

## Xyngular Super Fruit Global Blend

### Ingredient Benefits

#### Fruits:

#### Acai

- ☐ **Nutrients:** antioxidants, anthocyanins, protein, omega-6 and omega-9 fatty acids

For many centuries, the healing power of the acai berry was unknown outside of the Amazon rainforest. The acai berry grows as a wild plant on top of many native palm trees in the Amazon rainforest, with the fruits of the plant being harvested by local farmers and used to make a healthy and nutritious fruit pulp. When quickly frozen, this fruit pulp can retain its vast nutritional value even when being shipped around the world. The acai berry is known for its deep purple color, as well as for being a rich source of many important antioxidant vitamins and has been used by the indigenous peoples of the region for thousands of years to enhance health and vitality.

The major benefits of the acai berry are thought to include its strong heart health benefits. The acai berry is known to be a rich source of compounds called anthocyanins. These anthocyanins are the same compounds thought to give red wine its health benefits, but acai berries may contain even higher concentrations of these healthy chemicals than wine, with none of the health risks associated with alcohol.

The acai berry is also a rich source of protein and dietary fiber, in addition to high levels of both omega-6 and omega-9 fatty acids, thought to have a protective effect on the heart and cardiovascular system. The omega-6 and omega-9 fatty acids contained in the acai berry may also play a role in lowering levels of cholesterol in the blood.

In addition to these important benefits, the acai berry is thought to play a vital role in slowing down the aging process. In health food circles, the acai berry is known as one of the most powerful of the anti-aging super foods. It is thought that this anti-aging effect is a combination of the high levels of anthocyanins and the strong antioxidant vitamin content the fruit contains. In fact, the acai berry is known to contain ten times as many antioxidant vitamins as grapes and twice as many as blueberries.

The acai berry is truly one of nature's most healing foods, and a worthy addition to any healthy diet.

**Historical Benefits:**

- Acai has been recommended for heart and cardiovascular health, may play a role in lowering cholesterol, thought to play a vital role in slowing down the aging process.

**Apple**

- Nutrients:** flavonoids, polyphenols, Vitamin C , malic acid, tartaric acid

The old saying, "An apple a day keeps the doctor away", was coined for a reason. Apples are a rich source of flavonoids and polyphenols. Both are powerful antioxidants. In fact, studies show that eating 100g of an apple can give an antioxidant effect equal to taking 1,500mg of vitamin C.

The pectin contained in the skin of an apple supplies galacturonic acid which helps remove toxic substances from the body. In addition, Pectin helps prevent protein matter in the intestine from spoiling. Apples also contain malic acid and tartaric acid which can help prevent disturbances of the liver and improve digestion.

Eating an apple every day can lower cholesterol and reduce skin diseases and the large amount of vitamins and minerals contained in apples help strengthen the blood. Also, apple cider vinegar when used as beverage can help to prevent the formation of kidney stones.

**Historical Benefits:**

- Apples have been recommended for : Obesity, Headache, Arthritis, Bronchial asthma, Inflammation of the bladder, Gonorrhoea, Anemia, Tuberculosis, Neuritis, Insomnia, Catarrh, Gallbladder stones, Worms, Halitosis or , & Pyorrhoea

**Blackberry**

- Nutrients:** antioxidants, tannin, anti-bacterial, cyanidin-3-O-glucoside, salicylate

Blackberries bestow a number of health and nutritional benefits on their consumers. Being rich in antioxidants, blackberries assist the body in fighting free radicals and thus, avoiding various types of cancer, especially breast cancer and cervical cancer. Another benefit of the high level of antioxidants in blackberries is protection against chronic disease.

The high tannin content, and the resultant antiseptic and astringent properties, of blackberries makes them good for tightening tissues as well as treating minor bleeding. Consumption of blackberries has been found to be beneficial for those suffering from diarrhea and intestinal inflammation. Blackberries have also been used to alleviate hemorrhoids, another benefit their high tannin content. Blackberries have been found to have anti-bacterial properties and can even help cleanse blood. Mild infections, like sore throats and mouth irritations, can be treated with the help of blackberries.

Regular consumption of blackberries has been seen to delay the process of aging. It is believed that the cyanidin-3-O-glucoside present in blackberry exerts protective benefits against endothelial dysfunction and vascular failure induced by peroxynitrite. Blackberries are known to contain salicylate, an analgesic or pain reliever, which might help lower the risk of heart diseases. The flavonoids present in blackberries promote vision health by preventing macular degeneration.

Regular consumption of blackberries can help strengthen the blood vessels in your body. Blackberries serve as a great source of ellagic acid, which is known to have antiviral properties. The high fiber content in blackberries helps maintain digestive health, help control blood sugar, and assist in weight loss and in lowering cholesterol levels.

#### **Historical benefits:**

- Blackberries help the body in fighting free radicals and thus avoiding various types of cancer especially breast and cervical cancer, have antiseptic and astringent properties, are good for tightening tissues, diarrhea and intestinal inflammation, sore throats and mouth irritations, alleviate hemorrhoids, help cleanse the blood, delay the process of aging, protect against endothelial dysfunction and vascular failure, are an analgesic or pain reliever, might help lower the risk of heart diseases, help strengthen the blood vessels, have antiviral properties, help maintain digestive health, control blood sugar, lose weight and lower cholesterol levels, effective against macular degeneration

## **Blueberry**

- Nutrients:** antioxidants, anthocyanoside, Anthocyanins, Pterostilbene, Kaempferol, tannins

Blueberries are packed with nutrients and powerful antioxidants and earn their well deserved reputation of preventing cancer-causing cell damage of the body. Due to their antioxidant

power, blueberries also reduce the changes brought about by various age-related diseases. Blueberries protect the brain from oxidative stress and reduce the effects of Alzheimer's disease or dementia. Diets rich in blueberries have been shown to augment learning capability and memory power. The antioxidant Pterostilbene helps to reduce cholesterol and Kaempferol, a natural flavonoid present in blueberries, reduces the risk of ovarian cancer in females. The compound anthocyanoside present in the fruit helps to slow down visual loss.

Eating blueberries prevents different problems related to urinary tract infections and curbs problems related to diarrhea and constipation. Blueberries also contain tannins, which act as astringents in the digestive system and help to reduce inflammation. The high percentage of Anthocyanins present in the fruit combats E. Coli.

### **Historical benefits:**

- Blueberry seems to prevent cancer-causing cell damage, slow down age related disease, helps to preserve vision, prevents urinary tract infections, combats E. Coli, reduce cholesterol, reduce the effects of Alzheimer's disease or dementia, augment learning capability and memory power, reduces the risk of ovarian cancer in females, curbs problems related to diarrhea and constipation, aids the digestive system and help to reduce inflammation.

## **Cranberry**

- Nutrients:** proanthocyanidins, high-molecular-weight nondialysable material (NDM), flavonoids and polyphenolic compounds

While cranberry is perhaps best known for its effect on urinary tract health, newer research indicates that it may act elsewhere in the body against other bacteria as well. Cranberries contain proanthocyanidins, which inhibit the adhesion of bacteria to surfaces in the body and the subsequent reproduction required for infection. The adhesion of the different types of bacteria that cause both stomach ulcers, and periodontal gum disease, have been shown to be inhibited in the presence of cranberry, and it is likely that other susceptible bacteria will be found as well.

This anti adhesion effect of Cranberry may have far reaching implications. Not only may regular consumption of cranberry products help maintain health, but in the process it will reduce the number of infections in a given population, and thereby the doses of antibiotics which are needed. It is becoming increasingly clear that a reduction in general antibiotic use

also reduces the likelihood of the bacteria becoming resistant to those very same antibiotics, which is a public health problem of global proportions.

Studies have shown that cranberries have the ability to protect brain cells from free radical damage and subsequent motor and cognitive function losses. Preliminary results indicate that there will be compelling evidence that cranberry can help protect the brain from neurological damage. Studies also show that compounds in cranberries may prove to be a potent cancer fighter.

Atherosclerosis, in the simplest terms, is the accumulation of low density lipoprotein (LDL), or "bad cholesterol", in arteries resulting in restricted blood flow. Flavonoids have been shown to function as potent antioxidants and may reduce the risk of atherosclerosis. Cranberries contain significant amounts of flavonoids and polyphenolic compounds that have been demonstrated to inhibit low density lipoprotein oxidation. Cranberries may offer a natural defense against atherosclerosis.

Peptic ulcers are increasingly being attributed to infection by *Helicobacter pylori* bacteria, as opposed to stress and/or stomach acidity. A high-molecular-weight nondialysable constituent of cranberry juice has been shown to inhibit the adhesion of *Helicobacter pylori* to human gastric mucus. These preliminary results suggest that cranberry may be beneficial in the prevention of peptic ulcers. In addition to ulcers, *H. pylori* infection has been linked to gastric adenocarcinomas (stomach cancer), non-ulcer dyspepsia (acid reflux disease), and gastritis (inflammation of the stomach).

Dental plaque is composed primarily of oral bacteria that have attached themselves to the tooth and gum surfaces, and to each other (coaggregation). A component unique to cranberry juice has the ability to reverse and inhibit the coaggregation of certain oral bacteria responsible for dental plaque and periodontal disease.

#### **Historical benefits:**

- Cranberry inhibits the adhesion of bacteria that could cause urinary tract infection as well the adhesion of the different types of bacteria that cause both stomach ulcers and periodontal gum disease, reduces the number of infections in a given population and thereby the doses of antibiotics which are needed, plays a role in helping to prevent heart disease and certain cancers, has the ability to reverse and inhibit the coaggregation of certain oral bacteria, inhibits the adhesion of *Helicobacter pylori* to human gastric mucus, inhibits low density lipoprotein oxidation, can help protect the brain from neurological damage, may prove to be a potent cancer fighter

## Goji

- **Nutrients:** glyconutrients, 22 phytonutrients, carotenoids, beta carotene, Vitamin C, polysaccharides, LBP1, LBP2, LBP3, and LBP4, nineteen amino acids, 21 trace minerals, protein, zeaxanthin, B-complex vitamins, fatty acids, Vitamin E, Cyperone, Beta-Sitosterol, Solavetivone, Physalin, linoleic acid, and Betaine; Beta-Sitosterol

Goji juice is a powerful antioxidant that counters premature aging. Consuming Goji juice minimizes the risk of cancer by preventing DNA mutation, inhibiting growth of tumors, and by controlling the peroxidation of lipids.

The key nutritional ingredients of Goji juice are the glyconutrients that provide eight essential sugars required by the human body for growth. The 22 phytonutrient compounds present in Goji juice facilitate intercellular communication.

The tremendous health-giving properties of the Goji berry can be attributed to its composition; the Goji berry is rich in carotenoids such as beta carotene and vitamin C, contains germanium, no other fruit is known to contain this mineral, has four important polysaccharides, LBP1, LBP2, LBP3, and LBP4, which offer significant health benefits, provides nineteen amino acids including the eight essential amino acids as well as up to 21 trace minerals including zinc, copper, selenium, phosphorous, etc.

The extremely high nutritional value of the Goji berry has been shown to have a wide variety of benefits some of which include increasing the body's resistance to disease, helping to regulate blood pressure, helping to regulate blood-sugar during the early stages of diabetes, having a positive effect on vision, beneficial for the heart, relieving headaches and insomnia, helping to regulate weight, promoting sexual health and improving fertility, helping digestion and memory functions, and alleviating dry cough.

The Goji berry has protein content higher than wheat, contains zeaxanthin, which is good for the eyes, has B-complex vitamins as well as fatty acids, and provides Vitamin E, which is not found in many fruits but is normally limited to nuts and seeds. The Goji berry also contains Beta-Sitosterol which has anti-inflammatory properties, linoleic acid which aids weight loss, Betaine which improves the health of the cardiovascular system, and also contains Cyperone, Beta-Sitosterol, Solavetivone, Physalin, linoleic acid, and Betaine.

Studies with elderly people and those suffering from general debility have shown that consuming Goji juice can lead to a three-time increase in T-cell transformation functions and that white cell interleukin-2 count can double. This opens up the possibilities of extracting even greater benefits from this berry, particularly for fighting tiredness, improving the working of the immune system, preventing the growth of free radicals, etc.

### Historical benefits:

- Goji can lead to a three-time increase in the T-cell transformation functions, white cell interleukin-2 count can double, fights tiredness, improves the working of the immune system, could prevent the growth of free radicals, facilitate intercellular communication, counters premature aging, Increases resistance to disease, Helps to regulate blood pressure, Minimizes the risk of cancer , Regulates blood-sugar, positive effect on vision, supports the heart, relieves headaches and insomnia, Regulates weight, Promotes sexual health and improves fertility, Helps digestion and memory functions, Alleviates dry cough

### Grape skin extract

- **Nutrients:** Anthocyanins, polyphenolics, ellagic acid, flavonoids, Resveratrol, and proanthocyanidins

Many of the health benefits attributed to red/purple grapes are due to the pigments that are concentrated largely in the skin and seeds at levels about 100 times higher than the pulp of the grape. *Anthocyanins* tend to be the main polyphenolics in red grapes while the catechins are the more abundant phenolic in white grapes. The phenolic content of grape skins depends upon the variety, the soil, climate, geography, cultivation practice, and exposure to fungal infections. Grapes are also rich in ellagic acid, a potent flavonoid that helps fight cancer.

The pigments in red, purple and black grapes protect the cardiovascular system by a number of mechanisms that include the suppression of blood clots, inhibition of LDL cholesterol oxidation, reduced homocysteine levels, and anti-atherosclerotic properties. Grapes stimulate endothelial nitric oxide production which induces relaxation of the blood vessel walls, and a reduction in blood pressure levels. Recently, it was shown that a Concord grape extract lowered LDL cholesterol, raised HDL cholesterol, and decreased plasma inflammatory biomarkers.

Resveratrol (3, 5, 4'-trihydroxy-trans-stilbene), a dietary constituent found in grapes exerts a wide variety of pharmacological activities. Resveratrol is as an effective agent for cancer chemoprevention due its ability to block many steps in the carcinogenesis process. Resveratrol contained in red grapes and berries has been shown to inhibit prostate cancer cell growth, induce apoptosis, influence interleukin-6, and exert immunomodulatory effect on mouse lymphocytic leukemia. One of the possible mechanisms for the protective activity of

resveratrol is by down regulation of inflammatory responses. Resveratrol also inhibits the nuclear transcription factor, NF-kappaB.

Anthocyanins and proanthocyanidins are two groups of polyphenolics in Concord and similar grape juices. These substances show cancer preventive and anti-proliferative properties and can detoxify the activity of some cancer-causing substances. Concord grape juice can protect healthy breast cells from DNA damage caused by a chemical carcinogen. Grape juice also suppresses the growth and development of breast cancer cells in laboratory animals given chemically induced tumors. The grape juice reduced both mammary tumor size and the number of tumors per animal. The pigments in grape juice also improve immune responsiveness.

Promising data suggests the use of grape juice to promote brain health and delay neurodegenerative diseases. Participants that drank purple grape juice and similar fruit juices three times a week were about 70% less likely to develop Alzheimer's disease. When laboratory animals were fed Concord grape juice they showed significantly improved scores on memory and coordination tests.

#### **Historical benefits:**

- Grape skin extract has been recommended for strengthen capillary walls, reduces the risk of blood clots, cancer chemoprevention due its ability to block many steps in the carcinogenesis process, induces relaxation of the blood vessel walls, , inhibition of LDL, inhibit prostate cancer cell growth, induce apoptosis, regulation of inflammatory responses of cholesterol oxidation, reduced homocysteine levels, and anti-atherosclerotic properties, protect healthy breast cells from DNA damage, improve immune responsiveness, promote brain health and delay neurodegenerative diseases

## **Green Tea**

- Nutrients:** catechin polyphenols, particularly epigallocatechin gallate (EGCG). EGCG is a particularly powerful anti-oxidant

Scientific research in both Asia and the west is providing hard evidence for the health benefits long associated with drinking green tea. For example, in 1994 the Journal of the National Cancer Institute published the results of an epidemiological study indicating that drinking green tea reduced the risk of esophageal cancer in Chinese men and women by nearly sixty percent. University of Purdue researchers recently concluded that a compound in green tea

inhibits the growth of cancer cells. There is also research indicating that drinking green tea lowers total cholesterol levels, as well as improving the ratio of good (HDL) cholesterol to bad (LDL) cholesterol.

The secret of green tea lies in the fact it is rich in catechin polyphenols, particularly epigallocatechin gallate (EGCG). EGCG is a powerful anti-oxidant: besides inhibiting the growth of cancer cells, it kills cancer cells without harming healthy tissue. It has also been effective in lowering LDL cholesterol levels, and inhibiting the abnormal formation of blood clots. The latter takes on added importance when you consider that thrombosis (the formation of abnormal blood clots) is the leading cause of heart attacks and stroke.

Links are being made between the effects of drinking green tea and the "French Paradox." For years, researchers were puzzled by the fact that, despite consuming a diet rich in fat, the French have a lower incidence of heart disease than Americans. The answer was found to lie in red wine, which contains resveratrol, a polyphenol that limits the negative effects of smoking and a fatty diet. In a 1997 study, researchers from the University of Kansas determined that EGCG is twice as powerful as resveratrol.

New evidence is emerging that green tea can even help dieters. In November, 1999, the *American Journal of Clinical Nutrition* published the results of a study at the University of Geneva in Switzerland. Researchers found that men who were given a combination of caffeine and green tea extract burned more calories than those given only caffeine or a placebo.

Green tea can even help prevent tooth decay! Just as its bacteria-destroying abilities can help prevent food poisoning, it can also kill the bacteria that cause dental plaque.

### **Historical benefits:**

- Green Tea reduces the risk of esophageal cancer, inhibits the growth of cancer cells, lowers total cholesterol levels, as well as improving the ratio of good (HDL) cholesterol to bad (LDL) cholesterol, rheumatoid arthritis, cardiovascular disease, infection, improved immune function, inhibits the growth of cancer cells, kills cancer cells without harming healthy tissue, lowers rate of heart disease, prevents tooth decay, helps prevent food poisoning, kills bacteria

### **Noni**

- Nutrients:** Vitamin C, niacin, potassium, Vitamin A, calcium and sodium, anthroquinones, organic acids, and xeronine.

The pineal gland stimulates two major hormones called *serotonin* and *melatonin*. The pineal gland controls five other glands which are the thyroid, which produces thyroxine to energize our cells, the thymus which protects you against infections and cancer, the pancreas which is involved with blood sugar and secreting the hormone insulin, the adrenal gland which responds every time you are under stress; and the male and female sex organs and their hormones. Therefore a healthy pineal gland will have an impact on the other glands and their functions in the body.

When the pineal gland is at its peak performance, it turns a golden color and emits a black juice as well as a golden oil. Noni juice acts as a precursor to the secretions coming from the pineal gland, allowing it, and the other glands, to function fully. The pancreas is also affected by Noni juice helping blood sugar and blood pressure to normalize.

### Historical benefits:

- Noni juice can help stabilize blood sugar levels, reduce inflammation, joint pain, and arthritis, improve digestive function, remove parasites and cleanse the digestive tract, reduce ulcers, irritable bowel syndrome, constipation, and diarrhea, menstrual cramps, arthritis, gastric ulcers, atherosclerosis, pain relief, and mental depression.

## Pear

- Nutrients:** anti-oxidant, glutathione, vitamin C, copper, boron, folic acid

Pears have anti-oxidant and anti-carcinogen glutathione which help prevent high blood pressure and strokes. The high vitamin C and copper content act as good anti-oxidants that protect cells from damages by free radicals. The high content of pectin in pears is very useful in helping to lower cholesterol levels. The pectin in pears is diuretic and will give a mild laxative effect.

The cooling effect in pears is excellent in relieving fever, cooling your body in the summer, and nourishing the throat to prevent throat problems. The anti-oxidant nutrients in pears are critical in building up your immune system. Pear juice has an anti-inflammatory effect and helps relieve pain from various inflammatory conditions. Pears also contain a high level of boron. Boron helps the body to retain calcium, thus preventing or retarding osteoporosis and the high content of folate (folic acid) prevents neural tube defects in infants.

**Historical benefits:**

- The pear helps regulate blood pressure, protect cells from damage by free radicals, helps regulate bowel movements, is a natural diuretic, a natural source of energy, helps relieve fever, retards osteoporosis, is an immune booster and anti-inflammatory, helps clear phlegm, helps prevent neural tube defects, nourishes the throat and helps prevent throat problems, supports vocal chords.

**European Plums**

Prunes have been the subject of repeated health research for their high content of unique phytonutrients called *neochlorogenic* and *chlorogenic acid*. These substances found in prunes are classified as *phenols*, and their function as antioxidants has been well documented. These damage-preventing substances are particularly effective in neutralizing a particularly dangerous oxygen radical called *superoxide anion radical*, and they have also been shown to help prevent oxygen-based damage to fats. Since our cell membranes, brain cells and molecules such as cholesterol are largely composed of fats, preventing free radical damage to fats is no small benefit.

Prunes ability to deter oxygen-related damage to our cells is also related to their beta-carotene content. Beta-carotene acts as a fat-soluble antioxidant, eliminating free radicals that would otherwise cause damage to our cells and cell membranes. (Only after cholesterol has been oxidized by free radicals does it pose a threat to artery walls.) Free radicals can also damage cellular DNA, causing mutations which can result in the formation of cancerous cells. In addition, free radicals contribute to inflammation which increases the severity of a number of different conditions. This is why beta-carotene, which shuts down free radicals, has been shown to be helpful for the prevention of a variety of diseases, including atherosclerosis, diabetic heart disease, and colon cancer, and why it has also been found useful for reducing the severity of inflammatory conditions like asthma, osteoarthritis, and rheumatoid arthritis.

Prunes are also a good source of potassium which is an essential mineral for maintaining normal blood pressure and heart function thereby preventing high blood pressure and protecting against atherosclerosis. Potassium may also help to promote bone health.

**Historical Benefits:**

- Prunes help prevent oxygen-based damage to fats, they are helpful for the prevention of atherosclerosis, diabetic heart disease, colon cancer, and for reducing the severity of inflammatory conditions like asthma, osteoarthritis, and rheumatoid arthritis, help

maintain normal blood pressure and heart function to prevent high blood pressure and protect against atherosclerosis, also helps to promote bone health and increases the absorption of iron

## Raspberry

- ☐ **Nutrients:** antioxidants, salicylic acid, anthocyanins, quercetin, Manganese and vitamin C

Raspberries can restrain proliferation of cancer cells and even the formation of tumors in various parts of the body including the colon. The anthocyanins present in raspberry have been found to reduce the risk of heart disease and also delay the effects of aging. The presence of salicylic acid in raspberries might slow down atherosclerosis (hardening of the arteries). Daily consumption of raspberry has been seen to lower the risk of age-related macular degeneration (ARMD), the main cause of vision loss in older adults.

Being rich in antioxidants, raspberry helps neutralize free radicals in the body and thus, prevents damage to cell membranes & other structures. Raspberry is a good source of quercetin, an antioxidant that diminishes the release of histamines and thus, minimizes allergic reactions. Manganese and vitamin C, two antioxidant nutrients in raspberries, help protect the body tissue from oxygen-related damage. Research has shown that regular consumption of raspberry is good for those suffering from inflammation and pain.

### Historical benefits:

- ☐ Raspberry can restrain proliferation of cancer cells and even the formation of tumors in various parts of the body including the colon, lower the risk of age-related macular degeneration, reduce the risk of heart disease and also delay the effects of aging, may slow down atherosclerosis (hardening of the arteries), helps protect the body tissue from oxygen-related damage

## Seabuckthorn

- ☐ **Nutrients:** Vitamins A, B1, B2, C, D, K, and P, Carotenoids, Omega 3, 6, 7 & 9 (Essential Fatty Acids or EFAs), 42 Lipids, Organic Acids, Amino Acids, Folic Acid, Tocopherols, Flavonoids, Phenols, Tannins, Terpenes, Mineral

Known as the "Holy Fruit of the Himalayas," seabuckthorn has been cherished by native Tibetans for centuries for its incredible nutritive qualities. Seabuckthorn grows high in the Himalayan region and has been used in Asia over the centuries as an herbal medicine to relieve cough, aid digestion, invigorate blood circulation, and alleviate pain. This fruit has a high abundance of some of the rarest and most powerful antioxidants in the world. Not only that, but it is the only plant known to contain essential fatty acids 3, 6, 7, and 9.

Sea buckthorn is a powerful antioxidant, thanks to its very high vitamin C, carotenoid, and phenolic content. As a result of the powerful antioxidant levels, its ability to protect against aging of the skin and the effects of environmental pollution has been noted. It has been used for skin irritation, sunburn, wounds, inflammation, gastric problems, coughs, and mucous membrane disorders. The high concentration of some rare fatty acids and carotenoids are thought to be the cause of the healing effect Sea Buckthorn has on such skin problems as burns, dermatitis and eczema.

#### Historical benefits:

- Seabuckthorn has reduced inflammation, increased cellular rejuvenation, improved cardiovascular health, improved brain and nervous system function, provides a natural energy boost, helps soothe and heal scalds and burns, improves nervous system health, assists in wound repair, improves skin complexion, and is an anti-acne treatment

## Strawberry

- **Nutrients:** phenols, flavonoids and anthocyanins, antioxidants, ellagitannins, Vitamin C, manganese, folate, potassium, riboflavin, vitamin B5, omega-3 fatty acids, vitamin B6, vitamin K, magnesium, and copper.

Strawberries are filled with unusual phytonutrients and are famous in the phytonutrient world as a rich source of *phenols*. The *anthocyanins* in strawberry serve as potent antioxidants that have repeatedly been shown to help protect cell structures in the body and to prevent oxygen damage in all of the body's organ systems. Strawberries' unique *phenol* content makes them a heart-protective fruit, an anti-cancer fruit, and an anti-inflammatory fruit, all rolled into one. The anti-inflammatory properties of strawberry include the ability of *phenols* in this fruit to lessen activity of the enzyme *cyclo-oxygenase* which is involved in rheumatoid and osteoarthritis, asthma, atherosclerosis, and cancer.

The *ellagitannin* content of strawberries has actually been associated with decreased rates of cancer death. In one study, strawberries topped a list of eight foods most linked to lower rates

of cancer deaths among a group of over 1,000 elderly people. Those eating the most strawberries were three times less likely to develop cancer compared to those eating few or no strawberries.

In terms of traditional nutrients, strawberries are an excellent source of vitamin C and manganese. They also qualified as a very good source of dietary fiber and iodine as well as a good source of potassium, folate, riboflavin, vitamin B5, omega-3 fatty acids, vitamin B6, vitamin K, magnesium, and copper.

#### **Historical benefits:**

- Strawberry protect cell structures in the body and to prevent oxygen damage, anti-inflammatory properties protect against rheumatoid and osteoarthritis, asthma, atherosclerosis, and cancer, inhibit the proliferation of human liver cancer cells, and lower your risk of age-related macular degeneration

## **Tart Cherry**

- Nutrients:** Anthocyanins, Flavanols and Flavonols, Phenolic Acids , Phytochemicals, antioxidants, chronic diseases, Plant Hormones, Terpenes

The naturally occurring nutritional and medicinal value that tart cherries possess ranks above that of most other fruits. While some other fruits may have some of these bioactive compounds (such as antioxidants), tart cherries possess a wider variety of them and in greater amounts. Regular consumption of tart cherries is extremely beneficial to an individual's health and wellness.

Tart cherries contain Anthocyanins which help reduce inflammation and inhibit tumor growth along with Flavanols and Flavonols which improve blood flow, heart and brain health, and lowers blood pressure. They also contain Plant Hormones that help regulate physiological functions, Terpenes that are essential oils from plant elements, and Phenolic Acids which are powerful antioxidants. Phytochemicals (antioxidants) are associated with reducing the risk of major chronic diseases.

#### **Historical benefits:**

- Tart cherry reduces the risk of cardiovascular disease, cancer, diabetes, Alzheimer disease, cataracts, and functional deterioration due to age, improves blood flow, heart and brain health, and lowers blood pressure, reduces inflammation and inhibits tumor growth, helps regulate physiological functions

## White Tea

- ☐ **Nutrients:** polyphenols

A 2004 study at Pace University concluded that white tea can help your body's immune system fight off viruses and dangerous infection-causing bacteria. White tea is also more effective than green tea in killing germs. New studies conducted at Pace University have indicated that White Tea Extract (WTE) may have prophylactic applications in retarding growth of bacteria that cause Staphylococcus infections, Streptococcus infections, pneumonia and dental caries. Studies have also indicated that WTE has an anti-fungal effect on Penicillium chrysogenum and Saccharomyces cerevisiae. In the presence of WTE, Penicillium spores and Saccharomyces cerevisiae yeast cells were totally inactivated. It is suggested that WTE may have an anti-fungal effect on pathogenic fungi.

Furthermore, studies indicate that white tea is better for you. white tea contains more polyphenols, the powerful anti-oxidant that fights and kills cancer-causing cells, than any other type of tea.

### Historical benefits:

- ☐ White tea has an anti-fungal effect, retards growth of bacteria , kills germs, anti-viral effect, anti-microbial, helps your body's immune system fight off viruses and dangerous infection-causing bacteria, prevents the growth of dental plaque

## Wild Bilberry

The bilberry is one of the most powerful of all foods, and has shown great promise at treating and preventing a number of serious medical conditions. The compounds contained in the bilberry, notably the anthocyanosides, have been shown to help fortify blood vessel walls, thereby aiding circulation and increasing blood flow.

One of the most important benefits of bilberry consumption is the ability to enhance the vision and bilberry is thought to have a significant role to play in the prevention of many common eye diseases as well.

Bilberry has been used to treat diarrhea and other common stomach problems for centuries and is quite an effective treatment for sore throats.

**Historical benefits:**

- Wild billberry enhances vision, plays a role in the prevention of many common eye diseases, diarrhea, and sore throats

**Extramel**

- Nutrients:** Primary Antioxidants

**Historical benefits:**

- Impedes the production of primary free radicals

**Adaptogens:****Eleuthero Root**

- Nutrients:** Adaptogen

Eleuthero reduces the depletion of stress-reducing hormones. When the body is under stress, the adrenal glands react by releasing adrenaline and corticosteroids. This causes nervous exhaustion or physical fatigue.

By reducing the depletion of stress-reducing hormones, exhaustion and fatigue are diminished and the body is better able to respond to stress.

**Historical Benefits:**

Eleuthero has been known to help the immune system by stimulating the production of the t-cells (the specific white blood cells that attack any bacteria or virus that enters into the body). It restores energy/strength and improves appetite. Eleuthero also reduces stress and enhances mental attentiveness.

## Amla

- ☐ **Nutrients:** Tannins, polyphenols, Vitamin C, adaptogens, flavonoids, kaempferol, ellagic acid and gallic acid.

Amla has a reputation as a powerful rejuvenating herb. The Amla fruit is reputed to have the highest content of vitamin C of any natural occurring substances in nature. Amla studies suggest that it has potential efficacy against inflammation, cancer, age-related renal disease, diabetes, rheumatoid arthritis and osteoporosis.

A human pilot study demonstrated reduction of blood cholesterol levels. Another very recent study with diabetic rats given an amla fruit extract has shown significant decrease of the blood glucose as well as triglyceridemic levels and an improvement of the liver function caused by a normalization of the liver-specific enzyme alanine transaminase (ALT) activity.

### **Historical Benefits:**

Amla has been known to have potent antioxidant properties and give against oxidative stress. It has also been known to help control inflammation and its resultant effects.

## Ginseng

- ☐ **Nutrients:** ginsenosides

The power of Ginseng is known throughout the world. Ginseng allows the body to withstand higher levels of emotional and physical stress, increases levels of alertness and mental clarity, reduces fatigue, improves memory and wards off colds, flu and other infections.

Ginseng has also shown promise in the treatment of chronic fatigue syndrome and stimulates the immune and nervous system. It has been shown to help with diabetes, reduces the growth of certain types of cancer cells, and also increases testosterone levels and sperm production.

### **Historical Benefits:**

Ginseng improves cardiovascular, immune system and nervous systems. It also assists the function of the adrenal glands during exercise to build strength and endurance.

## Proprietary Primary Antioxidant Complex:

**Glutamic Acid** is the precursor of GABA but has somewhat the opposite function; it is an excitatory neurotransmitter. It is one of the few nutrients that crosses the blood-brain barrier and is the only means by which ammonia in the brain can be detoxified.

It is considered to be nature's "Brain food" by improving mental capacities; and is used in the treatment of depression, ADD and ADHD, fatigue and chronic fatigue, alcoholism, epilepsy, muscular dystrophy, mental retardation, and schizophrenia.

**Cysteine** is a precursor to the liver detoxifying and antioxidant amino acid glutathione. This functionality provides an anti-aging effect on the body—even reducing the accumulation of age spots. Another impressive function of Cysteine is the breakdown of mucus in the respiratory tract which can help in bronchitis, emphysema, and tuberculosis.

**Glycine** supplies additional creatine to muscles and is used to construct DNA and RNA. It functions in skin, connective tissues, the central nervous system and prostate.

A proper level of cellular glycine produces more energy.