



the aging antidote

Antioxidants

Discover for yourself how stopping free radical damage and reducing inflammation can lead to a longer, healthier life.



the
aging
antidote

Cell Essentials

YOUR BODY'S NEW ESSENTIAL

IMPORTANT NOTICE

THE CONTENT IN THIS BOOK IS NOT INTENDED IN ANY WAY TO BE A SUBSTITUTE FOR PROFESSIONAL MEDICAL ADVICE. THIS BOOK IS NOT INTENDED TO BE RELIED ON FOR MEDICAL DIAGNOSIS OR TREATMENT.

ALWAYS SEEK THE ADVICE OF YOUR PHYSICIAN OR OTHER QUALIFIED HEALTH PROVIDER WITH ANY QUESTIONS YOU MAY HAVE REGARDING A MEDICAL CONDITION AND PRIOR TO USING ANY NUTRITIONAL SUPPLEMENT OR ANY MEDICINE. NEVER DISREGARD MEDICAL ADVICE OR DELAY IN SEEKING IT BECAUSE OF SOMETHING YOU HAVE READ IN THIS BOOK.

In preparing this book, neither AlivenLabs, LLC, its parent, nor the authors make any warranties or guarantee with respect to any of products described herein. It should be understood that by making this book available, neither the authors nor the publisher is advocating use of any product described herein, nor is the author or publisher responsible for any misuse of a product.

Any use of the information in this book is at the reader's discretion. AlivenLabs, LLC, the authors and publisher strongly urge the reader that a health care professional should be consulted regarding your specific situation. Pregnant women should not take supplements unless under supervision of a professional health care provider.

The authors and publisher specifically disclaim any and all liability arising directly or indirectly from the use or application of any information contained in this book. ALIVENLABS, LLC, ITS PARENT, THE AUTHORS AND PUBLISHER MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE CONTENTS OF THIS BOOK AND SPECIFICALLY DISCLAIM TO THE FULLEST EXTENT PERMITTED BY LAW ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, COMPLETENESS, TIMELINESS, CORRECTNESS, FITNESS FOR ANY PARTICULAR USE, APPLICATION AND PURPOSE. IN NO EVENT WILL ALIVENLABS, LLC, ITS PARENT, OR THE AUTHORS BE LIABLE TO YOU OR ANYONE ELSE FOR ANY DECISION MADE OR ACTION TAKEN BY YOU OR ANYONE ELSE RELYING UPON THE INFORMATION CONTAINED IN THIS BOOK.

Cover Art: Stacy Vareen, CharterMain, Nashville, TN

Book Design and Production: McClearn Design Studios, Nashville, TN

Requests for information should be addressed to:

AlivenLabs, LLC, 104 Woodmont Blvd., Suite 405, Nashville, TN, 37205

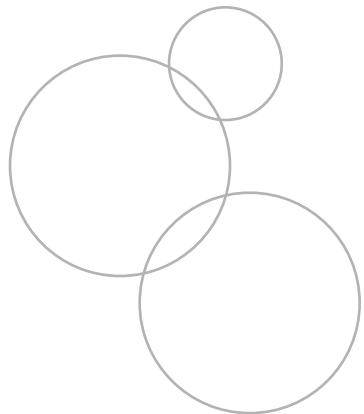
or visit our web site at www.mycelle essentials.com

©2006 AlivenLabs, LLC. All rights reserved. No part of this publication may be reproduced, resold, redistributed, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopy, recording, or otherwise) except for brief quotations in printed reviews, without the prior written permission of AlivenLabs, LLC. ALIVENLABS and CELL ESSENTIALS are the trademarks of AlivenLabs, LLC.

ACKNOWLEDGMENTS

The *Aging Antidote* is a result of a very dedicated and talented group of professionals. Special thanks to David Pillott, BJ Rogers, Sharon Fitzgerald, Martha Moore, Terri Morris, Brenda McClearen and Stacy Varen.

AlivenLabs, LLC would like to acknowledge the contributions of the many scientists, physicians, scholars, health professionals and researchers internationally, past and present, who have dedicated themselves to advancing world knowledge of antioxidants, anti-aging medicine and twenty-first century wellness.





The Aging Antidote

Cell Essentials

Your body's new essential

Introduction	vii
1 chapter 1 OPCs – From the beginning	1
2 chapter 2 Getting OPCs to your cells	5
3 chapter 3 OPC Factor's formula	11
4 chapter 4 To your health: OPC Factor as your protector	19
5 chapter 5 What does the future hold?	31
Appendix A “Restore”	32
Appendix B Scientific References	33

introduction

When you open the plastic container that's been hiding in the back of your fridge, the word "yuk!" rather than "oxidation" may come to mind. Yet your month-old leftovers are a first-rate example of oxidation, what mainstream medical science now regards as a primary cause of degeneration, immune deficiency and aging in all of us.

Oxidation is the slow deterioration of matter as a result of chemical reactions involving oxygen. It's a familiar phenomenon found throughout nature: metals rust, apples turn brown, oils become rancid, rubber crumbles. All are signs of oxidative stress, destruction caused by something called "free radicals." Now, imagine what free radicals could do to your body.

What are free radicals?

Think back to that high school physics course. Our bodies are made up of billions of molecules, each with paired electrons orbiting a protein nucleus. When oxidation destroys one of a molecule's orbiting electrons, a free radical is the result. To give you an idea of just how radical they are, scientists call free radicals *the* most unstable substance in physics. The free radical's unpaired electron wreaks havoc as it forces the molecule to hunt for a mate. Think back to high school again. You knew a free radical, didn't you?

And just like that old classmate prowling the halls, a free radical isn't picky. It will interact with the nearest available molecule of any kind – fats, proteins or even DNA. Scientists have discovered that this interaction damages molecules and even causes cells to die.

Now let's review our high school biology: The building blocks of our body and brain are cells, a collection of finely tuned molecules. Each cell is independent with its own job to do, separated from its neighbors and protected from its environment by its membrane. Membranes also separate different components *within* a cell; for example, the nuclear membrane surrounds a cell's chromosomes, which contain unique DNA. The genetic blueprint for each cell in your body, DNA determines whether a cell contributes to hair, teeth, fingernails, organ tissue, skin or even brain matter. So what happens if a cell's membrane is

damaged? Well, it can't be good.

Membranes, because they are made mostly from fats and proteins, are susceptible to the continued advances of a pesky free radical searching for an electron. A properly functioning cell membrane includes molecules that act as channels and pumps, allowing nutrients to pass into the cell and waste products to pass out. Without a proper membrane, a cell is in real trouble. It may starve or be poisoned by its own waste. Also, its DNA might be damaged, causing its "instructions" to go awry. Thus, free radicals pave the way for cell destruction – and accelerate the body's aging process as the steadily decreasing number of cells causes tissues to weaken and lose their function.

What causes oxidation – and thus the production of free radicals?

Chemicals, pollution, fumes, stress, athletics and food additives are among the substances and activities that accelerate the production of free radicals in our bodies. In the air we breathe and the water we drink, we are exposed to as many as 60,000 different chemical toxins, including cigarette smoke, car exhaust and vapors from cleaning fluids. Some, such as byproducts of chlorine in water, are toxic in quantities almost too small to detect. In addition, food additives such as preservatives, artificial colors and flavors, emulsifiers, lubricants, bleaching agents, flavor enhancers and synthetic sweeteners contribute to oxidative reactions in the body.

Even metabolism – the process by which nutrients are broken down so they can be used by the body for energy, growth and repair – is a culprit. We may think by burning unwanted calories that metabolism is our friend. Yet, like many biological processes, metabolism is a system of tradeoffs. On the one hand, metabolism is essential to life. On the other hand, metabolism generates toxic waste products and gives rise to free radicals.

Left unchecked, free radicals accelerate tissue damage and are a major contributing factor to the rate and severity of aging. Free radicals are also implicated in the progression of degenerative diseases, including adult respiratory distress, atherosclerosis, cancer, cardiovascular disease, cataracts, Crohn's disease, cystic fibrosis, diabetes, Down's syndrome, hepatitis, inflammation, motor-neuron disease,

organic brain diseases, renal failure, rheumatoid arthritis, and neurodegenerative conditions including Alzheimer's and Parkinson's diseases.

Ready to put up a fight?

Nutritional science has turned a major corner in the past decade as scientific researchers and physicians alike have acknowledged oxidation as a primary cause of disease and bodily deterioration and endorsed the preventive benefits of antioxidants. This is good news indeed, for now we are better informed and equipped than ever before to protect our health.

Antioxidants in our diet can help fight the formation of free radicals. What's more, these nutritional agents can help to repair damage that has already occurred. Antioxidants include vitamins E and C, as well as numerous other elements found in common foods. Fruits and vegetables are the primary sources of antioxidants, though some occur in grains, beans, meats, seafood and dairy products.

Although a healthful diet contains antioxidants, it's difficult to get enough of them from food alone to fend off those dogged free radicals. And, while all antioxidants help to prevent or minimize damage from oxidation, all antioxidants are *not* created equal. Their protective properties vary based on their structures and biological activities. Some antioxidants help prevent cancer (such as polyphenols in green tea), some protect the heart (such as vitamin F), some enhance immune function (such as vitamin C) and others increase microvascular circulation (such as anthocyanins in bilberry).

What are OPCs and what makes them so super?

OPCs are oligomeric proanthocyanidins – don't worry, we'll just call them OPCs. When it comes to antioxidants, OPCs are the super heroes, more powerful against free radicals than even vitamins C and E. Because they are rapidly absorbed and quickly distributed throughout the body, OPCs come to the aid of the body more quickly than other antioxidants. They also neutralize free radicals faster.

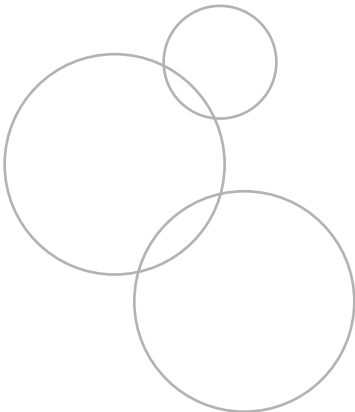
In addition to being free radical fighters, OPCs protect connective tissue – collagen, in particular – and prevent damage to cellular membranes caused by oxidation. Vascular membranes, the linings of the stomach and intestines, sinus and respiratory cavities, and joints and vertebral spaces all enjoy OPC protection. Nontoxic and readily bioavailable, OPCs thus prevent or reverse diseases and degeneration.

OPCs also give a boost to vitamin C by blocking the action of an enzyme that destroys vitamin C. These vitamin C-enhancing effects were noted in a significant study of guinea pigs deprived of vitamin C. The addition of OPCs to vitamin C provided more protection more quickly against scurvy – and with improved survival time – compared with twice the amount of vitamin C by itself.

OPCs have undergone extensive plant and animal testing and have successfully demonstrated unsurpassed antioxidant activity. With such highly optimistic results, it's time to put the product to work for the fitness and well-being of today's healthcare consumers. That's just what AlivenLabs is doing with the introduction of *Cell Essentials*.

“I REALLY BELIEVE antioxidants are extremely important to your health. Since taking OPC Factor, I am feeling much better and have **MORE ENERGY.**”

— Wanda Burchfield
Brentwood, TN





OPCs – From the beginning

1
chapter

OPCs – From the beginning

First a little history. OPCs were first discovered more than 400 years ago by Captain Jacques Cartier, who set off from France in search of riches and a passage to Cathay and ended up mapping the Gulf of St. Lawrence in what is now Canada. Cartier's sense of adventure was legendary; his practical skills were perhaps less outstanding. On his first trip to the New World in 1534, he missed the St. Lawrence River entirely, wandered around for a while and returned home. On his second trip a year later, Cartier sailed his three ships into the waterway – at the beginning of winter. While the captain spent the winter at a Quebec fortress, his crew of 110 brave souls was not so lucky. Stuck on their ice-bound vessels and unable to hunt for food, the sailors subsisted on wormy biscuits and salted meat.

Without fresh fruits and vegetables, 25 crew members had died of scurvy and more than 50 others were seriously ill by December 1535. The rest were too weak even to dig graves for their departed comrades and resorted to throwing the bodies overboard and covering them with snow.

With months before the spring thaw, Cartier's crew faced certain death. Fortunately, an Iroquois whom Cartier had befriended noticed the sailors' poor condition. He instructed Cartier to gather the bark and needles of the white cedar tree and boil them together in a large cooking pot. The brew, the Indian said, would cure the men. When none of the sailors would drink the concoction, the captain resorted to "volunteering" two of his men to try the strange mixture. The men were so much improved after one week that the rest were eager to partake of the brew. Those who had sores on their bodies treated the sores with the scum that floated on the liquid. The remaining 85 members of Cartier's crew all survived until spring,

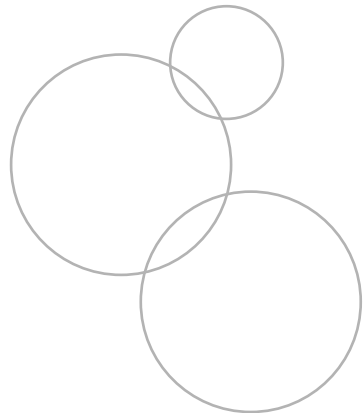
Cartier duly recorded these events in his journal, *Voyages au Canada*, unaware that he had witnessed the healing power of antioxidants. The white cedar needles contained a small amount of vitamin C, and the bark contained OPCs, which boosted the vitamin C's effect. While Cartier shared his exploits with the King of France and others, little

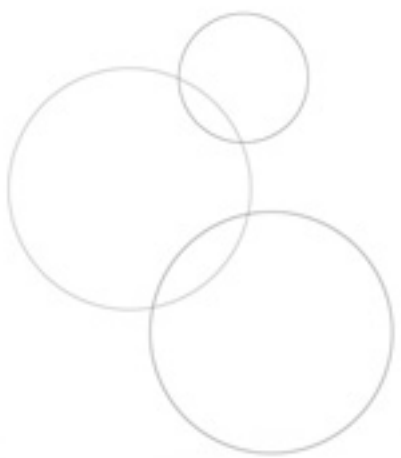
attention was paid to this medical miracle. *Voyages au Canada* lay hidden in the archives of Lyon, France, for the next four centuries.

Modern science steps in

In the early 1950s, Professor Jacques Masquelier, researching the medical properties of pine bark, grape skins and various nut shells, came across *Voyages au Canada*. The account of the crew's survival reinforced Masquelier's theory that OPC-rich extracts offered a viable method to control free radicals. He found that OPCs stayed active in the bloodstream for up to 36 hours and exhibited 20 to 50 times more antioxidant power than vitamins A, C and E. These two elements – potency and longevity – are keys to OPCs' overwhelming ability to slow, stop or reverse degeneration.

Since Masquelier's early work, the safety, toxicity and benefits of OPCs have been fully tested and documented in dozens of published studies by experts at centers such as the Pasteur Institute. In 1982, Masquelier patented his procedure for extracting OPCs, as well as the use of these compounds to battle free radicals. In 1987, he added to his large number of patents by specifically patenting the "radical scavenger effect" of his OPCs. While this radical scavenger effect doesn't overcome aging, which is biologically programmed in the genes, it may prevent, ease or inhibit some harmful effects of aging caused by an excess of free radicals.





Getting OPCs to your cells

2
chapter

Getting OPCs to your cells

Now you know that OPCs are natural substances that can have positive effects on your health. But do you want just any formulation of OPCs? Of course not. *Cell Essentials OPC Factor™* is a superior product for several reasons, and one is that it's delivered as a quick-acting liquid.

Just how big should a vitamin pill be? According to some supplement manufacturers, big enough for a horse! Yet, so many people, particularly youngsters and the elderly, have trouble swallowing pills. That's one reason why our researchers at Aliven Labs worked to offer *OPC Factor* as a powder that dissolves in water. Another reason is that pills often don't dissolve properly and pass through the body unchanged, having delivered none of their nutrients. In fact, the *Physician's Desk Reference* says vitamins and minerals in a pill form are only 10 to 20 percent absorbed by the body. What a waste.

Dietary supplements of any type must be accompanied by adequate fluid. Without it, the high concentration of nutrients may cause gastric distress, upset the delicate acid balance of the stomach and not be successfully absorbed. What's more, **drinking water with supplements is not enough.** After much study, experts at AlivenLabs found that a combination of *effervescent* and *isotonic* delivery works best. Read on and we'll explain what that means.

“I LIKE OPC FACTOR because it doesn't upset my stomach and it is absorbed better than all those capsules or pills I use to take. OPC Factor has really HELPED MY ACID REFLUX.”

— Vivian Hultgren
Hamilton, MT

Bubbling its way to you

In the same way that Alka-Seltzer® buffers the harsh effect of aspirin and thus eliminates stomach upset, *OPC Factor's* effervescence improves tolerance. When added to water, *OPC Factor's* bubbly effervescence replicates the natural buffering action of the body. Effervescence also dramatically improves absorption, with the added benefit of contributing vital potassium and other key electrolytes to the diet.

“I feel **LIQUID NUTRIENTS** are like a computer, and pills are like a typewriter. Once someone types a letter on a computer and sees how superior it is, they never want to touch a typewriter again.”

— David Friedman, D.C., N.D., in his article “Liquid Vitamins: The Wave of The Future” for *Chiropractic Economics*.

Advantages and benefits of an isotonic/effervescent delivery system

- **Advantage:** This isotonic/effervescent product is mixed with water. Informal surveys found that 19 out of 20 people prefer a liquid supplement to tablets or capsules.
- **Benefit:** Parents find that giving nutritional supplements to children in the form of a pleasant drink is far easier. Seniors find drinking their supplements preferable to swallowing pills or capsules, which can be difficult – or even impossible – to manage.
- **Advantage:** Isotonic supplements mixed with water are already liquid when consumed, so they can be absorbed immediately with no further digestion needed.
- **Benefit:** Some pills take minutes, even hours, to dissolve – or don't dissolve at all. Isotonic absorption is faster and more efficient, delivering more bang for your buck.

In Europe, effervescence has been recognized for many years as the way to go. Leading pharmaceutical companies, including industry giant Hoffman-La Roche, manufacture both drugs and dietary supplements in effervescent formulas.

The secret of isotonics

Yet what makes *OPC Factor* revolutionary is its isotonic quality. Isotonic solutions for human consumption have the same fluid pressure as natural body fluids like blood, plasma and tears, which means isotonic fluids like *OPC Factor* are ready to go to work immediately.

- **Advantage:** An isotonic/effervescent liquid does not stay in the stomach, but is absorbed almost immediately into the bloodstream.
- **Benefit:** No more upset stomachs from supplements that dissolve slowly or not at all. You get the full benefit of the antioxidants without that queasy feeling.
- **Advantage:** Isotonic/effervescent supplements have no need for binders, coatings, fillers, lubricants, disintegrators or artificial coloring and are not encapsulated or compacted using heat.
- **Benefit:** Unnatural ingredients, fillers and packaging processes destroy nutrients and cause such supplements to be of little or no value.
- **Advantage:** *OPC Factor™* is packaged in individual serving sizes.
- **Benefit:** Individual packaging takes away the dosing guesswork.

Obviously, the longer a supplement stays in the stomach, the longer absorption is delayed. In fact, tablets and capsules are in the stomach 30 to 50 minutes before the diluted, acid-attacked nutrients enter the small intestine for absorption. This doesn't happen with *OPC Factor*. The sensors in the gastrointestinal tract detect the isotonic quality of *OPC Factor*, the valve at the lower end of the stomach remains open and the solution heads immediately into the small intestine. Because *OPC Factor's* solution spends so little time in the stomach, it means your body receives the nutrients in a higher concentration. With so little dilution, there's almost instantaneous delivery of these vital nutrients to the blood stream.

Another feather in *OPC Factor's* cap is its original powder form. Thus, it contains no fillers, binders, coatings or lubricants commonly found in tablets or capsules. The heat and additives necessary to create tablets or capsules often cause a loss of efficacy. With *OPC Factor*, the negative aspects of tablets and capsules are eliminated.



OPC Factor's superior formula

chapter

3

Cell Essentials OPC Factor's superior formula

Ask any cook and you'll learn that the secret to success is quality ingredients and a sure-fire recipe. It's the same with *OPC Factor*, a unique combination of antioxidants, anti-cancer ingredients, cardiovascular helpers and digestive enzymes working synergistically to deliver a powerful punch.

Red-wine grape skin, pine bark and grape seed extracts are the primary active ingredients and *OPC Factor's* sources of OPCs. Each extract has its own particular nutrient benefit and works synergistically with the others to benefit different systems of the body. Most *OPC Factor* users enjoy more energy, less pain and an overall feeling of wellness immediately and almost always after their first 30 days taking our cutting-edge supplement. People who stop taking *OPC Factor* say they miss that vitality.

“OPC Factor seems like it has been **GREAT FOR MY ENTIRE BODY**. My results have been tremendous. My blood pressure has dropped from 180 to 120! I have lost 30 pounds. My breathing is better and I am walking and standing longer.”

— Carol Rogers
Fort Lauderdale, FL

Now, read about some of *OPC Factor's* ingredients and what they can do for you.

Lycopene

Lycopene is the natural pigment that makes tomatoes red. Evidence is emerging about the health benefits of lycopene, including that lycopene prevents oxidation of so-called “bad cholesterol” associated with the risk of developing atherosclerosis and coronary heart disease.

Sulforaphane cruciferous vegetable concentrate

With 10.3 million new cancer cases diagnosed each year worldwide, medical researchers are investigating specific fruit and vegetable phytochemicals (the natural chemicals found in plants) as weapons against cancer and other diseases. While phytochemicals number in the thousands, only a few have been identified and studied – and those are included in this *OPC Factors*’ vegetable concentrate.

Bilberry extract

Bilberry extract may halt progressive visual loss caused by dry macular degeneration and possibly even improve vision. Also, bilberry extract in combination with vitamin E stopped the progression of cataract formation in 97 percent of 50 patients with cataracts. Bilberry may also prove helpful in the treatment of glaucoma by strengthening collagen structures in the eye. Bilberry improves night vision and promotes more rapid restoration of visual acuity after exposure to glare.

Lemon bioflavonoid complex

Have you ever added lemon juice to cut fruit? The lemon juice keeps the fruit from turning brown by preventing free radical activity on the cut surface. Lemon bioflavonoid complex is a natural extract produced from lemon peels.

Ginkgo biloba

Long considered a great antioxidant with a talent for protecting micro-circulation in small blood vessels, ginkgo biloba has earned a reputa-

tion as a memory improver. Yet it has many more functions. Ginkgo biloba has been shown to lower blood pressure, inhibit blood clotting and relieve muscle pain. Among its anti-aging properties, ginkgo biloba may also slow the onset of Alzheimer's disease.

Vitamin A

Vitamin A promotes growth and repair of body tissue, healthy eyes, good night vision and a strong immune system.

Vitamin C

Vitamin C may just be one of aging's fiercest foes. Nobel Laureate Linus Pauling promoted daily megadoses of vitamin C as a way to prevent colds and protect the body from chronic diseases. Vitamin C plays a role in controlling infections and is a powerful antioxidant that can neutralize harmful free radicals. It assists in wound healing and may boost immunity. In addition, it helps form collagen, a connective tissue needed for healthy bones, teeth, gums and blood vessels.

“OPC Factor **BOOSTS MY IMMUNE**
system. I don't get colds anymore.”

— *John Peters*
Philadelphia, PA

“Taking OPC Factor for **OVERALL HEALTH**
and well being. Now I GET SICK VERY RARELY and
get over colds quickly. I have more energy,
better circulation and less pain.”

— *Mike O'Malley*
Homer, AK

Vitamin E

Vitamin E's potent antioxidant powers protect cell membranes. The vitamin is essential for the health of red blood cells, aids cellular respiration and helps protect lung tissue from the effects of air pollution. This fat-soluble vitamin is uniquely suited to intercept free radicals and prevent a chain reaction of lipid destruction that can lead to degradation of cell membranes.

Vitamin B-12

Vitamin B-12 releases energy from food, keeps red blood cells healthy, helps maintain the nervous system, boosts the immune system and helps prevent heart disease. Deficiency of vitamin B-12 causes pernicious anemia.

Folic acid

Folic acid is an essential vitamin that helps the body make red blood cells and maintain the genetic information in cell nuclei. Women of childbearing age should be sure to get 400 micrograms of folic acid daily; a deficiency in this vitamin can cause fetal neural tube defects (such as spina bifida) in the first few weeks of pregnancy.

Magnesium citrate

Every cell in the body needs magnesium. The mineral helps keep muscles strong and nerves alert. A study in the journal *Circulation* suggests that daily magnesium supplements can even help an ailing heart. Magnesium is also necessary for the absorption of a number of other important minerals, calcium among them, and for the body's use of vitamin B-6. Magnesium citrate facilitates wound healing, supports the body's immune system, helps to regulate body temperature and is useful in mitigating stress.

Digestive enzymes

Enzymes are protein molecules that carry a vital energy factor needed for every chemical action and reaction that occurs in your body. The several thousand enzymes in the human body combine with co-enzymes to form nearly 100,000 chemicals that enable you to see, hear, feel, move, digest food and think. Your body relies on enzymes to consume nutrients in their proper amounts, digest them, absorb them, carry them into the cells, metabolize them and eliminate the waste created by the process.

Potassium bicarbonate

Potassium is the most essential electrolyte present in your cells. Lack of potassium can cause erratic heart rhythm, weakness and death. Potassium bicarbonate provides the mild effervescence of *OPC Factor's* delivery system.

Selenium

An essential trace element, selenium activates enzymes while also apparently stimulating antibody formation in response to vaccines. It may provide protection from the toxic effects of heavy metals and other substances. Selenium may assist in the synthesis of protein, in growth and development, and in fertility, especially in men. It has been shown to improve the production of sperm and sperm motility.

Lutein

Known as an “eye-friendly” nutrient, lutein is an antioxidant. In one study, people with high amounts of lutein in their blood had a significantly lower risk for developing age-related macular degeneration. Dietary studies confirmed the association between frequent consumption of spinach or collard greens (particularly good sources of lutein) and lower degeneration risk.

Molybdenum

A component of a number of enzymes, molybdenum is an essential trace nutrient found in its highest concentrations in the liver, kidneys, adrenal glands and bones. It supports bone growth and strengthening of the teeth, and a deficiency has been linked to allergies, cancer, cold sores, dental problems and obesity.

Chromium

Chromium is an essential trace mineral required for normal sugar and fat metabolism. It functions primarily by boosting the action of insulin.

Zinc

Zinc, a trace mineral, is vital for proper functioning of the immune system. It is required for cell division, cell growth and wound healing. This element is second only to iron in its concentration in the body. Zinc affects the acuity of smell and taste and is involved in the metabolism of carbohydrates.

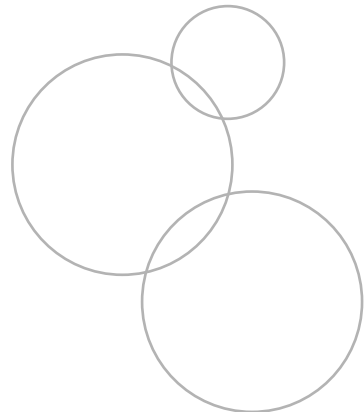
Manganese

Manganese is an essential trace mineral concentrated primarily in the bones, liver, pancreas and brain. This mineral is a component of several enzymes that break down carbohydrates and prevent tissue damage from fat oxidation. It also activates numerous enzymes, including those involved with cartilage formation.

Copper

Copper, a trace element, is a component of many enzymes and is involved in the absorption, storage and metabolism of iron. The symptoms of a copper deficiency are similar to those of iron deficiency – anemia.

These and other primary, proprietary ingredients comprise this synergistic mixture designed to reach your bloodstream in the most efficient manner possible. Within seconds after ingestion, *OPC Factor* can be detected in your bloodstream.





To your health:
OPC Factor as your protector

4
chapter

To your health: *OPC Factor* as your protector

Cardiovascular health

“IF YOU HAVE HEART DISEASE, you’ll probably never know it. For most victims, the first heart attack is the last one. Each year, about 750,000 Americans suffer a heart attack, but only 250,000 will survive.”

— *Dr. Robert Willix Jr.,
Confessions of an Ex-Surgeon*

First let’s review a few basics about your cardiovascular system. Made up of the heart, arteries, veins and capillaries, the cardiovascular system handles all the blood that flows through your body. The hardest-working muscle, the heart pumps blood. This all-important function goes on all day and all night for as long as you live. Arteries are the blood vessels that transport blood from the heart to all parts of the body, and veins are the vessels that transport blood back to the heart. Connecting the arteries and the veins are the capillaries, which provide fresh, nutritious blood to cells and which deliver “used” blood containing cellular waste products back for recycling.

When the heart can’t meet the circulatory demands of the body, heart problems arise. Cardiac insufficiency – inadequate blood flow to the heart muscle – can cause chest pain, shortness of breath, weakness and even a heart attack. When one of the arteries supplying blood to the heart becomes blocked, either by fatty deposits or by a blood clot, the blood supply to the heart is cut off, and muscle cells suffer irreversible damage. This can result in death or disability.

Researchers have noticed a phenomenon called the “French paradox.” Although French cooking is loaded with fat (butter, oil or goose fat, in addition to much cream and cheese), the French very rarely suffer heart disease. This may be because, along with all that foie gras and pastry, the French also consume red wine in reasonable amounts with many of their meals. Red wine contains a powerful antioxidant, and scientists theorize that the antioxidant in the red wine prevents the cardiovascular damage that might otherwise result from the rich French diet. While drinking some red wine on a regular basis has been shown, in fact, to be a reasonably healthful thing for most adults to do, the best way to guarantee a consistent daily intake of heart-protecting antioxidants is to take pure, concentrated OPCs.

“**HEART DISEASE** runs in my family.

So I take precautions. One of those precautions is OPC Factor every morning.”

— Martha J. Moore
Nashville, TN

Stroke prevention

Strokes are caused by blood clots that block the flow of blood to the brain or by hemorrhages that occur when blood vessels burst in the brain. In both cases, blood doesn’t get where it needs to go, and brain damage or death can be the result. OPCs restore the elasticity of collagen and, in so doing, restore the impermeability of blood vessel walls.

“I started taking OPC Factor to **LOWER MY TRIGLYCERIDES**. I’ve had great results it went from 2,000 to 298.”

— Betsy Larson
Pocatello, ID

“**I WORK OUT AND RUN** and OPC Factor helps my oxygen uptake tremendously! My blood pressure and pulse have lowered (my blood pressure is now 116/68 and my pulse is 54). I am 53 and feel like I’m 20 again! No medical problems anymore... I FEEL GREAT!”

— Charles Levitt
Shreveport, LA

Circulatory strengthening

The strength and integrity of your capillaries are essential to health, but few people give the role of capillaries much thought. You may hear someone say, “Poor thing. His circulatory system is weak and old, and his organs are beginning to fail.” What is actually happening, though, is that his capillaries are too porous or permeable, allowing water and small molecules from the blood to leak out into body tissues. When tissues fill up with fluid, it’s more difficult for the heart to pump blood through the organs. In addition, the tissues don’t receive the nutrients they need and aren’t able to rid themselves of wastes.

The sole function of the circulatory system is to exchange nutrients for waste products. If capillaries are damaged, this vital exchange is impaired. OPCs protect capillaries by preserving vitamin C, adhering to collagen and preventing free radicals from attacking capillary walls. Several European medical studies show that OPCs improve peripheral circulation, restore lost capillary activity and strengthen weak blood vessels. By reducing capillary fragility, OPCs help prevent bruising and improve varicose veins. In addition, they reduce venous insufficiency, reduce the severity of restless legs and diminish lower leg blood volume. OPCs also protect the membranes of red blood cells so that they remain flexible and pass easily through the very narrow capillaries.

A friend to your veins

After blood is collected by the capillaries and returned to the veins, how does the blood get back to the heart? The veins have a built-in pump powered by the action of skeletal muscles. Every time you use a large muscle, that muscle simultaneously presses on the veins, thus pushing the blood along. The veins have one-way valves, which prevent the blood from being pulled back by gravity when the surrounding muscle is not contracting.

If you are inactive for a long time, your muscle-vein pump is inactive, too. The blood volume increases in the veins, and the pressure in the veins rises. The one-way valves can give in, allowing gravity to pool the blood, resulting in edema, swelling and pain. Over time, the result will be varicose veins and/or hemorrhoids.

Dr. G. Feine-Haake, a specialist in internal medicine in Hamburg, Germany, studied the benefit of 90 milligrams of OPCs daily on 110 persons who suffered from varicose veins. A clear improvement was found in 77 percent of the subjects. Additionally, Italian scientists from the University of Florence studied the effect of OPCs on venous congestion in the legs, also known as leg edema. All of the study subjects taking OPCs had relief from at least some of their symptoms. What's more, swelling from injuries and surgeries – from face lifts to mastectomies – respond well to ingestion of OPCs.

The collagen enhancer

Skin, tendons, bones and cartilage are all made of connective tissue, which contains as one of its primary constituents a protein called collagen. Collagen is one of the most important agents in your body, for it literally holds you together.

Time and circumstance are not particularly kind to connective tissue. It starts out supple, strong and healthy early in life, and becomes brittle and weak through age and exposure to environmental factors such as sun, wind, smoke and pollutants. We have all seen the contrast between the smooth, clear, soft skin of an infant and the wrinkled, spotted, parchment-like skin of an old person.

The integrity of collagen-based tissue is the result “cross-linking,” when delicate strands intertwine almost like twisted rope. Between the intertwined strands are fibrous links of collagen, much like the steps of a ladder between the uprights. Adequate cross-linking is necessary to maintain the structural integrity of the body, but oxidation causes excessive cross-linking. That leads to brittle, stiff tissue that wrinkles and sags. Yuk!

In the case of collagen, OPCs play a dual role. On the one hand, OPCs help to ensure adequate cross-linking. On the other hand, OPCs' potent antioxidant activity effectively fights the adverse biological conditions that result in excessive cross-linking.

“I am taking OPC Factor for many reasons. **SINCE TAKING OPC FACTOR**, I have a younger appearance. As a middle-aged woman, I really like having better looking skin.”

— Teresa Morris
Greenbriar, TN

The internal cosmetic

Though there doesn't seem to be an actual "fountain of youth," as imagined in various myths and legends, OPCs play a convincing role as youth enhancers. That's because their strengthening and protective powers are so vital to the skin. They specifically help to inhibit the oxidative damage, excessive cross-linking and loss of suppleness that come with age. While collagen gives skin strength, another skin constituent, elastin, gives it suppleness. Like collagen, elastin is attacked by destructive enzymes and by oxidation. It's probably no surprise that OPCs have been proven to markedly inhibit the degradation of elastin protein by blocking the action of the potentially destructive enzyme elastase. Thus OPCs can prolong by years the health and youthful appearance of skin.

Enhancing sports performance

Ouch! That may be your reaction to the muscle soreness and weakness you experience after heavy exercise. But what causes that discomfort? Every time you exercise, you produce millions of free radicals, which act like shrapnel, damaging every muscle cell they contact. Thus the pain. Yet, OPCs prevent free radical damage to muscle cells and shorten recovery time.

Muscle power is generated by a chemical compound which must be regenerated continuously during exercise. The principal way your body does this is by converting muscle stores of fat and sugar – and that conversion occurs by none other than that pesky process called oxidation.

Pushing the intensity of training worsens the scenario. Research has shown that athletes may use 12 to 20 times the oxygen used by sedentary people; hence, they generate higher numbers of free radicals. Thus, those who exercise frequently need OPCs to neutralize and discard free radicals before painful damage can occur.

“I started taking OPC Factor because **MY WEIGHT LIFTING COACH RECOMMENDED IT.**

I now have more energy and feel much better after working out. I am also sleeping better and have less pain.”

— Travis Watson, USA Olympic Athlete,
Oklahoma City, OK

Food for the brain

Studies are proving a connection between the use of OPCs and reductions in the symptoms of attention deficit disorder. This favorable effect was observed by board-certified adult and child psychiatrist Dr. James Greenblatt of Boston, who said, “With electroencephalogram (EEG) studies, I’ve been able to determine which aspects of attention deficit disorders are helped by OPCs. This nutritional product improves the pediatric patient’s inattention component. ... [A] lot of inattentive kids who are taking OPCs have completely gotten off of Ritalin.” He adds the OPCs are even more effective for adults with attention deficit problems.

For monthly relief

Painfully swollen breasts, bloated abdomen, puffy face, undefined pelvic pain, weight gain, aching legs, depression, irritability, headaches and other discomforts make up the series of female symptoms known as premenstrual syndrome (PMS). A daily dose of OPCs has been shown to relieve many patients’ PMS problems in as quickly as two cycles.

The better to see with

Eye health depends to a great extent on the integrity of the fine vessels that supply blood to the eyes. OPCs can improve visual performance in two ways:

- By enhancing your ability to adjust from bright light to low light – which certainly helps those who sit in front of computer screens or drive for a living, and
- By easing degeneration caused by diabetes, arteriosclerosis, inflammation and other reasons.

Not only are OPCs an effective eye treatment, but they also work well to prevent eye disease. In a study of night drivers and television watchers, 100 subjects were given OPCs daily for four weeks. Of the 100 participants, 98 showed eyesight improvement.

Tackling diabetes

“I take OPC Factor **BECAUSE I AM A**

DIABETIC. Since taking OPC Factor my diabetes is under control. I have dropped 50 units of insulin. My eyes have improved. My kidneys have improved. My neuropathy is gone. My liver function has gone from 30 percent to 70 percent.”

— *Jacki Rolph*
Idaho Falls, ID

Diabetes affects nearly 17 million Americans and is the fifth-deadliest disease in the United States. Insulin is the predominant treatment, but patients eventually develop complications, including various forms of heart disease and nerve, liver and kidney damage.

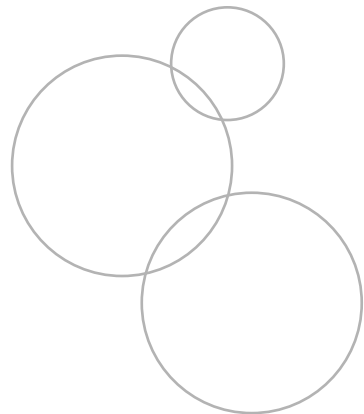
Diabetic neuropathy is a nerve disorder caused by diabetes. Symptoms of neuropathy include numbness and sometimes pain in the hands, feet or legs. Nerve damage caused by diabetes can also lead to problems with internal organs such as the digestive tract, heart and sexual organs, causing indigestion, diarrhea or constipation, dizziness, bladder infections and impotence. In some cases, neuropathy can flare up suddenly, causing weakness and weight loss. Depression may follow. Though its progress can be slowed or halted by maintaining normal blood glucose levels, diabetic neuropathy is irreversible using today's traditional therapy.


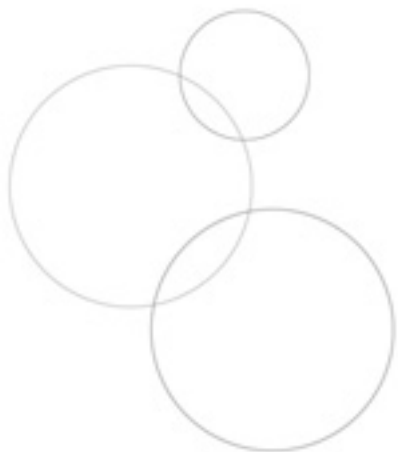
Yet research has shown that boosting insulin with vitamins C and E – known antioxidants – may improve the drug's effectiveness for treating diabetes. A University of California–Irvine College of Medicine study found that antioxidants not only enhance insulin's ability to reduce blood sugar, but also lower the risks of organ damage that can occur despite insulin treatments.

Blowing away allergies

We know today that allergies are an immune disorder, just like other inflammatory diseases such rheumatoid arthritis, hepatitis, Crohn's disease, lupus and ulcerative colitis. All inflammatory disorders involve free radicals; OPCs quench free radicals and inhibit inflammation.

Take a look at hay fever, for example, which is the common name for a histamine-caused allergic disorder characterized by a runny nose, itchy eyes and upper respiratory difficulty. An English study in 1990 found that OPCs greatly reduce the formation of histamine, thus reducing inflammation. In Finland, OPCs are very popular for alleviating hay fever symptoms – and without the unpleasant side effects, such as drowsiness, usually associated with antihistamine drugs.



A person is seen from behind, sitting in a small canoe on a calm body of water. The scene is misty or foggy, with the water reflecting the light. The background shows a distant shoreline with trees under a pale sky.

What does the future hold?

5
chapter

What does the future hold?

As more and more researchers and physicians study the antioxidant effects of OPCs, more and more benefits are discovered. The beauty of OPCs, coupled with *OPC Factor's* unique formula and effective delivery system, mean a better quality of life for those who drink this restorative compound. While you know *OPC Factor* is not the fountain of youth, your body doesn't.

Note: Information in this booklet is provided for informational purposes only. It is not meant to substitute for medical advice provided by your physician or other medical professional. You should not use this information for diagnosing or treating a health problem or a disease or for prescribing any medication. You should read carefully all product packaging and labels. If you have or suspect that you may have a medical problem, contact your physician or health-care provider promptly. Information and statements regarding dietary supplements have not been evaluated by the Food and Drug Administration and are not intended to diagnose, treat, cure or prevent any disease.

Copyright © 2006 AlivenLabs, Inc. All rights reserved.

AlivenLabs is also the maker of Cell Essentials Restore — an exceptional Age Defying Daily Antioxidant Facial Crème. Go to www.mycellessentials.com to discover how to look and feel your best.

Cell Essentials Restore Crème

Age-Defying Daily Antioxidant Facial Crème



Look years younger in just 30 days!

Cell Essentials Restore Crème is revitalizing the faces of America. Our powerful anti-aging blend of OPCs, antioxidants and other natural ingredients reverses the aging process, leaving you with fewer wrinkles and a healthier, youthful appearance. You'll start seeing the results in just two weeks!

**Smoother skin in two weeks.
Soft, luminous skin in 30 days.**

Reduces wrinkles

Makes your skin smooth

Moisturizes and hydrates

Improves firmness

Strengthens collagen and elastin

Clarifies and exfoliates

Renews skin cells

Calms sensitive skin

To order or for more information: AlivenLabs Products
www.mycellessentials.com Or call: 1-800-376-8955

Scientific References

(presented by chapter)

Introduction

- Tixier, J. M., G. Godeau, A. M. Robert, and W. Hornebeck. "Evidence by in Vivo and in Vitro Studies That Binding of Pycnogenols to Elastin Affects its Rate of Degradation by Elastases." Laboratoire de Biochimie du Tissu Conjonctif, Faculté de Médecine, University of Paris, June 25, 1984.
- Pfister, A., M. T. Simon, and J. M. Gazave. "Sites De Fixation Des Oligomeres Procyanidoliques Dans La Paroi Des Capillaires Sanguins du Pouton." *Acta Therapeutica* (8), 1982, pp. 223-237.
- Masquelier, J., M. C. Dumon, and J. Dumas. "Stabilization de Collagene Par Les Oligomeres Procyanidoliques." *Acta Therapeutica* (7), 1981, pp. 101-105.
- Kuttan, R., P. Donnelly, and N. Di Ferrante. "Collagen Treated with (+)-Catechin Becomes Resistant to the Action of Mammalian Collagenase." Laboratory of Connective Tissue Research, Dept. of Biochemistry, Baylor College of Medicine, Houston, Tex., May 28, 1980.
- Harmand, M. F. and P. Blanquet. "The Fate of Total Flavanolic Oligomers (OFT) Extracted from 'itus vinifera L.' in the Rat." *European Journal of Drug Metabolism and Pharmacokinetics*, 1978, No. 1, pp. 15-30.
- Delrieu, P., J. Ding, B. Escande, and D. Samaim. "Free-radical Scavenging Activity of Proanthocyanidolic Oligomers Encapsulated in Glycospheres: an in Vivo and in Vitro Study." Cosmetology Department, A & S Biovectors, Ramonville, St. Ague, France, pp. 1-9.

Chapter 1

- "Plant extract with a proanthocyanidins content as therapeutic agent have radical scavenging effect and use thereof." Masquelier, Jacques. United States Patent #4,300,869.
- Cartier, Jacques. *Voyages au Canada*.
- Masquelier, Jacques and Pierre Claveau. *Naturaliste Can.*, 1966.
- Yu. C. L. and B. Swaminathan. "Mutagenicity of proanthocyanidins." *Food Chem. Toxicol.*

Kilham, C. *OPC: The Miracle Antioxidant*. New Canaan, Conn.: Keats Publishing, Inc., 1997, p. 24.

Chapter 2

Turner, P. E., J. Tuomilehto, P. Happonen, A. E. LaVille, M. Shaikh, and B. Lewis. "Metabolic studies on the hypolipidaemic effect of Guar Gum." *Atherosclerosis*, 1990.

White, Z. L., R. McArthur, D. Topping, and P. Mestel. "Oat bran lowers cholesterol in mildly hypercholesterolemic effects of oats products." *Advances in Experimental Biology and Medicine*, 1992.

Carnot, P. and A. Chessevart. "Modifications studies dans l'estomac et la duodenum par les solutions salines suivant leur concentration moleculaire le reflex reguleru du sphincter pylorique." *C. R. Soc. Biol.*, Paris, 1905.

Hunt, J. N. "Some properties of an alimentary osmoreceptor mechanism." *Journal of Physiology*, London, 1965.

Koparkar, A. D., L. L. Augsburg, and R. F. Shangraw. "Intrinsic dissolution rates of tablet fillers and binders and their influence on the dissolution of drugs from tablet formulations." *Pharmaceutical Research* 7, 1990.

Meeroff, J. C., V. L. W. Go, and S. F. Shangraw. "Control of gastric emptying by osmolarity of duodenal contents in man." *Gastroenterology* 68, 1975.

"Absorption, distribution, and excretion." *Remington's Pharmaceutical Sciences*, 17th ed., Philadelphia College of Pharmacy and Science, 1975.

Graham, D. Y., J. L. Smith, and A. A. Bouvet. "What happens to tablets in the stomach." *Journal of Pharmaceutical Sciences* 79, 1990.

Seigel, J. A. "Biphasic nature of gastric emptying." *Gut* 29, 1988.

Chapman, D. G. and J. A. Campbell. "The Relation Between In Vitro Disintegration Time of Sugar-Coated Tablets and Physiological Training." *J. Amer. Pharm. Assoc.* 60, 1956, p. 374.

Xi, N., J. Lu, and G. Chen. "Bioavailability and Pharmacokinetic Analysis of Riboflavin Preparations." *Shanghai Diyi Yixueyuan Xuebao* 10, 1983, p. 193.

Stozek T. and J. Wielgus. "Comparative Study on the Release of Riboflavin From Tablets in Vitro and its Bioavailability." *Farm. Pol.* 38, 1982, p. 465.

Chapter 3

Acott TS, Weleber RG. "Vitamin A megatherapy for retinal abnormalities." *Nature Med.* 1995; 1:884-885.

Bates CJ. "Vitamin A." *Lancet.* 1995; 345:31-35.

- Agus DB, Gambhir SS, Pardridge WM, et al. "Vitamin C crosses the blood-brain barrier in the oxidized form through the glucose transporters." *J Clin Invest.* 1997; 100:2842-2848.
- Pauling L. "Evolution and the need for ascorbic acid." *Proc Natl Acad Sci USA.* 1970
- Delcourt C, Cristol J-P, Tessier F, et al. "Age-related macular degeneration and antioxidant status in the POLA study." *Arch Ophthalmol.* 1999; 117:1384-1390. The PDR® Family Guide to Nutrition and Health™
- Butterworth CE Jr, Bendich A. "Folic acid and the prevention of birth defects." *Annu Rev Nutr.* 1996; 16:73-97. MRC Vitamin Study Research Group Prevention of neural tube defects: results of the Medical Council Vitamin Study. *Lancet.* 1991; 388:131-137.
- Ellenbogen L. Vitamin B12. In: Machlin LJ, ed. *Handbook of Vitamins.* New York, NY: Marcel Dekker, Inc; 1984:497-547
- Baik HW, Russell RM. "Vitamin B12 deficiency in the elderly." *Annu Rev Nutr.* 1999; 19:357-377.
- Casscells W. "Magnesium and myocardial infarction." *Lancet.* 1994; 343:807-809.
- Sojka JE. "Magnesium supplementation and osteoporosis." *Nutr Rev.* 1995; 53:71-80.
- Olsen RJ, Olsen P. "Zinc as a treatment for age related macular degeneration (review)." *J Trace Elem Exp Med.* 1998; 11:137-145.
- Salgueiro MJ, Zubillaga M, Lysionek AK, et al. "Zinc an essential micronutrient: a review." *Nutr Rev.* 2000; 20:737-755
- Colditz GA. "Selenium and cancer prevention. Promising results indicate further trials required (editorial)." *JAMA.* 1996; 276:1984-1985.
- Huttunen JK. "Selenium and cardiovascular diseases -- an update." *Biomed Environ Sci.* 1997; 10:220-226.
- Klevay LM. "Cardiovascular disease from copper deficiency — a history." *J Nutr.* 2000; 130:489S-492S.
- Waggoner DJ, Bartnikas TB, Gitlin JD. "The role of copper in neurodegenerative disease." *Neurobiology of Disease.* 1999; 6:221-230
- Hussain S, Ali SF. "Manganese scavenges superoxide and hydroxyl radicals: an in vitro study in rats." *Neuroscience Letters.* 1999; 261:21-24.
- Keen CL, Ensunsa JL, Watson MH, et al. "Nutritional aspects of manganese from experimental studies." *Neurotoxicol.* 19
- Anderson RA. "Chromium, glucose intolerance and diabetes". *J Amer Coll Nutr.* 1998; 17:548-555.
- Merz W. "Chromium in human nutrition: a review." *J Nutr.* 1993; 123:626-633.

- Anon. "Molybdenum deficiency in TPN." *Nutr Rev*. 1987; 45:337-341.
- Barceloux DG. "Molybdenum." *J Toxicol Clin Toxicol*. 1999; 37:231-237.
- McCabe RD, Backarich MA, Srivastava K, Young DB. "Potassium inhibits free radical formation." *Hypertension*. 1994; 24:77-82.
- Tannen RL. "Effects of potassium on blood pressure control." *Ann Intern Med*. 1983; 98 (part 2):773-780.
- Gabetta B, Fuzzati N, Griffini A, et al. "Characterization of proanthocyanidins from grape seeds." *Fitoterapia*. 2000; 71:162-175.
- Frémont L, Belguendouz L, Delpal S. "Antioxidant activity of Red wine and alcohol-free wine polyphenols related to LDL oxidation" and polyunsaturated fatty acids." *Life Sci*. 1999; 64:2511-2521
- Head KA. "Natural therapies for ocular disorders, part two: cataracts and glaucoma." *Altern Med Rev* 2001;6(2):141-166.
- Logan AC, Wong C. "Chronic fatigue syndrome: oxidative stress and dietary modifications." *Altern Med Rev* 2001;6(5):450-459.
- Coenen TMM, Bertens AMC, De Hoog SCM, Verspeek-Rip CM. "Safety evaluation of a lactase enzyme preparation derived from *Kluyveromyces lactis*." *Food Chem Toxicol*. 2000; 38:671-677.
- Anthony H, Collins CE, Davidson G, et al. "Pancreatic enzyme replacement therapy in cystic fibrosis: Australian guidelines." *J Pediatr—Child Health*. 1999; 35:125-129
- Kitamura, M; Ishikaw, Y. "Oxidant-induced apoptosis of glomerular cells: intracellular signaling and its intervention by bioflavonoid." *Kidney-Int*. 1999 Oct; 56(4): 1223-9
- Grimm T, Schafer A, Hogger P. "Antioxidant activity and inhibition of matrix metalloproteinases by metabolites of maritime pine bark extract (pycnogenol)." *Free Radical Biology and Medicine*. 2004;36(6):811-822.
- Saleem A, Kivela H, Pihlaja K. "Antioxidant activity of pine bark constituents." *Zeitschrift Fuer Naturforschung. Section C. Biosciences*. 2003;58(5-6):351-354
- Ferrandini C, Droy-Lefaix MT, Christen Y, eds. *Ginkgo biloba Extract (EGb 761) as a Free Radical Scavenger*. Paris: Elsevier, 1993.
- Clostre F. "From the body to the cell membranes: the different levels of pharmacological action of Ginkgo biloba extract." In: Rukan (Ginkgo biloba): Recent Results in Pharmacology and Clinic. Fünfgeld EW, ed. Berlin: Springer-Verlag, 1988, 180–98.
- Bounous G, Gervais F, Amer V, et al. "The influence of dietary cruciferous vegetable concentrate on tissue glutathione and the diseases of aging." *Clin Invest Med*. 1989; 12:343-349.
- The PDR® Family Guide to Nutrition and Health™

- Berendschot TT, Goldbohm RA, Klöpping WA, et al. "Influence of lutein supplementation on macular pigment, assessed with two objective techniques." *Invest Ophthalmol Vis Sci.* 2000; 41:3322-3326.
- Bowen PE, Clark JP. Lutein esters having high bioavailability. International patent publication number: WO 98/45241. International publication date: 15 October 1998

Chapter 4

- Passwater, Richard. *The New Superantioxidant – Plus.* 1992.
- Chan, J. and M. G. Borzies. "Etude de l'administration d'oligomeres procyanidoliques (OPC) chez le rat." *Extrait de La Semaine des Hopitaux de Paris*, 1983.
- Dartenus, et al. *Bordeaux Med.*, 1980.
- Beylot, et al. *Gaz. Med. De France*, 1980.
- Biard, et al. *Medicine Prat.*, 1980.
- Baracco, et al. *Gaz. Med. de France*, 1981.
- Laparra, et al. *Expertise Pharmacologique*, 1978.
- Kagru, et al. *Vie Med.*, 1980.
- Feine-Haake, G. "A new therapy for venous diseases." *Seitschrift fur Allgemeinmedizin*, 1975.
- Blazso, G. and M. Gabor. "Oedema-inhibiting effect of procyanidin." *Acta Physiologica Scientiarum Hungaricae*, Tomus, 1980.
- Schmidtke, I. and W. Schoop. "Das hydrostatische odem und seine medikamentose beeinflussung," *Schwizerische gesellschaft fur phebologie, Jahrestische 1984.*
- "Die Objektivierung der Wirkung von Venepharmaka." Lenzerheide. 1984.
- Arcangeli, G. University of Florence, 1989.
- Delrieu, P., J. Ding, B. Escande, and D. Samaim. "Free-radical Scavenging Activity of Proanthocyanidolic Oligomers Encapsulated in Glycospheres: an in Vivo and in Vitro Study." *Cosmetology Department A & S Biovectors*, Ramonville, St. Ague, France, pp. 1-9.
- Harmand, M. F. and P. Blanquet. "The Fate of Total Flavanolic Oligomers (OFT) Extracted from *Vitus vinifera* L. in the Rat." *European Journal of Drug Metabolism and Pharmacokinetics.* 1978, No. 1, pp. 15-30.
- Pfister, A., M. T. Simon, and J. M. Gazave. "Sites De Fixation Des Oligomeres Procyanidoliques Dans La Paroi Des Capillaires Sanguins du Poumon Decobaye." *Acta Therapeutica* (8) 1982, pp. 223-237.

- Masquelier, J., M. C. Dumon, and J. Dumas. "Stabilization de Collagene Par Les Oligomeres Procyanidoliques." *Acta Therapeutica* (7) 1981, pp. 101-105.
- Kuttan, R., P. Donnelly, and N. Di Ferrante. "Collagen Treated with (+)-Catechin Becomes Resistant to the Action of Mammalian Collagenase." Laboratory of Connective Tissue Research, Dept. of Biochemistry, Baylor College of Medicine, Houston, Texas., May 28, 1980.
- Tixier, J. M., G. Godeau, A. M. Robert, and W. Hornebeck. "Evidence by in Vivo and in Vitro Studies That Binding of Pycnogenols to Elastin Affects its Rate of Degradation by Elastases." Laboratoire de Biochimie du Tissu Conjonctif, Faculté de Medecine, University of Paris, June 25, 1984.
- Greenblatt, J. M. "Nutritional Supplements in ADHD." *J. Am. Acad. Child Adolesc. Psychiatry* 38 (10), 1999, pp. 1209-1210.
- Gottmann, J. "France-Agriculture and Industries." In *Encyclopedia Americana*, International Edition. New York: Americana Corp., 1966, pp. 580-581.
- St. Leger, A. S., A. L. Cochrane, and F. Moore. "Factors associated with cardiac mortality in developed countries with particular reference to the consumption of wine." *The Lancet*, May 12, 1979.
- Renaud, S. and M. de Lorgeril. "Wine, alcohol, platelets, and the 'French paradox' for coronary heart disease." *The Lancet*, Vol. 339, June 20, 1992.
- Schwitters, B. with J. Masquelier. *OPC in Practice: The Hidden Story of Proanthocyanidins, Nature's Most Powerful and Patented Antioxidant*. Rome, Italy: Alfa Omega Editrice, 1995, p. 85.
- The Book of Popular Science*, Vol. 4. New York: The Grolier Society, Inc., 1965, p. 168.
- Masquelier, J., J. Michaud, J. Laparra, and M. C. Dumon. "Flavonoids et pycnogenols." *International Journal of Vitamin Nutritional Research*, Vol. 49, 1979.
- Masquelier, J. *A Lifetime Devoted to OPC and Pycnogenols*. An audiotape of Dr. Masquelier's premiere American scientific address. Baltimore, Oct. 18, 1996. Produced under the direction of Barry van der Sluis by the Amsterdam Broadcast Company, Amsterdam, The Netherlands. Spoken by Steven J. Fleay and Jacky Spears and translated from the French by Language Unlimited, Utrecht, The Netherlands.
- Op. cit.*, Schwitters, B., pp. 77-78.
- Masquelier, J. *Physiological Effects of Wine*. Lecture delivered at Wine and Health, an international symposium conducted in Mendoza, Argentina, Nov. 18-21, 1987.
- Kilham, C. *OPC: The Miracle Antioxidant*. New Canaan, Conn.: Keats Publishing, Inc., 1997, p. 18-20.

- Dubos, G., G. Durst, and R. Hognonot. "Evolution de la resistance capillaire, spontanement ou artificiellement diminuee par l'action d'une substance capillaro-toxique chez des personnes agees." *La Revue de la Geriatrie*, Vol. 5, No. 6, Sept. 1980.
- Dartenuc, P., P. Marache, and H. Choussat. "Resistance capillaire en geriatrie. Etude d'un microangioprotecteur – Endotelon." *Bordeaux Medicale* 13:903-7, 1980.
- Lagrué, G., F. Olivier-Martin, and A. Grillot. "Etude des effets des oligomeres du procyanidol sur la resistance capillaire dans l'hypertension arterielle et certaines nephropathies." *Sem Hop Paris*, 18-25, Sept. 1981.
- Lesbre, F. X. and J. D. Tigaud. "Effet de l'Endotelon sur l'indice de fragilite capillaire dans une population specifique: les sujets cirrhotiques." *Gaz. Med. de France*, Vol. 90, No. 24, June 24, 1983.
- Beylot, C. and P. Bioulac. "Essai therapeutique d'un angioprotecteur periferique, l'Endotelon." *Gaz. Med. de France*, Vol. 87, No. 22, June 13, 1980.
- Sarrat, L. "Abord therapeutique des troubles fonctionnels des membres inferieurs par un microangioprotecteur l'Endotelon." *Bordeaux Medicine*, 11:685-8, 1981.
- Delacroix, P. "Etude en double aveugle de l'Endotelon dans l'insuffisance veineuse chronique." *La Revue de Medicine*, 27-8, Aug. 31 - Sept. 7, 1981.
- Thebaut, J. F., P. Thebaut, and F. Vin. "Etude de l'Endotelon dans manifestations fonctionnelles de l'insuffisance veineuse periferique. Resultats d'une etude en double aveugle portant sur 92 patients." *Gazette Medicale*, Vol. 92, No. 12, 1985.
- Amsellem, M., J. M. Masson, B. Negui, F. Saily, J. Sentenac, A. Siou, and J.C. Tissot. "Endotelon dans le traitement des troubles veino-lymphatiques du syndrome premenstruel. Etude multicentrique sur 165 patientes." *Tempo Medical*, No. 282, Nov. 1987.
- Parienti, J. J. and J. Parienti-Amsellem. "Les oedemes post-traumatiques chez le sportif: essai controle de l'Endotelon." *Gaz. Med. de France*, Vol. 90, No. 3, Jan. 21, 1983.
- Baruch, J. "Effet de l'Endotelon dans les oedemes post-chirurgicaux. Resultats d'une etude en double aveugle contre placebo sur trente-deux patientes." *Ann. Chir. Plast. Esthet.*, Vol. XXIX, No. 4, 1984.
- Pecking, A., J. P. Desprez-Curely, and G. Megret. "Oligomeres procyanidoliques (Endotelon) dans le traitement des lymphoedemes post-therapeutiques des membres superieurs." Symposium Satellite, Congres International d'Angiologie, Toulouse, France, Oct. 4-7, 1989.
- Frenkel, E. N., J. Kanner, J. B. German, E. Parks, and J. E. Kinsella. "Inhibition of oxidation of human low-density lipoprotein by phenolic substances in red wine." *The Lancet*, Vol. 341, Feb. 20, 1993.

- Ariga, T. K. and M. Hamano. "Radical scavenging action and its mode in procyanidins B-1 and B-3 from azuki beans to peroxy radicals." *Agricultural Biological Chemistry* 54 (10): 2499-2504, 1990.
- Verin, P., A. Vildy, and J. F. Maurin. "Retinopathies et OPC." *Bordeaux Medicale* 11 (16), 1978, p. 1467.
- Fromantin, M. "Les oligomeres procyanidoliques dans le traitement de la fragilite capillaire et de la retinopathie chez les diabetiques. A propos de 26 cas." *Med. Int.* 16 (11), Nov. 1981, pp. 432-434.
- Arne, J.L. "Contribution a l'etude des oligomeres procyanidoliques: Endotelon, dans la retinopathie diabetique (a propos de 30 observations)." *Gaz. Med. de France*, Vol. 89, No. 30, Oct. 8, 1982.
- Corbe, J. P., A. Boissin, and J. Siou, "Sens lumineux et circulation chorioretinienne. Etude de l'effet des OPC (Endotelon)." *Fr. Ophthalmol*, 11 (5), 1988, pp. 453-60.

While most of the research cited in this Appendix is not directly quoted in *The Aging Antidote*, much of this publication's information is derived from the work of the researchers noted here. AlivenLabs is proud to recognize the invaluable contributions of all these scientists and so many more toward the body of knowledge that has made *OPC Factor™* possible.



Cell Essentials

YOUR BODY'S NEW ESSENTIAL

"The unique antioxidant capacity of OPCs helps keep the human body from experiencing degenerative changes and prevents cellular damage."

– Dr. Jeffery Fedorko

"I've learned that one of the main things you need for recovery is a good antioxidant. Using Cell Essentials OPC Factor makes a lot of sense and has really helped me."

– Chad Vaughn, 2004 Olympian and National Champion, Weight-lifting

"I recommend OPC Factor to my patients who have stress that is creating oxidative damage in their bodies. OPCs go to work right away and fixes that right up!"

– Dr. Harold Hagglund

"I recommend OPCs to my patients with immune challenges. As an antioxidant, it's just a great natural health care preventative."

– Dr. Greg Riley

"Once I get an athlete to start using OPCs, the first thing they notice is more energy. They don't get as tired, as fatigued, and they recuperate faster."

– Steve Miller, Olympic Trainer

"Our modern food sources are definitely lacking – today's fruits and vegetables don't have enough nutrients in them. Clinical evidence proves the strength of these OPC antioxidants and how they work together synergistically to be even more effective."

– Dr. Doug Moser

"I've been using and recommending OPCs for ten years. OPC Factor's unique formulation includes other beneficial antioxidants which really makes for a powerful free radical fighter... one of the most effective free radical scavengers out there."

– Dr. Lloyd Nelson