

# flourish

by New Roots Herbal

HEALTHY BODY, MIND, AND SPIRIT

Celiac Disease &  
Non-Celiac  
Gluten Sensitivity

How Meditation  
Boosts Immunity

Workout the  
**Canadian Way!**

Breaking the Myth That  
*Organic Food*  
is Too Expensive

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July/August 2017

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For more articles on health, lifestyle, and wellness—add to that delicious recipes!—all in a more dynamic and accessible format, visit our *Flourish* blog at [newrootsherbal.com/en/blog](http://newrootsherbal.com/en/blog)

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# Editor's Letter



For each issue of our Flourish magazine, I aim to find a central theme that will ensure all the articles will flow naturally. To be able to do this, I work with an extraordinary team, as well as with many talented and experienced collaborators. Finding a theme, relatable topics,

and renewing yourself time and time again is not always an easy task. Summer is such a dynamic season that it is often more enjoyable to be inspired by various lighter and accessible subjects reflecting this beautiful season.

However, a few weeks ago, I received some troubling yet inspiring news. During the last few months, my 10-year-old daughter had been suffering from several uncomfortable pains. Amongst the most prevalent were increasingly painful stomach aches. As is often recommended, the first thing I eliminated was dairy products. Certain things improved, but some symptoms remained. Subsequently, I reduced her gluten intake by around 90%. That's when we saw a significant improvement. Consequently, I made an appointment with her pediatrician and received a blood test referral to have screening done for celiac disease. The results were clear; we received a diagnosis of celiac disease. Glad to understand why she was suffering, although terrified of the changes, privations, and adaptations that would follow, my beautiful girl went through all the emotions.

Now you know why this summer issue includes two educational, inspiring articles on gluten and celiac disease. I get the chance to work in the most extraordinary, educational, and inspiring industry, which helps me enormously in this new journey. Moreover, I have the great privilege of working with renowned specialists. I made a special request to Dr. Philip Rouchotas and Dr. Theresa Nicassio to cover this subject, and they agreed.

Over the next few weeks, I encourage you to visit our blog to obtain additional information on health, new recipes, and so much more!

I wish you a very pleasant, energizing summer, as well as many beautiful moments with family.

Enjoy your reading!

Sonia Lamoureux  
Editor-in-Chief

flourish

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Chinese medicine, herbal medicine, crystal healing, oligotherapy, organotherapy, hydrotherapy, phytochemistry, functional medicine, etc., are no secret to him.

# The Summer Wind

by Gordon Raza, BSc

The sultry, lamenting lyrics of the iconic song popularized by Frank Sinatra last a shade over two minutes. For many of us indulging in summer's bounty of fresh corn, asparagus, beans, and broccoli, the inconvenient and often embarrassing "Summer Wind" they cause can linger for days.

We've developed a hybrid probiotic-enzyme formula that will strengthen your gastrointestinal performance. This will maximize the critical nutrients you harvest during digestion, and reduce the amount of undigested food left to ferment within your colon to create gas, bloating, and discomfort.

WindBreaker features the clinically proven probiotic strain *Bacillus subtilis* R0179, which has been shown to reduce abdominal pain and discomfort for patients with irritable bowel syndrome (IBS). It also consumes oxygen within the gut; this creates a favourable

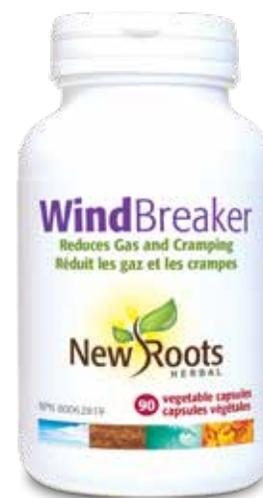
environment for the growth of beneficial anaerobic probiotics, which include *Lactobacillus* species. Its capacity to survive and deliver benefits throughout the intestinal tract further earns it human strain status.

Our formula also includes the synergistic action of the enzyme *alpha*-galactosidase. This essential enzyme, produced by the salivary glands and the pancreas, is instrumental in the process of breaking down complex carbohydrates. Unfortunately, many of us suffer an age-related decline of this enzyme; this leaves more fuel for harmful microbes and opportunistic yeast, including *Candida albicans*, to feed and ferment within the colon (large intestine), causing flatulence.

The importance of eating a broad range of food relates directly to the diversity of probiotics within your microbiome, which translates to

a healthy gut and better health in general.

WindBreaker is a side effect-free supplement suitable for long-term management of gas and bloating or for occasional use, so you can enjoy summer feasts with their many guilty culinary pleasures—maybe even a cob or two of road-side fresh, buttered corn.



## Just Say "No" to BPA

At New Roots Herbal, recyclable plastic bottles are the containers of choice for the vast majority of our products, to reduce shipping costs and our carbon footprint. Our plastic bottles are also free from bisphenol A (BPA), a compound found in many plastic products, with a laundry list of health concerns.

# Hit the Road with Travelers' Probiotic

by Gordon Raza, BSc

It seems like a rite of passage for many families with children approaching their teen years to embark on one last "road-trip vacation," where the parents market the family-bonding aspect of travel as being just as fun as exploring the "great outdoors."

Traveling within North America is relatively safe from a health perspective compared to travelling abroad; however, travelers' diarrhea can still make family fun come to a grinding halt. Traveler's sickness can result in extreme cases such as giardiasis, a water-borne parasitic infection commonly known as "beaver fever." Even when caution is taken regarding drinking water: An unexpected gulp of lake water, or simply brushing teeth with nonpotable water from a

campsite restroom, can cause digestive distress caused by a broad range of pathogenic microorganisms.

While we prepare for the many adventures we'll experience during our trip, we must also consider the countless microbes that will be paying a visit to our intestines.

New Roots Herbal's **Travelers' Probiotic** is the ideal travel companion for digestive peace of mind. It's a hybrid formula featuring 10 billion live cells of the transient yeast *Saccharomyces boulardii*, with 11 billion CFUs of our proprietary broad-spectrum probiotic blend.

Here's how it works: *Saccharomyces boulardii* crowds out harmful bacteria while neutralizing their toxins. Meanwhile, the predominant *Lactobacillus* and *Bifidobacterium* strains within the formula replenish and maintain the dominance of beneficial bacteria along the entire gastrointestinal tract. This limits adhesion sites for pathogens, competes for nutrients, and strengthens immune performance. Probiotics also stimulate production

of mucin, a protein that forms the matrix of the protective mucous membrane within the intestines. This regulates selective permeability for improved resistance to infection. Better yet: Our natural, water-based enteric coating protects the contents of every capsule from stomach acids, for selective release within the intestines.

Here's wishing you "safe travels" this summer! Enjoy and explore, while **Travelers' Probiotic** ensures any harmful microorganisms you encounter will be just passing through instead of calling your intestines home.



# Tea Tree Oil, Anyone?

by Gordon Raza, BSc

New Roots Herbal presents tea tree oil, steam-distilled from the leaves and new-growth branches of *Melaleuca alternifolia*. Native to Australia, its steam-distilled essential oil has a history of use among its indigenous people dating back centuries. Employed primarily for its antibacterial properties, the complex mosaic of volatile compounds also exhibit antiviral and antifungal activity. Pathogenic bacteria including *Escherichia coli* and *Staphylococcus aureus* are among the microorganisms it's effective against, with promising results for the opportunistic yeast *Candida albicans* as well.

The mechanism of action is similar for both bacteria and yeast: Volatile components within tea tree essential oil compromise the structure and permeability of the cell membrane selectively, affecting only the undesirable or pathogenic microorganisms. This process also denatures proteins within the cells, leading to their death, and—more importantly—their ability to multiply and spread throughout the body.

The therapeutic use of tea tree essential oil is achieved, inter alia, by diffusion or topical use. During diffusion, it would be used to clean the ambient air by depositing undiluted oil in an electric oil diffuser designed for this purpose.

Ten minutes per hour should be enough; you can repeat the diffusion if necessary.

During topical use, it would be used in a good diluted vegetable oil to disinfect wounds and favour their healing.

Because tea tree essential oil has immunomodulatory properties, it can be used once again, diluted in vegetable oil, on eczema or psoriasis; thanks to its antiviral actions, the same dilution can be used on breakouts of oral or genital herpes.



## Tea Tree Oil, Nail Infections, Mosquitoes?

When it comes to tea tree oil (TTO) for fungal toenail infections (onychomycosis) and mosquito bites, a little goes a long way. However, application must be done several times a day for fungal infections as they are tenacious.

For toenails, following a relaxing bath or soaking in saltwater, simply massage a drop per toenail in and around the affected area. Continue this routine for a few weeks until you are confident in wearing sandals again.

Mosquitoes will be abundant this summer, following record rainfalls this spring. For annoying mosquito bites, a drop or two of TTO on a cotton swab rubbed onto the site of bites can alleviate swelling and itching.



## *How Meditation Boosts Immunity*

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### The Evidence

by Liam LaTouche, ND

#### Overview of Meditation

The term meditation can mean different things to different people. One person may get the image of a monk sitting cross-legged silently in a monastery. Another may simply consider closing their eyes at their work desk and taking a few deep breaths. While someone else may recall the chess player in the park attentively focused, nothing could distract her.

These examples all reflect meditation in the context of how the term is used in our society today. A quick Google search will connect you with mindfulness meditation, loving

kindness meditation, meditation in motion, body scans, and the list goes on. Taking this into consideration, meditation can be thought of as a group of mental and emotional training regimens used to cultivate balance and well-being towards a number of ends. At the core, these regimens work by training the participant to become acutely aware of the content (thoughts) of the mind, but as a non-judgmental observer, thereby not identifying oneself by its content. In other words, the meditator develops the ability to intentionally focus his/her attention, in an impartial manner, on the present moment. Over time, the participant is empowered to better

manage life situations and stressors by controlling the rush of thoughts that can flood the mind and have far reaching effects. Intellectually, this may be difficult to conceptualize, and this is where formal practice is required for experiential knowledge to be gained and a true understanding of meditation to evolve.

Often having religious and spiritual undertones, but with numerous secular and practical traditions as well, meditation is a universal practice engaged in by various cultures and individuals. Participants may be motivated to calm the mind, reduce mental stress, improve physical health, take part in cultural

or religious ceremonies, improve emotional well-being through anger management and fostering compassion, increasing the ability to be more mindful (intentionally present, free of judgment) in their day-to-day activities, or any number of other reasons.

As science continues to shed light on ancient practices, we are beginning to better appreciate how the benefits of meditation exert their power. Generally, a person will feel better after a period of meditation; it can be calming and restorative to most. However, there are some very interesting physical effects meditation has on the body, particularly the immune system. This article will explore this connection and how to use meditation to boost immune function.

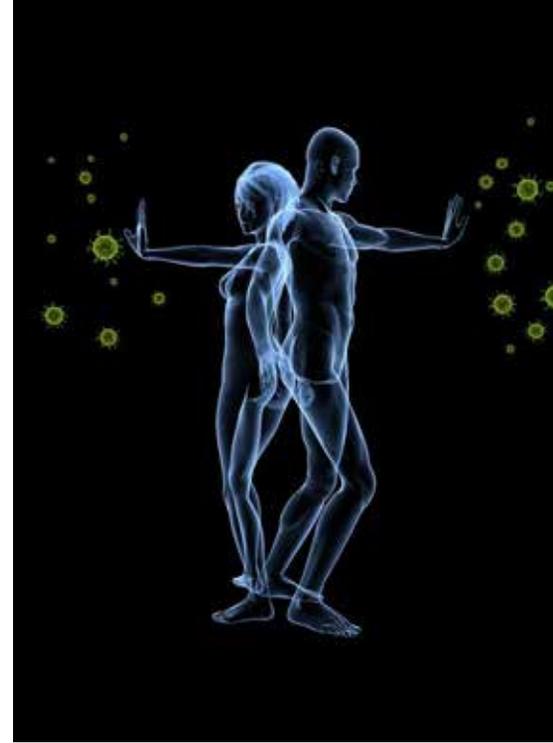
### The Role of the Immune system in Overall Health

Before exploring the influence mediation has on the immune system, it is important to better appreciate the role of the immune system in our overall health. Generally speaking, the immune system is the defense division of the body, using complex chemical messaging to protect us from potentially harmful foreign invaders, such as infectious agents and environmental/chemical toxins. We often do not think of the immune

system when things are going well, but there is constant action below the surface.

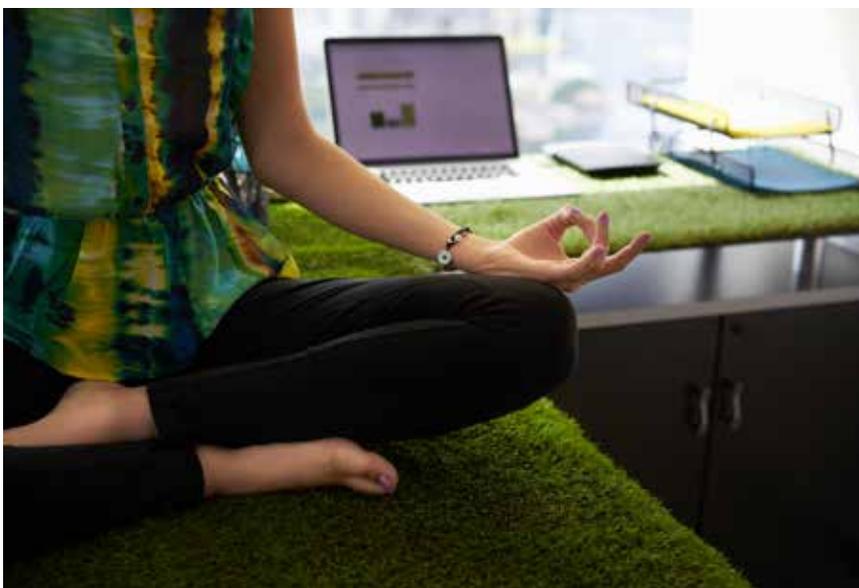
Most people think of the immune system in terms of keeping us free from, or working to clear, infections. However, a deeper look can provide insight into its role in a number of different disease states. For example, there is the understanding that immune-regulated inflammation can be an underlying cause, or mediating factor, in a number of conditions such as heart disease, cancer, and diabetes. There is also the understanding that immune dysfunction can lead to autoimmune conditions where the body actually attacks itself, such as rheumatoid arthritis, Hashimoto's thyroiditis, and lupus, or atopic syndromes where the body is hypersensitized to external triggers, such as in asthma, eczema, and allergies. Though much is yet to be learned about the incredibly complex immune system, the field of psycho-neuro-endocrine-immunology (PNEI; the connection between psychological processes, the nervous system, hormonal regulation, and immune function) is helping to elucidate the foundational and interconnected role immune function has within the body.

At the centre of the mind-body connection lays this PNEI system. Whether we are looking at how



physical activity can influence mood and mental function, or how mindfulness can impact physical health, the PNEI system intricately connects these important regulatory systems of the body and provides a platform for the promotion, or deterioration, of health. There is a webbed connection whereby our thoughts, emotions, and physical health influence our immune function. For example, stress and infections use overlapping pathways to stimulate the brain to produce sickness behaviour (the general signs and symptoms when you have a cold, encouraging rest, recovery, and immune support). This shared pathway lies in the vagus nerve, and can enable stress to sensitize the pathway to cause an exaggerated response to future infections, and vice versa. In other words, if you were to be under chronic stress, your susceptibility to infections is enhanced. The same is true when looking at how infections can sensitize your body's reaction to future stressful triggers.

With this awareness, it is important to support optimal immune function, while taking into consideration the various factors that influence it, as well as that which it exerts an influence on.



## The Impact of Meditation on the Immune System

The action of the immune system is based on an elaborate network of chemical messengers. As illustrated through the PNEI system, our thoughts can influence our immune system and meditation can influence our thoughts.

Various studies have looked into the effects of mindfulness-based stress reduction (MBSR) training, which incorporates formal meditation and mindfulness, on immune function. It has been demonstrated that MBSR programs can increase recognition and regulation of stress, reduce pro-inflammatory gene expression in older adults, enhance the immune system's response to the influenza vaccine, improve immune chemical messaging in cancer patients, and increase immune cell numbers and activity in HIV patients. A more recent study looked at three groups of women at a six-day retreat.

One group did not participate in meditation training (but were merely present at the resort), one group of novices did participate, and a third group contained experienced meditators also taking part in the meditation program. Each group experienced positive changes in gene expression to stress, inflammation, and wound healing. In this situation, it is hard to identify whether the results are due to meditation, or simply a result of being on vacation and physically separated from stressors. However, the group of experienced meditators were found to have positive changes in genes that are involved with viral infections, which may relate to increased anti-viral activity. This finding may point to a unique immune-related benefit of regular meditation.

Lastly, a large review including a total of 1602 participants validated that mindfulness meditation leads to reductions in pro-inflammatory processes and increases in immune

cell-mediated defenses. However, it did not support findings around positive changes in various other immune cells and inflammatory messengers. This identified the value of further investigation into this facet of the mind-body connection, to better understand its effects and applications.

Overall, it appears that meditation has a positive influence on immunity through various mechanisms, including regulating inflammation, boosting immune cell-mediated defenses, and modulating the body's physiological response to stress (which influences hormone balance and inflammation). Though more research is needed to actually identify how these biological changes translate into disease prevention and management, the current data is encouraging and adds to the existing list of benefits associated with meditation, such as enhanced emotional well-being.

See Meditation 101 – Applying the Science on our blog: [newrootsherbal.com/en/blog](http://newrootsherbal.com/en/blog)

For references and other great articles, visit [NaturopathicCurrents.com](http://NaturopathicCurrents.com)



**Liam LaTouche, ND**

Using an integrative and personalized approach to medicine, his goal is to help patients lose weight, reduce pain, boost energy, and better manage stress.

[liamlatouche.com](http://liamlatouche.com)

## Other Recent **NaturopathicCurrents.com** Articles:



### Protein Requirements – What Is Required for Optimal Health?

by Sarah King, ND

There are many controversies in health-care regarding the proper amount of dietary protein needed for optimal health. Previous concerns of high-protein diets included increased risk of renal (kidney) diseases, and decreases in bone mineral density from [ ... ]



### Iron Deficiency – What You Need to Know

by Lara Spector, ND

Iron deficiency is the most common nutrient deficiency in the world. Many women are iron-deficient, especially those who are menstruating, pregnant, postpartum, or breast-feeding. Iron deficiency is also commonly seen in those with chronic blood loss and/or [ ... ]



### Back Pain and Lumbago – Natural Approaches

by Philip Rouchotas, MSc, ND

Back pain is extremely common and has been experienced by almost everyone at one point in life. The official name for low back pain is lumbago, and it is literally defined as pain in the lower back. There are many possible causes for back pain, and often it is not even [ ... ]



### Finally, Some Shut Eye— Naturopathic Treatments for Insomnia and Sleep Disturbance

by Liam LaTouche, ND

Most people, at some point or another, have experienced poor sleep; feeling too warm, tossing and turning before a big event, thoughts buzzing through the mind [ ... ]



### Tracking your Menstrual Cycles Demystified

by Sarah King, ND

Understanding your menstrual cycle involves more than just estimating your next period. Knowing your body and tracking your menstrual cycles can provide insight into your hormonal and reproductive health. You might be experiencing symptoms that we usually. [ ... ]



### Substance Abuse Treatment Options

by Chris Habib, ND

One in five people over the age of 65 have had a substance or alcohol abuse problem at some point. It is one of the most common health conditions and one of the conditions that takes one of the largest financial tolls on society.. [ ... ]

# FROM RUSSIA WITH RHODIOLA

by Gordon Raza, BSc

Whether it's the Olympics, the Space Race, or the quest for military superiority, the postwar rivalry between the United States and Russia has spawned many technological advancements.

From a health perspective, rhodiola, Siberian ginseng, and schisandra berries were among the adaptogens the Soviets explored to improve the mental and physical stamina of their Olympians, cosmonauts, and military personnel.

Research with the unassuming yellow-flowered perennial plant native to arctic climates, *Rhodiola rosea*, ranks among the more interesting bodies of work.

Rhodiola emerged as the most beneficial in several trials. It proved effective for soldiers in sleep-deprivation trials and kept cosmonauts in good spirits despite living in cramped quarters.

For elite athletes, it was effective for endurance and accelerated recovery. Among the functions of rhodiola is its ability to modulate cortisol ("fight-or-flight" hormone) production; this function was most evident for biathletes. This grueling discipline combines cross-country skiing and sharpshooting. The

athlete's ability to relax, focus, and lower their heart rate for shooting accuracy is a testament to how an adaptogen such as rhodiola can help the performance of body and mind. These findings were published in a collaborative effort with Dr. Patricia Gerbarg, a professor in psychiatry at New York Medical College, and the late Russian researcher and pioneer in plant based nutraceuticals, Dr. Zakir Ramazanov.

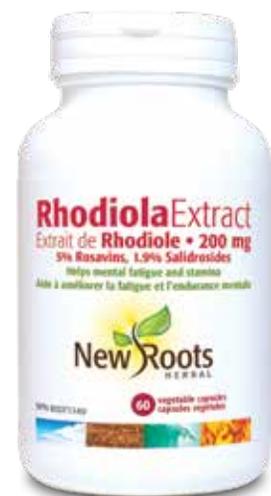
Rhodiola research has also shown promising results for those suffering from posttraumatic stress disorder (PTSD).

*Rhodiola rosea* boasts a complex mosaic of active constituents, with rosavins and salidroside, recognized for the bulk of its neuroprotective benefits. This tandem of compounds exerts beneficial effects on neurotransmitter function, with additional antioxidant action to shield cognitive performance from stress and anxiety.

Our innate ability to cope with stress, coupled with the unique circumstances that we face in life, can leave many of us "tired and wired," even if we're without a mental-health diagnosis.

*Rhodiola rosea* extract can definitely make a measurable impact on your life without the often-delayed onset of benefits and risk of side effects inherent with pharmaceutical interventions.

Most rhodiola extracts contain 3% rosavins and 1% salidroside; New Roots Herbal's **Rhodiola Extract** is potency-validated to 5% rosavin and 1.9% salidroside—which is 60% more concentrated in rosavin and 90% more concentrated in salidroside—by means of high-pressure liquid chromatography (HPLC) in our ISO 17025-accredited analytical laboratory. Here's to your health!



# Discover Your Inner “Iron Man” with Heme Iron

by Gordon Raza, BSc

Whether it's a comic character superhero or the finisher of a grueling triathlon, the name “Iron Man” resonates, as iron is the element critical for both strength and stamina. Iron is within the matrix of hundreds of proteins and enzymes; yet, its most prominent role is with heme, the compound that serves as the structural scaffolding for the proteins haemoglobin and myoglobin. Haemoglobin assimilates oxygen from the lungs and delivers it to cells throughout the body as fuel for cellular respiration. On the return trip, it binds to CO<sub>2</sub>, the waste product of cellular metabolism, which it transports to the lungs for exhalation. Myoglobin, on the other hand, stores oxygen within muscle cells as a buffer to meet intense oxygen requirements when urgent circumstances arise.

Adequate iron intake is critical for general health, stamina, and endurance for people of all ages. Individual requirements depend upon many variables including age, gender, as well as menstrual and pregnancy status.

Iron supplementation is generally recommended to compensate for a recognized deficiency when dietary intake and absorption fall short.

Heme iron is the preference for naturopathic physicians, as it's the same polypeptide form found in red meat and poultry, which is easily recognized and absorbed within the small intestine.

Furthermore, heme iron does not lead to common side effects of constipation, cramping, and nausea associated with many iron supplements.

New Roots Herbal's **Hemelron** is formulated with a full spectrum of

complementary nutrients. It contains vitamin C to enhance intestinal iron absorption, with the biologically active forms of folic acid (calcium L-5-methyltetrahydrofolate) and vitamin B<sub>12</sub> (methylcobalamin) included as critical cofactors for haemoglobin and myoglobin synthesis. The best iron formula in the universe will energize every cell, tissue, and organ system throughout your body for better strength, stamina, and overall energy.

Whether you have a diagnosed iron deficiency or your diet lacks iron-rich foods, it may be well worth exploring the many benefits of New Roots Herbal's **Hemelron**.





# Celiac Disease & Non-Celiac Gluten Sensitivity

by Philip Rouchotas, MSc, ND

Celiac disease is an autoimmune disorder in which the immune system attacks cells of the small intestine when it is exposed to gluten. It is thought that about 1% of the population in North America is affected by celiac disease, and risk factors include family history, certain genetic conditions such as Down syndrome, as well as the presence of other autoimmune conditions such as type 1 diabetes.

The diagnosis of celiac disease has been fraught with controversy. While there are several blood tests available, including *tissue transglutaminase IgA* (tTG), patients often go undiagnosed because the appropriate tests are not ordered. “Classic” symptoms of celiac are commonly thought of as including severe diarrhea and abdominal pain; when these symptoms are absent, many physicians fail to consider the diagnosis. It is now known, based on

extensive research, that symptoms may be relatively mild in many—if not most—cases. In addition to blood testing, the gold standard in the diagnosis of celiac disease is endoscopy and biopsy of the small intestine; *villous atrophy*, or a flattening of the intestinal lining (*villi*), is the hallmark of active celiac.

Symptoms may include gastrointestinal manifestations such as diarrhea, constipation, pain, and bloating, as well as multisystem manifestations such as iron-deficiency anemia refractory to iron supplementation, other nutrient deficiencies due to poor absorption, weight loss or poor growth in children, bone loss, a characteristic skin rash called *dermatitis herpetiformis*, fatty liver, and unexplained infertility, among others.

A recent study reviewed the metabolic and nutritional status of patients with celiac disease. Patients with celiac are at higher risk of iron, folic acid, B-vitamin, vitamin D, and calcium deficiencies. One study found that patients with celiac disease who had been on a strict gluten-free diet for several years experienced improvements in metabolic parameters as well as mood scores in association with vitamin B-complex supplementation. Plasma *total homocysteine* (tHcy), a marker of B-vitamin deficiency, especially vitamin B<sub>12</sub> deficiency, normalized and dropped by 34%, and ratings of anxiety and depression both improved.

The treatment for celiac is adherence to a strict gluten-free diet. Gluten is a protein present in specific grains including wheat, rye, barley, spelt, kamut, couscous, and

others. Grains such as rice, quinoa, and oatmeal are gluten-free, if they are not contaminated with gluten within the processing facility, as may sometimes be the case for oats. Gluten and/or wheat products are often used in the creation of many other foods, however, making adherence to a gluten-free diet challenging. Examples of foods that commonly contain gluten include salad dressings, gravies and sauces, canned soups, deli meats and sausages, chocolates and candies, chips, and beer (made from barley). Happily, many gluten-free options are becoming available.

In addition to celiac disease, a new entity named non-celiac gluten enteropathy or non-celiac

gluten sensitivity (NCGS) has been identified. As the name suggests, this is a disorder characterized by gluten intolerance, where testing for celiac disease remains negative. A broad range of symptoms may be affected by this type of intolerance, most notably conditions of chronic pain such as muscle and joint pain, migraine, and fibromyalgia. In the course of naturopathic medical practice, we routinely observe associations with a range of inflammatory and/or autoimmune conditions such as rheumatoid arthritis, lupus, and other arthritides; Hashimoto's thyroiditis; inflammatory bowel disease; irritable bowel syndrome; and a host of skin conditions.

Individuals who suspect a form of gluten reactivity should consult a knowledgeable health-care provider, who can assist them in conducting a thorough evaluation.

[Article including references on our blog: newrootsherbal.com/en/blog](http://newrootsherbal.com/en/blog)



## Could GABA Be Your Key to Relaxation?

by Gordon Raza, BSc

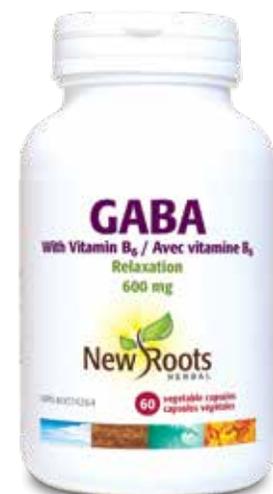
Thank goodness for acronyms! Can you imagine trying to relax with a product called “*gamma-aminobutyric acid*”? There are two groups of compounds that influence the nervous system: those that excite and agitate, such as adrenaline or histamines, and those that inhibit nervous-system activity, including GABA and serotonin.

*gamma-Aminobutyric acid* (GABA) is the major inhibitory compound employed by nerve cells as a defense mechanism for stress. Its action is simple: GABA populates specific receptors within neurons. Once these receptors are “locked down,” it relaxes the permeability of the neuron’s membrane to release a cascade of negatively charged ions. This results in a less-excitable

and more stress-resistant nervous system.

Stress is a necessary survival mechanism—consider the “fight-or-flight response”—however, many of us fall prey to constant stressors. A chronic state of alertness can lead to emotional burnout, insomnia, stress-related eating, memory impairment, and lack of mental focus. GABA is produced within the brain; therefore, in supplement form, it is easily recognized and employed by neurons to promote relaxation.

New Roots Herbal’s **GABA** is a side effect-free alternative to prescription drugs to promote relaxation and break the grip nervous tension can exert upon our body, mind, and spirit.





# Inositol: The Great Communicator

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

Inositol is a nutrient related to the family of B vitamins, and has been extensively studied for its role in conditions related to fertility, such as polycystic ovary syndrome, and diabetes. Inositol is a “second messenger”: a critical component of intracellular signaling cascades. This means that it participates in the sequence of events that occurs within the cell after a hormone binds to its receptor on the surface of the cell. This sequence of events then transmits the signal into the cell through a series of reactions, of which inositol is part. For this reason, we say that inositol augments hormonal signaling, or communication, throughout the body.

Inositol is known to function as a second messenger in two important

hormone systems: the insulin-signaling cascade and the thyroid-signaling cascade. *myo*-Inositol is also involved in FSH (follicle-stimulating hormone) signaling, which is important in stimulating follicle development in preparation for ovulation.

Insulin resistance is a critical factor in the cause of polycystic ovary syndrome (PCOS). This syndrome affects up to 10% of women and involves impaired ovulation or lack thereof, elevated male-like hormones including testosterone or DHEA, and polycystic ovaries seen on ultrasound. Insulin resistance leads to elevated insulin levels, and this in turn impairs ovulation.

Studies have shown that patients with PCOS have decreased levels of inositol, particularly in the theca cells of the ovary, and altered inositol metabolism. When *myo*-inositol is supplemented in these patients, ovulation normalizes; sex hormones including estrogen, progesterone, and testosterone improve; and insulin resistance improves.

Other metabolic benefits associated with *myo*-inositol supplementation include reduction of elevated blood pressure and cholesterol. A number of studies show restoration of normal ovulatory function in up to 65% of treated patients.

Studies show that inositol may be as equally effective as metformin, an insulin-sensitizing medication

often prescribed for PCOS, in regulating ovulation. One study found that inositol supplementation restored normal ovulation in 65% of women, compared to 50% of women in the metformin group. One study found that compared to metformin, inositol was superior in reducing elevated testosterone levels and measures of inflammation (C-reactive protein). Another study found that when metformin and *myo*-inositol were compared, both resulted in comparable results as far as the percent of patients with restored ovulation, improvements in insulin sensitivity, and a reduction in body mass index (BMI; a measure of obesity).

Inositol has also been investigated for its effects among patients undergoing fertility treatment.

In patients with PCOS undergoing ovulation induction and intrauterine insemination (IUI), supplementation with *myo*-inositol resulted in higher rates of pregnancy and lowered the doses of medication required. In patients undergoing IVF, inositol supplementation for three months beforehand has been shown to improve sperm and egg quality, improving follicle development and reducing the amount of hormonal medication required. Inositol also reduced the number of degenerated and immature eggs

In another study among women classified as “poor responders” to IVF, the addition of *myo*-inositol supplementation resulted in a greater number of oocytes (eggs) retrieved and an improvement in egg quality. This may be due to inositol’s role in augmenting FSH signaling. Indeed, researchers concluded that *myo*-inositol seemed to improve the ovarian response to gonadotropins (hormones FSH and LH) as well as the Ovarian Sensitivity Index (OSI), and thus may be helpful for women not responding well to fertility drugs.

Patients with PCOS are at higher risk of developing gestational diabetes (GDM) upon achieving pregnancy. Several studies suggest that supplementation with *myo*-inositol may reduce this risk.

In one study of 220 women with a family history of type 2 diabetes, supplementation with 4 g *myo*-inositol beginning at the end of the first trimester resulted in a significant decrease in the rate of GDM (6% v. 15% in the placebo group) and a decrease in macrosomia—giving birth to a large baby over 8.8 lb. Another study showed that among obese pregnant women, supplementation with *myo*-inositol beginning in the first trimester reduced the development of GDM to 14% of women, compared to 34% of women in the control group. Another study in 75 pregnant women who were not obese but had an elevated fasting glucose in their first trimesters found that *myo*-inositol supplementation resulted in a lower incidence of GDM diagnosed in the second trimester, as well as having generally smaller babies and delivering at a later gestational age



(less premature deliveries). A fourth study in 69 pregnant women with GDM found that supplementation with *myo*-inositol resulted in improved insulin sensitivity in 50% of treated women, compared to 29% of women treated with diet alone. A fifth study showed no effect in preventing GDM.

Finally, several studies suggest that inositol may help normalize thyroid function. A 2013 study of patients with Hashimoto’s thyroiditis, a chronic autoimmune thyroiditis that ultimately causes low thyroid function, found that supplementation with a combination of selenium and *myo*-inositol could improve laboratory measures of subclinical hypothyroidism, including lowering TSH and thyroid antibodies.

A more recent study found that among 86 patients with Hashimoto’s and TSH between 3 and 6, treatment with selenium and *myo*-inositol for six months resulted in significant increases in free T<sub>3</sub> and free T<sub>4</sub> thyroid hormones, and a reduction in symptoms associated with subclinical hypothyroidism. Supplementation was also associated with a decrease in tyroperoxidase (TPO) and antithyroglobulin antibodies.

In conclusion, we see the evidence for inositol being the second messenger par excellence: Inositol is a critical component of hormone-signaling cascades including insulin, gonadotropins such as FSH, and the thyroid-stimulating hormone (TSH). Inositol has been shown to improve ovulatory function, insulin resistance, and Hashimoto’s thyroiditis.

[Article including references on our blog: newrootsherbal.com/en/blog](https://newrootsherbal.com/en/blog)



# Sow the Seeds of Better Health with Vitamin E<sup>8</sup>

by Gordon Raza, BSc

The ability of plants to synthesize their own vitamin E is among the critical biochemical processes for the evolution of life on earth. The antioxidant properties of the entire spectrum of tocopherols and tocotrienols within seeds gives them the resiliency to exploit a wide variety of ecological niches. Vitamin E within seeds protects their delicate DNA while preserving their carbon-based energy stores, often for many years, for germination when favourable conditions prevail.

The relevance for our health is that the entire eight members of this group of lipid-soluble vitamins—4 tocopherols and 4 tocotrienols—are essential: our bodies can't make them.

The good news is we can harvest their benefits. Vitamin E protects us from lipid peroxidation, the process where free radicals (atoms or molecules that lack an electron or more) steal electrons from cells; a destructive process which leaves us prone to disease, illness, and an appearance that may regrettably exceed our biological age. Antioxidant action is simple: Vitamin E donates an electron or more to a free radical, thereby neutralizing it. Consider it a peace offering with a predator.

Vitamin E, being fat soluble, strengthens skin cell membranes for better fluid retention. This helps preserve cytoplasm (liquids and organelles that make up the cell

and continue its work of energy (ATP) and protein production, critical for cellular replication and repair.

Supplementation with vitamin E has been researched for a broad clinical spectrum, among others on the protection of neurons, through the reduction of glutamate, a neurotransmitter that, when produced in excessive quantities, can damage the neurons and create cognitive impairments. Cells throughout the body are under constant oxidative stress; this accounts for the fact virtually every tissue and organ system can benefit from naturally sourced vitamin E. It's easily recognized, absorbed, and transported throughout the blood stream. An initial benefit of vitamin E supplementation is that it inhibits oxidation of low-density lipoproteins (LDL cholesterol) that cling to arterial walls. The resulting plaque formation causes hardening and narrowing of the arteries known as atherosclerosis. Similar plaque can also build up in the brain and contribute to cognitive decline. Current research also points to the antioxidant role vitamin E can play for slowing down the onset of Alzheimer's disease. Kidney, liver, and epidermal health are among the many organ systems that also benefit from vitamin E consumption and supplementation.

**VitaminE<sup>8</sup>** delivers the naturally sourced and non-GMO benefits of vitamin E in both 200 and 400 IU formats.

Both formulas also feature olive oil-sourced squalenes, organic compounds which help skin retain moisture for a youthful look while strengthening immune performance, plus the addition of plant sterols for cholesterol management and superior immune function.



## EACH SOFTGEL CONTAINS:

Vitamin E (D-alpha-tocopherol) (from non-GMO soy) (400 IU) . . . . .	268 mg AT
Free plant sterols (from non-GMO soy) . . . . .	20 mg
(8 mg beta-sitosterol, 4 mg campesterols, 4 mg stigmasterols)	
Tocotrienols (from non-GMO palm fruit) . . . . .	3.16 mg
D-alpha-Tocotrienols . . . . .	24–30%
beta-Tocotrienols . . . . .	2–4%
gamma-Tocotrienols . . . . .	30–46%
delta-Tocotrienols . . . . .	10–20%
Squalene ( <i>Olea europaea</i> ) . . . . .	45 mg
Mixed tocopherols (from non-GMO soy) . . . . .	53 mg
D-alpha-Tocopherol . . . . .	7–14%
beta-Tocopherols . . . . .	0.5–2%
delta-Tocopherols . . . . .	13–25%
gamma-Tocopherols . . . . .	45–60%

# The YUM Story



## How Living Deliciously Can Become a Way of Life

(Excerpt from award-winning *YUM: Plant-Based Recipes for a Gluten-Free Diet*, by Theresa Nicassio, PhD, Sept. 2015)

In 1995, I married my long-time, beloved friend, Eric Mazzi. Together, we were moving along in life with our dog and three cats, just like so many others. Then, something unexpected happened that profoundly changed the trajectory of my life: I got pregnant! It wasn't that the pregnancy was unexpected—it had been planned for and hoped for, and was a wonderful blessing. What was unexpected were the consequences of my pregnancy: Physical debilitation and a cascade of health problems that lasted for more than a decade after our daughter Alex's birth in 1997.

*What the heck?* I say this jokingly now, but—believe me—it was no joke. In fact, it was downright terrifying at times. My immune and respiratory systems began to fail; neurological problems and chronic pain reduced my mobility and general functioning; and my life became a battle against perpetual infection, inflammation, fatigue, weight gain, and an endless list of food and environmental sensitivities. Medical appointments and visits to the hospital became a major focus of my existence, but all the while, I was still trying to be a good mom and contributing member of society in my professional capacity.

I knew this was not how I wanted to spend the rest of my life, but no matter how hard I tried, my condition only worsened. If it hadn't been for my meditation practice, my rebellious spirit of hope, my loving partner, our beautiful children, and the gift of meaningful work, I don't know how I could have survived and functioned as well as I did.

*My belief in the body's natural tendency and desire to heal itself was activated during this time and was a great blessing. A fire in my gut propelled me to fight against my condition; it felt like a force*

*more powerful than I could have mustered alone, and I embraced it. I chose to fight for a cause. I chose to say "Yes" to life in all its forms and advocate for it, starting with the little world I was in—first my body, then my family, and then beyond.*

Somehow, I was given the courage and tenacity to search for a way to transform myself and to emerge from this suffering. You name the treatment (even unmentionable ones I would never wish on anyone)—I probably tried it! Most treatments, whether conventional or alternative, resulted in minimal or no benefit



at best, and not-so-attractive side effects at worst.

I'd enthusiastically complied with countless caring and competent professionals' advice, yet my health didn't improve and the chronic conditions and negative effects of some of my medications continued to worsen. I knew that something needed to change, but what? It was just one big mystery. I had met my Baba Yaga in a big way!

*At a certain point, I realized that it was I who had to be the agent of change. The well-intentioned medical professionals at the time were unable to help, so I had to take responsibility for learning about my body in a whole new way. While I didn't know where to start, my lifelong love of science became my best ally. It was time to pull out all the stops and become my own case study. I took every conventional and alternative course about health and healing that I could, and became immersed in a journey of discovery that has changed my world forever.*

While amid all this research and experimentation, I reconnected with my former colleague and friend from the University of British Columbia, Dr. Hal Gunn. Hal and I had shared a passion for honouring the mind-body-spirit connection and a belief in the body's innate capacity to heal itself. He had followed his dream as a physician by cofounding an innovative holistic and integrative cancer treatment centre in Vancouver, Inspire Health, with Dr. Roger Rodgers in 1997. During our visit, Hal gave me Inspire Health's comprehensive, research-based information package that contained resources to empower their patients living with cancer. One of the things that stood out most for me, as I later perused the centre's materials, was the section about foods that help to fight cancer. This excited me and

launched my curiosity about how food could be used as medicine—and how healthy organic food, from naturally enriched soil, as fresh as possible (ideally grown at or near your own home) can be even better medicine.

Another great discovery I made was the work of functional medicine pioneers who spoke about how the wrong food for an individual can result in an inner world of toxicity. I learned more about the role of environmental and food allergies and cross-allergens, as well as how food sensitivities contribute to inflammation. Reading and employing Dr. Natasha Turner's book, *The Hormone Diet*, was a pivotal point in my journey. Her book opened my eyes to the barrage of toxins I had been exposed to—in food, air, and water—and how hard my body had been working to cope with these assaults. Natasha's book also introduced me to a simple elimination program to identify food sensitivities. Through this process, I discovered that when I completely eliminated gluten from my diet, the migraine headaches (from which I'd suffered all my life) disappeared. And the pain that filled every part of my body also lessened—all in less than a month! Holy cow—was that really possible? After all the treatments I had tried, this was the first clear improvement that I experienced. It did not resolve all my symptoms by any stretch, but it made a significant dent.

Okay, I was hooked.

Also in 2010, Alex—then 12 years old—saw Alicia Silverstone (actor and author of *The Kind Diet*) on *The Oprah Winfrey Show* talking about how farm animals are treated. After watching that program, Alex became a vegan in less than a week. Boom! How we ate as a family took another dramatic turn overnight.



Then there was the 2011 release of Dr. William Davis's *Wheat Belly*, a book that rocked the world. In it, Davis blew the whistle on wheat and demonstrated the connection between wheat and heart disease, diabetes, celiac disease, weight gain, the aging process, and a host of neurological problems. Both Dr. David Perlmutter, in his book *Grain Brain*, and Dr. Alessio Fasano, in his book *Gluten Freedom*, have subsequently brought more research findings about gluten and its potential health implications to light. For the first time since Drs. Colin and Thomas Campbell's 2005 book *The China Study*, which linked diet with chronic illness and mortality, the public was whacked in the gut in a way that could no longer be ignored.

In an effort to care for the needs of all our family members, Alex and I started trying a huge range of plant-based, gluten-free, and sugar-free foods in 2010. But we had a problem: most of them tasted terrible to us. So, we started to read every recipe book we could get our hands on, as well as countless

recipes from the internet, with only a few successes. We were able to find some products and recipes that were either vegan or gluten-free that we liked, but rarely any that were both. Those we did try were often filled with refined sugar, margarine, and other ingredients that we prefer to avoid. After a year of major frustration, we realized that we had to create our own recipes if we wanted to enjoy food that met our standards for health and taste.

Ever so slowly, we were able to come up with delicious meals that reflected the high-quality flavour, texture, and appearance that we sought—and were also easy and quick to make, given our busy lives.

It was amazing! When Alex and I decided to sink our teeth (so to speak) into taking on this challenge, it was impossible to stop us. Despite many culinary failures along the way, we were super excited when we had finally developed enough recipes to be able to once again invite friends over for meals—unapologetically. Yeah!

Then in 2013, Alex and I decided to go to the Living Light International Culinary Institute in California to learn even more. That year, we became Associate Raw Food Chefs and Instructors. I went back in 2014 to complete the Gourmet Raw Food Chef program, and then later that same year, Alex and I returned for the Advanced Raw Food Nutrition Educator Certification program.

We've now become a resource for others, sharing our recipes with friends who have similar dietary challenges. We are not alone; it was mind-blowing to learn how many folks live with food limitations!

Most people are tired of hearing about what they “need to,” “ought to,” “have to,” or “should” be eating—

or what they should be feeding their kids—because of health problems. I have found that such pressure not only results in very little sustainable behaviour change, but all too often also results in undue stress and guilt that serves no one. I want you to be able to shed any despair, frustration, or self-blame, so that you are less likely to give up if you don't feel able to resist eating food that you know may be harmful to your body. When grace and love are invited in, shame and hopelessness fade. When this happens, like a seed inspired to sprout and thrive, you'll find yourself better able to make life-enhancing choices, almost effortlessly...

As a psychologist, I have absolutely no interest or desire in colluding with potentially harmful ways of thinking.

My passion runs deep, both personally and as a professional who has practiced psychotherapy for almost 30 years. So, while writing a cookbook is the last thing I ever imagined I might be doing, it is clearly what I have been called to do. And while an unlikely vehicle for my life path, this philosophically grounded project indisputably resonates with my heartfelt commitment to do what I can to help others suffer less.

This is a world I know extremely well: It was the inspirational guiding force that gave me the tenacity to develop this extensive collection of recipes. For years, I saw my beloved dad struggling with diabetes, heart disease, kidney failure, and the associated circulation issues and neuropathy. Witnessing his struggles around food, which only worsened in his last years of life, was heart-wrenching. I'll never forget how he couldn't stop himself from eating the delicious cake at his granddaughter's birthday party, just days before the first of four

amputation surgeries on both his legs. He passed away one year later, after living with unbearable pain every moment of that year.

I want to help prevent you and countless others from having to live through such agony, and at the same time make it possible for everyone to enjoy the pleasure of sharing celebrations with loved ones—including being able to savour every bite of delectable cake at your granddaughter's birthday, or graduation, or wedding. With the alarming increase in the rates of obesity and diabetes (especially for our youth), my longing to help turn the boat around couldn't be stronger. The great news is that delicious food doesn't have to wreak havoc on our bodies—it's time to shed that outmoded belief!

Go ahead, call me crazy, because I am—crazy about life, crazy about love, and now more than ever, crazy about delicious and nontoxic food that nourishes instead of harms my body and the planet. It hasn't been easy, but it fills my heart with indescribable joy to be able to transform my struggle and frustration into an opportunity to create something worthwhile for others, something that might help bring to your life, and the lives of others, a little more ease.

For more information about Theresa's story and resources about living with celiac disease, visit [TheresaNicassio.com](http://TheresaNicassio.com)



**Theresa Nicassio, PhD,  
Psychologist**

Theresa is a kindness advocate, chef, wellness educator, and the award-winning Author of *YUM: Plant-Based Recipes for a Gluten-Free Diet*.



# Peacegreens

## Now With 400,000 IU of SOD per Serving

by Dany Lévesque, naturopath

New Roots Herbal's **Peacegreens** and **Peacegreens Immune** formulas now feature the added therapeutic action of ci li fruit (*Rosa roxburghii*), with a **potency-validated 400,000 IU of superoxide dismutase (SOD) per gram (serving)**.

Ci li fruit is richer in vitamin C and bioflavonoids than most fruits and vegetables.

This spike-armoured fruit is naturally rich in superoxide dismutase (SOD), antioxidant enzymes, and vitamin C. In addition, SOD contains several metalloenzymes which play a crucial role in the **elimination of free radicals that contribute to premature aging**. A double-blind, placebo-controlled human study (Ma et al 1997) also **demonstrated improved cardiovascular function and microcirculation**. This results in better nutrient delivery as well as in the removal of metabolic waste from organ systems and body tissue. **Increased immune-system activity and better resistance to oxidative stress were also observed.**

Another study (van Rensburg et al 2005) illustrated the antioxidant action of ci li fruit to protect and preserve glutathione; sufficient glutathione is critical to slow down aging, support elimination of toxins, and strengthen immune performance.

The addition of ci li fruit to **Peacegreens** and **Peacegreens Immune** further amplifies the antioxidant action of grapeseed, blueberry, *Ginkgo biloba*, thistle, and green tea extracts. **These nutrients also collectively benefit blood circulation**. Ci li fruit antioxidants also work synergistically with chlorella, pollen, barley grass, wheatgrass, spirulina, and probiotics to support your immune system and replenish your energy!

Available in capsule or powder form. **Choose one of our exquisite formulas for a wealth of benefits, unrivalled within our industry.**

Peace!

**Peacegreens** is a superfood formula containing over 50 top-quality ingredients including nutraceuticals, vitamins, minerals, essential amino acids, plant proteins, antioxidants, probiotics, phytonutrients, fibre, and chlorophyll, all in a base of plant enzymes.





# Does Cracking Your Fingers Really Give You Arthritis?

As part of my work as an osteopath, I meet several clients who are intrigued by the different crackling noises their own bodies produce and who ask me what they are. Some are delighted by these sounds and the relief they bring, while others are worried... and that's not counting those who are frankly disgusted from hearing me crack my own fingers several times a day!

I don't know how many times I have heard, as I casually cracked my knuckles, someone tell me that doing this repeatedly would make me suffer from arthritis... But is this really true?

## Some Scientific Readings... and a Bit of Madness!

In 2009, I heard about a completely silly story that brought a partial answer to this question. Dr. Donald Unger, an American physician, had heard the same warning as I did, and decided to check if the repetitive cracking of joints leads, as everyone says, to suffering from arthritis. Dr. Unger proceeded as

follows: For 50 years, twice a day, he cracked the joints of the fingers of his left hand, never touching the right. At the end of the 50 years, his hands were compared to judge the presence or absence of arthritis...

I summarize his conclusion: no sign of arthritis, and no difference between the hands. I hear you already protest that it is only *one* study, two hands, and a somewhat crazy man, but...

*No, but seriously!*

Already in 1975, doctors Swezey and Swezey had attempted to answer this question by taking radiographs of the hands of 28 patients of 78 years average age. Half of the group remembered cracking the knuckles of their fingers all their lives, while the other half were not too keen on doing so.

The study, as well as another one led in 2011, concluded that there is no link between cracking hand joints and an increased risk of arthritis or degenerative change in the hands.

Jorge Castellanos and David Axelrod have come to the same results as the studies mentioned above, but they warn that people who crack their joints frequently are more likely to suffer from edema (swelling) of the hands and lose some gripping force.

In short, you can crack your joints at will without fear of arthritis—but like all good things, it is better not to abuse!

To understand what the cracking noise is, visit [cynthiaosteo.com/fr/osteopathie/craquement-articulaire](http://cynthiaosteo.com/fr/osteopathie/craquement-articulaire) (text in French only).

Article including references on our blog: [newrootsherbal.com/en/blog](http://newrootsherbal.com/en/blog)



**Cynthia Chapdelaine,  
Osteopath D.O.**

She is captivated by jaw problems, hiking, biking, and endeavouring to reach balance, in her life as well as

in the body of her patients.  
[cynthiaosteo.com](http://cynthiaosteo.com)



# *Breaking the Myth That Organic Food is Too Expensive*

Sometimes, I hear people say: “I don’t eat organic because it’s too expensive.”

Although some organic foods may cost more than conventional options, this in reality isn’t always the case. To help you reduce costs while reaping the benefits of incorporating more organic foods into your diet, here are five tips to remember when grocery shopping.

## **Shop in Season**

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When fruits and vegetables are in season, they’re at their peak not only in terms of taste and quality, but also in affordability. In Canada, we’re fortunate to have a bountiful growing season and lots of options for fresh organic foods grown right here at home. During the upcoming summer months and even into the fall, stock up on what’s in season, then clean, dry, and freeze it for later.

Berries are the perfect fruit for freezing, as it’s one that can be costly to find organic during the winter months. Stocking your freezer with bags of organic berries in the summer, whether handpicked

yourself or store-bought, will give you the option to add organic berries to your smoothie, oatmeal, and healthy desserts all winter long.

Along with berries, you can also freeze vegetables such as squash, pumpkin, tomatoes, and even corn. All of these can later be added to your soups, stews, and sauces during the winter. It’s a good idea to slightly boil your vegetables then immediately place them into cold or icy water before drying—this process is called “blanching” and will help to preserve the texture and colour of the vegetables.

## **Pick the Clean 15 and Avoid the Dirty Dozen**

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Each year, the Environmental Working Group releases guides called “Clean 15” and “Dirty Dozen.” The Clean 15 are those fruits and vegetables that are not typically as contaminated by pesticide use, and the Dirty Dozen are those that are. By grocery-shopping while following these lists, you can save on produce listed on the Clean 15.

I like to print the full list and keep it in my wallet so I can pull it



out as a quick and easy reference guide when I'm grocery-shopping. Keeping in mind our first tip, remember to stock up on organic produce listed in the Dirty Dozen when they're in season. That will save you even more dollars!

*Source: Environmental Working Group*

### **Look Beyond the Produce Aisles**

When we think about going organic, we often only think about fresh fruits and vegetables. There are, however, many other organic food options available. From sauces to soups, beans, and pastas, the options are endless.

You can find prepackaged foods made with organic ingredients, but do you know how to read the labels to be sure? To verify that the product is made with 95% organic products, look for the Canada Organic logo (right) on the product label or box.

### **Stock Up When Items Are on Sale**

Everyone loves a good sale! All right, it's not the same as buying a TV on Boxing Day, but unlike gadgets and toys, if you don't take advantage of price cuts, you'll have to pay for it sooner or later!

Stocking up on organic food at a reduced price means you can have a freezer and pantry full of cheap

organic food. For instance, if you weren't able to stock up on produce when it was in season, be sure to fill your freezer bags during these sales. And don't forget about those sauces and soups as well! Nonperishable items can sometimes be bought at lower prices and stored in your pantry until you need them.

Be sure to store your food items safely. Health Canada has developed a guide to provide instructions for proper storage (see link on our blog).

### **Shop at Your Local CHFA-Member Health Food Store**

Your local CHFA-member health food store is the best spot to shop for organic foods. These stores typically have a wider selection, and specialty products that can be hard to find. You can find your local CHFA-member health food store at [chfa.ca](http://chfa.ca).

Eating organic food doesn't have to be expensive, especially if you follow these tips!



#### **Michelle W. Book**

A graduate in holistic nutrition and spokesperson for the Canadian Health Food Association (CHFA), she focuses on living life and raising a family focused on holistic health and wellness.

Visit our blog to learn about the list of organic foods to prioritize

# Workout the Canadian Way!

It can be challenging to hit the gym with a clear blue sky, warm air, and sunshine. So, why not take advantage of our beautiful Canadian summers and hit the outdoors instead! Being active outdoors can make your workout more enjoyable, and leave you feeling uplifted and energized. As Canadians, we only get a few months of warm weather, so why not make the most of it and get active with nature?

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## **Outdoor Workout: 30-Minute Total Body Workout** **15-Minute Walk/Jog Around the Block**

Try these muscle-toning exercises after your walk/jog. Complete these six exercises as many times as you can in 15 minutes. Improving your record or increasing your time to 20–30 minutes can be a fun summer challenge. Are you ready to take the challenge?



### **15 push-ups**

(working your chest and arms)

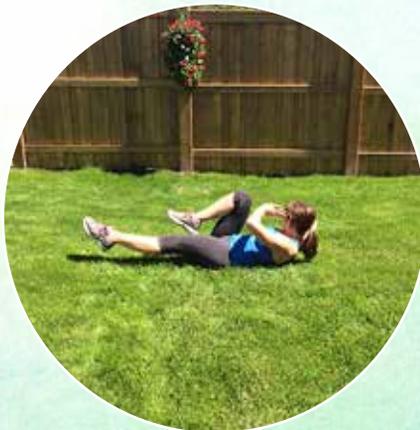
*Tip: You can do push-ups from your knees or standing up against a wall*



### **30 squats**

(working your legs and gluts)

*Reminder: Keep the weight in your heels as you sit back*



### **20 bicycles**

(working your side core)

*Reminder: If you move slower, you will feel the burn more*



### **20 sit-ups**

(working your core)

*Tip: If this is too challenging, you can always crunch instead, lifting the head and shoulders off the ground*



**20 pelvic lifts**  
(bridge pose; working the back of your legs and gluts)

*Reminder: Lift and lower down to a hover*



**10 triceps dips**  
(working the back of your arms, lift and lower your bottom)

*Reminder: Bend those elbows as you lower down*

*Tip: You can use a bench or step if you have one nearby*

**Other Ways to Get Active with Nature:**

**Hiking**

Find trails near you, and explore them—alone or with loved ones. It is a great way to get active, enjoy the weather, and explore nature. If you want to kick it up a notch, try trail-running. The hills and uneven ground will work your muscles extra hard and provide you with a challenging workout.

**Water Activities**

On those super hot days, try getting active in the water. You can swim, row, test out your balance on a paddle board, work your legs in a paddle boat, or just goof around in the water—maybe play some pool volleyball? These can be fun ways to get active while you are enjoying the summer weather.

*Reminder: Drink lots of water, especially when you are being active outdoors!*

**Sport Fun**

Playing sports doesn't always have to be competitive. Get outside with family and friends, throw a baseball around; play basketball, street hockey, tennis, or soccer. Enjoy the weather and great company!

**Parks**

Parks can be great for children, but why not make the most of your visit too? Walk/jog around the park, or find things you can use to work those muscles (e.g. benches for push-ups or step-ups).

Being active will likely leave you hungry. It is important to fuel your body postworkout with healthy foods. The combination of carbohydrates and protein makes for the perfect postworkout snack. It will help refuel your body and feed your muscles at the same time! Try this smoothie recipe with some delicious Canadian strawberries.



**Angela Wallace**

A registered dietician with the College of Dietitians of Ontario, personal trainer, and family food expert who specializes in women

and child nutrition and fitness, she loves helping families get healthy together.  
eatrightfeelright.ca



**Postworkout Smoothie Recipe**

- 1 cup kefir
- 5 whole strawberries, sliced
- ½ ripe banana
- 1 scoop vanilla protein powder (optional)
- 2 tsp. ground flaxseed
- 1 tsp. vanilla extract
- 1 tsp. honey (optional)
- Ice cubes

Blend together well, and enjoy!

**Other Postactivity Snack Ideas**

- Tuna salad (with light mayo) on a slice of whole-wheat toast
- Peanut butter and apple slices
- Yogurt parfait (yogurt of choice, with fresh berries, shredded coconut, and nuts of choice)

# Culinary Corner

## Veggie Wraps

by *Healthier Pace*

I whipped this up for dinner the other evening as a little something different from my normal salad. It was nice to use collard leaves for the wraps, especially since I can't get them at home—not even in the big city 5 hours away from my home! If you don't have access to them either, you can use chard or romaine leaves, which is what I normally do.

### Ingredients

- Leafy wrap of choice
- Veggies of choice, julienned (I went with cucumber, carrot, avocado, red pepper, and Philip's home-grown alfalfa sprouts)



## Hemp Dip

### Ingredients

- 2 cups chopped zucchini
- ½ cup hemp seeds
- Juice of ½ lemon
- 2 tbsp. tahini
- 1 clove garlic
- Sea salt, to taste

### Instructions

In a blender, combine all ingredients until smooth and creamy.

### Assembly

Remove the stems from the collard or chard leaves, creating two wraps.

Spread some of the hemp dip on a wrap. Arrange veggies at one end of the wrap and roll it up.

Serve with extra hemp dip.

# Blackberry Banana Ice Cream Cake



I like to make this dairy-free ice cream cake during blackberry season. It's delicious, refreshing, and perfect for the hot summer months.

## Chocolate Nut Crumb Ingredients

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- 1 cup walnuts
- ½ cup shredded coconut
- ¾ cup raisins
- 2 tbsp. cocoa powder

## Ice Cream Ingredients

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- 4 medium bananas
- ¾ cup cashews
- ¼ cup coconut sugar
- 1 cup blackberries (or your choice of berries)

## Instructions for the crust

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Grind all chocolate nut crumb ingredients together in a food processor into crumbs. Press half of the mixture into the bottom of a 6" spring-form pan. Set the rest aside.

## Instructions for the Ice Cream

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Blend the bananas, cashews, and coconut sugar until completely smooth in a blender. Transfer half of the mixture into a bowl. Add the blackberries to the remaining mixture, and blend until smooth to incorporate.

## Assembly

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Pour a big blob of the banana mixture over the crust in the pan. Pour some of the berry mixture into the middle over the banana mixture. Keep pouring into the middle, alternating fillings until they've been used up.

Drag a chopstick from the centre out to the sides all the way around, creating a pattern like the one in the photo. Arrange a few blackberries on top.

Freeze for 8–12 hours. Let sit at room temperature (about 30 minutes) until the sides soften just enough to remove the ring of the pan. Press the remaining chocolate crumb mixture on the sides. Slice and eat!



### Heather Pace

A classically trained chef turned raw-dessert chef. She is a travel bug, a chocoholic, and a certified yoga instructor.

[sweetlyraw.com](http://sweetlyraw.com)

# Mint Chocolate Banana Ice Cream

Whether you suffer from a severe or minor food allergy or intolerance, it makes eating difficult... period!

It makes meal planning and grocery shopping more difficult. Convenience, eating out, and even going out to a friends house can become nearly impossible—and, frankly, frustrating.

What I can't emphasize enough, is that this is a symptom and the root cause needs to be dealt with in order to protect the integrating of your gut.

These frustrations and symptoms are all preventable if you deal with the real issue. But you have to make the decision to invest in changing your lifestyle.

It's a bit of tough love—but you can find freedom from your symptoms, and I really want that for you!

One of the top food sensitivities in the world is lactose intolerance, which affects about three quarters of the world's population (*ouch!*).

When first avoiding dairy, it's easy to feel like you're missing out on foods that you love.

That's why I wanted to introduce you to my favourite nondairy indulgence when I need just a little sweetness loaded with healthy fats, antioxidants, and chocolate. Because, well... chocolate!

Give this recipe a try and fall in love with dairy-free, gut-friendly goodness!



## Ingredients

- 1 frozen banana
- ½ avocado
- 1 tbsp. pure maple syrup
- 5–7 fresh mint leaves
- 1 tbsp. dark chocolate chips (or dairy-free dark chocolate)

## Instructions

Combine frozen banana, avocado, syrup, and mint leaves in a food processor or blender for 1–2 minutes, until smooth.

Mix in chocolate chips (or dairy-free dark chocolate).

Serve immediately or place in an airtight container and store in the freezer.

Serves 2.



### Sharisse Dalby, RNC

Registered nutritional counselor; helps families and children beat their health struggles, focusing on digestive and emotional issues.

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# flourish

## August Blog Preview

For more articles on health, lifestyle, and wellness—add to that delicious recipes!—all in a more dynamic and accessible format, visit our *Flourish* blog at [newrootsherbal.com/en/blog](http://newrootsherbal.com/en/blog)



### Flax Seed — Hype or Superfood?

Superfoods have recently gained popularity. Consumers are interested in adding foods to their diet that pack a big punch in terms of nutritional content and therapeutic benefit. One superfood with a very impressive range of benefits is the flax seed. Historical research has revealed that this small seed was cultivated 30,000 years [.]



### The Evolution of the Heart-Healthy Diet

The evolution of what is considered to be a “heart-healthy diet” has undergone a long process of development. For instance, we have the low-fat diet, the glycemic index diet, the Mediterranean diet, and the low-carbohydrate diet. Each seems to have its own strengths, but this makes following an [.]



### Resveratrol - Uncovering the Health Benefits of Red Wine

Resveratrol is an important phytonutrient and antioxidant that naturally occurs in the skin of red grapes, peanuts, and some berries, and is touted as the health-promoting compound found in red wine. In the last few years, resveratrol research has exploded. Well over 1,000 research papers [.]



### Passionflower - Plant medicine for anxiety, insomnia and addiction

The beautiful purple passionflower is renowned as an ornamental flower, but it has been touted as an effective herbal medicine in cultures around the globe for centuries.

The Aztecs of Mexico and South America used passionflower [.]



### Spinach Basil Pesto

Packed with spinach and much lower in fat than most pestos, this is great over zucchini/kelp noodles, salad, crackers, or veggie sticks.



### Coconut Oil — What’s all the buzz?

From weight loss to memory to cholesterol regulation to everyday skincare, coconut oil has created quite the buzz in recent years about its effectiveness to address many common concerns. This may be surprising to some, as coconut oil was historically labelled as [.]

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