

flourish

by New Roots Herbal

HEALTHY BODY, MIND, AND SPIRIT

Organic v. Nonorganic Food

Natural Health Products
in Pregnancy

The Best Solutions to Limit
Toxin Accumulation

Gift Ideas for
Celebrating Mother's
and Father's Day



Vol. 1, No. 4 · Free
May/June 2017

For those who can't get enough of the benefits of probiotics, now you can.

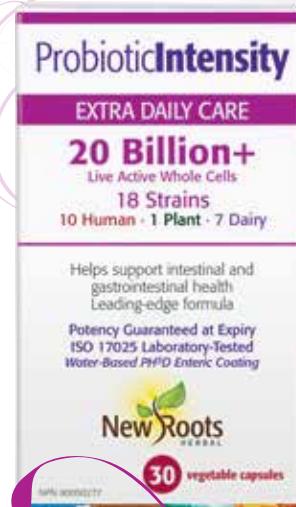
You know probiotics can do some amazing things: boost immunity, improve digestion, fight off disease—pretty much everything, short of doing your taxes. What you might not know is that there are many different strains of probiotics, each with its own specialty. Kind of like a family of overachievers.

ProbioticIntensity is formulated with 18 unique strains, each with their own species-specific benefits, including two sought-after strains: *Bifidobacterium infantis* and *Lactobacillus reuteri*. No need to learn Latin; just know our formula contains strains sourced from dairy, plant, and even humans. That's right: When it comes to probiotics, it pays to trust your fellow man.

And, when it comes to getting the most out of your probiotics, you can count on our natural, water-based, PH5D enteric-coated capsules to make sure our probiotics:

- Survive harsh stomach acids
- Reach the intestines alive and active
- Deliver all 20 billion cells for healthy benefits

A non-enteric-coated capsule cannot do the above.



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Learn more about our probiotic line and enteric-coating benefits at newrootsherbal.com

IBSurgency	AcidophilusUltra	Travelers'Probiotic	ProbioticsUrgency	ProbioticsRecovery
IRRITABLE BOWEL SYNDROME	DAILY CARE	PROTECTION	EXTRA POTENCY	ULTIMATE POTENCY
10 Billion+ Live Active Whole Cells 5 Strains 3 Human · 1 Plant · 1 Dairy	11 Billion+ Live Active Whole Cells 11 Strains 4 Human · 1 Plant · 6 Dairy	21 Billion+ Live Active Whole Cells 12 Strains 4 Human · 2 Plant · 6 Dairy	50 Billion+ Live Active Whole Cells 10 Strains 4 Human · 1 Plant · 5 Dairy	120 Billion+ Live Active Whole Cells 20 Strains 11 Human · 2 Plant · 7 Dairy
Could help reduce the duration of diarrhea in those with irritable bowel syndrome <small>Potency Guaranteed at Expiry ISO 17025 Laboratory-Tested Water-Based PH5D Enteric Coating</small>	Helps support intestinal and gastrointestinal health <small>Potency Guaranteed at Expiry ISO 17025 Laboratory-Tested Water-Based PH5D Enteric Coating</small>	Protects against travelers' diarrhea Helps support intestinal and gastrointestinal health <small>Potency Guaranteed at Expiry ISO 17025 Laboratory-Tested Water-Based PH5D Enteric Coating</small>	Helps support intestinal and gastrointestinal health <small>Potency Guaranteed at Expiry ISO 17025 Laboratory-Tested Water-Based PH5D Enteric Coating</small>	Helps support intestinal and gastrointestinal health <small>Potency Guaranteed at Expiry ISO 17025 Laboratory-Tested Water-Based PH5D Enteric Coating</small>
 30 vegetable capsules <small>water-based</small>	 60 vegetable capsules <small>water-based</small>	 30 vegetable capsules <small>water-based</small>	 30 vegetable capsules <small>water-based</small>	 30 vegetable capsules <small>water-based</small>



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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

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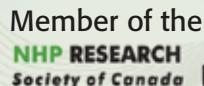


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Voice of the Natural Health Industry
La voix de l'industrie de la santé naturelle



Editor's Letter



It is difficult to understand what maternity is without living it. I always knew that I would one day have children, given the importance that I attributed to family.

However, once the decision to conceive is taken, one does not

always get pregnant in the first weeks. In my case, I had to wait almost *three years*, so I know it is not easy for a couple wanting a child to wait for so long. We go through moments of discouragement and sadness, not counting having to face questions such as: "So, when will you guys have a baby?"

Fortunately, there are resources, and excellent natural products, that should be part of the first step once the decision to conceive is taken. Today, years have passed since this difficult stage, and now being a mother of three wonderful children is priceless to me. I find that we really become parents when the interests and needs of the child also become ours. For example, when our child's sport suddenly becomes our favourite sport, and we become their number one fan! You should see me when my son scores during a soccer game!

But oh! how times flies by... It seems to me that not so long ago, I was still changing my baby's diapers; recently, I found myself waxing the legs of my preadolescent daughter!

Let's take some time during Mother's Day and Father's Day to stop for a moment and enjoy our loved ones—and have a good time with our family and our parents.

A stylized signature of the name "Sonia".

Sonia Lamoureux
Editor-in-Chief

flourish

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A practicing naturopathic doctor since 2007, her areas of focus include women's health, children's health, chronic pain, and more.



Philip Rouchotas, MSc, ND

Well-known in the community as a naturopathic doctor, associate professor, and editor-in-chief of *Integrated Healthcare Practitioners*.



Gordon Raza, BSc

As the technical writer for *Flourish*, Gord shares his unique perspective on natural health products, nutrition, and active living.



For the Full Benefits of Your Probiotics, Get on the **Enteric Express**

Boosting your immune system, keeping your intestines clean, fighting infections, and a whole lot more; probiotics work wonders... Well, they can work wonders—if they make it past your stomach acids and reach the intestines, where they actually do their job.

We'd like to think of our enteric coating as an express train: Eager probiotics are loaded on board, where they settle in, talk about the game, or maybe read the paper on their way to work. Before long, they're at the office (the intestines), relaxed and ready to get down to business. Meanwhile, with so-called "delayed-release" capsules, probiotics are in for a much more chaotic commute. The stomach acids make it seem like their train is constantly stopping and unloading passengers. When they finally arrive, only a fraction of the probiotics are left and, after such a hectic journey, they're hardly gung-ho to get to work.

So, what makes our all-natural PH⁵D enteric-coated capsules so efficient? In our finished product, the coating is made from the following natural ingredients: medium-chain triglycerides, glycerin, stearic and oleic acids, and sodium alginate—but you don't have to call the HAZMAT team: These are just fancy scientific names for the coating, that's derived from natural sources like red palm fruit oil and algae. Our ISO 17025-accredited laboratories (more fancy talk for state-of-the-art, internationally recognized) have tested these capsules and guarantee 100% delivery of New Roots Herbal's probiotics to the small intestine. They also guarantee the full potency on our label. Talk about traveling first class!

Now, let's take a closer look at what drives "delayed-release" capsules offered by other companies. Before you get on board with these, you should know

they don't meet the quality standards set by the US Pharmacopoeia (USP) convention—these are the folks whose standards are used as a reference by more than 140 countries around the world. Our ISO 17025-accredited laboratories (trust us, they're as impartial as they are professional) found that these capsules lasted 15 minutes in harsh stomach acids.

Our ISO 17025-accredited laboratories have also tested probiotics in regular vegetable capsules, and the probiotic cells had an astounding death rate. Even cryoprotected probiotics in regular vegetable capsules without enteric coating had a surprising death rate! The capsules rupture within 15 minutes, leaving less than a 1% survival rate when exposed directly to the harsh acidic conditions of an empty stomach.

There are also theories that taking probiotics with food or yogurt protects them from stomach acids. The same ISO 17025 lab found that less than 10% survive these conditions. Take for example a \$40 bottle of probiotics: in reality, you're getting forty cents worth of probiotics on an empty stomach, and a \$4 value on a full stomach. Ouch!

New Roots Herbal's all-natural PH⁵D enteric-coated capsules will last a full hour in stomach acids, and then release slowly within 30 minutes once reaching the intestines. You can then count on 100% of the probiotics surviving stomach acids and delivering their benefits. We invest up to twelve times more than marketing companies disguised as health-product manufacturers for our proven all-natural enteric coating that truly protects our probiotics.

Choosing the most effective probiotic delivery system seems pretty clear, doesn't it? All aboard!



Fertility

Overcoming Inhibitory Factors

by Philip Rouchotas, MSc, ND

A survey published in 2012 suggested that, at the time, the prevalence of infertility among Canadian couples with the women between 18 and 44 years of age was 11.5%. Based on our observations in clinical practice, it seems that increasingly younger couples are undergoing assisted reproductive technology including in vitro fertilization (IVF) techniques.

Clearly, infertility—or perhaps more aptly, subfertility—is becoming a silent epidemic, and one with considerable personal and social impact with respect to emotional cost, financial burden, and health effects, both maternal and child-related.

Among women, the most common cause of infertility is ovulatory dysfunction and associated hormonal imbalances, while among men, diminished sperm counts and motility are most common.

This article discusses some of the factors that may contribute to hormonal imbalances and infertility. In addition to identifying and removing, if possible, the underlying factors contributing to these problems, various natural health products (NHPs) have been shown to help boost fertility.

Endocrine Disruptors

Endocrine disruptors are chemicals that interfere with normal hormone production and/or signaling by mimicking the hormone, usually estrogen. These chemicals are also often referred to as xenoestrogens or, literally, “foreign estrogens.” Per a 2016 review, endocrine-disrupting chemicals (EDCs) have been demonstrated to interfere with the estrogen-receptor or the androgen-receptor signaling, and can interfere with hormone synthesis, secretion, transport, and metabolism.

Endocrine disruptors include chemicals such as bisphenol-A (BPA) and related chemicals such as bisphenol-B, dioxins, phthalates, perfluorinated chemicals (PFCs), and organophosphate compounds that occur in plastics, canned foods, pesticides, and some cleaners and personal-care products. Emerging data draws a closer link between exposure to these chemicals and a host of reproductive problems.

A recent study found that among 50 couples undergoing in vitro fertilization (IVF), there was an inverse association between male concentrations of phthalate metabolites and blastocyst quality, meaning that higher phthalate levels are linked with lower embryo quality. Another study found that a subgroup of low-chlorinated PCBs, considered to be estrogenic, were significantly higher among anovulatory (not ovulating)

women. A study evaluating the effects of BPA found that seminal BPA was inversely associated with sperm counts and quality. In addition, the total amount of PCBs was negatively associated with hormone parameters including total testosterone, free testosterone, the free androgen index, and dihydrotestosterone (DHT) in the blood.^[6] An association between phthalate metabolites and lower numbers of antral follicles (antral follicle count, AFC), a marker of decreased ovarian reserve, has also been found among women seeking fertility treatment. These studies are only the most recent, and a wealth of data on this topic has been published in medical research.

In addition to avoiding potential sources of endocrine-disrupting chemicals, maintaining efficient detoxification pathways is important in minimizing their influence on fertility. Supporting optimal digestive, liver, lymphatic, and kidney function through diet strategies and targeted supplementation appears justified. Supplements that may help include probiotics, *N*-acetylcysteine (NAC), and milk thistle, to name a few.

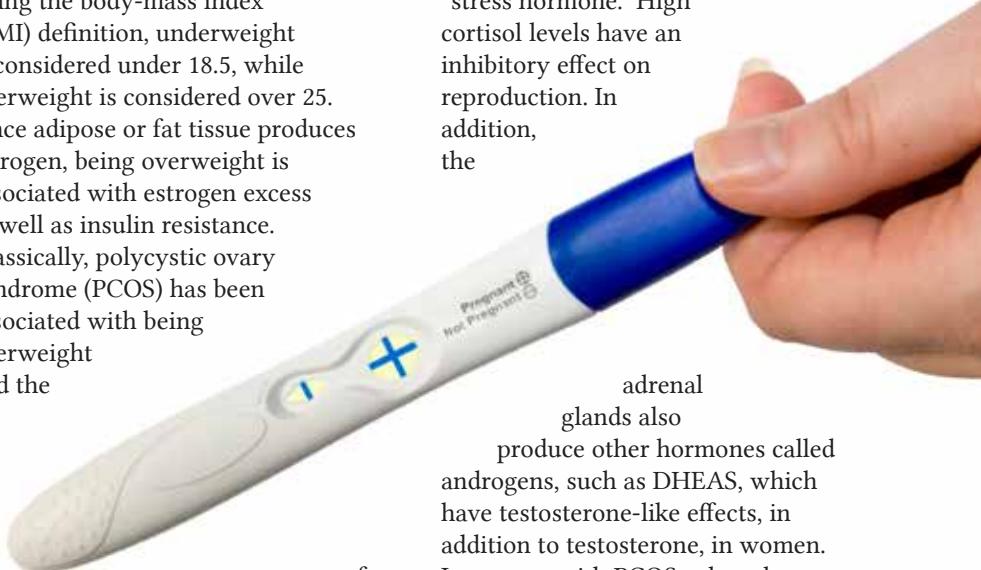
Hormonal Contraception

There is growing awareness among women that hormonal contraception, such as the birth-control pill, is not really good for them. There is a long list of side effects, but equally important is that most women don't know how the pill actually works. By introducing additional estrogens and progestins into the body, the pill works by suppressing your own body's natural hormonal signaling and ovulation. In medical terminology, the pill shuts down signaling from the hypothalamus and pituitary gland to the ovaries. It is simply assumed that after years of suppressing ovulation, the body will simply bounce back after discontinuing the pill. While this may be true for some, it does not appear to be true for all, and many

now suspect a link between long-term use of the birth-control pill and subsequent ovulatory disorders such as polycystic ovary syndrome (PCOS).

Overweight, Underweight, and Insulin

Having a body weight on either end of the spectrum appears to be bad for fertility. Being over- or underweight leads to imbalances in estrogen, insulin, and testosterone, which converge by inhibiting ovulation and sperm production. Using the body-mass index (BMI) definition, underweight is considered under 18.5, while overweight is considered over 25. Since adipose or fat tissue produces estrogen, being overweight is associated with estrogen excess as well as insulin resistance. Classically, polycystic ovary syndrome (PCOS) has been associated with being overweight and the



presence of insulin resistance.

Conversely, being underweight may be associated with symptoms of estrogen deficiency. Oddly enough, insulin resistance or reactive hypoglycemia, a different kind of blood-sugar problem, may be found in these women; newer research has identified a "thin phenotype" PCOS. In men, being overweight has been associated with worse sperm parameters.^[13]

Several of the medications and NHPs that have been shown to help with PCOS and promote ovulation do so by reducing insulin resistance. These include inositol, *N*-acetylcysteine (NAC), and chromium. Herbs that help to balance estrogen and progesterone—such as chaste tree berry, black cohosh, licorice, and peony—may also be helpful in these women.

In men, herbs and nutrients that have been shown to help improve sperm counts and quality include ashwagandha, acetyl-L-carnitine, *N*-acetylcysteine (NAC), and selenium.

The Stress Response

The hypothalamic-pituitary-adrenal (HPA) axis plays an important, yet often underestimated role in fertility. Under conditions of stress, the hypothalamus and pituitary gland signal the adrenals to produce cortisol, popularly known as the "stress hormone." High cortisol levels have an inhibitory effect on reproduction. In addition,

adrenal glands also

produce other hormones called androgens, such as DHEAS, which have testosterone-like effects, in addition to testosterone, in women. In women with PCOS, adrenal overresponsiveness to stress (HPA-axis activation) may be a significant source of excess androgens. In one study of women with PCOS, stimulation of the adrenals by the hormone ACTH resulted in adrenal overresponsiveness, demonstrated by excess production of DHEAS, 17 hydroxyprogesterone, and androstenedione. In addition, among women undergoing IVF, higher cortisol levels have been associated with lower chance of pregnancy.

NHPs that may help regulate adrenal function and dampen the stress response include ashwagandha and rhodiola, as well as B vitamins.

Article including references on our blog: newrootsherbals.com/en/blog

New Product Available in June

The Chemistry Between Us

by Gordon Raza, BSc

When it comes to love, people frequently refer to “chemistry” as the unexplained intangible that brought them together. When it comes to conception, the right chemistry is critical for both genders. According to Statistics Canada, infertility for couples trying to conceive spanning 1984 to 2014 rose from 5.4% to 15.7%.

Infertility is clinically referred to as a year of sexual activity without contraception not resulting in pregnancy. The cause can be attributed to either gender in one third of cases respectively, with the remaining third of situations open to debate. The science of prenatal nutrition has traditionally focused more on females; however, there are plenty of lifestyle adjustments and nutrients critical for male fertility.

Let's start the discussion with a few lifestyle suggestions: If you smoke, try quitting; cut back on caffeine and alcohol intake; trade in the bikini briefs for looser-fitting boxer shorts; and keep your cell phone out of your front pocket.

There are also vitamins, minerals, and nutraceuticals that elevate sperm count, protect their delicate DNA, and improve their motility (ability to reach their destination).

New Roots Herbal's **Generation** is formulated with ten specific

nutrients that maximize male fertility from multiple perspectives.

Six robust compounds comprise the backbone of our robust formula. L-Carnitine serves a dual role, as it increases energy and sexual stamina along with being an antioxidant to protect sperm cells from free radicals. N-Acetylcysteine (NAC) is a potent antioxidant clinically proven to improve sperm production and motility. Coenzyme Q₁₀ serves a similar role to NAC, as it delivers antioxidant protection for sperm cells while energizing mitochondria for increased motility. Astaxanthin, a potent carotenoid naturally sourced from freshwater algae, further protects sperm from free-radical exposure for better motility and the energy necessary for fertilization. **Generation** also includes ashwagandha root extract (5% withanolides), proven in clinical trials to elevate sperm production up to 167%. Naturally sourced lycopene amplifies resistance of sperm cells to oxidative stress for increased numbers and protection of their delicate DNA.

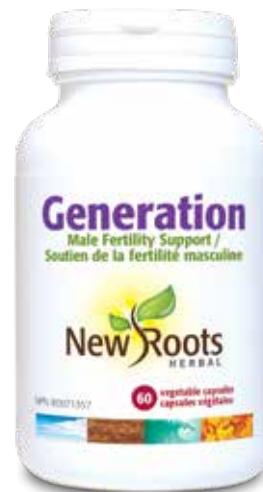
Vitamins C and E broaden the spectrum of **Generation** in two ways. Vitamin C deficiency is associated with low sperm counts and poor motility; adequate levels of this antioxidant are essential. Vitamin E is a micronutrient recognized for its role in spermatogenesis which

directly impacts the quantity and quality of sperm cells.

We've included a tandem of motility minerals in our formula: zinc and selenium collectively impact the ability of sperm to reach its destination. Zinc is also critical for sperm development.

Considering the process of spermatogenesis takes three months, the time is now to trust New Roots Herbal to prepare you for the next generation.

Visit our blog for article including references.





Keep on Track with Prenatal

by Gordon Raza, BSc

Have you ever known the directions to get somewhere, but still used an app on your mobile device as insurance to navigate any unexpected traffic situations?

If you're reading this, you're likely well-prepared for your pregnancy. Eating well and keeping active are lifestyle choices that don't waver, with additional caloric requirements adding up to 300 calories (a banana and a fistful of almonds) in the second trimester, and a 500-calorie tuna salad on whole-wheat being sufficient to meet additional needs in the third trimester.

The initial trimester, however, has immediate fetal demands for many vitamins and minerals with an additional 25% to 50% increase being critical during pregnancy. Folic acid for the prevention of neural-tube defects, and a highly bioavailable form of iron (iron bisglycinate) to

fuel haemoglobin production are must-have nutrients. There are also a mosaic of vitamins and minerals necessary to quench fetal demands for healthy development. You may also notice our formula is free from vitamin A and *beta*-carotene. This stems from a study featuring 1,075 pregnant women having proven these lipid soluble vitamins to be of no benefit compared to placebo, as well as having the potential to negate the expected benefits of a multivitamin for expectant mothers.

New Roots Herbal's **Prenatal** delivers therapeutic amounts of 23 biologically active vitamins and minerals specific for maternal health prior to conception, full-term, and while breast-feeding.

Consider **Prenatal** an ally to keep your eyes on the road as you navigate the long and winding path to parenthood.





Natural Health Products in Pregnancy Improving Generational Health

by Dr. Heidi Fritz, MA, ND

The fascinating emerging field, the “fetal origins of adult disease,” describes the impact that environmental factors *in utero* can have on the long-term health of the offspring. For instance, birth weight and other measures of fetal growth, as well as maternal stress during pregnancy, have been associated with risk of chronic adult disease, including cardiovascular and metabolic disease. Recent science shows that select natural health products can also reduce the baby’s long-term risk of disease.

The best example of the developmental effects of nutrients is folic acid. Folic acid decreases risk of neural tube defects. In addition, the use of a multivitamin during pregnancy furthermore reduces the risk of five other birth defects including heart defects, as well as three childhood cancers including leukemia and pediatric brain tumours. We advocate the use of a vitamin A/ *beta*-carotene-free multivitamin, considering the teratogenicity of vitamin A together with its low RDA in pregnancy

(2500 IU), which is easily obtainable from food alone; vitamin A deficiency is virtually nonexistent in North America.

Docosahexaenoic acid (DHA) is well-known for its beneficial effects on neurodevelopment. DHA is a major component of the phospholipid bilayer membrane in neurons, and in the third trimester there is a rapid increase in the proportion of omega-3 fatty acids in the fetal brain, retina, and liver. DHA is implicated in the development of *synapses* or communication junctions between brain cells, neurotransmitter metabolism, and retinal development. Studies have shown that fish oil supplementation during pregnancy improves measures of intelligence in children, including mental processing, hand and eye coordination, and problem-solving. Fish intake during pregnancy has been associated with higher verbal IQ, social behavior, fine motor, communication, and social development scores.

Eicosapentaenoic acid (EPA) is often overlooked in this setting; however, given the prevalence of mood disorders during pregnancy or postpartum, it is important to coadminister EPA with DHA due to its mood-enhancing effects. Several meta-analyses have demonstrated that an oil with a 2:1 ratio of EPA:DHA or higher is necessary to obtain antidepressant and mood-stabilizing effects, and that higher EPA is associated with better antidepressant effects. EPA may also improve the impact of DHA, as it has also been shown to upregulate fatty acid-transport proteins in the placenta, thereby increasing fetal transfer of DHA. A 2:1 ratio of EPA:DHA is therefore an ideal type of fish oil for supplementation during pregnancy.

Fish oil during pregnancy has also been shown to reduce the risk of allergic disease in the offspring. This includes risk of eczema, asthma, and allergy. Supplementation of between 2 and 4 g combined EPA and DHA has been associated with an increase in the number of T regulatory



cells, cells that are involved in dampening an overactive immune response. Similarly, fish oil has been associated with a decrease in the incidence of food allergy and eczema, and with a reduction in the risk of asthma at age 16 years.

Probiotics are like adaptogens for the immune system. They can boost the immune response if impaired, but they can also promote the induction of tolerance. Multiple human trials have shown that maternal use of a probiotic in the last three to six months of pregnancy, as well as delivery to the baby in the first six months of life, can dramatically reduce the development of eczema, asthma, and allergy. A recent meta-analysis examined 17 studies, including 4755 children, and found that supplementation with probiotics during pregnancy and early infancy was associated with a 22% lower risk of eczema compared to untreated infants, and this was especially marked in children who received a mixture of probiotics; these children had an almost 50% reduced risk. Another meta-analysis found that probiotic supplementation during pregnancy and early infancy may reduce risk of atopy as well as food hypersensitivity in the infants.

The mechanism for this effect appears to be related to uptake of probiotic species from the maternal gut. An intriguing new discovery is that the placenta harbors a unique microbiome. In addition, during late pregnancy and lactation, a bacterial enteromammary ("gut-breast," if you will) pathway is established, through which specialized immune cells select specific bacteria from the maternal intestinal tract, chaperoning them through the bloodstream to the mammary gland, where they enter the breastmilk and colonize the infant gut.

Observational data suggests that maternal vitamin D status is associated with lower risk of wheeze and better response to treatment (i.e. bronchodilator effect) in the offspring. A meta-analysis of cohort data found that the lowest risk of childhood asthma was associated with maternal 25(OH) D levels of 70 nmol/L. Data from a large cohort study of cod-liver oil supplementation in pregnancy, which contains omega-3 fatty acids plus vitamin D, indicates that supplementation is associated with 70% reduced risk of type 1 diabetes in the offspring.

Other data suggests that maternal vitamin D deficiency leads to increased fetal exposure to hormones called *glucocorticoids* such as cortisol (the "stress hormone"), which can affect programming of the fetal brain in regards to regulation of the stress response (HPA axis) and can impact fetal growth *in utero*.

In conclusion, pregnancy is a particularly sensitive window during which long-term health outcomes can be determined. There is ample evidence to justify the prenatal supplementation of specific nutrients, which include folic acid and a multivitamin, an EPA- and DHA-containing omega-3 fatty acid supplement, a multistrain probiotic, and vitamin D.

Visit our blog for article including references.





The Best Solutions to Limit Toxin Accumulation

How to Limit Everyday Toxin Exposure (Part 1)

by Alison Chen, ND

Introduction

Toxins surround us all day, every day. Whether it's your car fumes you inhale, frozen dinner you eat, or the negative thoughts you have at work, toxins are everywhere.

This post is not meant to drive you crazy. It's not meant to turn your life upside down and be paranoid about everything you and your family are exposed to.

In fact, most of the toxins discussed in the article don't harm you unless you are exposed to extremely high levels on a consistent basis, or if your body is unable to process them safely. History has shown us that everything is toxic and it is only the

dose that separates the toxic from the nontoxic.

Merriam Webster's definition of "toxin" is:

"A poisonous substance that is a specific product of the metabolic activities of a living organism and is usually very unstable, notably toxic when introduced into the tissues, and typically capable of inducing antibody formation."

By this definition, many typical toxins (e.g. car fumes, additives, synthetic chemicals) are not poisonous, life-threatening, or created by a living organism.

For simplicity's sake, this article will refer to a "toxin" as a synthetic or nonsynthetic molecule or state of mind that has the potential to negatively affect the body in moderate amounts over the course of a person's life. This may be a vague definition, but it is the accumulation and toxic burden that negatively affect people the most. It's not often one singular exposure.

Our bodies are designed to handle daily toxic exposures: in fact, it can be healthy to challenge your immune system and detoxification pathways. Living in a sterile environment has its dangers, especially with children.

The body needs to maintain a balance between T_h1 and T_h2 :



- T_{h1} is your “cellular immunity” that fights viruses and other intracellular pathogens, eliminates cancerous cells, and stimulates allergic skin reactions.
- T_{h2} drives your “humoral immunity” and upregulates antibody production to fight extracellular organisms.

It has been hypothesized that the decrease of infections (T_{h2}) in Western countries—and, more recently, in developing countries—is at the origin of the increasing incidence of both autoimmune and allergic diseases (T_{h1}). This is called the “hygiene hypothesis.”^[1] It is based upon epidemiological data, particularly migration studies, showing that subjects migrating from a low-incidence to a high-incidence country acquire the immune disorders, especially with first generation.

More simply:

- $T_{h2} > T_{h1}$: If a child grows up in a clean, semsterile environment (low T_{h1}), studies have seen an increase in autoimmune, asthma, and allergic conditions (high T_{h2}).
- $T_{h2} < T_{h1}$: Alternatively, if a person is exposed to many microorganisms, such as bacteria and parasite infections (high T_{h1}), it has been shown to reduce humoral allergic incidences (low T_{h2}).

are required for a healthy immune system. There are, however, natural toxins that could have deleterious effects even at small doses (e.g. food poisoning, heavy metals), but for the most part, it is the accumulation that stresses our bodies and have them working suboptimally.

We take in toxins in a variety of ways, including external and internal processes. My recommendation is not to make all these changes. And if you have already, I would question if your “healthy lifestyle” is more of an obsession. There are dangers in going too far: it’s called orthorexia. Limiting some of these toxic exposures and accumulations one step at a time will bring you closer to optimal health and vitality.

Limiting External Toxin Accumulation

External toxins or extrinsic factors are the most common factors that people think of when it comes to their health. It is anything from the things we consume, absorb, inhale, observe, or hear.

The list in the next page consists of common toxins we are exposed to daily, and excludes major infections such as *E. coli* and *C. difficile*, or side effects of vaccinations and specific medications.



Consumption	Problem and Solution
Processed foods, preservatives, and additives	<p>Give your body a break from heavy chemicals and irritants in many of the foods we eat by:</p> <ul style="list-style-type: none"> Washing your produce with more than just water (learn an easy DIY produce wash recipe). Buying organic, local, and seasonal produce (especially the “Dirty Dozen”). Avoiding detrimental additives such as artificial sweeteners, high-fructose corn syrup, MSG, trans fats, olestra, food dyes, sodium chloride / sulfite / nitrate / nitrite, BHA/BHT/propyl gallate, sulfur dioxide, potassium bromate, and parabens.
Excessive amounts of sugars and soda	<p>Avoid candy, concentrated juices, and soda pops by replacing them with healthier options.</p> <ul style="list-style-type: none"> Raw fruits and veggies (e.g. apples, avocados, oranges, peppers, tomatoes, cucumber, carrots, celery). High-protein snacks to help with satiation and blood-sugar regulation (e.g. nuts, protein shakes, beans, meat). Drink more water and fresh juice.
Poor water quality	<p>Limit bottled water and drink purified, remineralized, and alkaline water to avoid water contaminants but maintain beneficial mineral content.</p> <ul style="list-style-type: none"> Distillation, gravity-fed filtration systems, reverse osmosis, and carbon filter may be potential options depending of your current quality of water.
Heavy metals in seafood	<p>Avoid seafood and fish at the top of the food chain, which contain high levels of mercury.</p> <ul style="list-style-type: none"> Avoid shark, tuna, swordfish, and king mackerel, which are predator fish with higher amounts of mercury. Stick to shrimp, sardines, anchovies, salmon, pollock, catfish, and smaller fish (even in your fish oil). Eat up to 12 ounces (2 average meals) a week of a variety of fish and shellfish that are lower in mercury.
Packaging coated with PFCs and heated plastics	<p>Avoid food wrappers, pizza boxes, microwaveable popcorn, and other PFC (perfluorinated compounds) products, especially when reheating.</p> <ul style="list-style-type: none"> Purchase responsible prepackaged goods without PFC. Transfer microwaveable foods to glass, ceramic, or other safe-to-heat containers. Reheat your food on the stove or in the oven when possible. Try to cook and eat fresh foods whenever possible.
Rancid oils	<p>Oil-containing foods such as nuts, avocados, seeds, fish, and olive oil spoil with different temperatures and environmental factors. To be on the safe side, practice the following tips:</p> <ul style="list-style-type: none"> Keep oils refrigerated, sealed air-tight, and in a dark room (e.g. fridge) Consume within 3 months.
Not cooking or washing foods properly	<p>Especially when it comes to pork, chicken, turkey, fish, and seafood, make sure they are cooked appropriately to limit the number of bacteria and parasite infections. Similarly, little critters can live among leafy greens and produces with a high surface area, such as broccoli.</p> <ul style="list-style-type: none"> Use a meat thermometer to estimate how cooked a thick piece of meat. Soak your produce for 10 minutes in a solution of water, salt, vinegar, and grapefruit seed extract.



Charcoal grilling

Summer often means BBQ, but it also means volatile organic compounds (VOCs). The burnt crust on your steaks and veggies is carcinogenic in large quantities.

- Limit your consumption of charcoal-crispy bits of fatty meats and high-oil vegetables, from the BBQ but also skillet and oven.
- Try eating raw, steamed, or poached foods more often.

Misused Teflon cookware

The Teflon of nonstick pans contains the toxic compound polytetrafluoroethylene (PTFE), which can cause flu-like symptoms when consumed.

- Avoid metal and use plastic or wooden utensils on nonstick Teflon pans.
- Throw out misused Teflon pans that have scratches or pieces of Teflon flaking off.
- Switch to stainless-steel or cast-iron pots and pans.

For references and other great articles, visit NaturopathicCurrents.com

The Best Solutions to Limit Toxin Accumulation:
How to Limit Everyday Toxin Exposure
Part 2 available June 1, 2017, on our blog at
newrootsherbal.com/en/blog



Alison Chen, ND

A Canadian board-certified and licensed Naturopathic Doctor from Toronto, Ontario, she believes invaluable health-care integrates Western science with traditional holistic energetic medicine.

dralisonchen.com

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At the core, meditation 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 [...]



The Top 3 Supplements - Everybody Should Take These

Everyone seems to be taking supplements these days. But with so many supplements out there, how are you to know which ones would be best for you and which ones really are 'essential'? [...]



Arsenic in rice - An Overview

If you or your child is like mine and is sensitive to gluten and dairy - rice will often be the first thing you turn to! But did you know, there is a downside to rice. Rice based foods and drinks can contain a high concentration of inorganic [...]

How to Spend Quality Time with Mom for Mother's Day

by Michelle W. Book

We hope you didn't leave it to the last minute again!

In case you forgot (although we hope you didn't), Mother's Day is right around the corner! If it slipped your mind this year, don't fret—you still have a few more days to plan the perfect day for mom.

Run out of ideas and pressed to think of something she'll love? We've got you covered. Here are some of our favourite Mother's Day gift ideas to treat mom to an extraspecial day.

Sweat it Out Together

We all know the benefits of working out. Exercise can reduce stress and boost your mood, something both you and your mom could use. Luckily, there are some great fitness specials around this time of the year. Sign up for a mother-and-daughter/son yoga class, join an outdoor boot camp, or go outside the box with the latest hula-hoop dance party.

Whether you prefer the tranquility of yoga or a cardio rush, exercising together is a great way to bond with mom and get a workout while you're both at it!

You Can Never Go Wrong with a Delicious Meal

After your workout, head to the kitchen, and cook a healthy and hearty meal for mom. (If you don't know how to cook, she'll just be amused to see you attempt it!)

Create Your Own Spa at Home

It doesn't matter who you are—everybody loves some good, old-fashioned R&R. But you don't need to spend the big bucks to treat mom to a spa day when you can do it right in the comfort of your own home.

First off, light some beeswax candles to help clear the air naturally. To mimic the calming ambience of a spa, steep a teapot of green tea. It'll keep both you and mom hydrated, and it has natural compounds that can reduce oxidative stress and inflammation caused by UV exposure—in other words, it'll help to avoid those premature wrinkles.

Next, make a homemade exfoliating mask using all-natural and organic products that you can easily find at your local CHFA Member health food store, such as honey, sea salt, and sugar. It's a lot easier than you think.

And, of course, it wouldn't be a proper spa day without a manicure/pedicure. Soak your hands and feet in a basin of warm water with scented Epsom salts and essential oils to promote healthy and radiant skin. You can then use any leftover ingredients from your mask to slough off any rough skin. Finish with a nontoxic polish for the nails, and coconut oil to soften and moisturize your skin, and you're done!

Remember that no matter how you choose to celebrate mom, there's one thing that's for sure: she'll be happy just to spend the day with you.



A Guide to Naturally Healthy Gifts for Dads

Father's Day is just around the corner, so now's the time to help dad get his health in check with our guide to naturally healthy gifts.

Organic Vegetable Box Subscription

Organic veggie boxes are all the rage in urban centres around the country. This year, sign up dad for a program with one of your local organic coops and arrange to have delicious fresh produce delivered right to his door. He'll get what's in season, as well as a chance to expand his culinary skills with new and interesting foods. Cooking is also a great way for the two of you to spend some much-needed quality time together!

Organic Meat Delivery Subscription

If you think the organic veggies box will put a smile on dad's face, wait for his reaction if you chose to opt for an organic meat delivery, too. Organic meat share coops are available across the country and ensure that the animals are grass-fed and raised sustainably and humanely. They also use all parts of the animals, so that nothing goes to waste. Order a box, fire up the grill, and share a delicious dinner featuring local steak. There are great health benefits: meat from grass-fed cattle has been shown to be lower in overall fat and higher in some antioxidant nutrients, such

as vitamins A and E, than grain-fed cattle.

Natural Bathroom Bundle

The bathroom is a hotspot for exposure to harmful chemicals such as parabens, siloxanes, and phthalates found in shampoos, body washes, and skin-care products. Take the time to prepare a natural pamper package for dad with a shampoo, body wash, and deodorant that are free of chemicals found in common hygiene products.

Organic Beer

Does your dad love beer? If so, another great gift idea is to grab him a case of organic ale to enjoy while relaxing. Certified organic means that the foods and drinks we consume have been grown and handled according to strict procedures, without persistent, toxic synthetic inputs. It also makes a great marinade: new research shows that marinating a steak in a dark beer for four hours can cut the presence of carcinogens from grilling in half!

Supplements for Men

You can keep dad healthy from the inside out with a gift basket of "man-ssential" nutrients. For instance, omega-3s, men's multivitamins, and probiotics are a just a few that bring many positive health benefits for men.



Spruce Up His Gym Bag

Support his workout by popping in some high-protein snacks for his trip to the gym. There are a variety of high-protein bars now on the market that aren't filled with synthetic ingredients. A mix of nuts and seeds can also provide some excellent protein, as well as essential antioxidant nutrients like vitamin E for tissue repair and good fats.

Facial Care

Whether he's clean-shaven or on the beard trend, get your dad a premium, organic facial- or beard-care product. Whether hydrating and soothing razor-burned skin or styling that slick moustache, going for a natural, toxin-free product will reduce his skin's exposure to conventional, synthetic products, such as BHA and BHT, which are known endocrine disruptors.

See our full article on our blog at newrootsherbal.com/en/blog or on CHFA's blog at chfa.ca/en/blog



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.

New at New Roots Herbal

Cranberry Seed Oil

From the Rugged Canadian Shield
by Gordon Raza, BSc

Our certified organic **CranberrySeed Oil** is cold-pressed from the seeds of the robust perennial species of cranberry, *Vaccinium macrocarpon*. This hardy plant thrives in the rugged, sandy soil of northeastern North America. Its resilient berries have a 16-month maturation cycle, with seeds boasting an 85% fatty acid profile rich in omega-3, -6, and -9. Cranberries and their seeds share similarities with many therapeutic botanicals. Plants that thrive in harsh conditions develop compounds essential for survival that can in turn prove to be beneficial for your health.

The ideal 1:1 ratio of omega-3 and -6 complemented with omega-9 fatty acids found in **CranberrySeed Oil** penetrate and protect skin cell membranes. This process strengthens the epidermal lipid barrier to retain moisture, which translates into succulent, younger-looking skin.

These polyunsaturated fatty acids also strengthen collagen and elastin fibres, the connective tissues that make skin firm and youthful-looking. When skin stays firm and retains elasticity, it not only looks great, but it's also more resistant to infection and exposure to harmful environmental elements.

New Roots Herbal's **CranberrySeed Oil** is also rich in proanthocyanidins. These powerful antioxidants neutralize the activity of free radicals, the destructive force that drives premature aging of the skin.

New Roots Herbal's **CranberrySeed Oil** is unrefined with a subtle, pleasant aroma that's a perfect fit for skin-care application. It penetrates deep within the skin for great therapeutic results, so you can face the day looking and feeling terrific.



Take a Walk on the Wilder Side

by Gordon Raza, BSc

WildOregano C93 has earned its niche with Canadian consumers among premium oregano oils. Our formula is simple and effective; we blend steam-distilled, potency-validated oregano oil from the rare, mountain-grown oregano species *Origanum minutiflorum* with certified organic extra-virgin olive oil.

The rationale for the percentage of olive oil in our formula has always been to have a smoother-tasting product that's easy on the palate. If it's too harsh, we've learned it will

likely lose its premium shelf space in your medicine cabinet. This being said, just as people develop and nurture a tolerance for more robust flavours, the demand for a stronger **WildOregano C93** has emerged.

WildOregano C93 Extra Strong features a 30% concentration of our carvacrol-rich oregano oil blended with certified organic extra-virgin olive oil. It's a great therapeutic option for those that prefer more potency and full-bodied flavour.



Wild Omega 3 with a Lemon Twist...

We're all aware of the beneficial role that omega-3 fatty acid-rich seafood can play in virtually every aspect of our health and wellbeing. Did you ever wonder how lemons became "de rigueur" as a flavour enhancer with seafood?

The answer involves a little science and a long culinary history. Omega-3 fatty acids in fish can release ammonia-like compounds called amines, which cause that fishy smell and can result in the occasional unpleasant burp. Citric acid binds to and neutralizes these odour-causing compounds. Lemons have been used for centuries to preserve seafood freshness and scent; it also happens to be a great culinary pairing.

Canada's Food Guide recommends a minimum of two servings of omega-rich fish, such as salmon, per week. Let's set aside good intentions; when is the last time you had a couple of consecutive weeks with at least two servings of fish?

With the advent of omega-rich fish oil in softgel form, one dose can deliver the EPA and DHA equivalent of a 100 g (4-ounce) portion of salmon.

New Roots Herbal's high-potency **WildOmega 3 EPA 660 mg / DHA 330 mg** softgels are now available with the great taste of naturally sourced lemon oil. Why not consider them your daily serving of fish with a lemon twist?



New Products Available in May

Nutrition for Your Mood

by Gordon Raza, BSc

The research for marine-sourced omega-3 fatty acids has unveiled benefits for virtually every aspect of human health. The current millennium has fortunately led to extensive research for the specific benefits of the dominant omega-3 fatty acids, eicosapentaenoic (EPA) and docosahexaenoic (DHA).

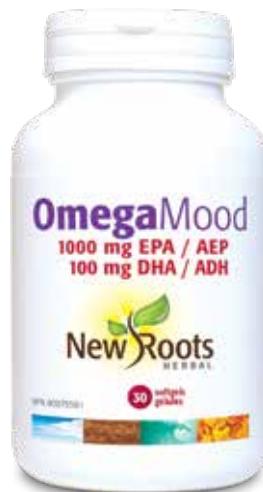
DHA has a critical role for brain and nervous-system genesis and development during pregnancy and early childhood. EPA demands become more pronounced during grade school years; studies demonstrate that EPA supplementation can help with behaviour, attention span, academic performance, and general demeanour. DHA serves more of a structural role in brain composition, whereas EPA exerts a hormonal influence throughout the body, with benefits to mental health in particular.

EPA benefits health as a mediator for cellular inflammation. Within the brain, inflammation can interfere with neurotransmitters such as dopamine and serotonin that affect mood in a positive way. A dynamic supply of this critical compound is essential as the body does not produce it. Furthermore, EPA is also vulnerable to oxidative stress, which depletes its concentration within the brain and central nervous system.

The therapeutic role of EPA supplementation is stressed by Mayo Clinic psychiatrist Dr. Daniel Hull-Flavin, with a correlation between symptoms of depression and low levels of EPA. He acknowledges the beneficial role EPA can play, even for those taking prescribed medication for mental health concerns.

New Roots Herbal's **OmegaMood** delivers a potency-validated, therapeutic dose of 1000 mg of EPA

per softgel, recommended for a broad scope of health benefits with an emphasis on cognitive and mood disorders. Populating the brain and central nervous system with EPA in highly concentrated supplemental form could prove to be a crucial, side effect-free intervention for your ongoing mental health and happiness.



Turn Your Plateaus to Peaks

Whether it's an endurance event, burning some midnight oil setting up a PowerPoint presentation, or cramming for exams, we've all "hit a wall" at least once in our lives.

Before you pour another cup of coffee or pop the top of an energy drink, consider **MCTEnergy** in convenient softgel form. They contain a 99% concentration of two energy-laden medium-chain triglycerides, caprylic acid (C8) and capric acid (C10). These fatty acids are easily absorbed within

the intestines, then metabolized for energy use up to eight times faster than carbohydrates. They are not stored as fat, and do not require the body's limited supply of L-carnitine for transport into cells to fuel cellular respiration. Furthermore they don't require bile salts and pancreatic enzymes for digestion.

MCTEnergy is a hybrid fuel for body and mind that will help you soar beyond your personal plateaus to reach new peaks, however high they may be.



Ashwagandha

For body and mind

by Gordon Raza, BSc

New Roots Herbal is excited to introduce **Ashwagandha Extract** to our selection of products suited for navigating the dynamic demands modern life exerts on us. Ashwagandha has long been featured in our stress-management formula **ChillPills**; consumer demand for this specific botanical made this product launch a natural selection.

Ashwagandha has a therapeutic history spanning millennia of use as an adaptogen in Ayurvedic medicine. The roots of this hardy perennial contain naturally occurring botanical steroids called withanolides. These biologically active compounds are credited for the many health benefits of ashwagandha.

Recognized as an adaptogen, ashwagandha has the capacity to energize or calm the body when faced with stressful situations. Its powerful antioxidant action

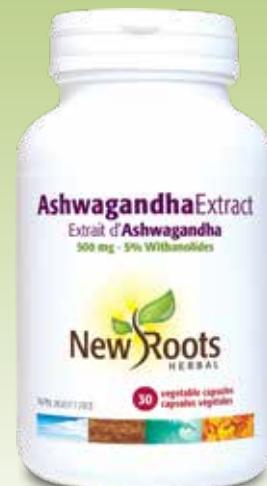
further shields the brain and central nervous system from the debilitating effects of chronic stress. Improved cognitive function and enhanced memory are also among its many benefits.

Clinical trials have demonstrated ashwagandha root extract to be effective for improved cardiorespiratory stamina, endurance, and exercise recovery. Even though these trials were performed with athletes, ashwagandha could even help the average person navigate a flight of steps without being caught short of breath.

Human trials employing ashwagandha have also proven to drastically reduce cortisol levels. Cortisol is produced by the adrenal glands; when released into the bloodstream, it triggers the “fight-or-flight” response. Chronic elevated levels of cortisol can lead to belly-

fat accumulation, compromised immune performance, and even suppression of bone formation.

New Roots Herbal's **Ashwagandha Extract** comes in 500 mg capsules and is potency-validated to contain a minimum of 5% withanolides. It could deliver that “natural nudge” you're seeking to enjoy life a little more.



Rethinking PARENTHOOD

While this season of celebrating Mother's Day and Father's Day can be a very special time to express and receive gratitude and love, for some, it can be a mixed emotional bag, fraught with a multitude of less-than-joyful emotions.

Moments and memories of the patter of little feet, scrambling to make and deliver breakfast in bed to mom or dad, are priceless for those who have the privilege of enjoying them. However, for anyone who has longed to become a parent, but has struggled with fertility challenges, lack of relationship, or whose dysfunctional family was never represented by the Hallmark commercials, these holidays can be a source of tremendous sadness, uncertainty, and loneliness.

Such challenges of living are indeed realities, but they do not need to leave us feeling helpless or in a place of despair. In fact, when we choose to be sensitive to the diversity of each other's lives in a nonassumptive way, we can take

opportunities of celebration to open our hearts even bigger to increase the possibilities of joy and connection for everyone.

Instead of myopically focusing on our own little world—whether it is full of joy or is heavy with grief—we can shift our inner lens in such a way as to acknowledge the truth of our own and each other's experiences, and simply make the conscious decision to be inclusive. When our own circle is filled with love, we can share this abundance with others. Similarly, when our cup feels empty, we can allow ourselves to receive the beauty that overflows around us in our community.

Most importantly, when we choose to be "real" and compassionate, no one needs to feel alone or left behind.

I like to think of motherhood and fatherhood as being all about service. This service may or may not include the parenting of human children, which is of course the most commonly understood form we are familiar with. As beings on this planet during whatever tenure we have here, every one of us has the opportunity to care for others in a loving way—and hopefully also to be similarly cared for by others as well.

Why not start a new tradition around Mother's Day and Father's Day by increasing our sensitivity to those around us and finding ways to enjoy celebrating the loving service of each other? The details of this can look many ways, but by simply tweaking our mindset with a more inclusive perspective, everyone can know that they have a place at the table to celebrate and have something beautiful to share.



**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*.

Organic v. Nonorganic Food

What Are You Getting for Your Organic Dollar?

by Tanmaya Krupanszky



This article is based on thoughts drawn from a keynote address given by Dr. Carlo Leifert (pictured above) at the 2017 Canadian Organic Growers Toronto Organic Consumer Conference called "Organic: Inspiring Change." Dr. Leifert coordinated a team of international experts, involving 31 research and university institutes, to study the nutrient quality of organic foods v. nonorganic. It revealed that nutrient levels were higher in organic foods and in some instances, up to 60% higher in several key antioxidants than conventionally grown crops. A link to the published study can be found at the end of the article.

Nutritional differences are one of the key reasons why consumers purchase organically grown food. Pesticide reduction, avoidance of GMOs, and environmental concerns are also important factors, but recent studies have brought organic food's nutrient quality to the fore. How important are organic growing methods to food's nutritional quality? Is there a nutritional difference between organic and nonorganic food? It is a question that generates great controversy and hype in the media. Though much is not known about exactly how nutrients function and how they benefit us, consumers, mindful of paying a premium for an organic product, are right to be hopeful that organic is better.

Dr. Carlo Leifert, a professor of ecological agriculture at Newcastle

University, took on the task of coordinating a major EU-funded study that carried out a thorough meta-analysis of data on the nutritional composition of organic food. The study was in response to widely publicized research by Britain's Food Standards Agency that fell short of collecting all the available data. As headlines proclaimed "Organic Food Not Healthier," Carlo and his team spent two years securing data from that study, and then included additional studies that had been omitted. They analyzed the work of 343 peer-reviewed studies, compared to only 46 used in the previous study.

The team looked at a wide variety of different types of studies that compared organic and nonorganic. They looked at studies that compared foods that consumers

purchase at the store. They looked at the crops and livestock produced on nonorganic and organic farms. They looked at work done in controlled field experiments that removed various environmental influences: this can include how the food is grown, where it is grown, and what type of soil it is grown in. You can see just how challenging it is to compare the diverse ways of producing food, with so many variables at play. For example, for livestock, factors such as what the animals ate, the breeds chosen, and so on, all play a role.

In synthesizing all the data for these studies using weighted analysis (a method that increases the validity and usefulness of the results), it was found that all the studies showed the same trends. These were lower pesticide residue, higher antioxidant

activity, and less cadmium residue in organic crops.

The trend overall was an average of almost 20% higher antioxidant activity in organic crops. Antioxidants are the compounds that make plants more resilient and are important for our own immune systems. Individual antioxidant compounds varied in the different types of plants, but the results support the health-promoting benefits of organic. Higher levels of antioxidants have been linked with reduced risk of some chronic and neurodegenerative diseases, including some cancers.

What is one of the factors that accounts for the difference in antioxidants? In lengthy field trials at Naferton, it was shown to be the choice of manure, not conventional, fertilization that increased the antioxidant quality in the crops. Conventional nitrogen fertilizer served to switch off the antioxidant-producing qualities in the plants.

The use of conventional fertilizers, it seems, also accounts for higher cadmium and nickel concentrations in nonorganic crops. Cadmium is a natural contaminant of some phosphorus deposits. In this study, commercial phosphorus fertilizers

elevated levels of cadmium in crops, as compared to those from manured organic crops. Cadmium is particularly concerning, because it accumulates in the kidney and liver, and there are no safe levels of this toxic contaminant. More studies are required to pinpoint the actual concentration differences between organic and nonorganic, but the need is there, as existing studies indicate it to be 10 to 100 times higher in conventionally produced foods.

Studies of organic milk revealed unequivocal evidence for higher levels of omega-3 fatty acids, conjugated linoleic acids (CLA), vitamin E, and others, all important requirements for health. Diabetes, heart disease, and nervous tissue development are all impacted by lack of sufficient omega-3 fatty acids.

While there are not a lot of studies for organic meat, statistically significant evidence shows, for example, that organic meat contains more omega-3 fatty acids and vitamin E, though less iodine, which is added as a mineral to conventional feed. Iodine is important for brain development and thyroid function. Iodine

supplementation is necessary in our nutrient-deficient world, but it is a complex balancing act between having too much and too little in your system. Worldwide, there is concern about too much iodine getting into the food chain, and the EU wants supplementation in livestock feed to be reduced.

Much of the reason for a higher concentration of omega-3 fatty acids is the feeding of forages like grass, clover, silage, and hay to livestock. Grass-fed meats in general are higher in omega-3 fatty acids both in conventional and organic, though organic is slightly higher. However, in grain-fed v. forage-fed beef and lamb, there are big differences in omega-3 fatty acids—especially in the long-chain fatty acids so lacking in our diets. Fresh forage is the key for these.

There is no doubt this study offers compelling evidence of statistically significant benefits from organic management on such nutrients as omega-3 fatty acids, antioxidants, and others, but is less clear on how these differences impact on human health. To date, there have been few studies done on dietary interventions with organic food. The variables to contend with can be



daunting, and the timeline for these types of studies long and expensive; however, there has been some promising research.

As early as the 1990's, Danish researchers concluded that sperm were both more numerous and more active in men working within the organic sector. Subsequent US studies have also linked low sperm count with pesticide use. Based on this finding, the Danish government decided to remove endocrine-disruptive pesticides.

Another more recent study in Sweden showed the risk of allergy and eczema in children was less for those whose families followed a biodynamic lifestyle which also involves eating organic food. This is an example of the complexity of dietary intervention studies. Many factors could be involved that also account for wellbeing in a biodynamic lifestyle, including no antibiotic use, longer breast feeding, and no MMR (mumps, measles, rubella) vaccines, for example. But there are promising linkages in the studies and the meta-analysis. It has been shown that high omega-3 intake produces less eczema in mice.

Even though the problems with a dietary intervention study are complex and controlling factors very difficult to manage, they could yield rewarding results. A French study showed that those eating organic food were less obese and overweight. The study was so large that it could adjust the results for lifestyle, even though organic consumers tend to have better diets and are perhaps more active. Yet, still the results confirmed organic had a positive impact on weight. No doubt with more studies like this, public health policies would shift.

Reduced levels of non-Hodgkin's lymphoma were also confirmed when eating an organic diet in a 7-year study. A Norwegian study

with pregnant mothers showed a reduction in preeclampsia and hypospadias in baby boys when mothers ate a diet high in organic vegetables and dairy. And the list goes on.

The fact is that much can be done to improve the quality of our food, and the evidence is mounting. The conventional agriculture system has grown dependent on inputs that are detrimental to plants, the environment, and our health. In addition, the system as it exists now is unsustainable in its use of natural resources and the damage to existing resources.

Convincing a sceptical public and vested interests of the need to change how we grow food will require further studies to examine the complete nutritional potential on health of organically grown food. It will require commitment, time, and resources. In addition, research studies that are required for the approval of new agricultural methods and products that could compromise the nutritional quality

of food should also be examined with rigour and health in mind.

Organic attracts the attention of people interested in their own health and that of the planet. Whether it be elevated levels of health-promoting substances such as omega-3 fatty acids, or lower risk of pesticides and GMOs, or a more humane approach to livestock management, organic production systems are raising the bar for agriculture in general.

Who will make these decisions for us, and who will set the priorities are the crucial questions now. Thorough studies like this meta-analysis will encourage more support for the organic model, and we in turn can encourage more growers to grow organically and consumers to appreciate the value of their organic dollar.

The complete study by Dr. Leifert's team can be found in *The British Journal of Nutrition*. Visit newrootsherbal.com/en/blog for the link to the study.





Brush Up Your Look with Hair & Scalp

by Gordon Raza, BSc

Spring is here, and it's time to enjoy a little more fresh air. Speaking of which, it's also time to shed the tuques, hoodies, and hats; then let your hair down and allow your scalp to breathe a little. Truth is, per the National Institute of Health, hair grows about 10% faster in the summer months. Humid summer air also favours hair with a fuller look. With this in mind, the time is ripe to feed your follicles with nutrients that will further enhance your look.

Enter **Hair&Scalp**: a unique formula that creates favourable conditions for the prevention of hair loss and thinning. Our synergistic formula contains 19 scalp-specific nutrients, which is up to twice as many ingredients as our competition. **Hair&Scalp** benefits the hormonal, nerve, microcirculatory, vitamin, and mineral needs critical for the ongoing health of both hair and scalp.

Hair&Scalp boasts a battery of ingredients that target the leading cause of male pattern baldness: the conversion of testosterone to dihydrotestosterone (DHT). Higher levels of DHT correlate with the miniaturization of hair follicles and their loss of productivity. Potent standardized extracts of saw palmetto, flax seed, grape seed, green tea, and stinging nettle, blended in a matrix of pumpkin

seed oil, work in unison to block action of the enzyme that drives DHT production. This protects hair follicles to preserve your hairline. L-Taurine works an additional pathway, as it blocks action of the TGF- β protein that causes inflammation and miniaturization of hair follicles. It's also beneficial for post-menopausal women left prone to thinning hair due to lower estrogen levels. **Hair&Scalp** can also address post pregnancy related thinning of hair, which is due to more hair follicles being in their dormant phase during this period.

We've included B-complex vitamins critical for keratin production—the pivotal protein in hair, skin, and nails. These vitamins also support sensory nerves and microcirculation, essential for productive hair follicles, and increase the bioavailability of the entire formula. Beneficial fatty acids, sourced from wild fish and evening primrose oils, favour microcirculation and hair growth, along with vitamin D₃.

Our formula also contains potent apple extract, standardized to 5% proanthocyanidins B2, the marker compound clinically proven to promote hair growth. Clinical trials have shown proanthocyanidins B2 (also called procyanidin B2) to stimulate both hair density and

thickness. It also interferes with a specific enzyme to prolong the anogen (growth) phase and shorten the telogen (dormant) phase of the hair-growth cycle. This results in more hair follicles in their active stage.

Silica-rich horsetail extract will invigorate hair follicles and strengthen individual strands for increased resistance to breakage and split ends, as well as to increase hair volume.

Great-looking, healthy hair starts from within. Let **Hair&Scalp** be the fuel that sparks your healthy, more youthful feel and look this spring and summer.





Three Simple Tricks for Beautiful Legs This Summer!

Summer's swelter season brings back dresses, skirts, shorts—all those clothes that we love to wear, but that automatically unveil our legs! For some, the idea of stripping this part of the body is out of the question, because they are not "beach-ready." I admit, I also prefer my legs to be smooth and slightly tanned (veins don't count as tanning). That's why, in this article, I give you my favourite tricks for perfect legs, all summer long!

Exfoliation

During the winter, our legs become more easily dull and subject to intense desquamation because of temperature variations. However, we still have time to get rid of dead skin by making room for leg exfoliation in our beauty routine.

Ideally, you'll want to exfoliate directly on dry skin before showering—but how?

Take your exfoliant (sea-salt- or brown-sugar-based), and massage gently in circular motions on your whole body, insisting on the dryer areas like knees and elbows.

Rinse everything under the shower.

Apply your moisturizer.

Hydrating

You must absolutely take the time to properly hydrate your body at least once a day. Personally, for an optimal result on my legs, I prefer to use a vegetable oil as a moisturizer when getting out of the shower. I make small mixtures per my specific needs.

Here is my favourite toning oil recipe:

Ingredients

- Argan oil (4–5 pump strokes)
- 1 drop of grapefruit essential oil (helps with cellulite and water retention)
- 1 drop of sandalwood essential oil (antiage, helps irritated skin)
- 1 drop of juniper berry essential oil (anti-inflammatory, painkiller)

Directions

Mix the ingredients together in the palm of your hand, and that's it!

Self-Tanning Lotions

Obviously, many of you will choose to use a self-tanning lotion. However, you should be aware that

most products are made from ingredients that are harmful to your health and the environment.

In the field of natural cosmetics, it's difficult to find that kind of product, and those

I have tried so far have fallen short of expectations.

On the other hand, to give an instant "good-looking" effect, you can apply this little home mix just before going out!

Ingredients

- $\frac{1}{2}$ cup of coconut oil
- $\frac{1}{2}$ cup of cocoa or shea butter
- $\frac{1}{4}$ cup of cocoa powder

Directions

Melt the cocoa butter and coconut oil. Then add the cocoa powder to your mixture. If you can find some, add a small pinch of mica to make your legs shine in the sun! Apply in small doses using your hands or a glove specially designed for the application of a regular self-tanning lotion.

Shirley Séguin



Founder and author of the mabeautebio.com blog, she is an expert in natural cosmetics and a professional makeup artist.

Culinary Corner



Oat Cakes

by Sonia Lamoureux

Ingredients

- $\frac{1}{2}$ cup of date purée
- $\frac{1}{2}$ cup unsweetened apple sauce
- 1 egg
- $\frac{1}{4}$ cup liquid coconut oil (lukewarm)
- 1 tsp. vanilla extract
- 1 tsp. baking soda
- 1 tsp. baking powder
- 2 tsp. New Roots Herbal's Stevia Sugar, or a pinch of Stevia White Powder Concentrate or Smooth Stevia
- 1 cup gluten-free quick oatmeal
- 1 cup gluten-free flour (I used $\frac{1}{4}$ cup brown rice flour, $\frac{1}{4}$ cup quinoa flour, and $\frac{1}{2}$ cup almond flour)
- A pinch of salt

Instructions

Preheat the oven to 350 °F (180 °C).

In a bowl, mix the dates, the apple sauce, the egg, the oil, and the vanilla. Add the dry ingredients and mix well. You can also add $\frac{1}{4}$ cup raisins or dark chocolate chips.

Place dough with a spoon on a baking sheet. Put in the oven for 15 to 17 minutes.

Date Purée

Cover with boiling or very hot water 100 g (about $\frac{1}{2}$ cup) of dates. Let stand for a few minutes, drain, and set the liquid aside. Purée with a hand blender. Add leftover liquid if necessary. The purée should remain relatively thick, but smooth.

Acai Smoothie Bowl



Ingredients

- 1 frozen acai package
- 1 frozen banana
- $\frac{1}{2}$ cup frozen berries of choice
- $\frac{1}{3}$ – $\frac{1}{2}$ cup almond milk
- Optional: $\frac{1}{2}$ cup diced frozen mango

Instructions

Blend all ingredients together in a high-speed blender until smooth. Garnish with fruit / coconut / nuts / granola of your choice, and a drizzle of nut butter.

Eat immediately.

Serves 1–2.

Heather Pace



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

sweetlyraw.com

Momentum Cold Brew

by Gordon Raza, BSc

For this recipe, I recommend the most common ratio of water to coffee at 8:1. You'll definitely tinker with the potency to suit your taste buds.

Ingredients

- $\frac{1}{2}$ cup coarsely ground dark roast
- 4 cups cold spring water (approximately 1 litre)
- 4 tbsp. of MCT Energy (100 calories per tbsp.)
- Almond milk to taste
- Pinch of Smooth Stevia to taste
- A dusting of finely ground cinnamon

Instructions

A high-quality French press works great and retains more of the flavour-rich oils from the bean than brewing and filtering with paper filters. Twenty-four hours of refrigerated steeping is optimal.

Plunge and let stand for an hour before pouring slowly into a Mason jar—this makes for a less cloudy brew—then add remaining ingredients, cover, and shake.

Blend 50/50 with unsweetened almond milk, which contains approximately 60 calories per cup.

Stores well refrigerated for a week.



Grilled Veggie Tostada

It's finally here: the time of year when your oven can hibernate! Soups are passé... and your kitchen floor stays just a little bit cleaner.

Yup! It's BBQ season!

This meal is great for the whole family and can easily become another DIY meal (see the recipe for tips).

What are you waiting for? Fire up the BBQ!



Ingredients

- 2 corn on the cobs, husk dipped in water
- 2 zucchinis, quartered lengthwise
- 2 peppers, seeded and halved
- 1 can low-sodium black beans, drained and rinsed
- 8 corn tostadas

Toppings

- $\frac{1}{2}$ cup fresh cilantro, chopped
- 1 avocado, diced
- $\frac{1}{2}$ cup fresh salsa



Sharisse Dalby, RNC

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

sharissedalby.com

Instructions

Heat your BBQ to 450 °F (230 °C).

Place the corn on the cob, zucchini, and pepper halves directly on the BBQ. Turn frequently. Cook 7–10 minutes, or until you begin getting grill marks on each side and the pepper begins to soften. Remove from grill.

Remove husk from corn, and use knife to remove corn from the cobs. Chop up the zucchinis and peppers, and combine with corn and black beans.

Serve on tostadas and top with your favourite (healthy!) toppings.

Serves 4

Make it DIY: Instead of combining the grilled veggies, keep all vegetables, proteins, and toppings separate, and let everyone personalize their own.

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Blog Preview

We love that you turn to us for the latest natural health news and trends. That's why we couldn't be happier to announce that your favourite magazine is now available online. From fresh breakthroughs to health tips to delicious recipes—and so much more—you'll find it all in a bright, vibrant, and searchable format.

Being your best just got better!

Visit our page in June for more health tips, recipes, and so much more!



Sweet almond oil comes from the seed—it's not a nut!—of the almond tree with the Latin names *Prunus dulcis* or *Prunus amygdalus*. The fruit of the almond tree is a drupe that has an outer hull and a hard shell, with the seed—the edible part—inside.

In this article by Dr. Anne Hussain, ND, you will learn more on its internal and external usage and benefits.



What's more enjoyable than eating a good homemade salad on a beautiful summer day? We offer you ideas of homemade and refreshing salad dressings. Visit our Culinary Corner for fresh takes on summer salads with innovative dressings and vinaigrettes that taste great and deliver health benefits. We believe in "salads without borders" that challenge conventional ways we view this venerable side dish that can elevate them to main dish status.

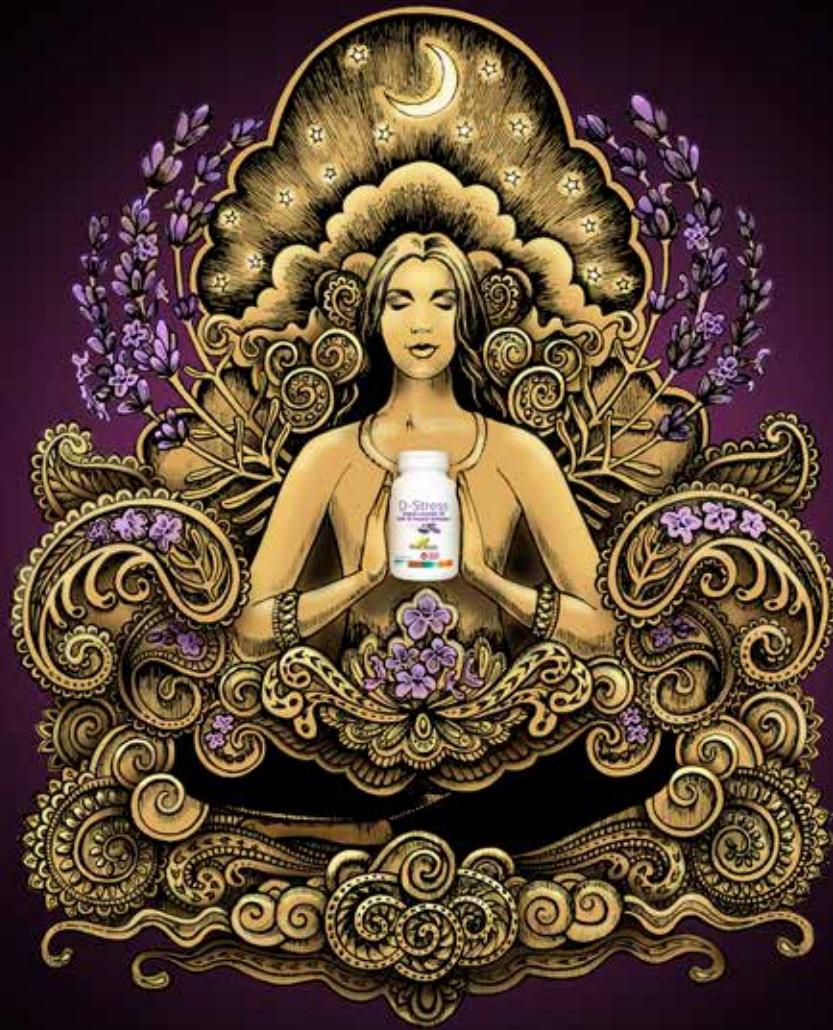


You want more on pregnancy? We will feature an article on coenzyme Q₁₀ and its impact on female fertility.

Fertility challenges associated with maternal aging are an ever-increasing concern for those wanting to conceive. It is quite commonly known that female egg quality and quantity both diminish as a woman increases in age; it is also important to be aware that...

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New Roots
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