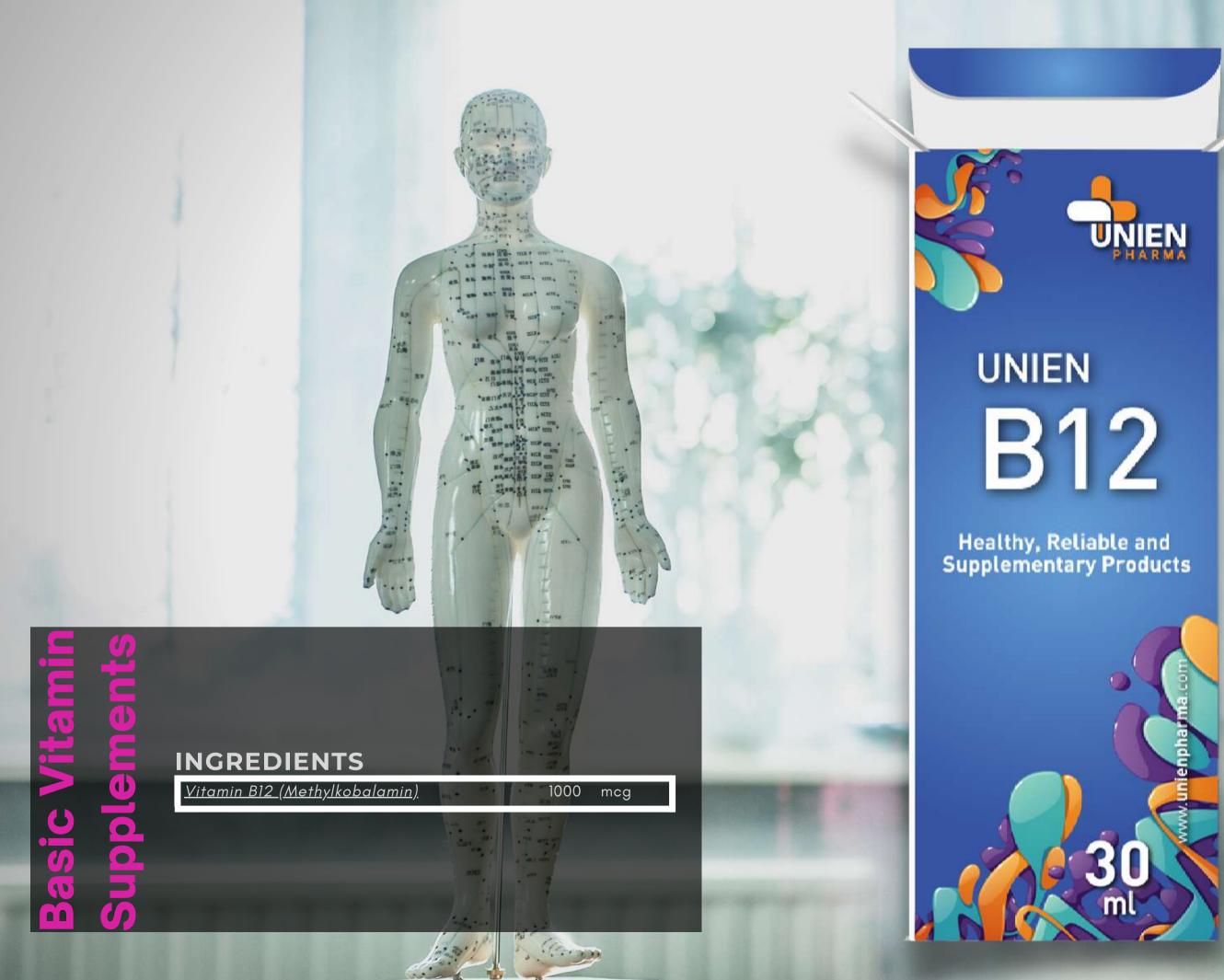


## Biotin

B

- Metabolism
- Hair, Skin, and Nail Health
- Cell Growth and Repair
- Blood SugarRegulation











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# UNIEN B1

- Red Blood Cell
   Formation
- DNA Synthesis
- Nerve Function
- Energy Metabolism
- Homocysteine Regulation



# Basic Vitamin Supplements ents

### INGREDIENTS

<u>Vitamin K2</u>	60	mcg
<u>Vitamin D3</u>	24	mcg





# UNIEN Vit D3K2

Healthy, Reliable and Supplementary Products





### UNIEN Vit D3K2

5

Healthy, Reliable and Supplementary Products

20 ml





# UNIEN D3K2

### Vitamin D3

- Bone Health
- Immune System Support
- Calcium and Phosphorus Regulation
- Cell Growth and Differentiation
- Mood and Mental Health

# Vitamin K2

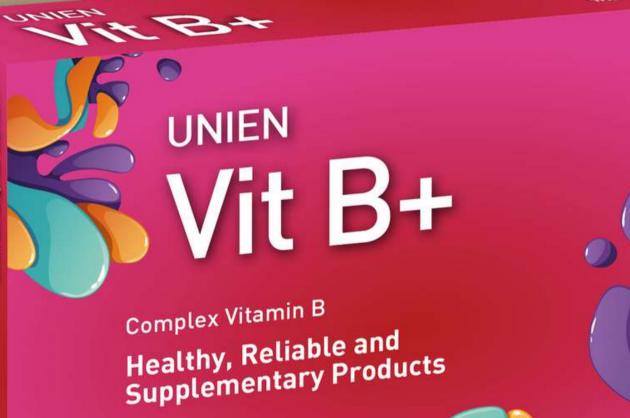
- Blood Clotting
- Bone Health
- Cardiovascular
  - Health

# **Basic Vitamir** ent em Supple

### INGREDIENTS

<u>Vitamin B5</u>	1.1	mg
<u>Vitamin B3</u>	1.4	mg
<u>Vitamin B2</u>	16	mg
<u>Vitamin B1</u>	6	mg
<u>Vitamin B6</u>	1.4	mg
<u>Vitamin B12 (Methylkobalamin)</u>	400	mcg

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20

Tablets

UNIEN

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# UNIEN Vit B+

### Vitamin B5

- Energy Metabolism
- Fatty Acid Synthesis
- Synthesis of
  - Acetylcholine
- Cellular Metabolism
- Skin Health

### Vitamin B3

- Energy Metabolism
- DNA Repair
- Cell Signaling
- Skin Health
- Cholesterol Regulation

# Vitamin B2

- Energy Metabolism
- Antioxidant Activity
- Cell Growth and Repair
- Eye Health
- Skin Health

- Energy Metabolism
- Nerve Function
- Heart Health
- Brain Health
- Digestive Health

# UNIEN Vit B+

### Vitamin B6

- Metabolism
- Neurotransmitter Synthesis.
- Hemoglobin Production
- Immune Function
- Hormone Regulation
- Brain Development and Function

- Red Blood Cell Formation
- DNA Synthesis
- Nerve Function
- Energy Metabolism
- Homocysteine Regulation





### INGREDIENTS

<u>Vitamin B12 (Methylkobalamin)</u> Folic Acid (5-MTHF)

200 mcg 400 mcg



Vitamin B12 Healthy, Reliable and Supplementary Products

# UNIEN



31

Tablets

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### Vitamin B12

- Red Blood Cell Formation
- DNA Synthesis
- Nerve Function
- Energy Metabolism
- Homocysteine Regulation

# Folic Acid (5-MTHF)

- Active Folate Form
- Role in Methylation
- Neural Tube Development
- Homocysteine Regulation
- Mood and Mental Health





# Basic Vitamin Supplements

### INGREDIENTS

<u>Panax Ginseng</u>

500 mg

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# unien Ginseng

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30 Tablets

Healthy, Reliable and Supplementary Products

# UNIEN Ginseng

# Panax Ginseng

Ginseng is an herbal remedy with a long history of traditional use and potential health benefits, including adaptogenic properties, improved energy and stamina, immune support, and antioxidant effects. However, individual responses to ginseng can vary, and it's important to consult with a healthcare provider before using ginseng supplements, especially if you have specific health concerns or are taking medications. Additionally, more research is needed to fully understand the extent of its benefits and potential side effects.





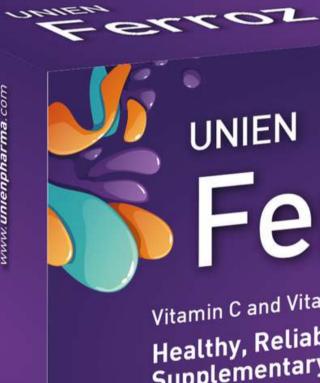
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### INGREDIENTS

<u>Iron (Ferroz Bisglisinat)</u>	17	mg
<u>Vitamin C</u>	200	mg
<u>Copper</u>	1	mg
<u>Vitamin B12 (Methylkobalamin)</u>	50	mcg

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unien Ferroz

Vitamin C and Vitamin B12 Healthy, Reliable and Supplementary Products NIEN

30 Capsule

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# **UNIEN Ferroz**

# Iron (Ferrous **Bisglycinate**)

Ferrous bisglycinate is a chelated form of iron that is known for its improved absorption and reduced gastrointestinal side effects compared to other iron supplements. It is commonly prescribed to address iron deficiency and irondeficiency anemia under the guidance of a healthcare provider. It is important to follow healthcare provider recommendations iron regarding supplementation to ensure safe and effective use.

# Vitamin C

- Antioxidant Properties
- Immune System Support
- Collagen Production
- Iron Absorption
- Brain Health

# Copper

- Enzyme Activation
- Iron Metabolism
- Connective Tissue
  - Formation
- Immune Function
- Neurological Health

- Red Blood Cell Formation
- DNA Synthesis
- Nerve Function
- Energy Metabolism
- Homocysteine Regulation





# UNIER PHARMA

### www.unienpharma.com

# UNIEN PHARMA

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For questions, comments, and inquiries

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