



sustain™

Avisae OptimALL Nutrition™ sustain™

Optimal Health and Anti-Aging Formula

Achieving optimal health and sustaining your Youth has never been easier! Avisae™ sustain™ is a powerful formula of scientifically validated vitamins, minerals, antioxidants, and other nutrients, which help support and maintain vital body organs and systems, protect against cellular oxidation, and maintain DNA telomeres. This incredible product also includes a fusion of over 21 body-beneficial fruits and vegetables rich in phytonutrients for added benefit. Promote overall health today and **sustain** your already active lifestyle.*

Key Benefits

Avisae OptimALL Nutrition™ sustain™ contains FIVE unique and proprietary ingredient formulas or systems to help **sustain** and maintain your good health.*

OptimALL Nutrition™ Antioxidant Powerhouse™

- Powerful formula boosts the reduction of oxidative stress through both external antioxidants*
- Promotes the synthesis of glutathione that's naturally produced in the body*
- Delivers nutrients to help support and maintain DNA telomeres*
- Contains L-carnosine, which has been shown in preclinical research to promote longevity*

OptimALL Nutrition™ BrainPWR™ Proprietary Anti-Aging, Brain and Energy Formula

- Provides antioxidant protection for the brain*
- Contains ingredients shown in clinical research to support focus, memory and mood*
- Supports cognitive health*
- Offers nutritional support during times of mild and occasional anxiety*

OptimALL Nutrition™ AviHeart™

- Encourages a healthy heart*
- Supports and maintains a fit cardiovascular system*
- Provides all 8 forms of vitamin E (mixed tocotrienols and tocopherols), which have been shown to promote healthy blood lipid levels*

OptimALL Nutrition™ ImmunGuard™

- Encourages a healthy immune response*

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- Contains vitamins and minerals essential to a healthy functioning immune system*

Avisae OptimALL Nutrition Phytonutrient Formula

- Over 21 Body-Beneficial fruits and vegetables rich in phytonutrients
- Delivers the superfruits açai, goji, noni, maqui, blueberry
- Provides carrot, broccoli, tomato, cucumber, kale, spinach, parsley, cabbage, celery, cauliflower, green bell pepper, asparagus, brussels sprouts, onion, garlic, ginger

Avisae OptimALL Nutrition™ Telomere Support

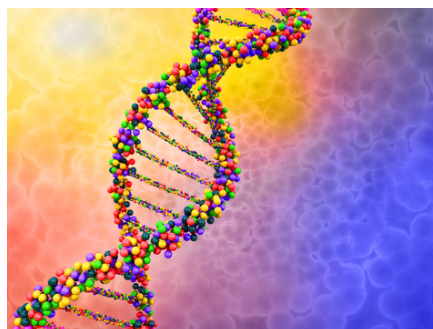
- Key ingredients help support and maintain telomere structure and function*

Product Features

- Features clinically proven, standardized ingredients
- Uses therapeutic doses supported by science
- OptimALL Nutrition™'s BioAccelerate™ - Increases Bio-Availability by providing quick and efficient delivery of sustain™'s nutrient rich Formula directly to your cells
- Made in the U.S.A. according to rigorous FDA GMP standards
- Free from preservatives, toxins, pesticides and heavy metals

DNA Telomeres and Aging

Telomeres, a key part of your DNA, are found in every cell in your body. Telomeres are like a protective cap to our chromosomes, which contain genetic information. Throughout life your cells duplicate and produce new cells. This process happens continuously. Each time this process happens, the length of the telomere shortens. Science is now showing that the length of your telomeres is directly related to how fast you age. The shorter the telomeres, the faster you age.



As you age and your telomeres shorten, your cells begin to slow and function in a subpar capacity. Cell damage caused by shortened telomeres makes you age more quickly. As a result, you look and feel older and you are more susceptible to illness. Research has shown shortened telomeres significantly increase your risk of health complications. In one study, those with healthy telomeres lived longer, because their cardiovascular and immune systems were stronger. Many people who live to a very old age with fewer age-related complications have healthier and longer telomeres.

There are things we can do nutritionally to support, protect, and lengthen our telomeres. According to the latest research individuals with longer telomeres consumed certain nutrients. Many of these nutrients are found in Sustain. This product is packed with specific nutrients, which have been shown in research to support healthy telomeres. Certain vitamins and other anti-aging nutrients are critical to support and maintain this normal process and Avisae OptimALL Nutrition™ Sustain™ has them.

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Ingredient Information

Vitamins and Minerals

Vitamin A and Beta carotene

Vitamin A is a fat-soluble vitamin that is naturally present in many foods. Vitamin A is important for normal vision, the immune system, and reproduction. Vitamin A also helps the heart, lungs, kidneys, and other organs work properly. Vitamin A is commonly known as the “anti-infective” vitamin, because it is required for normal functioning of the immune system. The skin and mucosal cells (cells that line the airways, digestive tract, and urinary tract) function as a barrier and form the body's first line of defense against infection. Retinol and its metabolites are required to maintain the integrity and function of these cells.*

There are two different types of vitamin A. The first type, preformed vitamin A, is found in meat, poultry, fish, and dairy products. The second type, provitamin A, is found in fruits, vegetables, and other plant-based products. The most common type of provitamin A in foods and dietary supplements is beta-carotene. If your body does not receive enough preformed vitamin A, it will convert beta-carotene into vitamin A. Beta carotene also acts as an effective antioxidant.*

Vitamin C

Vitamin C, also known as ascorbic acid, is a water-soluble nutrient found in some foods. In the body, it acts as an antioxidant, helping to protect cells from the damage caused by free radicals. Free radicals are compounds formed when our bodies convert the food we eat into energy. People are also exposed to free radicals in the environment from cigarette smoke, air pollution, and ultraviolet light from the sun.*

The body also needs vitamin C to make collagen, a protein required to help wounds heal. In addition, vitamin C improves the absorption of iron from plant-based foods and helps the immune system work properly to protect the body. Vitamin C is also an important physiological antioxidant and has been shown to regenerate other antioxidants within the body, including alpha-tocopherol (vitamin E). It is necessary for the biosynthesis of neurotransmitters and for the metabolism of protein. Getting adequate amounts of vitamin C may also support a healthy cardiovascular system. Among women, higher intakes of vitamin C was associated with longer telomere lengths.*

Calcium

The body needs calcium to maintain strong bones and to carry out many important functions. The body also needs calcium for muscles to move and for nerves to carry messages between the brain and every body part. In addition, calcium is used to help blood vessels move blood throughout the body and to help release hormones and enzymes that affect almost every function in the human body. Some studies have shown calcium to help maintain a healthy colon.*

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Iron

Iron, one of the most abundant metals on Earth, is essential to most life forms and to normal human physiology. Iron is an integral part of many proteins and enzymes that maintain good health. In humans, iron is an essential component of proteins involved in oxygen transport. It is also essential for the regulation of cell growth and differentiation. A deficiency of iron limits oxygen delivery to cells, resulting in fatigue, poor work performance, and decreased immunity. Zinc, iron, and vitamins C, E, and D also influence telomere length. Women, who supplemented their diets with a multivitamin, had longer telomeres.*

Vitamin D

Vitamin D is a nutrient needed for health and to maintain strong bones. It does so by helping the body absorb calcium (one of bone's main building blocks). Vitamin D is important to the body in many other ways as well. Muscles need it to move, for example, nerves need it to carry messages between the brain and every body part, and the immune system needs vitamin D to fight off invading bacteria and viruses. Together with calcium, vitamin D also helps protect older adults from osteoporosis. In one study published in a 2007 edition of *American Journal of Clinical Nutrition*, there is a widespread issue of insufficient intake of vitamin D. Higher levels of vitamin D are associated with longer telomeres, especially among women.*

Vitamin E

Naturally occurring vitamin E exists in eight chemical forms (alpha-, beta-, gamma-, and delta-tocopherol and alpha-, beta-, gamma-, and delta-tocotrienol) that have varying levels of biological activity. Alpha- (or α -) tocopherol is the only form that is recognized to meet human requirements.

In the body, vitamin E also acts as an antioxidant, helping to protect cells from the damage caused by free radicals. Free radicals are compounds formed when our bodies convert the food we eat into energy. People are also exposed to free radicals in the environment from cigarette smoke, air pollution, and ultraviolet light from the sun. Vitamin E has been shown to reduce oxidation (caused by free radicals) of LDL cholesterol. The body also needs vitamin E to boost its immune system so that it can fight off invading bacteria and viruses. It helps to maintain healthy blood vessels and keeps blood flowing easily within the cardiovascular system. In addition, cells use vitamin E to interact with each other and to carry out many important functions. Vitamin E may delay cognitive decline associated with aging. Among women, higher intakes of vitamin E was associated with longer telomere lengths.*

Vitamin K

Vitamin K, a fat soluble vitamin, helps the blood properly clot or coagulate, which is an important factor in wound healing. It is also used to help the body utilize calcium necessary to build bone. Studies have demonstrated that people with higher levels of vitamin K have more bone density. Some research suggests vitamin K may play a role in the body's ability to manage glucose. Epidemiological studies have shown people with higher intakes of the vitamin have increased insulin sensitivity. An adequate intake of Vitamin K may also help maintain a healthy cardiovascular system.*

Thiamin (Vitamin B1)

Thiamine, a water soluble vitamin, is involved in numerous body functions, including nervous system and muscle functioning. It assists with the flow of electrolytes in and out of nerve and muscle cells, helps with multiple enzyme processes, and is involved with carbohydrate metabolism. It also aids in the production of hydrochloric acid (which is necessary for proper digestion). Because there is very little thiamine stored in the body, depletion can occur quickly, within 14 days.*

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Riboflavin (Vitamin B2)

Riboflavin or vitamin B2 is one of eight essential B vitamins. All of the B vitamins including riboflavin help convert the food you eat into usable energy. They breakdown carbohydrates into glucose, which is the body's primary source of energy. B vitamins also help you metabolize fats and protein. Healthy eyes, skin, hair, and nervous system need B vitamins to function properly. Riboflavin is required in order for folate and vitamin B6 to be used by the body. Interestingly, riboflavin also has antioxidant capabilities to help your body fight off cell and DNA damaging free radicals.*

Niacin (Vitamin B3)

Niacin like riboflavin and the other B vitamins are necessary to foods you eat into fuel or useable energy. It is also needed to metabolize fat and protein. Sex and stress-related hormones are made with help of niacin. It also promotes healthy circulation. Niacin may also promote a healthy heart and cardiovascular system. Preliminary research suggests niacin may help with joint mobility while reducing the need for higher levels of pain medication. While there are no studies showing a direct benefit by taking a niacin supplement, research has shown that people who consume higher levels of niacin have a lower risk of developing age-related dementia.*

Vitamin B6

The body needs vitamin B6 for more than 100 enzyme reactions involved in metabolism. Vitamin B6 also participates in brain development during pregnancy and infancy as well as immune function. Some research indicates that elderly people who have higher blood levels of vitamin B6 have better memory. Research has shown that vitamin B6 supplements could reduce PMS symptoms, including moodiness, irritability, forgetfulness, bloating, and nervousness.*

Folate (Vitamin B9)

Folate helps the body convert carbohydrates, fat, and protein into either energy or usable subcomponents like essential fatty acids and amino acids. These nutrients are critical for good health. Folate is essential for normal brain function. It also needed for good mental and emotional health.

Folate helps make and repair DNA, the body's genetic material, and is involved in gene expression. This nutrient is essential when cells are rapidly dividing during growth like in pregnancy, infancy, or adolescence. Pregnant women or a woman wanting to become pregnant should consume adequate folate to help prevent neural tube birth defects. It along with vitamins B6 and B12 help manage homocysteine levels, which when high are associated with inflammation and poorer cardiovascular health. Research indicates telomere length is associated with plasma folate levels, especially in men. Plasma levels of folate above the median were linked with longer telomeres.*

Vitamin B12

Vitamin B12 is a water-soluble vitamin that is naturally present in some foods, added to others, and available as a dietary supplement and a prescription medication. Vitamin B12 is required for proper red blood cell formation, neurological function, and DNA synthesis. Scientists found that women, who supplement their diets with vitamin B12, have longer telomeres compared to women who do not.*

Elevated homocysteine levels have been identified as an independent risk factor for diminished cardiovascular health. Elevated homocysteine levels are thought to impair endothelial vasomotor function, promote lipid peroxidation, and induce vascular smooth muscle proliferation. Evidence from retrospective, cross-sectional,

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and prospective studies link reduced homocysteine levels with improved cardiovascular health. Vitamin B12, folate, and vitamin B6 are involved in homocysteine metabolism. In the presence of insufficient vitamin B12, homocysteine levels can rise. Results from several randomized controlled trials indicate that combinations of vitamin B12 and folic acid supplements with or without vitamin B6 decrease homocysteine levels in people who are at greater risk of developing cardiovascular and metabolic disorders and in young adult women. In another study, older men and women who took a multivitamin/multimineral supplement for 8 weeks experienced a significant decrease in homocysteine levels.*

Biotin (Vitamin B7)

Biotin, which is also a B vitamin, plays a critical role in health and acts as a coenzyme. As a coenzyme, biotin aids the process if necessary of creating glucose (energy) from non-carbohydrate sources like fat and protein. Biotin is necessary for the functioning and maintaining of a healthy immune system. It is essential for healthy skin, nerves and digestive system. Biotin may also be helpful with individuals with impaired metabolic function by helping conditions of nerve pathology. It may also help this population manage blood sugar levels and improve their cardiovascular health. It has been taken for years for the benefit of building strong, healthy nails and hair.*

Pantothenic Acid (Vitamin B5)

Pantothenic acid is one of eight B vitamins and is also sometimes referred to as vitamin B5. Like the other B vitamins, pantothenic acid helps the body metabolize carbohydrate, fat and protein. The word pantothenic comes from the Greek word pantos, which means “everywhere.” This vitamin is widely distributed in most plants and animals. Pantothenic acid is also used by the body to make stress and sex-related hormones in the adrenal glands. It is sometimes called the “anti-stress” vitamin. Some studies suggest vitamin B5 may promote healthier levels of triglycerides and LDL cholesterol in certain individuals. Pantothenic acid may also promote more rapid wound healing when combined with vitamin C and that it may help with joint mobility.*

Iodine

Iodine is a trace element necessary to produce thyroid hormones. It may be necessary for the proper function of several body systems, including lactation, gastric and oral mucosa, salivary glands and epidermis of the skin. Used topically, iodine has antiseptic properties. It also has antimicrobial properties when used to purify water. Vegetarians have lower intakes of iodine than nonvegetarians. A mild to moderate deficiency of iodine has been associated with an increased risk for attention disorders in children. Many people get iodine from iodized salt; however, in recent years people following a low sodium diet may be at risk of inadequate intake.*

Magnesium

Magnesium is the fourth most abundant mineral in the body and half of it is found in the bone. The remaining magnesium is found inside the cells of body tissue and organs. This mineral is essential for more than 300 biochemical processes in the body, including helping to maintain healthy muscle and nerve function, keeps the heart’s rhythm steady, supports a healthy immune system, and keeps the bones strong. It also helps maintain healthy blood sugar levels, promotes normal blood pressure levels, and it is known to increase energy metabolism and protein synthesis.*

Zinc

Zinc is an essential mineral that helps an individual to stay healthy. Zinc is involved in various aspects of cellular metabolism. This mineral is needed for the catalytic (causes or accelerates a chemical reaction) activity of about 100 enzymes. It is found in cells throughout the body and supports the immune system by fighting off invading bacteria and viruses. Zinc participates in wound healing and is necessary for the body to make proteins and DNA,

which is the body's genetic material found in all cells. Zinc, iron, and vitamins C, E, and D also influence telomere length. Women, who supplemented their diets with a multivitamin, had longer telomeres.*

Selenium

Selenium is essential to good health and is required in small amounts. Selenium is incorporated into proteins to make selenoproteins, which are important antioxidant enzymes. The antioxidant properties of selenoproteins help prevent cellular damage from free radicals, which may contribute to the development of chronic diseases such as heart disease and cancer. These proteins also play a role in supporting the immune system*

Copper

Copper is an essential mineral, which occurs naturally in many foods, such as vegetables, nuts, legumes, grains, fruits, shellfish, and beef. It is involved in multiple enzyme functions and the regulation of gene expression. Copper supports mitochondrial (participates in cellular energy production) function and cellular metabolism. It also has a role in red blood cell formation and wound healing. Red blood cells carry oxygen to tissues and organs and carry carbon dioxide to the respiratory system to expel it from the body.*

Manganese

Manganese is an essential mineral found mostly in bones, the liver, kidneys, and pancreas. It is involved in various chemical processes in the body, including processing of cholesterol, carbohydrates, protein and plays a role in blood sugar regulation. Manganese helps the body form connective tissue and sex hormones. It may also be involved in bone formation. It has been used for anemia and PMS. It is sometimes included with glucosamine and chondroitin and promoted for joint mobility and flexibility. Manganese when consumed with zinc, copper, and calcium may reduce the risk of spinal bone loss in postmenopausal women.*

Chromium

Chromium, an essential mineral, is known to enhance the action of insulin, which is a hormone critical to the metabolism and storage of carbohydrate, fat, and protein in the body. Insulin is used by the body to change sugar, starches, and other food into energy. In 1957, a compound in brewer's yeast was found to prevent an age-related decline in the ability of rats to maintain normal blood sugar levels. As much as 90% of Americans do not get enough chromium in their diet; however, very few are truly chromium deficient. There is some evidence that chromium supplements may help people with diabetes lower their blood sugar levels. Some studies show chromium may help people lose weight, while other studies do not show a weight loss benefit.*

Molybdenum

Molybdenum is an essential mineral found in very small amounts within the body, but its exact biological function is not well-understood. It may be involved in many important biological processes, including the development of the nervous system, waste processing in the kidneys, and cellular energy production. Research suggests it may also help prevent dental caries, support immune function, and when combined with other antioxidant nutrients it may help maintain healthy cell proliferation of the esophagus and stomach.*

Boron

Boron is the fifth element of the periodic table and thought to be essential for animal growth and development. It plays a role in regulating the metabolism of calcium and magnesium and it also enhances the activation process of vitamin D in the body. Because of these roles, boron is required for bone metabolism. Researchers believe it may play a role in the prevention of osteoporosis and treatment of osteoarthritis. The studies supporting these two effects are promising. Preliminary research suggest it might improve cognition.*

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Vanadium

Vanidyl sulfate (Vanadium), a trace element, like chromium has been used as a supplement to improve insulin sensitivity and for bodybuilding. While not officially deemed as necessary by the scientific community, vanadium may be essential for humans and other higher-order animals. Studies have shown vanadium to have insulin-like activity. There are several studies and summary reviews analyzing the effect of vanadium on glucose blood sugar control. The results of these studies suggest vanadium does support normal blood sugar management.*

OptimALL Nutrition™ Antioxidant Powerhouse™ Proprietary Formula

L-carnosine

L-carnosine is a dipeptide (bound together) of the amino acids histidine and alanine. This dipeptide is found exclusively in tissues and is concentrated in skeletal and heart muscle and also brain and nerve tissue. Typical vegetarian diets are believed to be deficient in L-carnosine. Carnosine has become popular with bodybuilders and athletes as it has been touted to help with post-exercise muscle recovery. It has been called a longevity and anti-aging nutrient based on research showing animals with higher carnosine levels live longer.*

L-glutamine

Glutamine is an amino acid found mainly in the body's skeletal muscles. One of its primary roles is protein synthesis. While glutamine is not an essential amino acid (e.g. the human body can synthesize glutamine when needed), it may become "essential" in certain situations like severe illness or trauma. Glutamine is commonly used to improve general immune health and as an ergogenic aid (increases the body's capacity for mental and physical labor) for exercise muscle enhancement and recovery. Clinical research has shown glutamine to stimulate serum human growth hormone (HGH) levels. HGH can positively influence body composition by increasing muscle mass and decreasing body fat.

An important effect of glutamine is its role in regenerating and maintaining the length of telomeres, which is the protective mechanism of the body's chromosomes. Telomerase is an enzyme involved in the formation and repair of telomeres. Glutamine make certain proteins in the body necessary for the proper function of telomerase.*

Alpha-lipoic acid (ALA)

ALA not to be confused with Alpha-linoleic acid (also ALA), is a potent antioxidant that is synthesized in the body. ALA has both hydrophilic and lipophilic properties, which makes it an excellent free radical scavenger in a wide range of physiological conditions. Unlike other antioxidants ALA can penetrate all membranes and cells. Foods rich in ALA include broccoli, spinach, and brewer's yeast. Research suggests ALA may help ameliorate neuropathy and support the role of insulin by helping maintain healthy blood glucose levels. ALA also appears to have the ability to promote a healthy balance of inflammatory mediators in the body. ALA also appears to help promote healthy telomeres.*

Turmeric (Curcuma longa) extract with curcumin

Turmeric is a spice commonly used in Asian food and is derived from the root of the plant. Curcumin is the bright yellow-colored active constituent (polyphenol) obtained from turmeric. It is also commonly used in foods and cosmetics as a natural colorant. Traditionally in Asian medicine, turmeric is used to alleviate occasional gastrointestinal (GI) upset, joint health, and as an energy tonic. The German Commission E has approved

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turmeric for GI upset. It appears to promote the production of bile, which is necessary for the digestion of fat. Turmeric also contains resveratrol. Preliminary research suggests curcumin helps maintain healthy cells by promoting normal cell proliferation and differentiation. Research has shown that curcumin inhibits telomerase causing apoptosis in atypical brain cells.*

N-acetyl cysteine (NAC)

NAC is a powerful antioxidant derived from the amino acid L-cysteine. NAC has been shown to increase plasma glutathione levels. Glutathione produced by the body is often referred to as the master antioxidant. Glutathione helps defend the body against toxins created by cells that have been damaged by free radicals. Without adequate glutathione in the body, these toxins can build in the body and limit the body's ability to naturally heal itself. NAC has been shown to have anti-inflammatory and antioxidant properties. It also supports respiratory health.*

Lutein

Lutein is from the Latin word "luteus," which means yellow. It is an antioxidant carotenoid found in green vegetables, egg yolks, grapes, orange juice, zucchini, squash and corn. Lutein is prominently found in the macular region of the eye's retina. Epidemiological studies suggest diets rich in lutein have a reduction of risk for age-related eye issues. Supplemental lutein may help maintain healthy vision during the aging process. Lutein has also been shown to protect DNA.*

OptimALL Nutrition BrainPWR™ Anti-aging, Brain & Energy Formula

Bacopa monnieri

Bacopa leaf extract is an Ayurvedic medicine, which has been used in India since the 6th century. It has been used as a nerve tonic to promote mental functioning, improve memory, and to act as a general revitalizing energizer. Traditionally, bacopa has also been used to anoint newborn babies as it is believed to increase intelligence.*

Bacopa has been shown to have antioxidant, free-radical scavenging properties. Research has demonstrated bacopa can increase glutathione peroxidase and superoxide dismutase (the body's own antioxidant systems) specifically in the prefrontal cortex, striatum, and hippocampus areas of the brain. The beneficial effect of improved cognition has been studied in humans. One twelve-week double-blind, placebo controlled, randomized study in 46 healthy individuals was conducted to evaluate the cognitive benefits of bacopa. Individuals, who took bacopa saw statistically significant improvements in speed of visual processing and learning rate. They also had a reduction in forgetting and anxiety.*

Milk Thistle (Silybum marianum)

Milk thistle, a red and purple flowering herb, has been used for its remedial assets for almost two millennia. It has been used primarily in the US and Europe for the benefit of supporting liver, gallbladder, and kidney function. Silymarin, a group of flavonoids shown to have antioxidant and anti-inflammatory properties, is believed to be the primary beneficial compound extracted from the seeds within the flower of Milk thistle. There are many studies that show silymarin can protect the liver from chemical toxins and some drugs. Research has also demonstrated that silymarin may help maintain a healthy liver by promoting the production of new cells within the liver.

Ashwagandha (Withania somnifera)

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Ashwagandha, often referred to as Indian ginseng, has been used as a part of Ayurvedic medicine for more than 4,000 years. Like Panax ginseng, Ashwagandha has adaptogenic properties, which means it helps the body work more efficiently by increasing concentration and endurance while under physical and mental stress. Some experts have suggested ashwagandha works more effectively while being less stimulating than Panax ginseng. “Ashwa” in ashwagandha means horse in Sanskrit referring to its believed ability to impart horse-like strength, stamina and resistance. Clinical studies have shown ashwagandha has the ability to boost stamina, relieve stress and fatigue, improve memory and cognition, and invigorate the body.*

Green tea (Camellia sinensis) leaf extract

Green tea has been grown for centuries, commencing in India and China. The green tea herb ranks 4th among the most commonly consumed supplements in the United States. Green tea has been used daily as a refreshing beverage in many Asian countries, including Japan and China. Due to its extensive use, green tea is considered to be safe and nontoxic. Made from dried leaves of *Camellia sinensis*, green tea contains many body-beneficial polyphenolic compounds called catechins, anthocyanins, and other phenolic acids. Unlike green tea, black tea and oolong tea go through a fermentation process, which can destroy a significant amount of these polyphenolic compounds, especially the catechin EGCG (epigallocatechin gallate). Research has shown EGCG to be one of the most active and valuable constituents of green tea. Green tea’s properties can be stimulating and relaxing, as well as offering significant protection for many body organs and systems.*

In addition to green teas polyphenolic compounds, it contains other components such as L-theanine and some caffeine. L-theanine is a naturally-occurring amino acid, which has been used with some success to fight occasional nervousness and tension. The amount of caffeine in green tea when compared to coffee is significantly less; one cup of green tea contains about 50mg of caffeine compared to coffee’s caffeine content of 65mg-175mg per cup. Some green tea extracts sold in supplements contain even less caffeine as they have been decaffeinated. Caffeine consumed in low to moderate amounts can provide a stimulatory effect, which may help cognition and alertness. Studies in animal model have also shown green tea to have neuroprotective effects.*

Observing populations which consume higher levels of green tea, research has established considerable health advantages to overall health and longevity. EGCG and other polyphenolic compounds fight free radicals, which can damage DNA and are associated with many age-related health concerns, especially those influencing the cardiovascular system. Research has shown catechins to promote a healthy inflammatory response. Interestingly, according to some studies, green tea extract (GTE) may improve energy expenditure. GTE may also increase the oxidation of fat on average by 17% during moderately intense exercise. Overall, green tea herb may provide significant contributions to overall good health.*

Choline

Choline, similar to many B vitamins, is not considered essential since it can be synthesized in the body. It can also be consumed in the diet as it is found in many foods, including eggs (yolk), peanuts, fish, milk, wheat germ, soybeans, Brazil nuts, poppy seeds, a variety of meats like red meat and chicken, and some vegetables (cabbage and cauliflower). Until 1998, choline did not have an established recommended dietary intake level. Choline is a precursor to acetylcholine, which is an important neurotransmitter involved in muscle control, memory, and many other important functions in the body. Choline is a subcomponent of phosphatidylcholine, a component of cell walls and membranes, as well as phosphatidylserine. Increased intake of choline may lead to a reduction in inflammatory markers by as much as 20 percent when compared to individuals with lower intakes of choline. Inflammation has been linked to normal, age-related cognitive decline.*

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Proprietary Phytonutrient Formula

Superfruit Blend

Açaí (Euterpe oleracea)

Açaí is known for its ability to increase energy levels, improve digestive functioning, enhance mental clarity, detoxify and cleanse the system, slow the natural process of aging and increasing the skin's vitality. Acai is considered one of the most nutrient dense foods.*

Noni (Morinda citrifolia)

Noni has been used by Polynesians as a traditional folk medicinal plant for more than 2,000 years. Traditionally, it has been used for various maladies including GI upset and minor aches and pains. Research has validated noni's antioxidant properties.*

Goji (Lycium spp.)

Goji berry has been used in China dating as far back as 2800 B.C. Shen Nung, the legendary First Emperor, who was an herbalist, used the goji berry for its health properties. It is used in traditional Chinese Medicine (TCM) to support kidney and lung health. Goji is also rich in vitamins A, C, and E as well as the antioxidant carotenoids beta-carotene, lutein, and zeaxanthin.*

Maqui (Aristoelia chilensis)

Maqui is a berry found in South America. This berry has been shown to have antioxidant and anti-inflammatory properties. It is used as a natural remedy for joint and cardiovascular health. It is rich in phytonutrients called anthocyanins. Preliminary research suggests the maqui berry's anthocyanins may help promote healthy cholesterol levels and relieve joint pain.*

Bilberry (Vaccium myrtillus)

Bilberry is a close relative to blueberry. Bilberry has been used historically for many ailments. It has been used for topical relief of minor inflammation, gastrointestinal issues, and for various eye maladies, including poor night vision and eyestrain. It is also rich in anthocyanins, which have antioxidant, vascular protective, and anti-inflammatory properties.*

Vegetable Blend

It is well-established that a diet rich in fruits and vegetables reduces the risk of certain diseases associated with aging, including some types of cancer. This vegetable blend is not intended to replace and cannot substitute a healthy diet, which includes a variety of fruits and vegetables. It is meant to provide nutritional support to a healthy diet.

Carrot

The carrot is a root vegetable categorized with the parsley family. Baby carrots are generally easier to chew, because of their softer texture, but they tend to be less flavorful. Carrots are rich in vitamin A in the form of beta carotene (an antioxidant carotenoid) and dietary fiber.

Broccoli

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This healthy vegetable is related to cabbage, Brussels sprouts, and cauliflower. Broccoli is a green stalked vegetable with large clusters of tight buds. Interestingly, broccoli was first commercially grown in the United States sometime during the 1920's. Some have stated that broccoli has as much calcium gram per gram as milk. Broccoli provides potassium, fiber and protein. It also contains sulforaphane, an antioxidant phytonutrient that supports the body's natural detoxifying enzymes.*

Tomato

Technically speaking, tomatoes are classified as a fruit; however, they are prepared and served like a vegetable. This "vegetable" comes in a variety of shapes, sizes and varieties, including the large beefsteak tomatoes, Roma tomatoes that are more oval shape, small and round grape tomatoes, and many others. The tomato is native to South America and it was brought to Europe by Spanish explorers. Interestingly, tomatoes were not widely accepted initially as they were believed to be poisonous. Tomatoes contain the antioxidant carotenoid lycopene, vitamin C and potassium.

Cucumber

Cucumbers contain B vitamins and can help hydrate the body, since they are 95% water. Generally discarded during preparation, the skin is a good source of vitamin C. They also contain phytonutrients, which may help keep one's cells healthy. Because of their low-calorie content, cucumbers are a great snack when trying to lose weight.*

Kale (Brassica oleracea L.)

Kale, like broccoli, cabbage and cauliflower, is a cruciferous vegetable from the *Brassica* family. A wild form of this vegetable originated along the Atlantic seaboard of Europe and the Mediterranean. *Brassica* vegetables are rich in vitamins, minerals, carotenoids, flavonoids and many (more than 80 micronutrients have been identified) other body-beneficial phytonutrients. Research has shown a diet rich in *Brassica* vegetables can help deter many age-related health conditions and slow the negative effects of aging. The nutrients and components found in these vegetables can enhance the body's ability to maintain healthy cell proliferation, fight free radicals, and remove harmful toxins.*

Spinach (Spinacia oleracea L.)

Spinach is a good source of vitamins, minerals, and carotenoids including iron, folic acid, vitamin B6, beta carotene and lutein. The German Commission E (a group of scientists, toxicologists, doctors and pharmacists, who have evaluated the safety and effectiveness of more than 300 herbs) has approved the use of spinach for GI upset, healthy growth in children, appetite stimulation and for fighting fatigue. Research has shown spinach can help the body maintain the proliferation of healthy cells, prevent oxidative damage, and promote a healthy inflammatory response. Interestingly, spinach is rich in the carotenoid lutein, which has been shown to help maintain healthy eyes through the normal aging process. Research has also shown spinach can help maintain healthy blood sugar levels.*

Parsley (Petroselinum spp.)

Parsley originates in the Mediterranean and has been used for more than 2000 years as a garnish, seasoning and herbal medicine. This often-used garnish is rich in vitamins like vitamin A (beta carotene), C, K and B12 as well as many bioactive flavonols and flavones. Due to its beta carotene and vitamin C content, parsley has strong antioxidant properties. Traditionally parsley has been used as breath freshener, gastrointestinal aid, and as an

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all-purpose general tonic.

Cabbage (Brassica oleracea L.)

Cabbage like broccoli, kale and cauliflower is a cruciferous vegetable from the *Brassica* family. A wild form of this vegetable originated along the Atlantic seaboard of Europe and the Mediterranean. *Brassica* vegetables are rich in vitamins, minerals, carotenoids, flavonoids and many (more than 80 micronutrients have been identified) other body-beneficial phytonutrients. Research has shown a diet rich in *Brassica* vegetables can help deter many age-related health conditions and slow the negative effects of aging. The nutrients and components found in these vegetables can enhance the body's ability to maintain healthy cell proliferation, fight free radicals, and remove harmful toxins.*

Celery (Apium graveolens)

Celery grows in parts of Asia, the Mediterranean, and throughout Europe. Interestingly, celery contains many healthful nutrients such as vitamin E, C, lutein, calcium, zinc, iron, magnesium, iodine and fiber. In one randomized, double-blind, placebo-controlled study of 180 females (ages 18 to 27), celery when combined with anise and 500 mg of saffron, helped reduce pain associated with these women's monthly menstrual cycle. This vegetable also contains compounds which have been shown to help maintain healthy cell proliferation. Parsley contains luteolin, which has been shown to have properties that may help maintain a healthy inflammatory response.*

Cauliflower (Brassica oleracea L.)

Cauliflower like broccoli, cabbage and kale is a cruciferous vegetable from the *Brassica* family. A wild form of this vegetable originated along the Atlantic seaboard of Europe and the Mediterranean. *Brassica* vegetables are rich in vitamins, minerals, carotenoids, flavonoids and many (more than 80 micronutrients have been identified) other body-beneficial phytonutrients. Research has shown a diet rich in *Brassica* vegetables can help deter many age-related health conditions and slow the negative effects of aging. The nutrients and components found in these vegetables can enhance the body's ability to maintain healthy cell proliferation, fight free radicals, and remove harmful toxins.*

Green Bell Pepper

Sweet bell peppers are green when they are young and then change their color as they age on the vine (red, orange, purple, and/or brown). All peppers start green when most are harvested to be sold. The more mature and vibrant colored peppers are also sweeter. Edible portions of the bell pepper are a good source of carotenoids, which contribute to overall good health and longevity. Bell peppers are rich sources of vitamin A, C, B vitamins and potassium.*

Asparagus

Asparagus is a perennial garden vegetable native to the Eastern Mediterranean and it has been adopted all over the world. Asparagus the name is derived from the Greek word meaning "shoot" or "sprout." Commonly used as a food, asparagus is believed to help promote the proper balance of water in the body and to help support

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kidney function. The roots and stems of this vegetable are used in Ayurvedic medicine to help support female fertility. Traditionally, it is believed to act as an aphrodisiac. Research has shown the roots of asparagus have antioxidant properties. Asparagus is a good source of vitamins A (beta carotene), C, E, and K. It is also good source of chromium, which helps maintain healthy blood sugar levels.*

Brussels sprouts

Brussels sprouts like cabbage, broccoli, kale and cauliflower is a cruciferous vegetable from the *Brassica* family. A wild form of this vegetable originated along the Atlantic seaboard of Europe and the Mediterranean. *Brassica* vegetables are rich in vitamins, minerals, carotenoids, flavonoids and many (more than 80 micronutrients have been identified) other body-beneficial phytonutrients. Research has shown a diet rich in *Brassica* vegetables can help deter many age-related health conditions and slow the negative effects of aging. The nutrients and components found in these vegetables can enhance the body's ability to maintain healthy cell proliferation, fight free radicals, and remove harmful toxins.*

Onion (Allium cepa L.)

As a food and culinary flavoring vegetable, onion has been used all around the world. It has been widely used for its medicinal properties for thousands of years. Onions contain flavonoids such as quercetin, kaempferol, luteolin, apigenin, and rutin, which have been shown to exert body-beneficial properties. Quercetin, a flavonoid found in rutin, may help strengthen the integrity of the cardiovascular system. *Allium* vegetables, which include onion, garlic, leeks, and shallots, are believed to help protect the body and its systems, including the cardiovascular and endocrine systems. Onions also contain organosulfur compounds that have been shown to inhibit the growth of tumor cells in an animal model. Further research needs to be conducted in order to see this effect in humans.*

Garlic (Allium sativum)

The use of garlic for medicinal purposes dates back to ancient Greece and was used by traditional Chinese physicians. Garlic has strong antioxidant and anti-inflammatory properties. It is a culinary food commonly used for its ability to promote a healthy cardiovascular system. Several small clinical trials have shown garlic may help maintain healthy cholesterol and lipid (triglycerides) levels. Some research has shown garlic can also promote small reductions in blood pressure, which are already within the normal range. The German Commission E supports garlic's use to address problems linked with cholesterol and to help prevent age-related vascular changes. The European Scientific Cooperative on Phytotherapy (ESCOP) suggests garlic can be used also to support and improve circulation and upper respiratory tract conditions. During both the first and second world wars garlic was used as an anti-microbial agent.*

Ginger

Ginger has been used as a medicinal herb for over 2500 years. Since the 1500s, ginger has played an important role in Chinese, Indian, and Japanese medicine. It is also widely used as a culinary spice in many countries and is sometimes used in soaps, candles, and cosmetics. Research has shown ginger to have antioxidant, antimicrobial and anti-inflammatory properties. Consumption of ginger stimulates the secretion of bile acids, which play a major role in digestion, especially in fat absorption. There is strong clinical evidence that ginger can help ease the symptoms of nausea and vomiting associated with pregnancy.*

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OptimALL Nutrition Aviheart™ Proprietary Formula

Grape seed extract (GSE)

Grape leaves, sap and fruit have been used to treat a variety of conditions since the time of the ancient Greeks. Today GSE is used by natural practitioners for inflammatory conditions, venous insufficiency, and cardio protection. There is significant clinical research to show GSE strengthens the body's vascular or circulatory system. This system is made up of arteries, veins and capillaries. Blood is pumped throughout this system by the heart. Studies also show GSE can promote healthy circulation to leg veins.*

Resveratrol

Resveratrol is a polyphenol phytonutrient with antioxidant properties found in grapes, red wine, purple grape juice, peanuts and other plants. Research has shown that resveratrol may be the leading contributor to the "French Paradox" effect. Death from cardiovascular diseases in France is relatively low despite the high consumption of saturated fat and cigarettes. The French also consume moderate levels of red wine, which is rich in antioxidant polyphenols, including resveratrol. These compounds in the French diet may significantly contribute to lower incidences of heart complications.*

In addition to its antioxidant properties (by inhibiting oxidation of LDL cholesterol), resveratrol has anti-inflammatory and other cardiovascular promoting properties, such as encouraging eNOS an enzyme that stimulates the production of nitric oxide (NO). NO helps maintain arterial relaxation or vasodilation.*

Resveratrol also has insulin enhancing capabilities. In one randomized, placebo-control clinical study, published in the *British Journal of Nutrition*, 19 participants were given either 5 mg of resveratrol or a placebo twice daily. At week 4 (end of study), individuals taking resveratrol saw a statistically significant improvement in insulin resistance. This suggests that resveratrol may help support healthy blood sugar levels.*

Inflammation has detrimental effects on healthy telomeres. Under inflammatory stress, cells replicate themselves at a higher than normal rate. Each time a cell reproduces its telomeres shorten. Through resveratrol's ability to help support a healthy inflammatory response, it helps to maintain the length of telomeres. In a 6-week, placebo controlled study, with 20 healthy subjects, resveratrol decreased plasma levels of NFkB and TNF-alpha, which are both involved in promoting inflammation.*

Coenzyme Q10

CoQ10, a powerful antioxidant, helps fight the normal aging process. It is also called ubiquinone, because CoQ10 is ubiquitous throughout the body. It can be found in almost every cell in the body. The highest concentrations of CoQ10 are found in the heart, liver, kidneys and pancreas. As we age, our CoQ10 levels diminish. Certain prescription medications call also lower CoQ10 levels in the body, such as statins (for cholesterol), beta blockers (for heart and blood pressure), and certain anti-depressants.

This powerful nutrient also helps recycle other antioxidant nutrients like vitamins E and C. Not having enough CoQ10 can accelerate DNA damage. This nutrient supports heart health and muscle function. Inadequate CoQ10 can lead to muscle weakness and fatigue. It may also help maintain healthy blood pressure levels already in the normal range. In a research survey of supplement users conducted by ConsumerLab.com, CoQ10 was the fifth most popular supplement. Fifty-three percent of supplement users in the US had purchased CoQ10.*

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Lycopene

Lycopene is a carotenoid present in human serum, lungs, prostate, colon and skin. Foods with lycopene include apricots, pink grapefruits, guavas, guava juice, palm oil, watermelon and tomato-based foods like tomato juice, ketchup (or catsup), and marinara, tomato paste, or spaghetti sauce. It has been shown to have antioxidant and healthy cell proliferating properties. Individuals with a diet abundant in lycopene foods have increased cardiovascular health, reduced risk of age-related eye complications, and a lower incidence of certain cancers; however, these observations are seen in persons who report eating higher amounts of tomato based foods and not lycopene supplements. Many studies have identified that men, who consume high amounts of tomato-based foods, have healthier prostates compared to men with low intakes. A potent antioxidant, lycopene as a stand-alone ingredient, has demonstrated protective effects against DNA damage.*

Inositol

Inositol is a vitamin-like ingredient found in many plants and animals, including the human heart and brain. Technically not an essential vitamin, because it is synthesized in the body, inositol is considered a member of the B-complex family. It is sometimes called vitamin B8. It can be identified in foods such as brown rice, beans, corn, sesame seeds, and wheat bran. Fruits abundant in inositol include fresh cantaloupe and oranges. Part of cell membranes, proper muscle and nerve function requires inositol. Inositol participates in the action of serotonin, a neurotransmitter that is important to feelings of well-being and mood.*

Natural Vitamin E with mixed tocopherols and mixed tocotrienols

Vitamin E acts as an antioxidant, helping to protect cells from the damage caused by free radicals. It has been shown to reduce oxidation (caused by free radicals) of LDL cholesterol. The body also needs vitamin E to boost its immune system so that it can fight off invading bacteria and viruses. It helps to maintain healthy blood vessels and keeps blood flowing easily within the cardiovascular system.*

In addition, cells use vitamin E to interact with each other and to carry out many important functions. Vitamin E may delay cognitive decline associated with aging. Among women, higher intakes of vitamin E was associated with longer telomere lengths. In laboratory research, tocotrienols have elongated telomeres, promoted healthy telomerase activity, and have reduced damaged DNA.*

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