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ESSENTIALS

SUPER ONCE A DAY (Vegan)

Contains nutrients that contribute to the reduction of tiredness and fatigue

Nutritional Information

One Tablet provides:

Vitamin A	750 µg	Copper	1000 µg
Vitamin E (50 i.u.)	34 mg	Molybdenum	25 µg
Vitamin C	150 mg	Chromium	25 µg
Thiamin (B1)	39 mg	Selenium	32.5 µg
Riboflavin (B2)	50 mg	Choline Bitartrate	50 mg
Niacin (B3)	50 mg	Inositol	50 mg
Vitamin B6	41 mg	Methionine	50 mg
Folacin (Folic Acid)	200 µg	PABA	50 mg
Vitamin B12	50 µg	Citrus Bioflavonoids	25 mg
Biotin	50 µg	Lysine HCl	22 mg
Pantothenic Acid	50 mg	Lecithin	40 mg
Calcium	158 mg	Papain	2 mg
(40 mg as mineral amino acid blend)		Rutin	2 mg
Phosphorus	91 mg	Betaine HCl	12 mg
Iron	15 mg	Hesperidin	10 mg
Magnesium	60 mg		
Zinc	10 mg		
Iodine	100 µg		
Manganese	1 mg		

Take one tablet daily with the main meal. Swallow with water.

SUMMARY

- Our comprehensive Super Once A Day without animal derived ingredients.
- A wide spectrum of vitamins, minerals and additional factors.
- One a day dose.
- Patented timed-release formula that provides a steady supply of nutrients over 6 hours.
- With gentle iron and papain for enhanced digestive comfort.

DESCRIPTION

Quest Super Once A Day Vegan is a supplement to support optimal wellbeing and nutrient intake. It is similar to our popular Super Once a Day formula but without vitamin D3 which is not suitable for vegans. Super Once A Day vegan supports the metabolic pathways which generate energy, support immunity and contributes to healthy blood and cardiovascular health. This high potency formula contains 11 vitamins and vitamin-related ingredients, 12 minerals and 12 additional factors to augment dietary intake and to prevent dietary deficiencies. The minerals are chelated to a blend of amino acids to maximise absorption. Contains a gentle form of iron which is less likely to cause constipation or digestive discomfort. This patented timed-release tablet is designed to release nutrients over 6 hours and optimise absorption of water-soluble vitamins.

WHY IS A MULTINUTRIENT IMPORTANT FOR VEGANS

Vegan specific nutrition: Vegan diets have very specific nutrient requirements, and upon analysis they are found to be lower in some nutrients, and higher in others. Typically, vegans consume a much higher level of phytic acid and lectins which are found in beans and grains. Phytic acid has the potential to be anti-nutrient as it easily chelates to essential minerals[1] such as zinc and iron and can transport them out of the body. Phytic acid should not be avoided however as it does have other health benefits. Increased consumption must be supported with a multi-nutrient formula that contains nutrients with enhanced absorption such as amino acid chelates.

Vitamin A: Natural vitamin A is found in animal food only. Most vegans rely on the conversion of beta carotene to vitamin A for their source. The conversion of beta carotene into retinol happens via the enzyme -carotene 15,15-monooxygenase (BCMO1 gene). However, a considerable percentage of the population carry genetic SNP's which slows down this conversion. This is potentially a risk to health when dietary retinol is consumed.[2]

Vitamin B12: Vitamin B12 is not found in its active form in vegan diets. Moreover, attempts of vegans to source B12 from algae and seaweed is problematic. Pseudo vitamin B12 from seaweed and algae competes for absorption with real vitamin B12 yet has no vitamin B12 action within the body. B12 supplementation is essential for vegans.

Calcium: Research suggests that vegans require calcium supplementation due to increased phytic acid consumption which binds to minerals and carries them out of the body. Vegans typically have a lower bone density than non-vegans.[1]

Iodine: Studies suggest that vegans only achieve 40% of their iodine requirements. Therefore supplementation is essential to safeguard against future health complications.[3]

Zinc: Due to lower dietary intakes and increased consumption of phytates, vegans are recommended to safeguard their intake with a dietary supplement. Zinc is essential for many enzymatic processes within the body, including the metabolism and regulation of hormones.

Methionine: Methionine is an amino acid that is found to be low on vegan diets. Methionine contains sulphur and is required for growth and healing.[4]

Lysine: Lysine is another amino acid that vegans should supplement with. It is required for the production of collagen and works in balance with arginine. Found to be low on vegan diets.[4]

B vitamins: Levels tend to be lower in vegan diets, and unless supplementation is taken, diets are devoid of vitamin B12. A combination of B vitamins should be taken daily to support optimum levels and to work synergistically.

Safeguarding total nutrition intake: Super Once A Day vegan is a great way to safeguard nutrition intake. It is hard to consume all the nutrients required each day. Unfortunately, food quality has significantly decreased over the last century due to intensive farming methods, artificial growing environments and the use of pesticides and herbicides leading to lower nutrient status of food. This combined with an increase in toxic exposure and therefore an increased need for nutrients leaves a nutrient deficit.

Modern dietary deficiencies: Another reason for poor nutrient intake is the consumption of processed and refined foods. Refining often takes out nutritional value of foods such as the removal of B vitamins with the refining of flour. Refined foods often cause a spike in blood sugar levels which takes vital nutrient stores such as calcium and magnesium to recreate equilibrium within the body. The consumption and choice of convenience foods has increased over the last 100 years. Convenience foods typically contain a large content of fat, salt and sugar and are generally of lower nutritional value.

Modern lifestyles causative factors: Modern, fast paced and hectic lifestyles often lead to poorer nutrition intake as prepared and convenience food intake increases. Increased stress levels deplete the body of B vitamins, vitamin C and magnesium. A higher consumption of sugar and caffeine is likely with fast paced lifestyles as it serves as quick fuel for a period of high energy demand. This causes a blood sugar spike and loss of nutrition in the process.

WHAT ARE THE BENEFITS OF A DAILY MULTINUTRIENT FOR STRESS AND A HECTIC LIFESTYLE?

Support for a stressful and hectic lifestyle: Vitamin C is released by the adrenal glands alongside stress hormones, which can cause vitamin C levels to become quickly depleted in chronic stress states which then decreases resistance to infection.

Neurotransmitters: Magnesium is required for the production of gamma-aminobutyric acid (GABA), a neurotransmitter that helps to relieve anxiety and fear. One study found that an increase in magnesium levels in the brain led to decreased fear[5]. Another animal study found that decreased magnesium levels were a direct cause of anxiety[6]. Stress itself increases the need for magnesium[6], further potentiating the situation. Molybdenum is a trace mineral required for many enzymatic processes within the body, including for the breakdown of amino acids. These amino acids are then used in many other functions of the body such as for the production of neurotransmitters including serotonin which helps us to deal with stress.

Energy production: Super Once A Day contains a potent level of nutrients such as the B vitamins required directly for the energy production cycle, also called the Krebs cycle. Insufficient intake of B vitamins can impair energy production and cause fatigue. Iodine is another nutrient in Super Once A Day that supports the production of energy. Iodine is required for the creation of thyroid hormones. T4 requires 4 molecules of iodine, which then travel to the liver where 20% of it is converted into T3. T3 is much more potent than T4, but requires selenium and zinc for conversion. Thyroid hormones ultimately regulate metabolism and are therefore essential for a constant energy supply.

WHAT ARE THE BENEFITS OF A DAILY MULTINUTRIENT FOR THE IMMUNE SYSTEM?

Vitamin C: Vitamin C is required for the proper function of Natural Killer T and B cells. One study showed that vitamin C was able to increase Natural Killer T and B cell function by 10 fold in patients who had the immune cell suppressed by toxins, completely restoring immune function[7].

Zinc: Zinc is also a major nutrient required for proper immune function. Diminished stores rapidly decrease antibody responses which result in low resistance to infections[8].

Mixed carotenoids: Beta carotene is often cited as the most potent carotenoid. However, there are other types of carotenoids that work with beta carotene to enhance its action further, as well as having their own functions. Lutein and zeaxanthin are both potent carotenoids that form the main pigment of the retina in the eye[9], and therefore must be consumed to maintain eye health. Interestingly, cryptoxanthin has been shown to stimulate the repair of DNA damage[10], an important function in maintaining healthy cells.

WHY DOES SUPER ONCE A DAY VEGAN CONTAIN ADDITIONAL FACTORS?

Cysteine is a sulphur containing amino acid. Sulphur is the 6th most abundant micromineral in the body. It is converted in the body into glutathione a potent antioxidant and detoxification aid in the body. Glutathione can become depleted with poor diet and stress, which in turn affects antioxidant capacity of the body.

WHAT IS IN SUPER ONCE A DAY VEGAN AND WHAT BIOLOGICAL EFFECT DOES IT HAVE?

Vitamin A	Vitamin A is required for the health of the immune system, eyes and mucus membranes. Vitamin A is superior to beta carotene alone as some individuals are inefficient at producing the correct β, β-carotene 15, 15'-monooxygenase enzymes for conversion and should take vitamin A in its retinol form.[11]
Mixed carotenoids (including beta carotene, alpha carotene, cryptoxanthin, zeaxanthin, lutein)	Carotenoids are potent antioxidants that work in synergy with each other. Carotenoids have individual functionality and benefit the eyes and offer some protection against UV sun damage to skin.[12]
Vitamin E	Vitamin E is a powerful antioxidant is required for the membrane of every cell, particularly the skin and mucus membranes.[13]
Vitamin C	Vitamin C is needed for the function of immune cells. It is required for antioxidant protection for neutrophils and increases immune function when it is lowered.[14]
Thiamin (B1)	Vitamin B1 is required for the health of the nerves and can become depleted with the consumption of alcohol. Vitamin B1 is also used for the production of energy.[15]
Riboflavin (B2)	Vitamin B2 is required for the creation of flavoproteins and is necessary for the function of many cells. It is also involved in the Krebs and redox cycle.
Niacin (B3)	Vitamin B3 is required for the synthesis of hormones and neurotransmitters. It is also involved in the metabolism of fats, carbohydrates and protein.
Pantothenic acid (B5)	Vitamin B5 is required for the production of stress hormones which can become depleted in chronic stress states. Vitamin B5 also helps to maintain normal uric acid levels which can become elevated on a modern diet.
Vitamin B6	Vitamin B6 is needed for the activation and conversion of many neurotransmitters. It helps to regulate blood testosterone levels. Vitamin B6 is needed for normal red blood cells and oxygen transportation.
Folacin (Folic acid)	Folic acid is needed for the methylation cycle and works with vitamin B12 to maintain normal homocysteine levels. High homocysteine is a risk factor for cardiovascular disease.
Vitamin B12	Vitamin B12 is required for the myelin sheath that coat the nerves and controls nerve to nerve communication. Vitamin B12 is also needed for the normal formation of red blood cells and oxygen transportation.
Biotin	Biotin belongs to the B vitamin family and is needed for the cross linking of proteins in hair and nails. Biotin is also required for normal glucose metabolism.
Calcium (as amino acid blend)	Calcium is the main structural mineral in bones and teeth and is required for their strength. Calcium is also required for the activation of digestive enzymes.[16]
Phosphorus	Phosphorus is required for the homeostasis of calcium and is another main structural component of bones. Phosphorus is required for the activation of B vitamins.

Iron	Iron is needed for the creation of haemoglobin and oxygen transportation. It is also required for the formation of skin and nail cells.
Magnesium	Magnesium is involved in over 300 enzymatic processes within the body. It is a main structural component of bones and teeth and is required for the synthesis of GABA.[16]
Zinc	Zinc is another enzyme that is required for many enzymatic reactions. It is required for the proper function of immune cells and as an antioxidant.
Iodine	Iodine is required for the manufacture of thyroid hormones which are essential for metabolism and energy production. T4, T3, T2 and T1 thyroid hormones require 4,3,2 and 1 molecules of iodine retrospectively.
Manganese	Manganese is required for the activation of many enzymes and as a cofactor in lipid and carbohydrate metabolism.
Copper	Copper is required for normal skin and hair pigmentation. It works in balance with zinc and should be taken in the correct ratio. Copper is needed for the immune system and for the synthesis of dopamine.
Molybdenum	Molybdenum is a cofactor for many enzymatic reactions and is required for detoxification.
Chromium	Chromium aids with the regulation of blood sugar. Blood sugar often peaks and dips with modern lifestyles and diets. Chronically elevated blood sugar may lead to insulin resistance, diabetes and associated conditions such as obesity and PCOS.
Selenium	Selenium is a mineral that is often deficient due to low levels in European soil. Selenium is an antioxidant and is involved in the recycling of vitamin C and vitamin E. Selenium protects against chromosomal damage.
Choline	Choline is a nutrient required for the liver and normal lipid metabolism. It is required for the production of acetylcholine an important neurotransmitter for learning and memory.
Inositol	Inositol is a vitamin-like substance that is used for increasing insulin sensitivity in metabolic disorders such as polycystic ovary syndrome.
Methionine	Methionine is an amino acid that converts into S-adenosylmethionine, the main biological methylating agent. Methylation is a complex biochemical process essential for the availability of nutrients and for detoxification.
PABA	Para aminobenzoic acid is a constituent of folic acid and is beneficial to the health of the skin.

ARE THERE ANY PRECAUTIONS BEFORE OR WHILE TAKING SUPER ONCE A DAY VEGAN?

Super Once A Day vegan is intended for the sole use of adults who wish to improve their nutrient intake and support their wellbeing and is not intended for use by:

- Children
- Pregnant and breastfeeding women

HOW SHOULD SUPER ONCE A DAY VEGAN BE TAKEN?

As a food supplement, take one tablet daily with a main meal. Swallow with water.

FEATURES

- High potency comprehensive formula.
- Patented timed-release tablet releases nutrients over 6 hours.
- Provides a broad spectrum of vitamins, minerals and vitamin-like substances.
- With additional synergistic cofactors.
- Contains amino acid chelated minerals to maximise absorption
- Provides a gentle form of iron less likely to cause constipation or digestive discomfort

HEALTH NEEDS

STRESS & HECTIC LIFESTYLE

DETOX AND CELL PROTECTION

IMMUNITY

SENIOR'S HEALTH

WEIGHT MANAGEMENT

ENERGY

SCIENTIFIC REFERENCES

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