

# NaturalFacts

New Product Announcements, Specials, and Information



## Health Advice





by Philip Rouchotas, MSc, ND and Heidi Fritz, MA, ND

## What is Adrenal Fatigue?

There is much confusion around the term "adrenal fatigue," what it refers to, and whether it is real. In simple terms, we often explain this term as encompassing various stages of burnout, along with accompanying symptoms. This is certainly a simplified definition, and certainly there are people who would not describe themselves as "burnt out", but who may yet benefit from what we call "adrenal support" with specific herbs, nutrients, and lifestyle changes. In this article, we will describe the physiology of adrenal fatigue in greater detail.

The adrenals are endocrine glands that sit on top of the kidneys. They are responsible for the production of cortisol or the "stress hormone" in the body. Cortisol is the primary mediator of the effects of chronic stress on the body. When cortisol output is insufficient to meet situational needs, adrenal fatigue results. The three stages of the stress response are described in Hans Selye's General Adaptation Syndrome (GAS) model, first developed in the 1950s.<sup>[1]</sup>

These stages describe how extended exposure to severe stress leads to the depletion of adrenal reserves and poor adrenal function.

- 1. Alarm Phase: also known as the "fight-or-flight" response. In response to the initial stressor, the body increases cortisol output, causing more blood flow to the heart, muscles, or lungs; increases blood sugar; and increases mental alertness and vigilance. This is a normal response if the body then returns to its original state.
- 2. Resistance Phase: During this phase, the body attempts to maintain its original alarm reaction to an ongoing stressor. Cortisol output remains elevated for a prolonged period, and begins to cause abnormal symptoms (see the table on top of the next page).
- 3. Exhaustion Phase: During this phase, the adrenal glands essentially "burn out." They can no longer produce the same level of cortisol to maintain an adequate stress response as before. This stage is also frequently called adrenal fatigue in popular terms, or mild adrenocortical deficiency (MAD) in medical terms.<sup>[2, 3]</sup>



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#### **Please Note!**

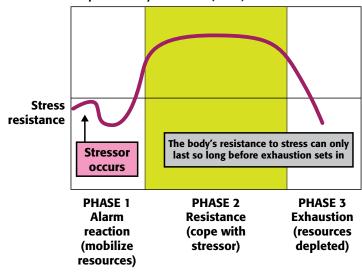
We will be closed for the holidays starting the 23rd of December at 4 p.m. EST. On the 30th of December, the following departments will be open: customer service and shipping department from 8 a.m. to 4 p.m. EST; billing department from 10 a.m. to 3 p.m. EST. All services will be back on the 2nd of January.

From everyone at New Roots Herbal, we wish all of you happy holidays as well as a great new year.

#### Stages of the Stress Response — Association with Bodily Symptoms

Alarm Phase (Normal)	Resistance Phase	Exhaustion Phase (Adrenal Fatigue)
<ul> <li>Increased blood sugar</li> <li>Increased blood pressure</li> <li>Mental alertness</li> <li>Blood flow to heart, lungs, and muscles</li> </ul>	<ul> <li>Feeling "wired but tired"</li> <li>Anxiety and/or depression</li> <li>Easy sweating</li> <li>Heart palpitations</li> <li>Insomnia</li> <li>Elevated blood sugar</li> <li>Worsening diabetes in absence of other causes</li> <li>PMS and fertility problems</li> <li>Central weight gain</li> <li>Digestive problems</li> <li>Peptic ulcer</li> </ul>	<ul> <li>Extreme fatigue</li> <li>Anxiety and/or depression</li> <li>Poor tolerance to stress/exertion</li> <li>Poor memory</li> <li>Allergies</li> <li>Chronic infections</li> <li>Chronic fatigue syndrome</li> <li>Fibromyalgia</li> <li>Autoimmune diseases (lupus, rheumatoid arthritis, etc.)</li> <li>Hypoglycemia</li> <li>Trouble losing weight</li> <li>Hypothyroidism/low thyroid</li> <li>Fertility problems</li> </ul>

#### General Adaptation Syndrome (GAS)



Today, MAD or adrenal fatigue remains a diagnosis unrecognized by the medical profession at large; however, it has remained a mainstay of complementary medicine to describe the long-term effects of stress on the body.

Some of the most common conditions that benefit from adrenal support include:

- Unexplained fatigue or feeling "burnout"
- Chronic elevated stress levels
- Chronic fatigue syndrome/fibromyalgia
- Anxiety & depression
- Autoimmune diseases, arthritis, and chronic pain
- Environmental allergies

Natural therapies work by helping the body to produce a more balanced stress response, and can result in considerable improvements of these conditions.

New Roots Herbal has several products that can help.

**Adrenal** is a raw adrenal concentrate that supplies the adrenal glands with the necessary nutrients to cope with the effects of chronic stress.

Standardized extracts of rhodiola and ashwaghanda, two herbs recognized for stress resistance, are among the many nutrients in our **ChillPills** formula. Our family of **Ultra**B Complex formulas is also a must for critical nervous-system support.

#### References

- 1. Fritz, H. "HPA dysregulation and human health: what is the evidence?" Integrative Healthcare Practitioners June/July 2011: 56–61.
- 2. Prousky, J. "Mild adrenocortical deficiency (a.k.a. adrenal fatigue): a real diagnosis?" Journal of Orthomolecular Medicine Vol. 27, No. 4 (2012): 155–156.
- 3. Prousky, J. "Mild adrenocortical deficiency and its relationship to: (1) chronic fatigue syndrome; (2) nausea and vomiting of pregnancy and hyperemesis gravidarum; and (3) systemic lupus erythematosus." Journal of Orthomolecular Medicine Vol. 27, No. 4 (2012): 165–176.

# Great Health, Less Stress

## Chill Pills, *Pro re nata* (Take As Needed)

A large proportion of natural health products are formulated for daily consumption to preserve ongoing health and wellness. **ChillPills** fall into a hybrid category for usage; they are safe and nonaddictive for prolonged use, yet are invaluable on a *Pro re nata* basis.

Stress and anxiety can have multiple sources. The diverse formulation of nutrients in **Chill**Pills are ideal to shield body and mind for the long term, or for preventive use in acute situations.

**Chill**Pills contain standardized extracts of nine specific nutrients that target a complete range of stress-related concerns that include

hypertension, cortisol (stressresponse hormone) production, mental and physical stamina, and production of GABA for stress reduction. ChillPills also deliver a dynamic supply of the complete collection of B vitamins crucial for maintaining the health of the myelin sheath that insulates nerves for stress resistance. Additional ingredients that include the amino acid L-theanine penetrate the blood-brain barrier to stimulate *alpha*-wave production synonymous with a state of serenity conducive for mental clarity and concentration.

**Chill**Pills for side effect—free relief from stress and anxiety, naturally!



## Fast-Acting and Flush-Free



Our three formats of B-complex vitamin supplements feature the full range of coenzyme B vitamins and flush-free niacin. UltraStress B Complex contains an additional 425 mg of vitamin C.

B-complex vitamins are necessary as critical cofactors to actively

metabolize protein, carbohydrates, and fats into energy. They also serve as the catalyst for the synthesis of compounds within the brain critical for safeguarding nervous system function and mood enhancement.

With the exception of  $B_{12}$ , the body can't store B vitamins due to their water solubility, and it loses unused amounts via urinary excretion. This makes the necessity of a dynamic supply of B vitamins crucial for the ongoing health of body and mind.

Stress and anxiety can frequently be traced to acute deficiencies of B vitamins. Overconsumption of diuretics, including caffeine and alcohol, during the holiday season can also make supplementation with a comprehensive B-complex a must.

One of our New Roots Herbal's **Ultra**B Complex formulas may be the spark needed to meet your energy and nervous system requirements.

## Food Choices and Digestive Decisions



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Breathing and eating are the two most fundamental elements critical for survival. Countless variables are out of our control regarding the quality of the air we breathe; yet despite the fact that we choose the food we eat, effective digestion is an intangible frequently overlooked in the wellness equation. We eat food; however, the efficiency of our digestive system is the key to unlocking the energy and nutrition within every meal.

Intestinal inflammation; chronic stress; and an age-related decline in digestive enzymes produced within the salivary glands, stomach, pancreas, and intestines can collectively

contribute to impaired nutrient absorption.

New Roots Herbal has two comprehensive digestive enzyme supplements formulated for complete digestive support. They actively break down proteins to amino acids, dietary fats to fatty acids, and carbohydrates to simple sugars, and make vitamins and minerals readily available for intestinal absorption. This will result in harnessing more energy and nutrition from the food you eat. Better digestion can even lead to decreased consumption of excess calories for a fitter, more active lifestyle.



## Cedar-Planked, Pine Nut-Crusted Cajun Salmon

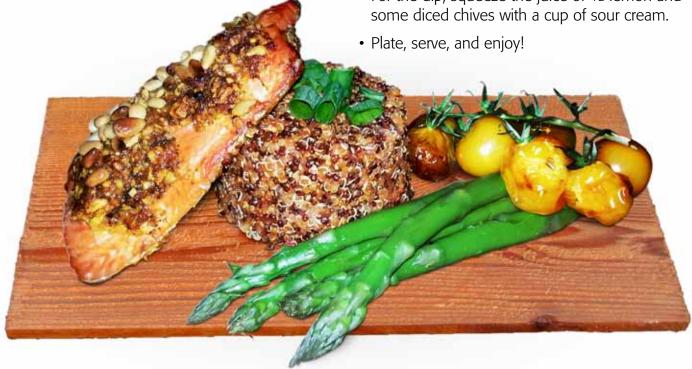
#### Serves: 4 Ingredients:

- 4 six-ounce wild salmon filets
- 2 vines of cherry tomatoes
- 1 tablespoon Cajun spice
- ½ cup butter
- 1/4 cup pine nuts
- 1 bunch asparagus
- 1½ cups quinoa
- 2 roasted red peppers
- Small container sour cream
- 1 lemon
- 1 bunch chives
- New Roots Herbal's Red Palm Fruit Oil
- · Salt and pepper

#### **Directions:**

- Soak plank in water for about an hour.
- Drizzle Red Palm Fruit Oil over plank.
- Preheat grill or oven to 350 °F.
- Mix pine nuts, butter, and Cajun spices with a fork.
   Rub on flesh side of salmon filets.
- Place Cajun/pine nut—crusted salmon skin-side down on plank with tomatoes on the vine. Cook until firm yet still pink in center.
- Machine-blend roasted red pepper with 3 cups of spring water.
- Sauté 1½ cups of quinoa in 1 tablespoon of Red Palm Fruit Oil for 30 seconds on high heat, add the roasted red pepper mixture, and simmer until done. Season lightly with salt and pepper to taste. Follow cooking time on package.

• Steam asparagus and serve with sour-cream dip. For the dip, squeeze the juice of ½ lemon and some diced chives with a cup of sour cream.



# Analytical Testing //

**Special Feature** 

At New Roots Herbal, we are relentless in our aim to make the best natural health products in the world. To achieve this, we have an extensive staff devoted to quality assurance.

With one of the most advanced laboratories in Canada, we are able to test over 700 raw materials using the latest in analytical equipment, employing a very wide spectrum of specialized and often specific methods. Our raw materials include herbs, vitamins, minerals, nutraceuticals, as well as vegetable and fish oils. We test every single raw material lot that comes in, without exception.

Raw and finished product analytical testing is only one layer of quality assurance at New Roots Herbal. To ensure products' adherence to all relevant Health Canada guidelines as well as labelling requirements, we employ numerous specialists

dedicated to total quality assurance. They help ensure that what is on the label is what goes into the bottle. In addition, they ensure that all products meet all standards for safety and efficacy. Quality control is intimately linked to the production of every bottle at New Roots Herbal.

Our laboratory and quality control staff consists of 11 full-time employees, whose credentials are listed below.

## Their qualifications include (but are not limited to):

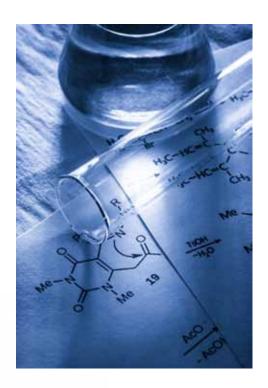
- PhD in Analytical Chemistry from McGill University;
- PhD in Food Science and Agricultural Chemistry, as well as an MSc in Food Science and Agricultural Chemistry from McGill University;
- PhD in Biochemistry from the Friedrich-Alexander Universität Erlangen-Nürnberg (Germany) focusing on the purification and characterization of enzymes;
- Postdoctoral training concerning the plant genomic project (a collaborative study with Genome Quebec/Canada);
- MSc in Analytical Chemistry from McGill University;
- MSc in the field of Automated Testing Instrumentation from McGill University's Department of Bioresource Engineering;
- MSc in the area of biosynthesis structured lipids from McGill University;



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- MSc in Food Science from the University of Florida;
- BSc in biochemistry from Bishop's University;
- BSc in physiology and biology from McGill University;
- BSc in Food Science and Technology from Institut National Supérieur de Formation Agroalimentaire in Rennes, France;
- BSc in Biology from Acadia University;
- BSc in Biology from UQAM;
- BSc in Chemical Engineering from the University of Florida;
- Certificate in analytical chemistry from UQAM;
- Professional training in Applied statistics, Quality Management / Improvement and Quality Assurance from ÉTS;
- Professional training in advanced statistical approaches to quality, total quality project management, as well as implementation and development of Six Sigma.

Their extensive knowledge is applied to ensure the products you purchase from us are the highest quality available to Canadian consumers.



### Their experience includes:

Decades of experience in the biotech sector in the field of chromatography, which includes TLC, HPLC, GC, GC-MS, LC-MS/MS, and ICP-OES.

Decades of experience in pharmaceutical and natural health product fields.

Extensive backgrounds in Quality Control Laboratories & product assurance as well as R&D.

Strong knowledge in USP, BP, EP pharmacopeia as well as ICH, GLP, and cGMP guidelines.

## Their fields of expertise include:

Biotechnology, Enzymology, Chemistry, Biodistribution, Sterility, Microbiology and Protein Chemistry, and extends to many other specializations. Our team of quality control and quality assurance are experts in analytical applications. They have strong backgrounds in procedural development of Laboratory Quality management systems. Our laboratory personnel are proficient in qualitative and quantitative testing of raw materials and finished products.



Our laboratory Director is specialized in method development and validation of natural health products and dietary supplements. Our staff's research has been published in several peer-reviewed journals.

Our laboratory and quality control experts maintain their knowledge at the leading edge by regularly attending seminars and training conferences.

Furthermore, we maintain an internal program of training which helps ensure quality is implemented throughout the company's processes. All products developed are done so with the collaboration of naturopathic physicians and associated PhDs.

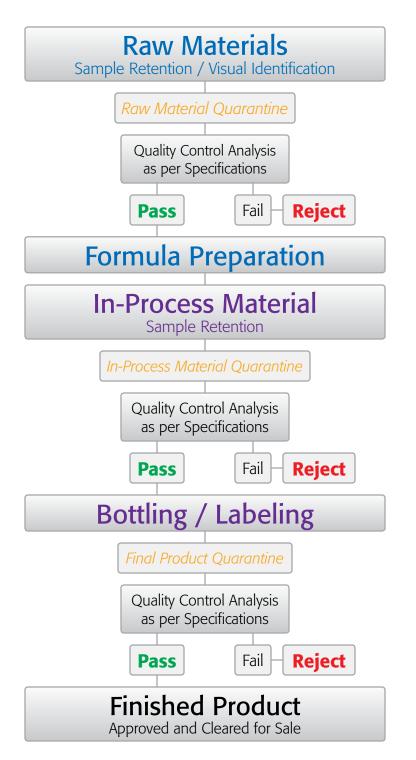
We offer an extensive line of products with raw materials grown and sourced from around the world. We ensure products are free from contaminants and adulteration. Exceeding the highest standards of identity, purity, and potency involves everyone at New Roots Herbal. On every level, we are committed to the manufacturing of the safest highest quality natural health products.

### Our products undergo testing for:

- ✓ Identity
- ✓ Potency
- ✓ Purity
- ✓ Heavy metals
- ✓ Microbial contamination
- √ 80+ different pesticides
- ✓ Solvent residues
- ✓ Aflatoxins, mycotoxins
- ✓ Total PCBs
- ✓ Dioxins
- ✓ Oxidation
- ✓ Disintegration
- ✓ Additional very material specific analyses.

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## **Manufacturing Flow Chart**





#### In conclusion

We invest over 400 hours per week testing thousands of raw material samples prior to inclusion in every New Roots Herbal product. All raw materials are tested for identity, purity, and potency to verify the accuracy and integrity of every Certificate of Analysis.

Our industry-specific scientific team employs advanced analytical equipment to examine the fingerprint of all the constituents of plant materials rather than only specific marker compounds. This permits us to truly determine the specific genus and species of every raw material, to confirm identity as well as potency for specific compounds that deliver therapeutic benefits, as well as freedom from contaminants.

The body of work being compiled within our analytical lab allows us to acknowledge seasonal and geographical variability of natural products, yet is also precise enough to recognize adulterated or spiked raw materials.

You can truly say that science is in our nature!

## Exotic Oils Gift Set ,

## Back to Stay!

The popularity of last year's Exotic Oils Gift Set has led to adding them to our product line on a year-round basis. Our gift set features four certified organic therapeutic oils that cover the entire spectrum of skin care to soothe, hydrate, pamper, protect, and beautify your skin from head to toe.



Our Exotic Oils Gift Set make a great gift for the holiday season, for birthdays, Valentine's Day, anniversaries, or for any other occasion.

Each gift set contains four 15 ml bottles of the following certified organic oils:

#### **Argan**Oil

- · Nourishes hair, skin, and nails
- Prevents and reduces stretch marks

#### **Rosa**Mosqueta Seed Oil (Rosehip)

- Reduces skin aging
- Reverses UV damage

#### **Tamanu**Oil

- Great for eczema
- Soothes cuts, scrapes, bites, and stings

#### **Skin**Lovers Oil

- A unique blend of goji seed, rosehip seed, seabuckthorn seed, argan, and tamanu oils
- Deeply hydrates skin
- Improves elasticity
- Beautifies naturally

## Did You Know?





## "Like" Us on Facebook and Win!

Between November 18th and January 10th, you will have the chance to win one of five Exotic Oil Gift Sets. It's simple: you "Like" our page, and you can win!

Our page addresses current topics on new products, events, culinary creation, and various articles reflecting health and wellness trends.

http://facebook.com/newrootsherbal







by Philip Rouchotas, MSc, ND and Heidi Fritz, MA, ND

## Tips for Stress Management and Healthy Living

The last few months of the year can be a very stressful time. Summer is long forgotten, while work and school routines have been in full swing for a couple months already. It is easy to put health on the back burner during this time. However, it's important to remember that better lifestyle habits and better health will actually improve our ability to handle these many demands in an effective manner.

This time of year can be an opportunity to reset, refocus and reestablish new, healthy habits and routines. Not only will the overall sense of well-being improve, but so will the emotional tone at home, productivity at school and/or work, and immune function. This issue, we share some tips to get you started.

## 1. Establish Healthy Eating

 Start each day with a good, protein-rich breakfast. Skipping breakfast, or any meal, sets you up for low energy, sugar cravings, and weight gain! Try a bowl of oatmeal with nuts/seeds, a protein shake, or an egg omelette.

- Make healthy lunches for everyone! Salads, quinoa, soups, etc.
- Sit down when you can as a family and eat a home-made dinner.
- Aim for eight fruits and vegetables a day. They fuel us with energy and help prevent disease.
- Minimize caffeine! It provides a false sense of energy and puts stress on your body.
- Ensure 6–8 cups of water each day!
- Make sure you have enough healthy fats; your brain needs them to function optimally.
- Life is about balance! Aim to eat healthy 90% of the time and allow yourself to indulge the other 10%.



#### 2. Stay Active

- Schedule in some activity 3–5 days a week. This helps you and the family decompress from the stressors of the day. This doesn't have to be a chore, and you definitely don't want it to be stressful. It can be an outing at the park with the kids, a family walk or bike ride, or maybe some alone time where you walk, run, bike, or meditate to decompress.
- Regular activity improves not only your physical well-being, but also helps you cope with stress better.

## 3. Establish a Healthy Sleep Schedule

 Several studies have established that getting enough uninterrupted sleep is important for good health, and ensures better productivity and performance. Without enough sleep, the body doesn't get to repair and release the hormones needed for regulating growth, appetite, and immune function.

- Getting to bed *in a dark room* before 9 p.m. for children/teens and 10 p.m. for adults allows melatonin (our sleep hormone) to be released at an appropriate time, and the body gets a restful sleep. Artificial indoor light is enough to prevent this release!
- Establish a routine for the whole family that persists on the weekends.

#### 4. Tools for stress reduction:

- Deep breathing, especially if the day is a bit more hectic than you anticipated.
- Listen to your favorite music or comedy station.
- Take a relaxing Epsom salt bath.
- Talk to someone you trust.

Find what works for you and your family, and ensure this year starts off on the right foot.

# **Naturopathic Currents**

We're excited to host the *Naturopathic Currents* website, our most recent contribution to the expanding and dynamic field of naturopathic and alternative medicine. A team of experts has collaborated to present articles, reviews, and news relevant to the diverse disciplines of alternative health

and the novel nutrients being researched and employed in the natural health product industry. The intellectual exchange presented throughout this site should prove useful for health-care professionals, providing a window on the world of naturopathic medicine — for those of you in the industry as well as for consumers.

Naturopathic Currents will also keep you abreast of upcoming events in the natural health product industry.

We hope you'll enjoy this publication as much as we have enjoyed participating in its launch.



Visit www.NaturopathicCurrents.com

# Get More Out of Your Holidays

## A Product that Won't Cramp Your Style



Magnesium deficiency is a common yet often overlooked cause of diverse health-related conditions, from nocturnal muscle cramps to increased vulnerability to stress, that can contribute to anxiety, depression, and insomnia.

Low magnesium levels can compromise critical synapses (communication) between nerve endings and the muscles they stimulate, and contribute to cramping. Among the most extreme form of potentially fatal muscle "cramping" is atrial fibrillation (A-Fib), which causes the heart's upper chambers to beat chaotically. These heart palpitations disrupt the flow of oxygen-rich blood throughout

the body, and can lead to shortness of breath, dizziness, and weakness.

Despite the fact the brain is an organ, as opposed to a muscle, we've all heard of brain cramps. Healthy brain function depends heavily upon an adequate supply of magnesium. Stress increases magnesium depletion, which your brain requires as a buffer for coping with stress. Magnesium bisglycinate is the most bioavailable form of magnesium, with the ability to cross the blood-brain barrier and break this vicious cycle for critical resistance from chronic stress

New Roots Herbal's

MagnesiumBisglycinatePlus capsule contains 150 mg of elemental magnesium, chelated (bound) with two glycine molecules. The stability of this bond maximizes intestinal absorption by means of the amino acid pathway. An additional 30 mg of L-taurine further enhances cellular magnesium absorption.

Supplementation with premium New Roots Herbal's **Magnesium**Bisglycinate**Plus** could definitely be among the solutions for many health and wellness challenges.



Natural Facts magazine is published every 6 weeks. Distributing 2700 copies (2075 in English and 625 in French) through Canada.

**Questions or comments:** 1 800 268-9486 info@newrootsherbal.com



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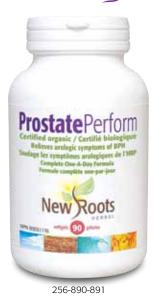
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## Movember: More Than a Moustache



Congratulations to all those raising awareness for prostate cancer and generating critical funding for cancer research in general!

Despite the fact approximately 23,600 Canadian men will be diagnosed with prostate cancer this year, prostate health in general — and particularly benign prostate hyperplasia (BPH) — is among the leading health concerns affecting the quality of life for Canadian men.

The Canadian Urological Association estimates that over half of Canadian men over 50 experience symptoms of BPH. **Prostate**Perform is a proactive, innovative formula that inhibits the enzyme that contributes to prostate enlargement. This helps to stop the urgency, low volume, and strain of urination that keep you on edge during the day and up at night. **Prostate**Perform can improve prostate health and quality of life in just 7 to 10 days.



## Fuel for fighting disease



The healing power of the human body is unparalleled; we've formulated a tandem of products to help realize its full potential. Prevent and Prevent44 boast the therapeutic punch of 44 cups of green tea per capsule. Green tea is recognized as being among the most powerful antioxidant allies for prevention of diseases of the breast, colon, stomach, and prostate gland. However its positive effects for accelerating the metabolism to deter obesity, a critical risk factor for coronary heart disease and type II diabetes, truly rank these products as essential for achieving and maintaining great health.

Standardized extracts of premium antioxidants including *N*-acetylcysteine, resveratrol, lycopene, and astaxanthin fight free radicals for protection from disease and environmental toxins at the cellular level to further enhance the health benefits of both formulas.

#### Rationale for two formulas

The emergence of evidence that curcumin can interfere with chemotherapy spawned the development of **Prevent**44. **Prevent** harnesses the disease-fighting and anti-inflammatory power of 100 mg of curcumin (95% curcuminoids) per capsule. **Prevent**44 is chemotherapy-compliant, replacing curcumin with the broad scope of protection from diseases of an additional 5 ingredients that include: orange phytonutrients, grape seed extract (95% phytonutrients), multianthocyanidins, black pepper extract (95% piperine), and selenium ascorbate.

Our potent pair of products is formulated for standalone or adjunctive use during chemotherapy.



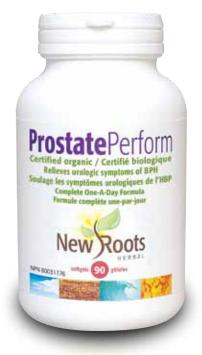
## Take control with Prostate Perform

**PROSTATE PERFORM** is a proactive, one-stop supplement important for protecting your ongoing prostate health. Our innovative formula will help to stop the urgency, low volume, and strain of urination that keep you on edge during the day and up at night.

**PROSTATE PERFORM** reduces the enzyme that increases the levels of dihydrotestosterone (DHT), a dangerous form of testosterone that can enlarge the prostate gland.

**PROSTATE PERFORM** also supports your prostate metabolism and protects you from disease. **Get relief in just 7 to 10 days.** 

For more information, visit www.newrootsherbal.com





- Our in-house laboratory has the most advanced instruments in North America for natural health products
- Highly skilled staff (3 PhDs, 3 MScs and 5 BScs)
- Exceeds government testing requirements

