



**New Roots**  
HERBAL

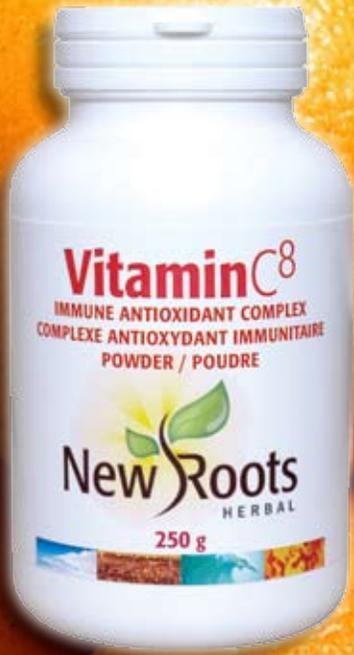


# NaturalFacts

*New product announcements, specials  
and information from New Roots Herbal*



November 16 – December 31, 2009



## **Vitamin C<sup>8</sup>**

**The most advanced  
buffered form and  
long lasting  
vitamin C possible**

**240 hours of testing and research every week  
Our full-time laboratory is staffed with 1 PhD, 3 MSc and 2 BSc**



## Represent

This simple word has gained “pop culture popularity” for standing up for your rights. The CHFA program is up and running, so look out for your awareness package in the mail.

We were scanning the first hundred or so comments that were posted online and there is a common theme: **family** and **freedom** are among the most frequent words encountered.

People rely on these products to play pivotal roles in the wellness of their **families**, and they want the **freedom** to choose the products that will ultimately keep them out of hospital corridors.

This program represents a terrific vehicle for the concerns of the industry to be heard; however the groundswell of public awareness begins with you!

Log on to

**saveournaturalhealthproducts.ca**

and voice your opposition

Between November 15, 2009 and April 1<sup>st</sup>, 2010, we will not be shipping any of the following liquid products, to keep them from freezing:

- *Chlorophyll*
- *Morning Life*

In order for you to stock up with a 4-month supply, we are offering a 120-day credit on these products.

# The Holiday Season: 48 Hours...

The holiday season represents one of the most stressful periods of time in North American culture. There are many time frames to define the event: for some, it spans from leaving work at 1:00 the afternoon of the 24<sup>th</sup> for last minute shopping, to returning that unwanted gift from your sister in law on Boxing Day... while for others, the season can span those 48 days starting when Santa appears at the shopping plaza, to when the credit card bill arrives on a bleak January afternoon.

## “Christmexcess”

Let’s start by debunking a popular urban myth; depression and suicide rates are not higher at Christmas time, despite all the stress the season evokes. Even the most unsavory individuals are prone to random acts of kindness, and “It’s a Wonderful Life” can elicit a tear of happiness from anyone with half a heart.

People are generally around the ones they love, they recall fond memories, and look forward to all the good things the New Year will bring. The holiday season is unfortunately a time for excess; too much eating, too much alcohol consumption, too much stress, too much travel, and too much shopping, to name a few things. There are a couple of options for you: go into hibernation, or treat the holidays like the physical and mental challenge they are. Circle a date on the calendar in mid-November to get your mind and body stoked for the holiday season. The time to fertilize and protect your lawn and garden is in the fall, to ensure great growth come spring time. A little advanced preparation can insure you won’t need time off to recuperate after the holidays.

## Holiday Boot Camp, New Roots Herbal Style

Everything in moderation is a simple guideline that applies to most things in life; even the liquor control boards throughout Canada advocate it. We tend to over-extend ourselves and compromise our immune systems: this combined with all the increased contact



# or 48 Days?

Researched & written by Gord Raza, B.Sc.

with others in enclosed surroundings is a recipe for burn out and illness.

A good start is to engage yourself in some form of cardiovascular activity, even if it's just skipping the elevator once in a while, or going for a walk at lunch time to soak up a little of the sunshine vitamin (D). You can go online to resource various top 10 lists of ways to

reduce holiday stress, including ways to prepare various hors-d'œuvres and holiday menu items in advance.

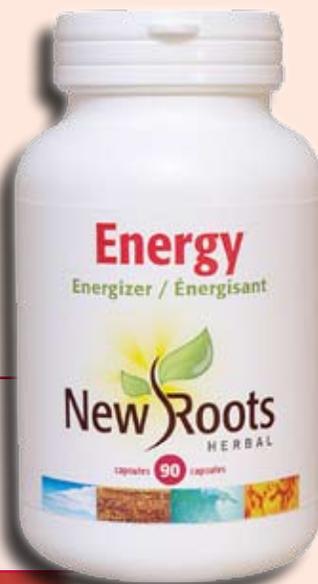
We can't help you cope with your in-laws, but we can provide you with a checklist of New Roots Herbal products to help you cope with all the trials and tribulations that the season brings; so you can enjoy the holiday season.

## New Roots Herbal Holiday Essentials Checklist



**Chill Pills:** A synergistic formula of vitamins and herbs to brighten your outlook on life and support your nervous system.

16 capsules #1166  
30 capsules #1163  
60 capsules #1277

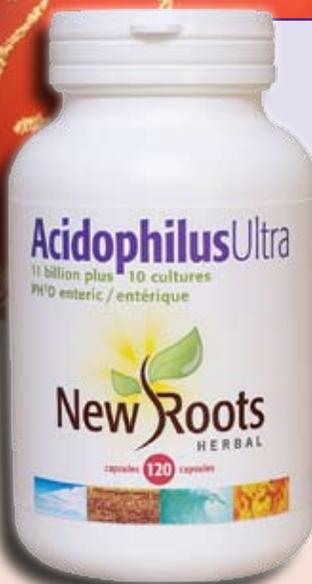


**Energy:** Royal jelly and bee pollen highlight this formula which stimulates adrenal function and improves stamina.

45 capsules #209  
90 capsules #237

**Wild Oregano C93:** A few drops administered sublingually can boost your resistance to the many cold and flu viruses circulating around the holiday season.

15 ml #1233  
30 ml #1255  
60 ml #1266



**Acidophilus Ultra:** Gets your intestinal flora equipped for possible changes in your dietary regimen.

30 capsules #1270  
60 capsules #4  
120 capsules #495  
250 capsules #940



**Multi-Max Immune:** A highly bioavailable source of vitamins and nutraceuticals.

60 capsules #1236  
120 capsules #225  
240 capsules #253

100 capsules #224

**Digestive Enzymes:** Give your body a helping hand with the holiday diet often rich in animal fats and dairy products.



*Metals are among the most important building blocks of both modern civilization and mankind in general. The discovery and exploitation of metals has and continues to be a driving force behind world exploration, scientific advances, and the world economy.*

*Likewise, their role in human physiology is priceless.*

# PRECIOUS METALS

*Researched & written by Gord Raza, B.Sc.*

## **Health is Wealth**

If we take this expression to heart, the true measure of wealth is not the value of the jewellery you're wearing or gold and silver in your safety deposit box, but the adequate levels of essential trace metals in your body.

Metals are defined as compounds, alloys, or elements that readily donate electrons in chemical reactions—this accounts for their tendency to conduct electricity. The chemical properties of our trace metals make them essential in hundreds of chemical, physical, electrical, and enzymatic reactions. We preface the body's metals with the adjective "trace"; however if we consider that approximately 80% of our body weight is water, followed by carbon at about 18%, these can be regarded basically as a substrate for the intricate reactions that minerals and metals undergo to sustain life.

## **The Pump**

The most critical process in cellular respiration is carried out by two alkali metals: sodium and potassium. These two highly reactive metals are abundant in the blood stream as well as inside the cell walls, with potassium at the intracellular level, and sodium in the blood and interstitial fluid.

The process of the extrusion of 3 sodium ions out of the cell wall and the importing of 2 potassium ions through cell walls is a form of active transport called the sodium-potassium pump. The energy produced via this process is used for osmotic regulation, action potential generation for neurons, and the driving force behind all secondary active transport in animal cells. Basically, cellular respiration is dependent upon these two metals.



## **Magnesium**

Magnesium constitutes approximately .05% of the human body; however the impact it has on human physiology outweighs the mere 24 grams found in the average adult human body.

Magnesium participates in over 300 enzymatic reactions, including those generating energy at the cellular level. The most important function of magnesium is the role of gatekeeper for calcium absorption and release from the skeletal system where 50% of calcium is stored.

Osteoporosis being one the biggest challenges facing baby boomers (especially post-menopausal women): the focus on adequate dietary and supplemental intake of calcium should be accompanied by a sufficient amount of magnesium.

## **Molybdenum**

Molybdenum ranks 52<sup>nd</sup> among the most abundant metals present in the Earth's crust and 25<sup>th</sup> most abundant elements in our oceans. From an evolutionary perspective, molybdenum was an important element employed by bacteria for nitrogen fixation.

Approximately 50 enzymes contain molybdenum in both animals and bacteria; there are several enzymes that rely upon molybdenum as a cofactor, with sulfite oxidase being the most critical for human well being. Sulfite oxidase triggers the conversion of potentially toxic sulfites to sulfates necessary for the metabolism of sulfur containing amino acids. Sulfites are among the top food allergens; they can also cause respiratory distress.



## New Roots Herbal minerals and metals:

Boron	#436	Calcium Magnesium	Organic Germanium	#764	Strong Bones	#296, 297, 950
Calcium Ascorbate	#239, 30, 159, 31	Citrate ZDBS	Magnesium Citrate & L-Taurine	#903, 904	Super Iron	#970
Coral Calcium	#327	Calcium Magnesium Citrates	Molybdenum Rice Chelated	#846	Ultra Iron	#971
Calcium Magnesium	#265	Chromium Picolinate	Selenium	#808	Ultra Zinc	#974, 975, 976

### Iron

We reflect the environment we inhabit; iron is among the most abundant metals, both on our planet and in the human body.

Present in all the cells of the human body, iron plays a role in the functioning of our immune system and in our central nervous system, and most importantly as the major component of hemoglobin.

Hemoglobin is a protein within red blood cells responsible for absorbing atmospheric oxygen in the lungs and the subsequent distribution to all cells throughout the body.

### Zinc

The total amount of zinc in the average adult is between 2 and 3 grams, with about 90% present in the musculoskeletal system. Not surprisingly, of the roughly 300 enzymatic reactions that rely upon zinc as a cofactor, those affecting growth are among the most critical.

Perhaps the role zinc plays in protecting the prostate gland from enlargement and infection, along with supporting sperm count and motility, gives it a pivotal role in the prosperity of the species in general.

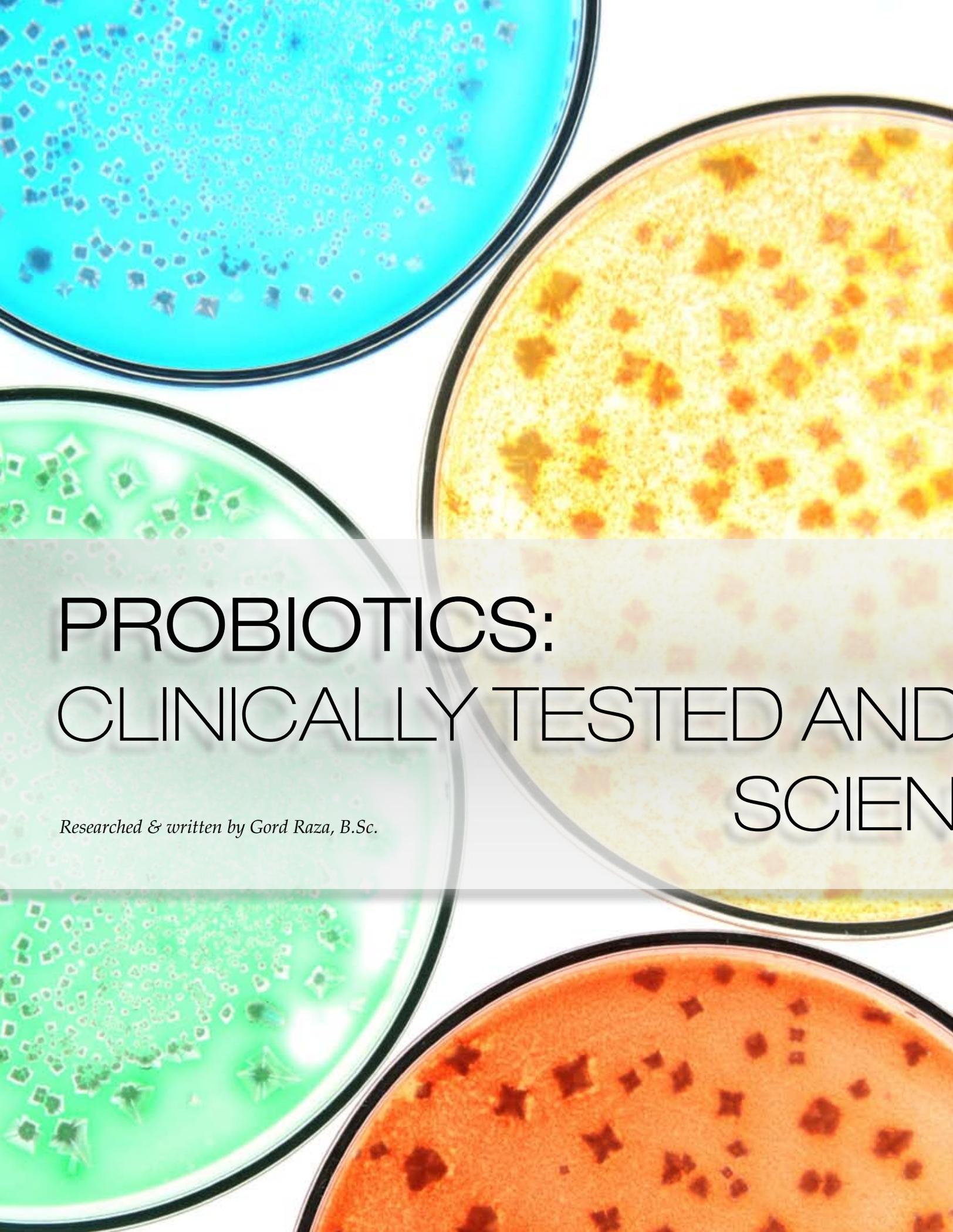
Zinc is abundant in the retina and therefore an important factor in maintaining good eyesight. Hair, nails and skin require adequate zinc to support growth and renewal. Zinc is also a common ingredient in many medicated shampoos as well as skin care products; remember the America's Cup sailors with their zinc oxide covered noses?...



### *We Are the World*

As a species we tend to immortalize politicians, scientists, and even athletes. When we look at the relatively short period of time that we have existed compared to the Earth's history, it's merely a tick of the geological clock. Life itself relies on the ability of carbon to bond to itself and incorporate a vast number of elements to forge both flora and fauna.

The proportions of elements essential to human life tend to reflect their amounts on Earth in general. The miracle of life on Earth has an extensive supporting cast, including your "precious metals."



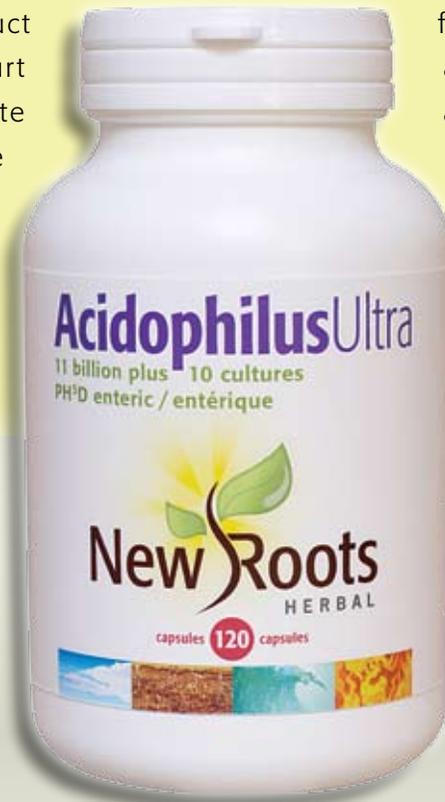
# PROBIOTICS: CLINICALLY TESTED AND SCIENCE

*Researched & written by Gord Raza, B.Sc.*

We have recently received some customer inquiries relating to a "simple" way to determine whether your probiotic supplement contains live bacteria. Some companies' sales reps are misleading retailers by advising them to empty the contents of a capsule into a glass of milk, leaving it overnight and observing the results the next day. The subsequent appearance of curdled milk only proves that the ingredients in their product contain common bacteria for yogurt production; it does not indicate that the capsule contained live probiotic cultures. Possibly these companies are trying to deceive you by selling cheap yogurt culture with inferior probiotic strains.

The most important factor in the quality of a probiotic is the integrity of each probiotic strain. New Roots Herbal has formulated their probiotic products to promote intestinal vigor and maximize effectiveness at the intestinal level. The capsules are specially PH<sup>5</sup>D enteric coated to guarantee survival of the probiotics through the harsh acidic gastric environment.

Ten registered bacterial strains are formulated with prebiotics, which are non digestible nutrients that are species specific in their ability to promote colony forming units. This synergistic effect lies at the heart of the performance of the product.



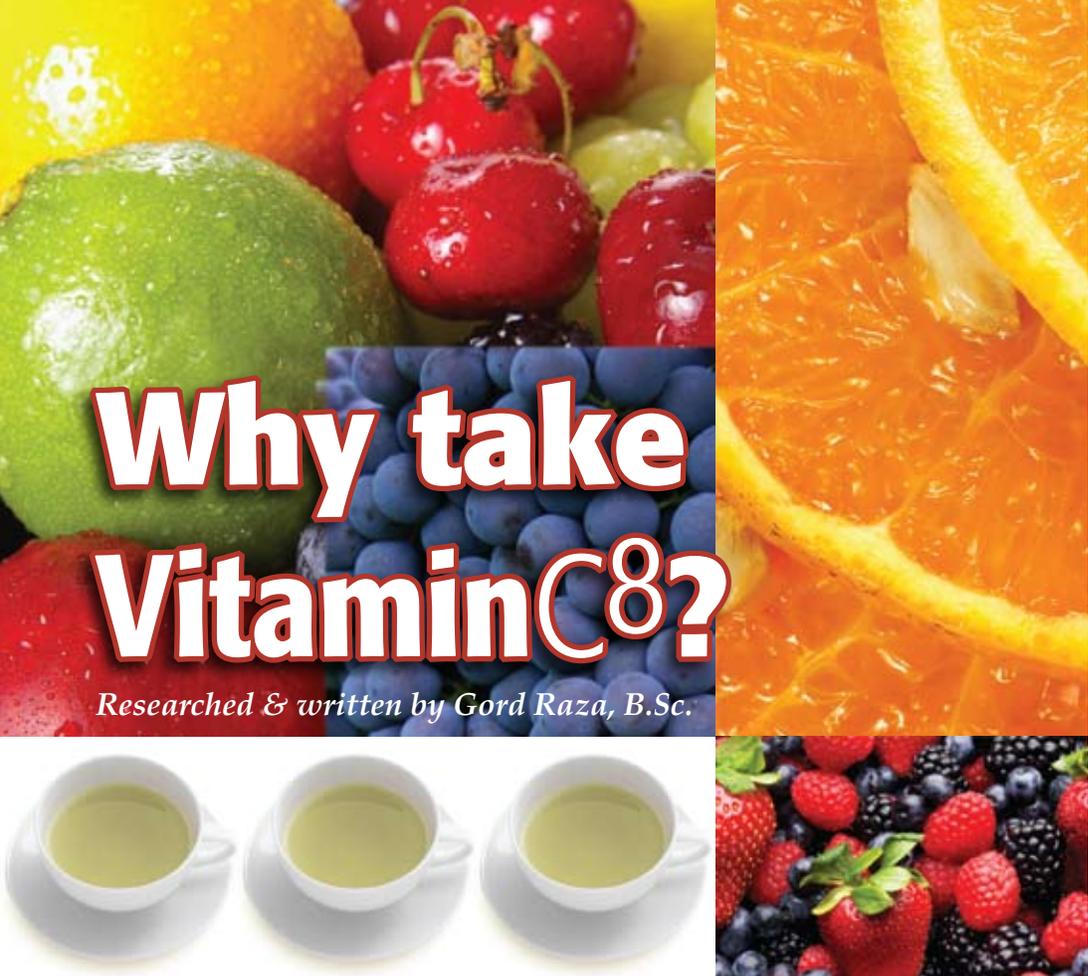
30 capsules #1270  
60 capsules #4  
120 capsules #495  
250 capsules #940

# SCIENTIFICALLY FORMULATED

The bacterial strains in the uniquely formulated probiotics offered by New Roots Herbal are clinically tested for their colony forming capacity at specific sites within the intestines. The intestines, from the duodenum to the colon, have various temperatures, pH levels, and surface areas for the probiotics to colonize. The "workplace" for a probiotic supplement varies greatly from a glass of pasteurized, vitamin D enriched supermarket milk.

Probiotic supplements from New Roots Herbal are refrigerated from the raw material stage, through the bottling process, and all the way to shipping directly to the retail level, to guarantee product quality and effectiveness. They are manufactured in the only certified GMP (good manufacturing practices) licensed facility for probiotics in all of North America, i.e. government inspected, government accredited laboratory facility.

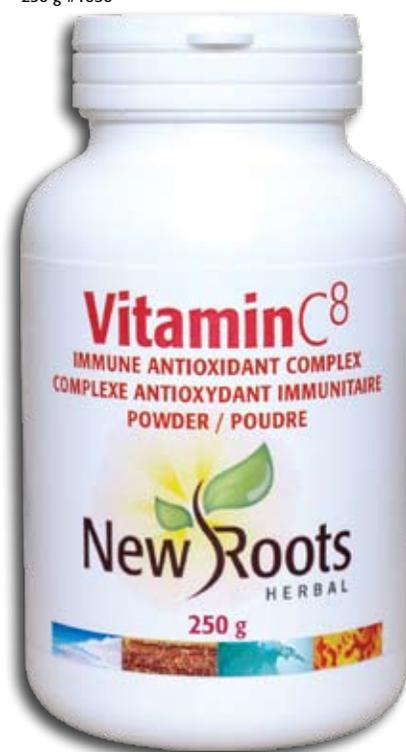
They perform, period.



# Why take Vitamin C<sup>8</sup>?

Researched & written by Gord Raza, B.Sc.

250 g #1030



Vitamins, minerals, antioxidants, and flavonoids have become the buzz words of the wellness industry and have dominated public awareness in the new millennium.

*Vitamin C<sup>8</sup> Immune Antioxidant Complex*, formulated by New Roots Herbal, combines all the health benefits of 23 ingredients to offer a comprehensive supplement that would require the resources of an apothecary to replicate.

## Buffered for Bioavailability

Vitamin C supplements taken on their own can literally be money going down the drain as our kidneys excrete our well intended investment. *Vitamin C<sup>8</sup> delivers 1165 mg of vitamin C per 5 g (1 heaping teaspoon) in the form of mineral salts (ascorbates)*. This buffered form improves intestinal absorption and prevents possible onset of abdominal discomfort and diarrhea. The 23 mg of ascorbyl palmitate adds to the ascorbic content, as well as being both a water- and fat-soluble antioxidant that helps protect both vitamin E and hemoglobin from oxidative damage.

The following seven mineral ascorbates support the body's complex array of metabolic functions:

**Calcium Ascorbate:** This natural form of vitamin C is more readily absorbed than other forms of calcium. Adequate calcium in an absorbable form contributes to combat osteoporosis.

**Magnesium Ascorbate:** Magnesium is the fourth most abundant mineral in the body and plays a pivotal role in over

300 enzymatic reactions. Magnesium is also essential for strong musculo-skeletal and cardiovascular systems.

**Potassium Ascorbate:** Potassium is an essential dietary mineral also known as an electrolyte that along with sodium, forms the Na<sup>+</sup>/K<sup>+</sup> pump responsible for active transport of nutrients at the cellular level.

**Manganese Ascorbate:** Manganese supports thyroid function along with activating enzymes responsible for the assimilation of vitamins B7, B1, and C.

**Selenium Ascorbate:** Selenium rarely occurs in its elemental form. In its buffered form, it supports immune system function, and protects cells from the effects of free radicals. Selenium is also a cofactor in several enzymes critical in thyroid hormone function.

**Zinc Ascorbate:** Zinc facilitates cellular metabolism, along with being a component in over 100 enzymatic reactions. Zinc also moonlights in the role of geneticist as zinc proteins bind to DNA molecules to facilitate gene expression.

**Sodium Ascorbate:** Sodium is the electrolyte that along with potassium is responsible for active transport in the form of the Na<sup>+</sup>/K<sup>+</sup> pump. Sodium is also integral to the process of thermoregulation.

## Nutraceutical Powerhouse

Vitamin C<sup>8</sup> has an antioxidant backbone of nutraceuticals (extracts of whole foods that have medicinal benefits) that support the body's defense mechanisms as well as improving immune system function.

**Green tea 75% EGCG:** Studies have shown that the flavonoids in green tea extract inhibit tumor cell growth and stimulate tumor cell apoptosis. The EGCG in green tea has been proven to inhibit, attack, or induce death in diseased prostate, breast, lung, mouth, stomach, and colon cells.

**Multi-Anthocyanidins, Bilberry, Grape Seed and Cranberry Extracts:** Proanthocyanidins, anthocyanidins and cyanidins are a group of bioflavonoids that have powerful antioxidant properties. These flavonoids in Vitamin C<sup>8</sup> are derived from multiple fruit sources, including strawberry, bilberry, blueberry, grape, cherry, cranberry and elderberry. All of them serve a slightly different role in added antioxidant protection and are also included for scavenging free radicals.

**Resveratrol:** Resveratrol is most commonly found in the skin of red grapes, it supports cardiovascular function along with exhibiting anti-aging effects observed in many vertebrates.

**Citrus Bioflavonoids:** Citrus bioflavonoids increase bioavailability of ascorbic acid and improve arterial elasticity.

**Quercetin, Rutin, and Hesperidin:** These flavonoids are known for their positive effect on blood lipid profiles, evidenced by the "French Paradox." There is clinical evidence supporting

strong antioxidant properties along with inhibitory effects on bone loss (osteoporosis). The synergistic effect they have on the absorption of vitamin C intensifies their effects, and cycles vitamin C similar to the way a catalytic converter maximizes automotive fuel consumption.

**Black Pepper 95% Extract:** Piperine is the active ingredient in black pepper that works to increase the bioavailability of the nutraceuticals and to subsequently improve overall product performance.

**Proteolytic Enzymes:** Bromelain and papain, respectively derived from pineapple and papaya, are proteolytic enzymes instrumental in maximizing protein bioavailability. They break down the strong peptide bonds that link proteins together to amino acids for use at the cellular level. They are both potent digestants that resist gastric degradation. Through its prostaglandin regulating properties, bromelain can moderate inflammatory symptoms, shorten recovery time and reduce clotting that contributes to inflammation.

## Desert Island Supplement

The fact that 72% of doctors and 89% of nurses take vitamins, minerals, or some form of herbal supplement attest to the role they play in overall wellness<sup>(1)</sup>. Vitamin C is a cofactor in collagen\* production, (imagine bricks without mortar), and acts as a major antioxidant scavenging free radicals throughout the body.

The 7 buffered trace elements present in Vitamin C<sup>8</sup> are responsible for hundreds of enzymatic reactions. Roughly one third of North Americans are vitamin C deficient: studies have shown that supplementation of 500 mg daily can reduce the risk of cardiovascular disease by 42% and death by any other cause by 35%<sup>(2)</sup>.

The supporting cast of nutraceuticals and proteolytic enzymes maximize the body's ability to assimilate and benefit from all the ingredients in Vitamin C<sup>8</sup> and more easily digest dietary protein.

INGREDIENTS PER 5 GRAMS (APPROXIMATELY 1 HEAPING TEASPOON)	
Ascorbic Acid (vc 565 mg)	565 mg
Calcium Ascorbate (mv 28 mg) (vc 252 mg)	280 mg
Magnesium Ascorbate (mv 20 mg) (vc 184 mg)	204 mg
Potassium Ascorbate (mv 11 mg) (vc 59 mg)	70 mg
Zinc Ascorbate (mv 11 mg) (vc 59 mg)	70 mg
Sodium Ascorbate (mv 2 mg) (vc 21 mg)	23 mg
Manganese Ascorbate (mv 2 mg) (vc 12 mg)	14 mg
Selenium Ascorbate (mv 3.5 mcg) (vc 3.4965 mg)	3.5 mg
Ascorbyl Palmitate (vc 9.9 mg)	23 mg
Citrus Bioflavonoids 50% hesperidin	23 mg
Quercetin Dihydrate 98%	23 mg
Rutin	23 mg
Green Tea (EGCG 75%) extract	35 mg
Resveratrol 50% extract	12 mg
Multi Berry Extract (multi-anthocyanidins)	29 mg
Bilberry Extract 25% Anthocyanidins	12 mg
Grapeseed Extract 95% Proanthocyanidins	23 mg
Cranberry 107x extract	23 mg
Black Pepper extract 95%	1.165 mg
Bromelain 2,400 gdu	5.8 mg
Papain	58,000 a.u.
Orange Crystals (natural)	1165 mg
Malic acid	398 mg
mv : mineral value (elemental)    vc : vitamin C value	

## The Taste is Out of This World

The recommended daily dose of Vitamin C<sup>8</sup> powder is 5 g (one heaping teaspoon). With its natural orange flavour, it has a retro taste similar to the powdered beverage of choice of NASA. One heaping teaspoon dissolved in approximately 120 ml of water is ideal for a robust flavour that reflects its effectiveness.



"Morning Maker" smoothie.  
 One heaping teaspoon of *Vitamin C<sup>8</sup> Immune Antioxidant Complex*  
 250 ml cold filtered water  
 1 regular-size banana  
 ½ cup low fat yogurt  
 A few ice cubes  
 Blend and enjoy

### References

- (1) HCP Impact Study, November 2007
- (2) Enstrom JE, Kanim LE, and Klein MA, Epidemiology 3(1992):194-202

\* Collagen is the prominent structural protein found in skin, connective tissue, arteries and veins, bones, and all organs.

# Science Supporting Nature

Researched & written by Gord Raza, B.Sc.

New Roots Herbal manufactures over 300 natural products ranging from advanced formulas and herbal tinctures to single ingredient products. The raw materials are sourced worldwide with quality, purity and value being paramount in our selection process. Our product development team travels extensively with the goal of selecting the world's finest ingredients. It is not uncommon for a single formula to contain ingredients from several continents: the one thing they all have in common is the battery of tests they are subjected to prior to inclusion in any New Roots Herbal product.

Two state-of-the-art diagnostic machines employed by New Roots Herbal include the *Clarus 500* series Gas Chromatograph and Mass Spectrometer by Perkin Elmer. These analytical machines work in unison to isolate and



Clarus 500 Mass Spectrometer

Clarus 500 Gas Chromatograph

identify desired volatile compounds.

It also tests for 37 pesticides and other harmful chemicals such as PCB's (polychlorinated biphenyls) and residual solvent plus aflatoxins.

The samples first pass through the gas chromatography phase, which exposes the material to a temperature exceeding the boiling points of its components. This

differentiates and separates the various components and allows the mass spectrometer to identify and verify the integrity of the material for purity, quality and safety. For some materials, the mass spectrometry analytical technology allows for discovery of elemental composition of raw materials down to the atomic level.

## Gold Standard

The exact same model of analytical equipment employed by our diagnostic laboratory is also used by WADA (World Anti-Doping Agency). Allegations of the use of performance enhancing drugs require empirical evidence to support them on the world stage. The integrity of every New Roots Herbal product is as precious as Olympic gold.





## Back Orders Aren't Always Bad

We work closely with our suppliers to produce products that are safe and effective. Raw materials are quarantined and analyzed and only upon lab approval will they be approved for use in a New Roots Herbal product. In cases of raw material failure, production is delayed. Certificates of analysis and certifications from suppliers are always subject to analytical verification. The time it takes to source, transport and test replacement raw material takes time and can cause backorders. We test every lot number received. This takes time. Safety and quality are Number 1 at New Roots Herbal.

With our pharmaceutical compliant laboratory and production facility, New Roots Herbal looks forward to an exciting future of developing exquisite and innovative products focused on wellness and natural solutions to the many challenges we collectively face in managing a healthy lifestyle.



## FYI

New Roots Herbal is excited to add UNICEF Canada (United Nations Children's Fund) as a benefactor of the Choose to Care program. UNICEF is an advocate for the rights of women and children worldwide, with a focus on education, disease prevention and awareness, as well as life skills development. These values reflect our own values at New Roots Herbal.



## Culinary Corner

### Roasted Tuscan Root Veggies

Root vegetables were essential to our survival through Canadian winters and remain an affordable mainstay for fall and winter cuisine. Try a simple Tuscan twist as a vegetable side for any grilled dish.

### Forget the salad tonight!

#### Ingredients

Carrots, potatoes, onions, turnips, sweet potatoes, garlic, Heart Smart olive oil, Tuscan\* seasoning

#### Directions

Wash (don't bother peeling) and cut vegetables—into smaller pieces for potatoes and carrots as they take longer to bake. Cut onions into wedges, dice garlic (1/2 clove per pound).

Combine vegetables with 1 tablespoon per pound of Heart Smart olive oil and Tuscan seasoning (to taste). Toss and bake for about an hour at 350 °F (175 °C), tossing again after 20 minutes. Put bowl aside to serve in.

#### Recipe for Tuscan seasoning

- 1/2 cup dried oregano
- 5 tbsp. sea salt
- 4 tbsp. Spanish paprika, ground fennel
- 3 tbsp. granulated garlic and onions
- 2 tbsp. cayenne, rosemary
- 4 tsp. cane sugar

Store Tuscan seasoning in a glass jar or any container with a tight fitting lid—it will keep a few months.



HeartSmart Sunflower Oil #1247  
HeartSmart Safflower Oil #1395  
HeartSmart Olive Oil #1399