

The Benefits of Ageless Xtra & Xperia

A naturopathic physician's perspective

Neil Tessler ND, DHANP

The Following article is my own personal research. It is not meant to suggest a cure, diagnosis or treatment for any condition, but represents a careful scan of research-supported *potential* benefits of the individual ingredients of Ageless Xtra and Xperia (higher potency, no sucralose, five more ingredients). This document has no official or unofficial acknowledgement from Univera at this time, and is purely for educational and research purposes only.

In my office, almost daily, sometimes several times a day, someone phones or writes to request more Ageless Xtra or Xperia because of the overall benefits they are noticing for themselves or a family member. In twenty-five years practice, I've never carried an item in my naturopathic pharmacy that has been so eagerly appreciated by so many of my patients. As a result I've put together the following discussion of some of the individual ingredients.

Ageless Xtra and Xperia address a number of the common causes and effects of aging by supporting repair and preventing damage. It does this by nourishing, restoring, fortifying/protecting and vitalizing basic functional units of the cell.

On the basis of traditional usage, supported by wide ranging research, including Univera's own, third party research studies of its products, Ageless Xtra and Xperia may help:

- 1) Improve mental clarity and focus.
- 2) Enhance cellular energy
- 3) Aid in joint comfort and flexibility.
- 4) Help the body's management of stress.
- 5) Provide an exceptionally rich source of diverse antioxidants, as well as substances that activate natural anti-oxidant activity in the body.

A few research based potential benefits of the individual ingredients:

- 1) Supports improved blood lipid profile
- 2) Prevention of atherosclerosis
- 3) Heart and vascular protection
- 4) Prevention of cellular mutation

- 5) Improved stamina in both physical and mental performance
- 6) Improved healing time from injury
- 7) Enhanced nutrient absorption
- 8) Enhanced connective tissue/protein repair
- 9) Improved blood sugar metabolism
- 10) Anti-bacterial, anti-viral activity

Let's review some of the specific ingredients and their potential benefits as derived from scientific literature.

Cordyceps Sinensis

Cordyceps is one of the supreme anti-aging plants and comes from the fungi family. Cordyceps is a fungus that in nature lives on the larva of a particular species of moth in Tibet. It is now grown in specialized media that maximize its medicinal components.

According to available research studies, the following effects of Cordyceps have been indicated: It can reduce total cholesterol and triglycerides, lower blood viscosity (mild blood thinning), enhance the efficient use of oxygen, improve glucose metabolism by increasing insulin sensitivity, improve libido, enable weight loss, stabilize heart rhythm, increase the body's ability to scavenge free radicals, increase overall vitality, and reduce the symptoms of several age related respiratory and kidney disorders.

Cordyceps increases ATP production (in animal model research). ATP serves as the primary energy currency of the cell and is the most widely distributed high-energy compound in the body. Several ingredients in Xperia support the healthy function of Kreb's Citric Acid (cellular respiration) cycle), the basic energy creating process of the cell which produces ATP as a byproduct.

Cordyceps activates Superoxide Dismutase (SOD) one of the most important free radical scavenging molecules. SOD dramatically decreases with age. Cordyceps is therefore a significant anti-oxidant.

Cordyceps also helps inhibit specific brain chemicals associated with age related conditions impacting mental function.

Rhodiola crenulata

There are several medicinal species of Rhodiola. This species is also found in the mountains of Tibet and South Western China. It can be a valuable in reducing the effects of stress on the body.

Research indicates Rhodiola enhances physical and mental work performance. It can be of value in sleep difficulties, poor appetite, irritability, hypertension, headaches and fatigue. Rhodiola has been shown to enhance the transport of tryptophan and 5-HTP (serotonin precursors), as well as helping to reduce the degradation of other mood-elevating neurotransmitters in the brain.

Besides improving resistance to physical and emotional stress, Rhodiola increases stamina in athletic and intellectual performance. In athletes, Rhodiola decreases recovery time. Rhodiola increases focus, learning and memory. It also improves the quantity and quality of mental work. Rhodiola has been shown to promote higher levels of ATP and Creatine Phosphate, providing more of the energy required for physical exertion throughout the day.

Rhodiola is also cardio-protective, working against stress induced heart damage.

Sometimes people taking Xperia report feeling jittery as if they had coffee. Rhodiola is likely the responsible agent as some individuals may feel overly activated, jittery, or agitated. If this occurs, then a smaller dose with very gradual increases may be needed. If used late in the day, Rhodiola can, for some people, interfere with sleep or cause vivid dreams during the first few weeks of use.

Ginkgo Biloba

Ginkgo biloba is the oldest tree species that exists having a two hundred and fifty million year history. Ginkgo leaf is the source of its values. It improves blood flow (including microcirculation in small capillaries) to most tissues and organs and has potent anti-oxidant value.

Ginkgo is widely touted as a "brain herb." Ginkgo can improve attention, learning and memory in healthy individuals.

In addition, Ginkgo is sometimes used preventively because it may delay the onset of Alzheimer's in someone who is at

risk for this type of dementia (for example where there is family history).

Ginkgo may stop or reduce some retinal problems by increasing circulation to the eyes. Retinal damage has a number of potential causes, including diabetes and macular degeneration. Studies suggest that Ginkgo may help preserve vision in those with macular degeneration.

A clinical study found that Ginkgo extract reduces the effects of menopause on thinking and memory.

Ornithine Alpha Keto-glutarate

Alpha Keto-glutarate is a rate-limiting step in the Krebs's cellular respiration cycle that produces ATP, the body's primary energy currency. As we age, Alpha Keto-glutarate diminishes, therefore reducing the capacity to produce ATP. It is therefore critical in maintaining the vitality of the energy creating process.

Alpha Keto-glutarate increases muscle protein synthesis and decreases protein catabolism or breakdown. It also speeds wound healing.

In addition, Alpha Keto-glutarate in combination with ornithine (OKG) dramatically increases the synthesis of amino acids arginine, proline and polyamines, which play key roles in the body's response to trauma. Therefore, it can counteract trauma-induced immune disturbance.

OKG also helps support our most important protein building hormones, including human growth hormone (HGH), insulin-like growth factor, and insulin. It has been documented that trauma, stress, and aging cause a dramatic decrease in the level and function of these important hormones. Among OKG's effects in the body is the ability to simultaneously increase all these important anabolic hormones.

Protectin

This is a patented, propriety botanical product, unique to the Univera line. Research demonstrates its safe yet potent ability to gently down-regulate the three major inflammatory pathways COX1, COX 2 and 5LO.

Maxcell

This is s another propriety botanical product unique to the Univera line that has been shown to dramatically increase

nutrient absorption. It has also been shown to stimulate cellular renewal, as well as amplifying the effects of other nutrients and enhancing immune activity.

Seroctin/Serenix

Seroctin is an alkaloid (6-MBOA) derived from young corn shoots. Findings to date suggest its value in improved mood, enhanced memory and decreased anxiety. It also appears to help improve sleep quality. Seroctin increases the production of serotonin and melatonin. Some findings in rodent research suggest that seroctin may also increase libido and reduce appetite. Too much seroctin may induce the need for sleep.

Alpha-Lipoic Acid:

Alpha lipoic acid is a powerful, natural antioxidant becoming recognized as having unique benefits in the therapy and prevention of a broad range of conditions. In addition to its antioxidant activity, alpha lipoic acid helps the body utilize glucose, hence alpha lipoic acid's potential role in improving blood sugar control. Lipoic acid is readily absorbed from the diet or as a supplement.

Alpha lipoic acid increases or maintains levels of other antioxidants including COQ 10, Vitamin C, Vitamin E and glutathione, which often decline with age. As they breakdown in the course of their own metabolic function, Alpha lipoic acid aids in the recycling of Vitamin C and E. It specifically increases the production of Glutathione, one of the most common and powerful antioxidants in the body, responsible for mopping up all types of toxins and free radicals. This is particularly important during periods of excessive stress or exposure to toxins.

Alpha lipoic acid serves as a coenzyme in the Krebs cycle (the basic cellular energy production cycle which produces ATP) and in the production of cellular energy.

The body routinely converts some alpha-lipoic acid to dihydrolipoic acid, which appears to be an even more powerful antioxidant. Both forms of lipoic acid quench peroxy nitrite radicals, an especially dangerous type of free radical consisting of both oxygen and nitrogen. Peroxy nitrite radicals play a role in the development of atherosclerosis, lung disease, chronic inflammation and neurological disorders.

Green Tea Extract - Standardized L-Theanine Content

Green tea is high in an anti-oxidant known as epigallocatechin gallate, or EGCG for short. Findings suggest that green tea may help protect the body against certain kinds of cancer as well as heart disease. It has anti-inflammatory and antioxidant effects.

Information from both animal and human studies suggest antioxidants in green tea may lower cholesterol, reduce the risk of heart disease, and aid in the control of blood pressure.

Recent scientific research also suggests that green tea has potent fat-burning properties.

In a study of concentrated green tea catechins, there was a dramatic increase in the production of a group of key detoxification enzymes crucial to the body's defense against cancer-causing chemicals and other toxins. According to the study's lead investigator, a research associate professor at the University of Arizona, the catechins were found to alter the dangerous molecules that would otherwise damage cellular DNA, thus rendering these molecules inert. "They actually convert known carcinogens to non-toxic chemicals."

Clinical tests show that EGCG not only inhibits the growth of new cancer cells, but it kills some existing cancer cells without harming normal cells. EGCG also can inhibit the unnatural formation of blood clots, one of the leading causes of heart attacks and stroke.

L-Theanine is a derivative of green tea and is responsible for the fact that tea does not produce strong nervous system stimulation despite the presence of caffeine. L-theanine reduces both psychological and physiological stress responses, helps learning and induces relaxation, while enhancing focus. One research project found that L-Theanine may help the body's immune response when fighting infection.

L-theanine increases the calming alpha waves in the brain and is being studied for its potential benefits in Attention Deficit Disorder. It has also demonstrated blood pressure lowering effects in animal studies. It has also been shown to help lower blood lipids.

The green tea extract in Ageless Xtra/Xperia contains ten milligrams of caffeine, about one ninth to one fifteenth the amount found in a cup of coffee or about one third to one fifth the amount found in a cup of tea - not enough to create any kind of stimulant.

Niacin /Niacinamide

Vitamin B3 is involved in thousands of biochemical reactions in the body, and is necessary for cell respiration and the release of energy from carbohydrates, fats and proteins. In addition, niacin supports mental function, including memory. A six year evaluation of cognitive function with healthy elderly subjects age 66 to 90 demonstrated a significant association between niacin levels and certain brain functions related to learning. Niacin helps increase healthy lipids and control overall cholesterol levels.

P5P/B6

Vitamin B6 is extensively involved in the metabolism of amino acids, lipids and nucleic acids. The benefits of vitamin B6 are wide ranging - from supporting protein metabolism and muscle growth to overcoming premenstrual symptoms and depression by encouraging the production of 'feel-good' chemicals, such as serotonin and dopamine that help maintain emotional balance.

It is important to be aware that vitamin B6 comes in different forms and the type found in most multivitamin supplements is an inactive and cheaper form called pyridoxine hydrochloride, rather than the active form: pyridoxal-5-phosphate (P5P). Certain deficiencies or liver problems can inhibit the transformation of pyridoxine to P5P and lead to nerve damage over time.

P5P helps control homocysteine levels that in turn helps prevent cardiovascular disease, stroke and arthritis. Scientists from the Department of Neurology, Massachusetts General Hospital in the US, have found that levels of P5P in stroke patients is about half that of healthy individuals. Having low P5P levels has been shown to increase the risk of stroke by up to four-fold.

Low levels of P5P are significantly implicated in cases of rheumatoid arthritis as discovered by scientists at Tuft's University.

COQ10 (Xperia)

Co-Enzyme Q10 (CoQ10) is an essential factor in the production of cellular energy in the mitochondria. It is also a powerful fat-soluble antioxidant. Extensive research demonstrates that CoQ10 supports healthy cardiovascular function. CoQ10 affords protection against fatty acid oxidation, which is a pivotal step in atherosclerosis.

CoQ10 keeps other antioxidants (e.g. vitamins E and C) in their active states, a feature that we also saw with Alpha Lipoic Acid. The amount of CoQ10 in Xperia is not a therapeutic dose. In other words, research based treatments with CoQ10 utilize much higher potencies. The dose in Xperia is supplemental only.

Chromium picolinate (Xperia)

Helps maintain blood sugar levels and promotes the body's ability to build muscle. More than 90% of U.S. adults have a deficiency of the mineral chromium. Chromium is believed to enhance insulin sensitivity, vital for the processing of glucose. The role of insulin is to usher glucose into the cells for breakdown into energy. The use of chromium as a supplement reduces blood glucose levels.

High levels of glucose in the blood stream for longer periods of time leads to decreased sensitivity to insulin. This then leads to glycation, where glucose molecules bind to and damage proteins. This is a leading cause of hardening of the arteries, as these glucose protein complexes (Advanced Glycation End-products) lay down in arterial tissue. This protein damage is the principal reason that diabetics have a lower life expectancy than normal. Many researchers believe that supplementary chromium could be very useful for diabetics, especially those with type 2, or adult-onset, diabetes by encouraging glucose metabolism.

Chromium polynicotinate is more effective than any other type of chromium, as it binds the elemental chromium to niacin (vitamin B-3). This provides a biologically active form of chromium that is safe and highly bioavailable.

Folate (Xperia)

Folate helps produce and maintain new cells. This is especially important during periods of rapid cell division

and growth such as infancy and pregnancy. Folate is needed to make DNA and RNA, the building blocks of cells. It also helps protect DNA. Both adults and children need folate to make normal red blood cells and prevent anemia. Folate is also essential for the metabolism of homocysteine, which is important because high levels of homocysteine are associated with damage to arteries and increased cardiovascular risk, atherosclerosis, etc. At least one study has linked low dietary folate intake with an increased risk of coronary events.

Methylation is the passing of a chemical fragment called a methyl group (a carbon atom linked to three hydrogen atoms) from one molecule to another. This acts as an all-important signal and structural modifier throughout our bodies. DNA itself requires methylation and in animals, DNA methylation is lost with age.

Folate provides the requirements for methylation of a wide variety of essential biological substances, including phospholipids, proteins, DNA, and neurotransmitters.

A landmark research study at the University of Wageningen, Netherlands and published in *The Lancet*, showed that high-dose folic acid supplements take over a long period slows the effects of aging on the brain, and "tests showed performance on memory and speed of thinking tasks was comparable to that of people five years younger".

Magnesium aspartate (Xperia)

Magnesium is an essential mineral commonly deficient in the average American diet. Many forms of supplemental magnesium are not readily absorbed. Magnesium Aspartate has been found to be the most bio-available form of magnesium.

Magnesium is needed for more than 300 biochemical reactions in the body and is fundamental to a number of important physical processes, including converting carbohydrates and protein into ATP (the body's energy source), blood clotting, activating B vitamins and relaxing muscles. Magnesium boosts the activity of several enzyme systems needed for neuro-chemical communication and transports electrolytes like potassium and sodium in and out of cells. Furthermore, magnesium assists in calcium and potassium absorption.

Potassium aspartate (Xperia)

Potassium aids in the conduction of nerve impulses, also helping to generate muscle contractions and regulating the heart beat. Potassium also maintains a normal water balance between the cells and body fluids, supports the function of cellular enzymes and participates in protein synthesis and carbohydrate metabolism.

Aspartic Acid (Xperia)

Aspartic acid, also known as L-aspartate, is thought to help promote a robust metabolism, and is sometimes used to treat fatigue and depression. Aspartic acid plays an important role in Krebs's citric acid cycle, transporting NADH (nicotinamide adenosine dinucleotide) molecules from the cytoplasm of the cell to the mitochondria, where it is used to generate adenosine triphosphate (ATP).

Some studies have shown that aspartic acid actually increases both stamina and endurance levels in athletes. In addition, this aspartic acid helps transport minerals needed to form healthy RNA and DNA to the cells, and strengthens the immune system by promoting increased production of immunoglobulins and antibodies (immune system proteins).

Aspartic acid may help cognitive function by increasing concentrations of NADH in the brain, which is thought to boost the production of neurotransmitters and chemicals needed for normal mental functioning. It also removes excess toxins from the cells, particularly ammonia, which is very damaging to the brain and nervous system as well as the liver.

Extracts of Cranberry, Blueberry, Black Cherry and Concord Grape

The dark red/blue/purple berries that comprise the base of Ageless Xtra and Xperia provide a wide range of phenolic compounds known as flavanoids, with remarkable health benefits. They are powerfully antioxidant, neuro-protective, help learning and memory, enhance overall immune function, provide anti-oxidant, anti-cancer, anti-blood clotting, anti-inflammatory, and anti-atherosclerotic values. The fruit extracts, all grown in Washington state and go through the most advanced testing for pesticide residue or other contaminants. Unless it says None Detected, they are not accepted in the manufacture of the products.

Resveratrol is found in cranberry, blueberry and concord grapes. It mimics the life span enhancing effects of calorie restriction, lowers cholesterol and triglycerides, dilates blood vessels, lowers blood pressures, and decreases platelet aggregation.

Concord Grape

The benefits of grape juice stem from its flavonoids, natural plant chemicals that act as antioxidants. Grape juice flavonoids help keep arteries clear by reducing the production of clotting factors while increasing the production of nitric oxide, a substance that keeps arteries open.

Flavonoids may also increase the production of "good" HDL cholesterol and lessen the risk of clogged arteries posed by "bad" LDL cholesterol. A recent preliminary study hints that daily glasses of grape juice may even reduce blood pressure.

Research, while still in the early stages, suggests that the antioxidants in grape juice may also protect brain cells directly. For example, experiments at Tufts University suggest that grape juice may improve the strength, memory, and coordination of laboratory rats.

Concord grape juice is particularly rich in one of the heart-healthiest of flavonoid types, the proanthocyanidins.

Black Cherries

Cherries have been shown to lower levels of uric acid in the blood, which is one of the most common causes of gout. They are also rich in anthocyanins, responsible for many of the benefits of cherries and are found in the rich pigmentation of the fruit. It is also suggested that consuming anthocyanins on a regular basis may help lower heart attack and stroke risk.

Cherries have also been shown to have relatively high levels of melatonin, which may aid in sleep disorders, Seasonal Affective Disorder and high blood pressure.

Blueberry

Key benefits of blueberries are:

- Improves short term memory loss

- Ameliorate age-related declines in neural and cognitive function
- Protect against macular degeneration of the retina
- Promote urinary tract health
- Act as a potent anti-inflammatory agent
- Improve glucose metabolism through the activity of chologenic acid
- Reduce the risk of some cancers

Cranberry

Key benefits of cranberries are:

- Help prevent urinary tract infections by preventing bacteria from adhering to the bladder and urinary tract;
- Help maintain heart health. Evidence shows that the flavanoids in cranberries play a role in preventing clogged arteries;
- The flavanoid content of cranberries, including anthocyanins, proanthocyanins, and flavonols, make cranberries an important cancer fighter. In-vitro studies suggest cranberries contain components that can inhibit carcinogenesis.
- Tannins found in cranberries may help to inhibit bacteria in the stomach, which can prevent gastric, duodenal and peptic ulcers as well as gastric cancer.
- Reduction of Dental Plaque - It is believed that cranberry juice can inhibit the aggregation of bacteria that cause dental plaque. Also, tannins inhibit bacteria responsible for tooth decay.
- Hot off the press is a new study conducted at the University of Western Ontario. Preliminary results found that eating cranberries cuts the risk of breast cancer in mice in half.

A Note on Using Ageless Xtra/Xperia

Everyone is different. There are always going to be those individuals who overreact or under react to any given product or substance. That product that can help the most people improve in their health and overall wellbeing is what is wanted. Ageless Xtra is well balanced in this way in that the dosages of the ingredients seem to agree with a great majority of users. Xperia is significantly stronger and should be started at about one-half an ounce well diluted, once or twice daily, gradually moving to an ounce once or twice a day. For most people this will be quite

adequate. It is not wise to adopt the "more is better" principle, but understand that a small amount of excellent ingredients is often enough to effect most people positively. Otherwise, you may find yourself facing the "too much of a good thing" principle. Let your body be your guide.

Dr. Neil Tessler is a licensed naturopathic physician, in practice since 1983. Dr. Tessler specializes in Classical Homeopathy and regenerative nutrition. He is the President of the Homeopathic Academy of Naturopathic Physicians and for the last five years served as the Editor of an international journal of professional homeopathic practice. He lives with his wife, Jennifer and family in White Rock, B.C.

Neil Tessler ND, DHANP

