

Why Finlandia?

We know what works. For over 30 years, we have been integrating allopathic and natural medicines, providing a comprehensive range of healing options. We are pleased to offer the following quality products and services:

- The largest selection of vitamins, herbal and natural medicines, and the most comprehensive homeopathic dispensary in Western Canada;
- A full service pharmaceutical dispensary and comprehensive herbal dispensary;
- Private health and wellness consultations;
- Counselling for women's health issues;
- Breast thermography screening;*
- Bio-identical hormone replacement (testing and compounding of prescription);
- DEXA Osteometer bone scan;*
- Detoxification program (consultation, ion cleanse, private infrared sauna, lymph drainage, and dietary recommendations);*
- Psychosomatic Energenics™ to clear emotional conflicts;*
- ETA Bio-resonance scanning to assess the body's energy flow;*
- Heart Rate Variability Assessment;*
- Brain State Conditioning™ to help you become your best.*

Our friendly and skilled health professionals maintain comprehensive knowledge in the areas of:

- Naturopathic medicine;
- Traditional Chinese Medicine (TCM);
- Homeopathy;
- Vitamin & mineral therapy.

* appointment required

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Finlandia Health Solutions

For everyday living

Volume IV, N° 4



The Stop Aging Issue

Aging. It's a word fraught with emotion and, for many, fear. We see our grandparents—or parents—in their golden years and pray that what they are experiencing won't happen to us. For the diseases of aging are both debilitating and humiliating—hardly the way we want to be remembered by those who love us.

Although we cannot completely prevent the march of time, scientists are finding new ways to curb many of the processes that result in aging and its associated diseases.

(Many researchers are now questioning whether aging itself is a disease—one that all life forms experience but perhaps the highest life-form—man—can eventually “cure.” It's a tantalizing concept, and one that ethicists and those of a higher spiritual nature can debate at length.)

Among the debaters, one thing remains certain: that the diseases associated with aging—including arthritis, heart disease, diabetes, osteoporosis and most cancers—must be halted if we are to fully enjoy all the years given to us.

What causes aging?

While there are various theories as to why we age, most focus on breakdown and decay at the cellular level. Many processes contribute towards cellular breakdown, including glycation, oxidation and inflammation, but the actual death of our cells is believed to be the primary cause of physical and mental aging.

Most people have heard of the “Hayflick Limit” usually in biology classes at school. The term is applied to the number of times a normal cell will divide before it enters a phase termed *replicative senescence*—meaning it is no longer capable of dividing into daughter cells. At the tissue level,

senescent cells progressively gather until the tissues and organs can no longer perform the functions they were designed to do, and eventually become incapable of sustaining life.

Adding to this decrepitude, senescent cells don't just “lie down and die.” Instead, they secrete large amounts of harmful substances that affect the well-being of their neighbour cells, degrading the architecture of the tissues and encouraging the progression of age-related diseases, including cancer. We can easily see this on the outside of our bodies as sagging, wrinkling, and the development of age spots.

Although we have known for several decades that cells will divide between 40 and 60 times—no one yet understands why this limit is imposed on us. What we *do* know, however, is what limits the cells from dividing indefinitely. In the 1930s, Hermann Müller, working with fruitflies, discovered that each chromosome had at its ends a

sequence of DNA that appeared to have no purpose other than to perhaps protect the chromosomes from damage during the dividing process. These he termed *telomeres* from the Greek for “end parts.” In 1940, geneticist Barbara McClintock discovered that, without telomeres, chromosomes would fuse to each other, causing cell death.

Fast forward to the early 1970s, when Russian theorist Alexei Olovnikov realized that, when they unravel during cell replication, the chromosomes cannot completely replicate their telomeres. Building on Hayflick's theory, Olovnikov proposed that every time a cell divides, it loses part of its telomere DNA. When the loss reaches a critical level and the telomeres are very short, cell division ceases and the cell becomes senescent.

“Senescent cells don't just “lie down and die.” Instead, they secrete large amounts of harmful substances that affect the well-being of their neighbours.”

Continued on Pg.2.

Finlandia
PHARMACY & NATURAL HEALTH CENTRE

We now know that telomeres play a significant role in preventing DNA damage and associated mutation. Their role is to protect. Unfortunately, in performing this protective function, they shorten, causing the cell to age. If, however, we were to keep them long (or at the very least prevent them from becoming too short), then our cells and tissues would remain youthful—pushing off aging and death for decades, and perhaps indefinitely.

Recent research has established a clear association between leucocyte telomere length (LTL) and the development of age-related diseases. For example, in the development of atherosclerosis, LTL has emerged as a far better indicator than cholesterolⁱ, and is an accepted biomarker of aging.ⁱⁱ

The discovery of telomerase

While scientists were looking into the workings of telomeres, they noticed something interesting. Within specific groups of cells, some telomeres were not shortening as time progressed, neither were they staying put. Surprisingly, they were *lengthening*.

Armed with this knowledge, a race ensued among scientists to find out exactly *what* was causing these telomeres to grow longer. Logically, if shortening telomeres caused aging, then reversing this process could, at the very least, slow down aging, and might perhaps cause an organism to grow younger.

The answer came on Christmas Day, in 1984. On that day, Elizabeth Blackburn—then a molecular biologist at the University of California, Berkeley—and her graduate student, Carol Greider, were able to show that an enzyme was responsible for adding telomeric DNA to the end of chromosomes. The two women had discovered what might be mankind's ultimate Christmas gift—the enzyme they later dubbed *telomerase*.

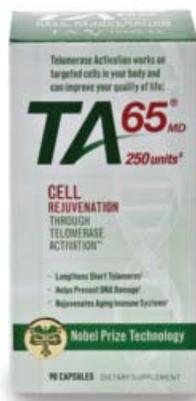
So significant was this finding, its impact so far-reaching, that in 2009, Blackburn and Greider were awarded the Nobel Peace Prize for their discovery.

The search for a telomerase enhancer

Once it was known that an enzyme was responsible for keeping the telomeres from shortening, another race was on: to find something that would switch the gene responsible for generating telomerase—the hTERT gene—on. (Two types of cells are considered immortal: Germ cells, i.e. sperm and ova, as they must continue the species, and cancer cells which, having mutated, will

do anything in their power to prevent their own senescence. Both germ cells and cancer cells produce telomerase, but telomerase cannot give rise to a cancer cell any more than it can create a germ cell.)

Fast forward to 2005, when Geron Corporation, a biotech company based in California, made available its product TA-65, a concentrated, patented derivative of the root of the *Astragalus membranaceus* plant, popular in Traditional Chinese Medicine over many millenia. This derivative, they had discovered, kick-started the production of telomerase in human cells. More importantly, it appeared to address the *shortest* telomeres—those likely to send their parent cell into senescence.ⁱⁱⁱ



At first, TA-65 was made available only through the offices of a few physicians, licensed to distribute it. Recently, however, the product has become available through select health centres, including **Finlandia**.

Some of the results experienced by those who have been taking TA-65 along with a number of specific health supplements include enhanced powers of accommodation (the ability to switch between close and long distance vision) increased energy, better sexual function, improved endurance, better skin elasticity, and joint flexibility.

We at **Finlandia** are excited about this supplement as we believe that aging and its associated diseases can be averted, or even prevented with the proper attention to lifestyle and diet, and the use of appropriate supplements. With new discoveries in the realm of cell science and the enhancement of telomerase production, we look forward to helping you fulfill your health and longevity objectives in the years to come. 🌱

i. Brouillette SW, Moore JS, McMahon AD, Thompson JR, Ford I, Shepherd J, Packard CJ, Samani NJ. 2007. Telomere length, risk of coronary heart disease, and statin treatment in the West of Scotland Primary Prevention Study: a nested case-control study. *Lancet* 369: 107-14

ii Brouillette S, Singh RK, Thompson JR, Goodall AH, Samani NJ. 2003. White cell telomere length and risk of premature myocardial infarction. *Arterioscler Thromb Vasc Biol* 23: 842-6

iii. Calvin B. Harley, Weimin Liu, Maria Blasco, Elsa Vera, William H. Andrews, Laura A. Briggs, and Joseph M. Raffaele. *Rejuvenation Research*. February 2011, 14(1): 45-56. doi:10.1089/rej.2010.1085.

What you can do

Although telomere length is partially related to genetics, it is most affected by environmental and lifestyle factors that influence the stress our cells experience. Smoking, obesity, sleep deficit, unhealthy diet and lack of exercise all negatively impact telomere length.

For best results, supplements that have been shown to positively affect cellular metabolism should be taken along with your telomerase enhancer. These include **resveratrol** (derived from grapeskins or Japanese knotweed), which positively influences longevity genes as well as conferring a number of other health benefits, **ubiquinol** (the bioactive component of CoQ10, needed for cellular energy), and **melatonin** (the sleep supplement, which has been shown in mammal models to increase lifespan).

For more details on TA-65 and to learn more about specific, personalized longevity protocols, please call **Finlandia** and ask to speak with Harlan.

Introducing LivLong

For centuries, the Chinese herb *Astragalus membranaceus*, has been used to strengthen the immune system and to promote health and longevity. This is especially true when *Astragalus* is used on a long-term basis.

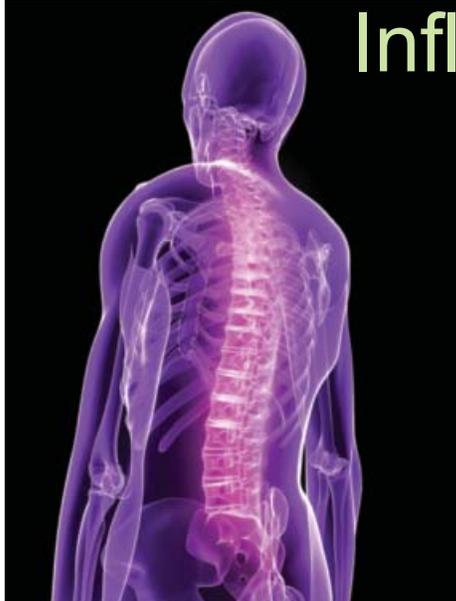
The plant's roots are a rich source of powerful antioxidants, flavonoids, and other substances that possess anti-bacterial, antiviral and anti-inflammatory properties.

Finlandia LivLong is an exceptionally concentrated form of *Astragalus* compounds formulated to help you in your quest for a longer and healthier life.



Shortening telomeres are not the only contributor to aging. Inflammation, glycation and oxidation all play a significant role. Learn more as you read on.

Inflammation



invading pathogens. The process is characterized by an increase in local blood flow, attraction to and activation of immune cells within the affected area, the release of large numbers of free radicals, destruction of normal tissue, and the deposition of scar tissue. This usually halts the infection and then subsides to allow the rebuilding of normal, healthy tissues. If, however, infection remains, the inflammation may become chronic, lingering for weeks or even years.

Even when no significant infection exists, chronic inflammation may persist, because the inflammation response has become hypersensitive or the immune system recognizes some of the body's own tissues as foreign. Both these types of chronic inflammation "fly beneath the radar" and contribute towards the process of aging.

As the years press on, we tend to develop autoimmune conditions as well as other kinds of chronic inflammation. In fact, most elderly people have some degree of chronic inflammation and/or mild autoimmune disorders. Many more have more obvious inflammation, like painful arthritis.

Chronic inflammation contributes to aging when it floods tissues with free radicals that destroy normal cells. This destruction gives rise to the degenerative diseases we associate with growing old: cardiovascular disease, diabetes, cancer, even obesity. Worse, like most of the body processes we associate with aging, chronic inflammation creates a vicious cycle. Cellular breakdown (due in part to

shortened telomeres) leads to increased chronic inflammation which, in turn, accelerates aging.

Although chronic inflammation contributes to the aging of tissues throughout our bodies, it plays its strongest role in the aging of the two systems most vital to our survival—the cardiovascular and nervous systems. It is now recognized as one of the key risk factors for heart disease and stroke, presenting a greater risk even than elevated cholesterol or homocysteine. Inflammation also contributes to age-related neurodegenerative diseases including Alzheimer's and Parkinson's.

What you can do

Studies have shown that meditation calms the whole body, reducing stress and inflammation.

A number of health supplements also reduce inflammation including *Boswellia* and curcumin (turmeric). Krill, fish and flax oils (omega-3 fatty acids) also exert an anti-inflammatory effect and are therefore helpful in reducing the pain experienced with chronic inflammatory conditions like arthritis.

Even if you limit your exposure to inflammatory toxins by buying and living "green" you should consider detoxifying your body twice a year. Ask about our infrared sauna and other detox aids and supplements.

If ever there were a double-edged sword, it would be inflammation. The inflammatory process is a defense mechanism essential to survival, yet it also contributes to aging and the development of degenerative diseases.

Inflammation is our immune system's first response to infection or irritation. Without inflammation, we wouldn't be able to survive in a world full of dangerous microorganisms. (People whose inflammatory response is suppressed—either by drugs or a malfunctioning immune system—can easily develop life-threatening infections from bacteria, fungi and viruses that healthy people easily cope with.)

Inflammation involves a number of responses aimed at destroying or reducing the impact of



How Active Is Your Curcumin?



AOR Curcumin Active provides a higher dose of easily absorbed Curcumin for effective relief of pain and inflammation. It is ideal for long-term maintenance of severe chronic inflammatory conditions, like arthritis, IBD, liver problems, neurological disorders and cholesterol levels. It's effective in doses of just one capsule per day up to 9 capsules daily for more severe conditions.

CurcuVIVA contains the same easily absorbed Curcumin, at a dose of 80 mg, in the convenient dose of 1 capsule per day.



The damaging ways of sugar...



Anita Tannis, MD
MD, CCFP, ABHIM,
Certified in
acupuncture

Sugar. Few foods have been as desired or as maligned. Children adore candy, and adults seek sugar out in more sophisticated variations (Frappuccino and cheesecake anyone?). But sugar is not always good for us.

In the 1700s, the average western person consumed no more than 4 pounds of sugar per year. By 1900, consumption had increased to 90 pounds, and a 2009 study indicated that 50 per cent of Americans consumed a whopping half pound of sugar *per day*. That amounts to 180 pounds of sugar annually!

A matter of survival

Some researchers believe that our love affair with sweetness has its roots in the survival of the fittest. The breast milk of female mammals is extremely sweet and, from birth, we are programmed to enjoy sweetness as a source of the energy needed for survival.

In ancient times, however, "sweet" was available only in forms that occurred in nature: fruits, vegetables, nuts, leaves, spices and herbs. Back then we ate the *whole* food—where natural sugars were combined with vitamins, minerals, fibre and phytonutrients. Our ancestors also learned to eat to excess when food was abundant. But excessive food intake was naturally balanced by both the inevitability of imposed periods of famine and the physical activity that came with the lifestyle of a hunter-gatherer.

Dangerous sweetness

Today, sweetness has been added to almost every food that we consume and, as a result, we constantly crave it. Sugar in the form of glucose is the primary source of fuel for our brains and bodies and our bodies convert foods to glucose as a source of energy. As a result, our bodies are designed to easily absorb, metabolize, distribute and store it (usually as fat).

When we eat something super sweet, like candy, the sugars are rapidly absorbed and the blood sugar quickly rises. This increase stimulates the pancreas to release insulin, which causes the cells to absorb sugar to create energy. The higher the spike in sugar,

Dr. Anita Tannis is an Associate Clinical Professor at UBC in the department of Family Practice. She is Board Certified in the USA in Holistic and Integrative Medicine as well as being certified in Medical Acupuncture from the University of Alberta. She has a passionate interest in Mind-Body-Spirit integration and the Functional Health issues that underlie many of today's modern health concerns. She practises consultative Integrative Medicine in West Vancouver.

the faster and higher the insulin response. But our bodies are also programmed to create equilibrium (homeostasis) and a sudden increase in insulin may result in an equally sudden decrease in blood sugar, causing light-headedness, voracious hunger, irritability, the inability to focus, and weakness. These feelings frequently prompt a frantic search for another sugar fix—continuing the cycle of up-and-down blood sugar (hyper/ hypo-glycemia) and associated mood and metabolic changes.

Eating a snack that is balanced with protein and fat ensures a slower increase/decrease in blood sugar and insulin levels, and a smoother, healthier brain and body response. Long-term spiking of blood sugar and associated high insulin levels can lead to obesity, insulin resistance, diabetes and metabolic syndrome (almost endemic among North Americans).

The food additive to avoid

Compounding the problems created by too much glucose is fructose. The primary sugar in fruits, fructose is less efficiently absorbed by the body, requires extra work by the liver to be metabolized, and does not stimulate a rise in insulin. When eaten in moderation in fruit and whole foods, fructose is not a burden upon the body, but when consumed in its most insidious form as High Fructose Corn Syrup (HFCS) it becomes very problematic.

HFCS was developed in the 1970s as a cheap, super-sweet additive to processed foods. It is in all sodas, many juices, canned foods, sauces, cereals, pre-packaged meals, desserts, ready-to-eat dinners and sweets of all kinds. Some researchers correlate the "war on fat" that began in the 1970s, and the unexpected, dramatic increase in obesity that resulted, with the development of HFCS. Since manufactured "low fat" foods are not naturally pleasing to the palate, it was believed that sweetness would overcome this marketing-induced obstacle—and the sweetest/cheapest HFCS was the ideal flavour replacement.

Some sweet news

Many excellent books have been written on the dangers of sugar. I would personally recommend *Sugar Blues* by William Dufty and *The Sugar Fix* by Dr. Robert J. Johnson.

So what can you do, if you love sweetness? Remember to add moderation, fibre and physical activity to every extra sweet thing you consume. Make sure you eat healthily *before* going to the party; consume less—or no—alcohol, drink lots of water, and remember that the cake/sweet/pie you are enjoying so much

doesn't have to be eaten in its entirety today. Worth remembering too is that any chocolate over 70 per cent cocoa content is a *food*, while less than 70 per cent is *candy*. As cocoa is rich in nutrients, cocoa-rich chocolate is the ideal indulgence for when sweet cravings strike.

Is sugar your drug?



The consumption of both fructose and glucose tends to upregulate our sugar metabolism pathways. The more sugar we eat, the more rapidly we absorb and metabolize it (and store it as fat if we are not using it up). We will also crave it more. For many people, sugar is like a drug, affecting mood, energy, and sense of well-being.

Even if you consume a moderate amount of sweets, you may want to try avoiding all sugar-rich foods for just a week. This includes fruits and their juices, cereals, grains and starches. Note your cravings during the first 3-5 days. Does your body try to talk you out of your resolve? Do you notice yourself longing for a little sweetness to help you to relax, calm down, sleep? Is your thinking clearer and your need for sweets lessened? Try it for a week to see...

A sweetener primer

Glucose, also known as dextrose, is the most common sugar and the type our body uses as fuel. Glucose is found in fruits, vegetables and honey, and, along with fructose, is a component of corn syrup.

Fructose is the sugar that sweetens fruits, and it is also naturally present in honey and some vegetables. It is most commonly known for its role in High Fructose Corn Syrup. It is 1.2 times as sweet as table sugar and does not suppress the sensation of hunger.

Sucrose, or table sugar, is the type of sugar used in cooking. It is derived from either sugar cane or sugar beets and is a combination of glucose/fructose. Raw, turbinado, white, icing and fruit sugars are some varieties of sucrose.

High Fructose Corn Syrup (HFCS) is corn syrup that has undergone enzymatic processing to convert some of its glucose into fructose to produce a desired sweetness.

Glycation



This causes the tissues to become stiff and rigid.

And it only gets worse... As more and more cross-linked proteins develop, the damage turns into a free radical *and* inflammation generator, causing even more mayhem inside of us. (This is a perfect example of how the body works in harmony—or disharmony. If one of our systems becomes stressed, it sets off a host of negative actions that add to the imbalance. Similarly, if we take one good action such as slowing down glycation, we also slow down other damaging, aging processes such as free radical action.)

Glycation is the same process that happens when we cook a roast in the oven, only much slower: the protein of the cooked meat reacts with the sugars present and the roast browns and hardens. We can think of glycation as the gradual browning and stiffening of our own tissues (known scientifically as the *Maillard reaction*).

People with diabetes have an increased rate of glycation because their bodies don't process sugar as effectively as those without this condition. (Research shows that the most common type of glucose-based cross-link in aging tissues is *glucosepane*—a chemical bridge formed when glycated proteins react with specific amino acids of other proteins. People with diabetes have roughly twice the number of glucosepane cross-links as nondiabetics of the same age.)

Glycation and AGE production in the blood vessels causes the arterial walls to become rigid and inflexible, in the brain, it can contribute to Alzheimer's and dementia, and in the eyes, blindness. When glycation affects the collagen and elastin of the skin, it becomes inelastic and inflexible, contributing to tissue breakdown, sagging and wrinkling. Enzymes too are damaged by glycation, becoming less able to act as important catalysts as the proteins that comprise them cross-link and harden.

Not all inside...

The development of AGEs and the associated, damaging cross-linking aren't completely



attributable to our own metabolic processes. Foods that have browned, such as barbecued meats or meats cooked at high temperatures (think fried bacon or sautéed chicken), browned toast, and caramelized toppings have already developed AGEs, which cannot be broken down in the body and so end up contributing to the sticky mess that is growing inside of us. 

What you can do

Although glycation is not the only cause of cross-linking, it is considered the primary cause. (UV radiation, peroxides, tobacco smoke, heavy metals, acetaldehyde—a product of alcohol metabolism—and free radicals are also potent cross-linkers.)

The most important step in minimizing glycation and cross-linking is to develop a tolerance for carbohydrates. This tolerance has been noted among centenarians and appears to be at least partly responsible for their longevity. To improve carb tolerance, always consume complex carbohydrates such as those found in whole grains, pastas and yams, and give up simple carbs like sugar and products made from white flour.

When cooking, use low temperatures and water (i.e. boil, poach, stew or steam) if possible since moisture prevents glycation. Marinating proteins such as fish, fowl and meat will also help.

Certain supplements and spices help prevent glycation. The most significant and well-studied of these is *carnosine*, a dipeptide found in high concentrations in brain and muscle tissues. Carnosine is also a potent anti-oxidant. Vegetarians and vegans frequently lack carnosine in their diets as it is primarily found in protein foods, including milk, eggs and cheese.

Other supplements that help prevent glycation include pomegranate extract, blueberry extract, rutin, turmeric/curcumin, alpha-lipoic acid, ginger, acidophilus/bifidus supplements, garlic and cinnamon. All these are available instore and online. (Carnosine eye drops—which have been shown to help prevent cataract development—can also be purchased from **Finlandia**.)

Although much of aging is undesirable, some of the processes associated with degeneration also keep us alive. We have already mentioned inflammation, which is part of our natural defense system. The second major cause of aging is an insidious process known as glycation. We need glucose to survive but glucose causes glycation.

Glucose is the primary fuel for the central nervous system. If the level of glucose in our blood drops below a certain point for a long enough time, we will lose consciousness, fall into a coma, and eventually die. High blood glucose is also harmful over the long term. To avoid dangerous ups and downs in glucose levels, the body has developed a sophisticated system for maintaining blood glucose within an appropriate range: Some reserve glucose is always stored in the liver in the form of a starch-like substance called glycogen. (This means that, whether or not we actually consume sugar, sugar is always circulating in our blood.)

AGEs and aging

Glycation happens when a sugar molecule randomly bonds to one of the amino acids that form the proteins of the body, or to the actual cellular DNA. That protein could be anywhere: in the skin, arteries, internal organs or blood. The product formed by this bonding is appropriately termed an AGE—an acronym for Advanced Glycation End-product. These AGEs form bonds between the elastin and collagen fibres, giving rise to a process called cross-linking. When we are young, our collagen and elastin are cross-linked in a specific way that promotes firmness and resilience. However, as we age and glycation causes havoc in our tissues, the cross-linking becomes random and imperfect.

Oxidation



The process of oxidation begins with an unstable oxygen molecule that loses one of its electrons. This sets off a chain reaction where the unstable molecule—now called a free radical—goes searching for another oxygen molecule from which to steal an electron. The victimized oxygen molecule then repeats the process, and all havoc breaks loose. These reactions take a nanosecond to damage thousands of cells and are occurring all the time in our bodies. The reason we don't die as a result of them is because the body also produces substances that have an antioxidant action, halting the free radical chain-reaction just as quickly as it began. The enzymes *glutathione peroxidase* and *superoxide dismutase* are both potent antioxidants manufactured inside the body and outside by supplement manufacturers.

Outside dangers

The problem is that free radicals produced as a result of normal metabolism are not the only free radicals our 21st-century bodies have to cope with. (If they were, our own antioxidant enzymes would likely take care of them more expediently.) Unfortunately,

external factors such as pesticide and herbicide use, workplace stress, tobacco smoke, smoggy environments, radiation, microwaves and a whole host of other toxins and pollutants daily assail us, causing a significant increase in free radical production. Sadly, our natural antioxidant systems can no longer cope with the onslaught.

Glycation too, is an internal source of free radical action, as is the consumption of unstable/rancid animal fats and too much alcohol.

The result of excess free radical production in our tissues is cell damage and death, and associated inflammation. These increase the risk for a number of age-related diseases and conditions including osteoarthritis, cataracts and cancers.

Are you seeing a pattern here? How glycation,

oxidation and inflammation support each other's efforts in a deadly dance of destruction? If we want to truly halt the aging process, we must hit all three with healthy eating, supplementation and lifestyle practices—and the sooner, the better. 

Oxidation and DNA

One of the primary ways free radical action ages us is through direct damage to our DNA. When free radicals attack the DNA in our cells, their ability to properly replicate and pass on important information is compromised.

In lab experiments, oxidative stress has been shown to accelerate the shortening of telomeres.ⁱ Inside of us, this contributes to cell senescence and associated tissue aging.

i. Mild hyperoxia shortens telomeres and inhibits proliferation of fibroblasts: a model for senescence? von Zglinicki, T., Saretzki, G., Docke, W. & Lotze, C. (1995) Exp. Cell Res. 220, 186–193.

What you can do

Scientists estimate that each cell in your body is attacked by a free radical roughly 10,000 times daily. Unfortunately, only some of the damage is halted by the body's natural production of antioxidants. With the increase in stressors from the environment, it's no wonder the body can't keep up.

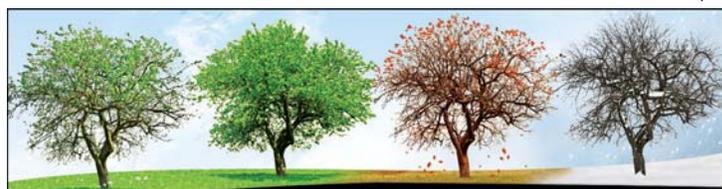
Naturally-occurring antioxidants such as those found in brightly coloured fruits and vegetables, teas, coffee, chocolate, carob and spices help support your own system of quelling free radicals. Whenever possible, choose organic, pesticide-free produce, as fresh as possible and eat it raw or lightly steamed.

It is also important to consume only fresh oils and fats as rancidity is another cause of oxidation.

Reducing stressors in your life will also help quell free radical action, as will not smoking and making sure you are not exposed to second-hand smoke.

Finally, we believe that it is very difficult to obtain enough dietary antioxidants to fully support the body in its fight against free radical action. If your diet is a little "iffy" you may want to consider taking supplements with antioxidant activity. These include vitamins A, C and E, CoQ10 and turmeric (curcumin) as well as extract of pine bark (Pycnogenol®)—available in store as **Finlandia Pine Bark Extract**—and concentrated fruit/vegetable extracts such as blueberry and pomegranate.

Most of us have heard the terms oxidation, free radicals and antioxidants. Over the past couple of decades, they have become buzzwords to sell everything from colas to salad dressings. Like inflammation and glycation, oxidation is a natural byproduct of the metabolic process, and can be dramatically slowed down.



Do you, or someone you know, suffer with any of these symptoms?



-  Itchy eyes, runny nose, lethargy
-  Colds and flu that never go away
-  Aching feeling, insomnia, depression
-  Frequent bathroom visits (men)
-  Joint pain and stiffness
-  Flaky, itchy patches of dry skin
-  High blood sugar levels
-  Low CD-4 cell count
-  Stressed out

Then you probably need to strengthen your immune system. Immuno-Care™ is the only ONE-A-DAY supplement of plant sterols synergistically formulated with antioxidants and essential fatty acids to positively balance and support your immune system. Make Immuno-Care™ your once a day supplement to BALANCE your Immune System.

Guaranteed to Work!

 Preferred Nutrition **PNO.CA**   

Harlan's Corner

The aging power of words

Although you might be reading this at any time of year, I am writing it at Christmas—the time when attitudes seem to change and people get in a positive mood. But why does it have to just be at Christmas—one mere month of the year?

You create your life, environment and how you feel by what you *think* and what you *say*. Have you ever noticed how another person is sparked up by a kind word about them, a compliment, or anything positive? In the office, a worker praised for her attitude about something will live up to that attitude, and friends or family members will always change a negative demeanour if you tell them they are special to you.

Passing a compliment to ourselves has exactly the same effect! Our mood is elevated or depressed depending on where we look (up or down), and whether we speak positively about ourselves or get down on ourselves. The phrase, “**I am the creator of my world,**” defines this perfectly. Our bodies and the world around us mirror back what we think and how we react. Therefore, our thoughts control everything and we are in control of our thoughts.

So how does this relate to holding back the

Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence. Helen Keller



years? To retaining or regaining our youthfulness? The length of time we spend in our bodies, or our *age* as most call it, is determined by our thoughts, our outlook and our actions.

If you say, “I am too old to do that!” you will be too old to do that.

When you use the words “I am” followed by an adjective, it is a statement of who you are at that moment and in the future. So if you believe you’ll live to 70, 80 or 90, so be it. Your thoughts are setting your biological program or body clock to run for that period of time. *I am old* is a deadly phrase. It almost makes your joints start to creak. So, why not leave longevity an open-ended possibility? Phrases like *I am too old for that* can be the



limiting attitude that will shorten your lifespan.

Having an anti-aging attitude is the most important factor in determining how long and well you will live. Watch carefully the phrases you use because they are a giveaway of your attitudes. Your body runs on the mental program you create. You are the programmer, and you rewrite the program every day.

The phrase “**What you feel you make real**” means what you focus on is attracted and intensified. I have always told my children when they hurt themselves, “Forget about it and the pain will go away faster.”

The outcome of your days and the length of your life is in your hands and mind. Take care of your body and mind and they will serve you well. They deserve the same care and attention you give your loved ones. So love your body, nourish it with good food and thoughts, exercise it daily, and appreciate the biological processes that are going on without even a thought from you. Most of all give your body no mental limitations. The people who live over 100 (centenarians) sometimes have bad health habits like smoking, drinking and not exercising, but they have something even more important: They are all optimists. The “gratitude attitude” is probably the most powerful factor in achieving a long healthy life.

 Harlan

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Herbal profile

Anti-aging Qi Building Formula

Finlandia Pharmacy's Qi Building Formula will help replenish the Qi (life force) from deep levels, acting as a premier anti-aging formula. It may be used to strengthen and balance the entire body at any time, but particularly after trauma or as a preventive going into a stressful situation. The formula acts as an anti-oxidant which reduces the signs of aging. It contains:

Ho Shu Wu (*Polygonum multiflorum*) – a yin jing tonic for the liver, kidneys and blood.

Schizandra (*Schizandra chinensis*) – nourishes all 12 body meridians and replenishes jing, qi, and shen.

Reishi (*Ganoderma lucidum*) - nourishes the heart, liver, lungs and kidneys and restores jing, qi, and shen.



Rehmannia (*Rehmannia glutinosa*) (prepared) – this yin jing restorative works through the liver and kidneys.

Astragalus (*Astragalus membranaceus*) - revitalizes the blood, spleen and lungs and boosts wei qi (the immune response).

Asparagus (*Asparagus officinalis*) - a yin jing, qi and shen tonic, asparagus supports the lungs, kidneys and heart.

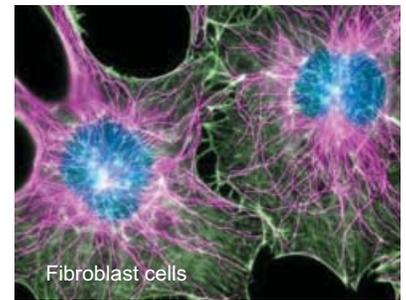
Codonopsis (*Codonopsis pilosula*) - This herb is a blood tonic that works through the spleen and lungs to support qi.

For more information on **Finlandia's** Qi Building Formula, please contact our Clinical Herbalist, Michelle Bonnie.

Aging Skin



Dare we mention the shortening of telomeres in the cells of the skin? When researchers study telomeres, they normally do so using fibroblast cells. Fibroblasts are the most common type of cell found in connective tissues. Their job is to secrete collagen proteins that are used to maintain a structural framework for our skin and internal organs. Because the skin protects us, and in doing so is damaged, it must constantly be renewed. This renewal is achieved by cell division. When telomeres shorten, the cells can no longer divide, and so become senescent and rigid.



Fibroblast cells

We all know what damage the sun can do to the skin, and most of us wear sunscreen daily—at least on the face—to prevent wrinkling and age spots. But, despite what you've read about the sun causing 80 per cent of skin's aging, other factors contribute greatly to the breakdown of the skin.

Can you guess what they are? You'd be right if you answered "Oxidation, glycation and inflammation." Just as this deadly trio slowly but surely destroys the tissues of our internal organs, so it gums up and hardens the tissues of our largest "external" organ—the skin.

Glycation and associated cross linking in the skin combines with oxidative damage, to form even more cross-links. As a result, the collagen and elastin proteins become rigid, and the skin loses its flexibility. This usually accelerates at the same time that we lose the superficial fat that forms padding under the dermis, meaning we literally have too much skin covering too little fat. As a result, we develop the wrinkles and crevices we associate with the end of youth.

Inflammation caused by damaged and dying cells, and/or too-harsh skincare products only adds to the problem—creating a vicious cycle.

Armed with this knowledge, as depressing as it first may seem, we are poised to take action—not only to save our skin, but every cell, every tissue, and every organ throughout our bodies. 🌿



Keys Solar Rx:

- Daily Skin Cancer Prevention
- Anti-Aging UVA and UVB Protection
- Natural Chemical-Free Daily Moisturizer
- Cosmetically Clear Foundation
- Glowing Soft-Focus Effects

What you can do

Sunlight wrinkles and ages the skin. There is no way around this, although consuming brightly-coloured fruits and vegetables and eating dark chocolate can create an "internal sunscreen" with an SPF equivalent of about 4. So wear a high quality, broad spectrum sunscreen every day of the year to protect your skin from UV radiation and associated damage.

Since inflammation in the skin is also damaging, always use non-irritating skincare formulations. Our skincare/cosmetics staff will be able to help you identify what is best for your specific skin type. In general, skin creams incorporating retinoic acid, beta hydroxy and alpha-hydroxy acids should be avoided as they promote inflammation. Of course, you should learn how to prevent inflammation, oxidation and glycation throughout the whole body, and be sure to act on it.

Lifestyle factors such as never smoking, getting enough sleep, reducing alcohol consumption, drinking more water and making exercise a priority, all contribute towards a glowing, youthful skin. So be sure to check your everyday activities and add/subtract as necessary.

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PHARMACY & NATURAL HEALTH CENTRE