Flouish

HEALTHY BODY, MIND, AND SPIRIT

How to Keep Your Family Healthy During Cold and Flu Season

Naturopathic Perspectives

Relationship Advice

Straight Talk on Probiolics

Health Benefits and the Science Behind Them

Vol. 4, No. 4 · Free Autumn 202<mark>0</mark>

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Editor's Letter



Does it seem like someone pressed the fastforward button on summer? If so, I suggest pressing "Pause" and taking some time for our latest edition of *Flourish*, filled with suggestions to help keep our bodies and minds at their best as we head into fall and winter.

We kick off with suggestions from psychologist Theresa Nicassio to successfully navigate the

anticipated second wave of COVID-19. Naturopath Mallory Murray expands on ways to keep your family healthy during cold-and-flu season, while naturopath Guillaume Landry highlights the results of a recent study involving vitamin D and COVID-19 patients.

Probiotics take centre stage with Dr. Sarah Zadek exploring the role of gut health for physical and mental wellbeing, along with excerpts of an interview with Dr. Philip Rouchotas discussing their vast benefits and providing advice on choosing one.

We delve into the science of natural eggshell membrane (NEM®) for relief from nagging joint pain, then explore how a man's prostate issues can impact relationships with resident supplement specialist Gordon Raza. Advice on dealing with seasonal affective disorder is next up with Dr. Ashley Kowalski, while licensed family-and-couples therapist Hye Kam shares great tips for successful communication.

A review of the clinical evidence for elderberry by naturopaths Drs. Heidi Fritz and Philip Rouchotas round out our current issue, along with some great recipes from our culinary contributors.

Wishing you all great health and a safe and happy holiday season!

Sophia Golanowski, BCom, MBA Editor-in-Chief

Flourish

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Tips to Ride the Second Wave of COVID-19

by Theresa Nicassio, PhD, Psychologist

"The most powerful weapon against stress is our ability to choose one thought over another."

-William James

None of us ever imagined experiencing in our lifetime the upside-down world we are now living in. Navigating the ever-changing learning situations for our kids, shared time with family and friends, and even reinventing ways to celebrate the holidays can feel overwhelming at times, especially amidst frequent reports of spikes in the curve and the widespread fear that is permeating the globe.

This is a time when exercising our creativity is crucial. While change is inherently difficult, it also opens new possibilities, as long as we are able to manage our stress and stay focused on leveraging aspects of our world that we do have control of instead of feeling debilitated by the tsunami of fear and uncertainty about the things we cannot control. Shifting perspective is good medicine.

Often, the simplest things can make the biggest difference. Here are a few tips to help you ride the wave of this storm.

Values: What's Most Important to You

I have found that a useful starting point when confronting any major life stressor is to first clarify one's values. This is no time for multitasking. Instead, setting priorities can be a useful step in offloading a significant amount of stress.

If you are a parent, you can not only role-model this process, but you can also teach this valuable life skill to your kids. As big and scattered as our adult world has become these past couple of decades, with globalization and superhigh-speed everything, the world of our children has become even more explosive and expansive. This is an incredible window of opportunity to introduce our future generation to savouring the simple pleasures in life such as cooking healthy food together, enjoying time in the garden and in nature, and learning new ways to communicate and have fun with each other.

Reach Out to Your Community

Even with physical distancing measures in place, community connection is now more important than ever. Do not be afraid to reach out to your neighbours for help and resources. If your in-person circle is limited, you can access online community connections. Amongst countless others, the Buy Nothing Project, Zero Waste Communities, and Organic Gardening groups are popping up everywhere, supporting individuals and groups in practical ways, helping members with health, food security, and financial insecurity challenges.

Remember that we are all in this together and you do not need to be alone during the second wave (or any other wave, for that matter).

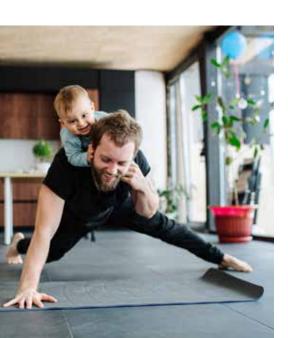


Eat Unpackaged Whole Food

While health-and-wellness experts have been touting for a long time the benefits of eating unprocessed whole foods that are rich in phytonutrients, the messages about doing so now to support our immunity during this unique time have become even more emphatic.

There is a big problem with these messages, though: Unfortunately, many people do not feel confident or comfortable preparing meals from scratch. It is mind-blowing to discover how few young people (and many adults) know how to prepare even the most basic of recipes.

The great news is that it does not need to be difficult to learn to cook healthy meals. The key is to start with one recipe that looks delicious to you. Get the ingredients and give it a go. If you like it, keep making it for a while until it becomes second nature for you. Once you have mastered that recipe, repeat with a second dish. You won't become a virtuoso chef overnight, but you will be surprised and delighted by how fast your repertoire of new, healthy recipes will grow—and how much money you will also save by cooking more of your own food. This is a serious win-win opportunity.



Move Your Body

Not many things can help combat stress and calm the mind more than physical movement. There is something about getting your blood flow nourishing the contents of your wondrous cranium and tissues throughout your body that is a game-changer.

As we move into the shorter days of fall, however, it can sometimes be hard to follow through with our best intentions. Because of this, go easy on yourself. Avoid "shoulds" and other judgements about what you think the movement "ought" to look like. Instead, find forms of movement that you love to do even when the weather is not at its best or that you can easily do indoors. Dance in your living room, stretch or do yoga in your bed, jump rope on your sidewalk, or go for a walk alone or with a friend. Whatever you do, choose movement that brings you joy.

Indulge More and Do Less

In contrast to the familiar pressure to always do more, which is often at the expense of self-caring and pleasurable activities, experiment with doing the opposite! My beloved friend and colleague Dr. Robert Wadeson would half-jokingly talk about the art and wisdom of "being lazy." During this time of a collective pause, it is a fabulous opportunity to learn the skill of slowing life down and discovering the many gifts of mindful living.

Final Thoughts

One of the cognitive biases we have seen rise with this pandemic is the tendency to focus on our fears about things we cannot control. If you can resist this temptation and shift your focus more on the possibilities for transformation that are available, you will find a lot more ease and grace while moving through this second wave.



Theresa Nicassio, PhD, Psychologist

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TheresaNicassio.com

How to Keep Your Family Healthy During Cold and Flu Season

Naturopathic Perspectives

by Mallory Murray, ND

As the temperatures drop and the days get shorter, viruses tend to start making their way around as well. This is especially true if you have kids in daycare or school, or if you work in an office surrounded by coworkers. The viruses that cause colds and the flu can be spread easily by coughing and sneezing.

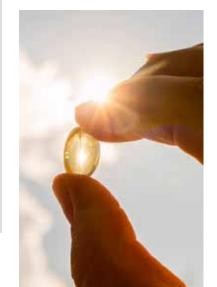
While there is no way to guarantee you won't get sick this winter, there are things you can do to reduce the severity of your sickness. Wash your hands well and often to help minimize the spread of germs. If you are exposed to germs, which you inevitably will be at some point, a healthy immune system will ensure that your body is not completely overwhelmed and can fight off the infection. Keeping your immune system in excellent shape is the best way to prevent infections from knocking you down this year and keeping you in bed for days or even weeks.

Here are a few easy ways to help your immune system get the support that it needs during the cold-and-flu season.

Stock Up on Your Vitamins

Vitamins C and D and zinc are three of the most important nutrients for our immune system to function optimally. Insufficient vitamin intake can cause you to become deficient and will lower your body's defense against toxins and invading pathogens.

Vitamin C is a micronutrient that reacts powerfully in our body. One of the roles that vitamin C plays in the body is to support the epithelial barrier, the outer layer of our skin and organs, to prevent pathogens from invading the body. It accumulates in our phagocytic cells, which are the cells that protect the body by eating and essentially destroying foreign molecules that are in our body. Vitamin C helps our phagocytic cells destroy invading pathogens more efficiently so that the microbes are killed and removed quicker. Vitamin C deficiency has been correlated with a weaker immune system that is more susceptible to infections and disease. Supplementing with vitamin C for optimal levels in the body can prophylactically prevent infection, and if infection or disease does occur, higher doses of vitamin C can help speed up the recovery process.



The vitamin D receptor is found on our immune cells in our body. Deficiency in vitamin D has been shown to make the body more susceptible to infection. There have been studies showing that people with vitamin D deficiency are more likely to self-report suffering from an upper respiratory effect, and miss more days of work during the recovery process. This vitamin inhibits B-cell proliferation and differentiation, and plays a role in T-cell maturation. B and T cells make up our adaptive immune response and are in charge of making antibodies to fight off infection. Having the support of vitamin D allows our adaptive immune response to be even stronger and function more efficiently.

Zinc plays an important role in the optimal development and function of neutrophils and natural T killer cells, both of which fight off viruses. Zinc is also an antioxidant and helps support healthy cell membranes. When you become deficient in zinc, your immune system defenses are down and your body is more susceptible to viruses and illness.

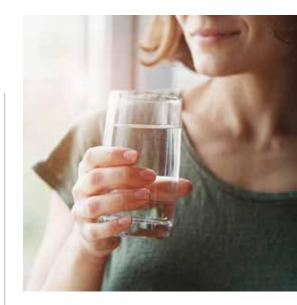
While vitamins C and D and zinc aren't the only ones that play a role in immune support, they are some of the most effective. Be sure you are getting adequate levels of these nutrients, and if you feel like you may be coming down with something, ask your health-care practitioner about dosing them higher to treat your acute sickness.



Get Enough Sleep

Sleep is our body's best opportunity to rest and recharge. Inadequate sleep lowers your immune function, and this in turn makes it easier for you to catch a cold or the flu, and chances are the virus will hit you harder than your well-rested counterparts. Nighttime sleep has been shown to enhance the body's production of the immune cells that fight off infection. When your body doesn't have a chance to reset at night, your immune system is also not able to recharge and produce the immune components necessary to keep your body healthy.

Try to aim for eight consecutive hours of quality sleep each night. Minimize electronics in the evening, dim the lights, and sip on a soothing cup of chamomile tea before bed to help you unwind and get ready for your slumber. If you are starting to feel like you're coming down with something, don't hesitate to load up on the ZZZs. Take a short afternoon nap if you have the opportunity, or go to bed an hour earlier. Skip your morning workout and get some extra sleep if you feel like you need it, with no guilt. Sleep is vital, so don't skimp on the snoozing.



Stay Hydrated

Your kidneys are essentially the glorified trashmen of the body. The role of the kidneys includes aiding in the elimination of waste and toxins that would otherwise begin to cause damage if they accumulated in the body. When damage is done anywhere in the body, all of our energy goes into healing that damage. This, in turn, leaves us susceptible to infections and illness, because our body doesn't have the necessary energy stores to fight off immune-system invaders. Water is necessary for proper kidney function and for flushing out toxins as required. Staying hydrated helps prevent toxins from building up and, in turn, allows our body to have the energy needed to support our immune system.

Aim for a minimum of half your body weight in ounces of water per day (e.g. a 180 lb person needs at least 90 oz of water). If you are very active and losing fluids through sweating, you will need even more water to best support your body. If you don't enjoy plain water, add fruits to enhance the taste. Slice up some lemons, cucumbers, and strawberries to have on hand so you can quickly add a few slices to your water in the morning.



Elderberry Syrup

Elderberry is a fantastically effective herb in the winter months for aiding your immune system to function optimally, and for good reason. If you haven't heard of it before, it's a sweet berry that comes from the *Sambucus* plant. The berries and flowers are used for medicinal purposes. Thanks to the bioflavonoids in this plant it is antiviral, and it's also rich in vitamins A, C, and B₆, as well as in potassium. If taken before getting sick, it can significantly reduce the severity and duration of symptoms.

Elderberry syrup can be ingested on its own, or you can add it to foods and use it as a sweetener instead of honey or sugar. Try adding it to your morning bowl of oats, a warm mug of herbal tea, or on top of a scoop of vanilla ice cream for a yummy dessert.

Eat Real Food

This means food that doesn't come from a box or a jar. Fruits, veggies, legumes, and meat are packed with the vitamins and nutrients that we need in order to feel good. Those immune-boosting vitamins that were mentioned above can easily be found in foods. Make sure you are incorporating plenty of fresh fruits and veggies into your daily diet. If you are going to buy prepackaged food, keep it to a minimum.

Garlic is a powerful antiviral and antibacterial herb that can help boost your immune system so you don't get sick. Fresh herbs are best and this herb is so easy to use fresh and incorporate into your meals. Chop up a few cloves and add it to your stir fry or your veggie scramble for a great immune boost. You can also make an immune boosting drink called an oxymel. It's a warm beverage made from apple cider vinegar, honey, and garlic. Prepare a batch of it and store it in the fridge to drink over a few days. You can also get creative and add herbs to your oxymel to increase it's immune boosting properties. To make your oxymel simply combine 1 cup apple cider vinegar, 1 cup water, 1/2 cup honey, 2 cloves of freshly minced garlic, and the juice of one lemon. Heat on the stove at a simmer for ten minutes and enjoy.



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Mallory Murray, ND

She utilizes the most noninvasive treatments possible while helping achieve the most optimal state of health. Focusing on nutrition, lifestyle changes, and botanical supplements, she treats the whole family.





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LUTEN





NEM® Eggshell Membrane for Your Joint Pain

by Guillaume Landry, MSc, Naturopath

Autumn 2020

Do you think that only great athletes or the elderly feel joint pain?

Think again, because one Canadian out of five is affected by arthritis and symptoms of joint pain, with half of those 6 million people being under 65. Arthritis is, in fact, the most common chronic disease in the country, even more than diabetes, cancer, and cardiovascular disease.

The term "arthritis" is an umbrella for about 100 diseases,

the common element of which being inflammation of joints and other body parts. The five main symptoms of inflammation are pain, stiffness, redness, swelling, and loss of function. If neglected, inflammation can result in major and often permanent damage in the affected parts. Arthritis results in loss of joint function and mobility.

Any part of the body can be affected by arthritis (from "arthro-," joint, and "-itis," inflammation); but the hips, the knees, the spine, and weight-bearing joints are the most affected. Arthritis is a chronic disease that cripples permanently or for recurrent periods ranging from several months to a lifetime. Arthritis largely affects physical as well as mental health, and those affected have difficulty with mobility, work, etc.

Currently, no medication can slow down or reverse osteoarthritis (the most common form of arthritis). The most commonly prescribed and over-the-counter drugs used to relieve osteoarthritis are anti-inflammatory drugs (NSAIDs), analgesics (such as acetaminophen), corticosteroids (often injected), and even serotonin reuptake inhibitors, a class of antidepressants.

In the long term, the risks of side effects from these treatments prompt patients to consider more natural alternatives. Lifestyle and nutrition undoubtedly play a crucial role in the improvement of the disease, and there are also natural ways to help alleviate the symptoms of joint pain and arthritis, such as Natural Eggshell Membrane (NEM[®]).



NEM[®] organically contains the most commonly used nutraceuticals for musculoskeletal health, namely type I collagen, glucosamine, chondroitin, hyaluronic acid, and calcium. Traditional Chinese medicine used eggshell membrane as wound dressing to accelerate healing, as it is naturally aseptic and contains zinc.

But back to our joints. NEM[®] increases flexibility and range of motion, while reducing pain and stiffness; NEM[®] also improves the production of synovial fluid, which lubricates the joints, and it also helps the body to produce its own collagen (type II), thus helping to protect and repair cartilage. Indeed, its properties as an excellent chondroprotective have been clinically shown to decrease CTX II, a marker of cartilage degradation.

In a 2009 randomized clinical study (RCT) of patients affected by osteoarthritis of the knee, NEM[®] significantly relieved joint pain and stiffness, as compared to placebo, at days 10, 30, and 60.

In another RCT, conducted in 2018 with 60 postmenopausal women, NEM[®] reduced discomfort immediately after exercise, and quickly improved recovery of exercise-induced joint stiffness and pain (respectively on days 4 and 8).

If you have joint pain or arthritis, NEM[®] can definitely make a difference for your health, mobility, and wellbeing; not only long term, but quickly. NEM[®] is clinically proven to reduce joint pain in as little as 7 to 10 days!

This is a great reason to consider hikes in beautiful Canadian forests this fall!



RELIEVE JOINT PAIN ASSOCIATED WITH OSTEOARTHRITIS



- Contains 250 mg of clinically researched NEM[®] (Natural Eggshell Membrane) per capsule
- Formulated with boswellia, devil's claw, and turmeric



To ensure these products are right for you, always read and follow label directions.

PROUDLM

Influencing the Gut Microbiota and Host Health

Naturopathic Perspectives

by Dr. Sarah Zadek ND

Would it surprise you to know that the human colon contains about 3.3 lb of bacteria? This microbiota is practically its own organ, acting as an entire ecosystem with its own immune system, nervous system, and the ability to influence what the body absorbs from inside the intestinal lumen.

Consider the gut as the bridge between the inside of the body and the outside, connected by signals, nerves, compounds and other molecules. The gastrointestinal tract (GIT) is like a tube running from one end of your body to the other, acting as a barrier between what you ingest and what actually gets absorbed. Its job is to absorb nutrients and protect you from pathogens. However, at the same time, you have trillions of bacteria in there, working along this lining and determining influential aspects of your health.

The gut lining must stay tightly controlled to stop anything that you eat from just wandering into your bloodstream. These cells are susceptible to changes and inflammation, all related to what you're eating (what the cells are exposed to) and the strains of bacteria species present.

Probiotic supplementation has been shown to reinforce the barrier of the intestinal lining. This barrier not only decreases infections, but it also prevents reactions to food antigens, causing food sensitivities or IgG immune-system reactions. These reactions have been responsible for a multitude of symptoms such as gas, bloating, diarrhea, and eczema.

The composition of the gut microflora isn't just based on probiotics supplementation, though. A poor diet can lead to a change in the species composition that colonizes the gut. The gut microbiota not only help to digest your leftovers from higher up in the intestines, but they actually produce their own cocktail of nutrients, neurotransmitter signals, and other chemicals that determine your health.

The Role of the Gut Microbiota in Host Health

The term "gut microbiota" is used to describe the multitude of species and colonies of bacteria and yeast in the GIT. The composition of the gut microbiota is influenced by diet, stress and environmental factors; however, diet may play the largest role, attributing to 60% of the gut microflora.

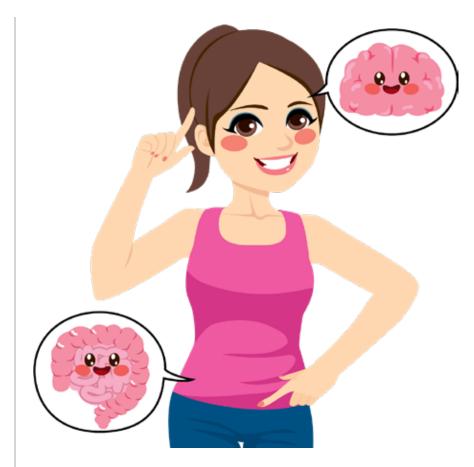


The diversity and density of gut microbiota is influenced by our diet, as bacteria feed on the undigested foods in the large intestine. This includes resistant starches; nonstarch polysaccharides such as celluloses, pectins, and gums; as well as nondigestible oligosaccharides, often called "prebiotics."

This feeding drives the fermentation of carbohydrates in the colon and releases short-chain fatty acids for energy production for other, more specialized bacteria. The metabolites produced by gut microbiota play crucial roles in host health. These metabolic products include regulators of cytokines, inflammation, and the immune system; visceral pain modulators via induction of opioid and cannabinoid receptors; and key nutrients such as folic acid and neurotransmitters such as GABA and serotonin.

Lactic-acid bacteria are known to release various enzymes and vitamins, and have also been shown to affect the pH of the intestinal environment to inhibit the development of invasive pathogens such as *Salmonella* and *E. coli* strains.

Any disturbance in this ecosystem by diet, pathogens, or antibiotics can lead to gut dysbiosis, and therefore, impaired activity of gut bacteria. This may result in negative effects on host health due to changes in intestinal-wall integrity and transit time of food through the GIT. Additionally, gut dysbiosis has been associated with anxiety and depression, and animal studies have shown that probiotic supplementation may be a potential treatment for these mental-health conditions.



The Gut-Brain Connection

The gut-brain axis essentially is the connection between the enteric nervous system and the central nervous system (CNS), including all communications between the GIT and the brain. Gut bacteria play a critical role in the function of this axis as well as the hypothalamicpituitary-adrenal axis and thus, stress-hormone release.

Serotonin, a neurotransmitter, functions as a major signaling molecule in the enteric nervous system, functioning and overlapping with the CNS. Tryptophan, a precursor to serotonin, is found in seeds, soybeans, meat, and fish. Tryptophan is absorbed in the gut and crosses the bloodbrain barrier, where it is transformed into serotonin. Interestingly, the majority of serotonin in our bodies is actually located in the gut, synthesized by enterochromaffin (EC) cells. This production of serotonin is used to modulate the functioning of the GIT via secretion, peristalsis, vasodilation, and the perception of pain and nausea.

Not only do EC cells synthesize serotonin, but gut bacteria also have the ability to produce serotonin from tryptophan and use it as a signal within the gut-brain axis to modify host behaviour. Serotonin also helps to regulate the development of microvilli, the microscopic protrusions that increase the surface area of the intestinal lining to promote increased absorption of nutrients.

Development and Maintenance of a Healthy Git Microbiota

As mentioned above, diet plays a key role in the maintenance of beneficial gut microbiota. After all, these bacteria are feeding on the compounds and nutrients that are found in our GIT. Fibre plays an especially important role, and its absence can lead to bacterial migration. If their preferred food source isn't available, bacteria will look to feed on other compounds, such as amino acids, releasing potentially harmful substances during metabolism. These substances may contribute to inflammation and "leaky gut" issues, whereby intestinal permeability is altered and the tight junctions between intestinal cells lose their integrity. This process may influence the development of IBD or colon cancer, in addition to food sensitivities and/or allergies.

Fermentation of dairy products, such as yogurt and kefir, with lacticacid bacteria have multiple benefits on human health. Fermentation increases levels of vitamins B_2 and B_3 in yogurt. One study of a yogurt produced with the species *Lactobacillus bulgaricus* showed that daily consumption significantly reduced the incidence of the common cold in elderly subjects. These fermented dairy products may also help alleviate symptoms of lactose maldigestion.

Current evidence is mounting that fermented foods may even help to promote cognitive health, enhance memory, and prevent neurotoxicity. Probiotic-rich diets have led to positive effects on stress relief, as gut bacteria are closely associated with hormonal stress responses.

Probiotics and Prebiotics

Probiotics, by definition, are live microorganisms that are administered in high-enough doses to provide beneficial health outcomes to the host. Probiotics can attenuate hormonal stress responses in addition to producing anxiolytic effects via GABA, glutamate, and serotonin production. Abnormal stress responses have been observed in adults with gut dysbiosis, which can be reversed with proper colonization and restoration of the gut microbiota. Probiotics and beneficial species of gut bacteria have been shown to support and modulate cortisol as well as reduce stress reactivity, and decrease social anxiety.



Lactobacilli



Bifidobacteria

Human studies are ongoing, some of which are investigating the involvement of gut microbiota in areas such as autism, Parkinson's, and chronic pain. Strains most notable for their ability to improve anxiety, depression, and stress responses, in addition to gastrointestinal relief, include *B. longum*, *B. breve*, *B. infantis*, *L. helveticus*, *L. rhamnosus*, *L. plantarum*, and *L. casei*, with doses ranging from 10 million to 40 billion colonyforming units (CFU) per day.

Prebiotics are typically nondigestible fibres that are used and/or consumed and fermented by bacteria of the microbiome. They have been shown to stimulate the growth and activity of beneficial microflora in the colon. Often, there is a preference by Bifidobacteria to consume oligosaccharides, which can be found as a supplement or as part of a probiotic blend. Prebiotics also occur naturally in foods such as leeks, asparagus, chicory, Jerusalem artichokes, garlic, onions, and oats.

Examples of functional fibres that induce health benefits to the host include inulin, *beta*-glucans, and xylooligosaccharides (XOS). These prebiotics each provide a unique carbon source for specific and selective support of different bacterial species. Therefore, the use of either one, individually, or in combination, can shape the population and colonization of specific bacterial species.

XOS is an emerging prebiotic naturally found in fruits, vegetables, milk, honey, and bamboo shoots. XOS, when given alone, has been shown to increase and benefit *Bifidobacterium* species within the gut microbiome. Most notably, XOS has been used clinically to improve the frequency of bowel movements and stool consistency. XOS produces less gas than inulin, and therefore the tolerated dose of XOS is higher than inulin (found to be approximately 12 g/d).

Studies have shown that the introduction of XOS into the gut can significantly increase *Bifidobacterium* species within 24 hours. As well, there is a greater affinity of bifidobacterium species to XOS than inulin or *beta*-glucans.



Conclusion

The colonization of the gastrointestinal tract by bacterial species influences several areas of our overall health, including digestion, mood and behaviour. The ability of the gut microflora to modulate cytokines and produce nutrients as well as neurotransmitters play key roles in signaling between the gut and other body systems such as the HPA axis, the immune system and the CNS. Their presence also protects us from infections by strengthening the barrier of intestinal cells separating the outside of the body (including what we ingest) from the inside of the body (within the bloodstream or body tissues).

Fermented foods, such as yogurt and kefir, in addition to prebiotic food ingredients, such as chicory and inulin, may serve as a vector for beneficial bacteria exposure. However, with equal importance is the maintenance of a high-fibre diet via vegetables, and grains such as oats, which feed these bacteria, allowing for the metabolic products which are so beneficial to our health.



Dr. Sarah Zadek, ND

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The Rise of Probiotics

Take a stroll down the organic or dairy aisles of your local health-food or grocery store, and you discover probiotics are everywhere.

Yogurt, sauerkraut, kimchi, and kombucha rank among the most popular functional foods, with unique nutritional profiles along with active probiotic content. But food and beverage sources of probiotics usually do not validate or quantify probiotic content, apart from a few brands of yogurt who indicate a culture count but do not clarify further.

Some brands of sauerkraut sold at room temperature have been pasteurized, so although they may be great-tasting and full of fibre, their probiotic value is questionable.

Probiotic formulas bearing a Health Canada–issued natural product number (NPN) will clearly indicate the probiotic strains contained within, cells count at expiry, as well as associated therapeutic benefits.

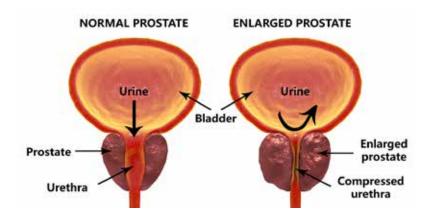


Relationship Advice for Your Prostate?

by Gordon Raza, BSc

Quality of life has a different meaning for many of us. I like to think it's based upon a foundation of great relationships with family and friends. But when it comes to your prostate, things can get complicated.

The prostate is a walnut-sized gland which surrounds the urethra and is essential for male reproduction. It produces fluid which serves a protective role for sperm during reproduction as it's propelled by the smooth muscle surrounding the prostate. Here's where things get complicated. As men age, an enzyme produced throughout the body affects the size of the prostate. This enzyme, called 5-*alpha* reductase, converts testosterone to another sex hormone called dihydrotestosterone (DHT). Collectively, these hormones contribute to male sex characteristics which include deepness of voice, body-hair growth, reproductive organ development, and fat distribution. Unfortunately, dihydrotestosterone also accelerates cell growth within the prostate gland.



Excessive levels of DHT can lead to benign prostate hyperplasia (BPH), a noncancer-related abnormal cell growth of the prostate gland. Gradual growth of the prostate for a man can advance from the size of a walnut in his 20s to an apricot in his 40s and as large as a lemon in his 60s onward.

How BPH affects a man's plumbing is simple. As the prostate gland grows, it applies pressure on both the urethra and bladder. This leads to common symptoms of BPH such as trouble initiating urination, weak stream, sudden urge to urinate, stopping and starting several times while passing urine-and most importantly-frequent urination, especially sleep disrupting nocturia (nighttime urination). Men tend to accept these symptoms as a normal part of aging. Sleepwalking to the bathroom may even become



"the norm" for some. However, disruptive nighttime urination (nocturia) can also lead to sleep deprivation for a significant other. When you consider the time it takes to fall back asleep following an interruption, this may rival snoring for sleep disruption.

Prescription drugs which relax the muscle surrounding the prostate and enzyme inhibitors are popular approaches for BPH among the medical community. There are also surgical procedures for extreme cases. However, "watchful waiting" is the most common approach for BPH. This involves close surveillance with yearly exams and lifestyle adjustments, yet with no active intervention.

But there exist natural products that provide symptomatic relief from nagging symptoms of BPH. There is a wealth of studies featuring wellresearched nutraceuticals available to consumers, as alternatives while you're "watchfully waiting."

Let's discuss several of the natural products that can make a difference. Berries from a dwarf palm tree native to the American Southeast called saw palmetto have been the topic of more than 35 human trials for BPH. Fatty acids within extracts of saw palmetto have been demonstrated to show improvement in urinary-tract symptoms in several ways. Their action via hormonal and anti-inflammatory pathways rivaled those of prescription drugs for the treatment of BPH. Rye flower pollen is another ingredient to look for in a formula for BPH management. Research involving 144 men with BPH receiving natural products including rye flower pollen showed decreases in both nocturia and daytime urinary frequency.

Free plant sterols, which are well known for their ability to block intestinal absorption of harmful cholesterol, possess an additional therapeutic property. They bind with the prostate gland to help reduce There are also many vitamins, mineral, and micronutrients which contribute to a healthy prostate and urogenital tract. Trace minerals beneficial for prostate health include selenium, of which Brazil nuts are an excellent source; as well as zinc, which is abundant in pumpkin and sunflower seeds along with almonds, pecans, and walnuts. Vitamins B_6 and D_3 round out this important list.

Benign prostate hyperplasia is a common condition that men experience with aging. According to the Canadian Urological Association, more than half of men in their 60s and up to 90% of men in their 70s and 80s experience symptoms associated with BPH. This represents more than 3.7 million Canadian men. Sadly, the number of specialists in urology is not keeping pace with the current demand given our aging population.

There is good news though. There are well-researched, Health Canada–approved nutraceutical formulas that combine a variety of proven ingredients to deliver fast, effective relief from symptoms of BPH.

Size matters when it comes to prostate health. And in this case, bigger is not better!

inflammation. A randomized, double-blind, placebo-controlled trial (RDBPCT) featuring 200 men taking plant sterols demonstrated increased peak flow and a decrease in residual volume within the bladder. Patients who continued sterol supplementation maintained improvement in symptomatic relief for an 18-month period. Great news for long term management of BPH!



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New Roots



Health Benefits and the Science Behind Them

with Jamie Bussin and Dr. Philip Rouchotas, MSc, ND

On the September 12 episode of *The Tonic* talk show, Jamie Bussin interviewed Dr. Philip Rouchotas, MSc, ND, discussing the health benefits and science behind probiotics. The following is an excerpt from their dialogue. To hear the full interview, visit thetonic.ca or youtube.com/newrootsherbal

I'm hopeful that today's conversation will help everybody move forward with their health. So let's talk about probiotics.

This is a topic I love talking about. Probiotics are fascinating little organisms; they are live bacteria. There are many different species that live throughout our digestive tract. In fact, we have ten times more bacteria living in our intestines than we have cells throughout our bodies. It's a phenomenal concept to try to wrap our heads around. These little guys interact intimately with our bodies, and every day we're learning more about how they impact human health. I agree, and it's more expansive than we might think. Probiotics affect digestion and nutrient assimilation, but the picture is so much bigger than that. So what are the health benefits of taking probiotics?

The

The list of common health concerns that are positively impacted by probiotics is almost insurmountable. The one we tend to think of first is digestion. We know that for digestive issues, from the mild being irritable bowel syndrome (IBS) or constipation to the very severe such as ulcerative colitis or Crohn's disease, multiple human studies demonstrate probiotics really help.

Many people are familiar with the concept that most of our immune system lives in the gut, specifically the small intestine. Billions of these bugs live there, intimately interacting with our immune system and fostering tolerance. To explain it, think about seasonal allergies. Pollen, grass, and ragweed are normal inhabitants of the environment. When you walk outside, if they cause an immunological response, it means you have lost tolerance. You are reacting to something that you're not supposed to. These bugs interacting with our immune system help achieve and maintain tolerance, basically telling the immune system: "Hey, I'm foreign, I'm a bacteria, not a human cell, yet it's OK that I'm here. Calm down! Don't react." And in doing so, they limit the list of diseases that can be induced. So, if we're not in balance, do these illnesses come forward? Is it that our body is attacking those illnesses, or is it that it's susceptible to those illnesses? What's happening?

Essentially, the bugs interacting with your immune system will calm it down. They communicate that a certain level of foreign substance is acceptable. When you lose that tolerance, the immune system starts to attack its own tissues. An unbalanced microbiome directly contributes to processes such as arthritis and inflammatory bowel disease, even chronic headache and a list of skin ailments including eczema, psoriasis, and acne.

Many people have heard the phrase that your gut is like your second brain. You actually have more serotonin in your gut than you do in your brain. We now realize that probiotics also have a very profound effect on mental health. There are multiple studies showing that if you start taking a probiotic, mood improves, and you feel less anxious. That's the gut-brain connection. So it's this panacea of impact that probiotics have. I may have made it sound like they slow immunity down-that's not accurate. They do something almost miraculous. On the one hand, they shut down subsets of immunity that would drive auto-immune disease. Yet at the exact same time, they're able to ramp up other subsets of immunity that help us fight infection.

We have a huge slew of human studies showing that if you take a probiotic, you're less likely to get a cold or flu, and if you do get it, you recover much quicker. It's really remarkable. Obviously, humans have been living with bacteria in their guts forever. Can't we just get enough of these good bugs in our tummy through our daily diet?

So, probiotic-containing foods—including yogurt, sauerkraut, even olives; basically anything fermented—can contribute to a more appropriate probiotic environment. The foods we eat become food or "prebiotics" for these bugs. It's clearly been shown that if you live on a fast food–based diet, it can cause havoc to this microbiome, whereas if you consume a diet very rich in vegetables and fruit, it encourages this healthy balance of microbes in the gut.



Alright, let's circle back to probiotics in supplement form. If I were to go and look for them, I would see something on the packaging referencing CFUs. What are they?

We're talking about live bacteria, measured as CFUs, which stands for colony-forming units. It's basically a count of how many of these bacteria are present in this particular product that you're looking at. A standard adult dose for a probiotic would be 10, maybe 20 billion a day. I know that number sounds astronomical, but kept in the context of our small intestine, where most of this magic is happening, we have 10 to 100 billion bugs. So if you take 10 or 20 billion in a capsule, it will have a significant effect on that population of microbes.

Then people say: "But there are ones out there that are 50, 100, or even 120 billion. When would I want to use one of those?" On occasion, you may want to have an impact on your colon, which has 10 to 100 *trillion*. It's a crazy number, but that's how many live there. If you want to impact the colon, you need to look at larger doses of probiotics. If you want to have an impact in a population that's 10 to 100 trillion, 10 billion isn't going to do that much. So, when you know you have a problem in the colon, like ulcerative colitis or Crohn's disease, you want to consider a higher dose. You would also want higher doses when recovering from a prescription of antibiotics.

Alright. So, what's the most effective form of probiotic?

There are a few things to look at, and the industry could be a tough place to navigate. I feel sorry for the consumer that walks into a health-food store, stands in front of a fridge or a wall, and is overwhelmed by what they see. Number one: Look for multistrain probiotics. There are close to



1,000 different species of bacteria living in your gut. You want to take one that has between 10 and 20 different types of probiotics, so multistrain. Number two: You want to get a probiotic that's refrigerated. There has been a push in recent years for the concept of shelf-stable probiotics, which I'm opposed to. There are a few species that can survive at room temperature, but most can't—and they degrade very quickly. *Bifidobacterium* bacteria, an important therapeutic classification, dies completely within 30 days.

And you want one with enteric coating. Remember: These are live bacteria, and your stomach is so acidic, probiotics don't survive the magnitude of your stomach acid. The little joke I make is that if you put your hand in your stomach, you won't have a hand left. With enteric coating, the capsule has a coating on it that won't let it open in your stomach. It is engineered in this way—think food science—that prevents capsule disintegration in the stomach. But as soon as it enters the small intestine, it opens up. Your body has mechanisms that neutralize stomach acid in the upper small intestine. That change—going from very acidic pH to neutral pH—triggers the enteric coating to open and release the probiotics into the small intestine, alive. The science is very clear on this. Take two identical probiotics, one enteric-coated, one not. The enteric-coated one delivers greater than five times more live bacteria to your intestine.

So, I would say those are the three key things to keep in mind when looking for a probiotic: enteric coating, refrigerated, and multistrain.

Alright. You mentioned the number of bacteria, but you also mentioned deterioration. From the time it's manufactured, are those numbers reflective of what we're actually getting? Or is that more reflective of what was originally bottled?

Great question! Unfortunately, that changes from brand to brand. Find yourself a health-food store you trust and talk to the staff. Some brands are labelling their amount at time of manufacture. There can certainly be degradation, depending on how it's transported and time-stored. There is less degradation when stored in the fridge, but still. There are also companies indicating the colony-forming units at time of expiry. You'll find some companies in the industry are guaranteeing that at time of expiry—assuming you kept it in the fridge—it will have the number of bacteria that are claimed on the label.



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*Kuate, S.P., S. Bai, and A. Hossain. "In Vitro Comparative Study of the Survival of Probiotic Capsules in a Simulated Gastric Environment." Data on file.

PROUDLY



Can Vitamin D Crush the Next Wave?

by Guillaume Landry, MSc, Naturopath

It was only a matter of time before a formal human clinical study supported the countless appeals from the scientific community to administer vitamin D to patients with COVID-19. Just completed, the results confirm what previous study correlations proposed: Vitamin D, particularly safe and accessible to all, delivers resounding health benefits.

A randomized, double-blind clinical study was conducted in Spain, a country among the most impacted by the pandemic in Europe. Doctors and scientists from the University of Cordoba's Queen Sophia Hospital involved 76 patients hospitalized for acute respiratory infection caused by SARS-CoV-2 (the coronavirus causing COVID-19). This was confirmed by a radiographic pattern of viral pneumonia and by a positive SARS-CoV-2 polymerase chain reaction (PCR). This translates to identifying the virus at DNA level.

All hospitalized patients received the same medical care, including hydroxychloroquine along with the antibiotic azithromycin. In the study cohort, 50 people were supplemented with 16,000 IU of vitamin D on the day of their admission to the hospital, then with 8,000 IU on days 3 and 7, then weekly until discharge or admission in intensive-care unit (ICU). The form of vitamin D used was calcifediol, which bypasses synthesis in the liver for a more direct impact on the body.

A control group of 26 people did not receive vitamin D. Of these patients, 50% were admitted in the ICU, and two deaths occurred. While in the group that received vitamin D supplementation, only 1 out of 50 patients (2%) had to be transferred to the ICU, with no mortalities, nor complications upon leaving the hospital

This pilot study demonstrated that "administration of a high dose of calcifediol or 25-hydroxyvitamin D, a main metabolite of vitamin D endocrine system, significantly reduced the need for ICU treatment of patients requiring hospitalization due to proven COVID-19." However, the authors suggest that more rigorous studies be conducted to confirm their observations.

Vitamin D shows promise to help reduce the severity of this serious viral disease. Winter is on the horizon, with its shorter days and colder temperatures driving us indoors, increasing our susceptibility to transmission of viral infections. Given its proven effects against the flu, its affordability, and safety profile, the "sunshine vitamin" is a must to help protect our families. Let's spread the news!

Read more about the science of the benefits of vitamin D for the immune system by visiting newrootsherbal.com/vitamin-d



What is it and what causes it? Seasonal affective disorder (SAD) is a form of depression that occurs during certain times of the year. It generally occurs during the colder months and is associated with shorter days. Reduced sunlight exposure during the fall and winter can disrupt the body's internal clock, also known as the circadian rhythm. The circadian rhythm has many roles: It influences the sleep-wake cycle, hormone release, and body temperature. The circadian rhythm responds to cues in your surroundings, especially light and dark. A hormone called melatonin is produced from the pineal gland in the brain at night in order to help you sleep. Shortened daylight hours can alter this natural rhythm and lead to SAD.

Low serum vitamin D levels have been associated with a higher likelihood of SAD. The solar ultraviolet-B (UVB) rays are not strong enough during the winter months from November to March, and therefore our bodies are not able to produce vitamin D; vitamin D production occurs within the epidermis of the skin when exposed to UVB sunlight. Meanwhile, numerous variables affect skin synthesis of vitamin D, including latitude, season, time of day, degree of skin pigmentation, and sunscreen use.

Who Does It Affect?

Two to three percent of Canadians will experience SAD in their lifetime. Another 15% will experience a milder form of SAD (known as the "winter blues") that leaves them only slightly depressed, but still able to function without any major disruptions. People with SAD make up about 10% of all depression cases.

SAD is also thought to run in families, as 13-17% of people who develop SAD have an immediate family member with the disorder.

Adults seem to be at higher risk of developing SAD compared to teenagers and children; meanwhile, women are more likely to experience SAD than men. Researchers are not sure why the latter is so, but it may be because of increasing life responsibilities, and therefore stress levels, that adults and women suffer more. People in northern countries and cities are more likely to experience SAD than those who live close to the equator. The amount of daylight you receive changes as you move north, and that change is thought to be a part of SAD.

Signs and Symptoms

The symptoms of SAD vary from one individual to the next, but the spectrum includes irritability, overeating and associated weight gain, sadness, depression, fatigue, feelings of guilt and worthlessness, difficulty concentrating, body aches, changes in sleep patterns, a loss of interest for life, and decreased sex drive.



There is no cure for SAD; however, treatments do exist that can help you feel your best during the cold winter months. It is important to speak with your naturopathic doctor to determine whether your symptoms are due to SAD or another condition. There are many reasons why individuals may feel down or have low energy, and your naturopathic doctor can help determine what the underlying cause may be.

Lifestyle Recommendations

Exercise: Bodies are meant to move. Endorphins are produced when we exercise, and these endorphins help us feel good overall. Exercise has many other health benefits, including weight loss, improved sleep quality, and greater focus and concentration. Morning exercise may be beneficial in the treatment of SAD.



Attend Group Outings and Social Events: Talking with friends and family can help lift moods. A support system is important for optimal mental health and wellbeing. Being around people with similar interests can help motivate you to engage in activities that are pleasurable.

Meditation: Meditation is an effective technique to relax and switch the nervous system from a sympathetic ("fight-or-flight") mode to a parasympathetic ("rest-and-digest") state. Guided meditations are great for stress reduction, anxiety, and depression. Some meditations utilize deep-breathing and

body-scan techniques to increase awareness and focus/concentrate on specific body parts that may require attention.

Colour: Adult colouring books are in—and so are mandalas! Mandalas are circular shapes that are used as tools to facilitate meditation. These shapes are repetitive and allow one to experience a similar sense of relaxation, along with all the other health benefits, that come from meditating.

Natural Treatments

Vitamin D: During the appropriate season, exposing arms and legs to the sunlight for 5–30 minutes twice weekly may be sufficient to meet vitamin D requirements. Vitamin D is important for optimal immunesystem functioning, bone development, and mental health/ wellbeing. Vitamin D is poorly absorbed from the diet, and the majority of Canadians are deficient in the winter months. Naturopathic doctors can check your vitamin D status by means of a simple blood test, and prescribe an appropriate dose according to serum levels.

Light Therapy: Missing daylight hours can be replaced with an artificial substitute to help reduce symptoms of SAD. Patients sit in front of a light-box or wear a visor according to a doctor's recommendation. The box shines light much brighter than ordinary indoor lighting. Studies show light therapy relieves SAD symptoms for as much as 70% of patients after a few weeks of treatment, and some note improvements before then.



Omega-3 Essential Fatty Acids: Healthy fats are important for nerve and brain function. The eicosapentaenoic acid (EPA) component is responsible for the antidepressant effects of supplemental omega-3. EPA is known to reduce depression, as it is critical for the dynamic structure and function of neuronal membranes. It is also required for neurotransmitter binding and signaling within the cell. Dose varies from 1 to 4 g/d with food.

B-Complex: Studies show that B-complex vitamins resulted in significantly lower personal strain and depressive moods. Improved ratings of stress and mental health were also noted. Take one B-50 or B-100 complex capsule per day with food.

5-HTP: This precursor is important for serotonin production. Serotonin is involved in mood and appetite regulation, and it also has antianxiety effects. Serotonin is also important for melatonin synthesis.

Melatonin: Melatonin helps regulate our internal clock, which can be offset during the winter months. Exogenous sources can be taken temporarily to help regulate the circadian rhythm. Dosing ranges vary depending on the condition being treated; speak to your naturopathic doctor to determine which dose is best suited to your needs.

Conclusion

SAD is a form of depression that can be debilitating; it results from decreased sunlight exposure and an altered circadian rhythm. Other mental health disorders can have similar symptoms to those of SAD. Although research suggests there is no "cure" for SAD, there are various lifestyle recommendations and natural treatments available to help diminish symptoms. Speak with your naturopathic doctor before commencing a new supplement regimen, in order to determine which treatment method might be best suited to your particular needs. Supplements may have their own set of side effects, and your naturopathic doctor will discuss dose and any potential side effects to be aware of, if necessary. Natural products can interact with other medications, so it is important to let your naturopathic doctor know what you are currently taking.



Dr. Ashley Kowalski, HBSc, ND

Ashley is a licensed naturopathic doctor practicing in Ontario. Some of her main focus of interests are digestive complaints/food sensitivities, women's health, and thyroid issues.

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by Hye Kam, MFT

One of the top reasons couples come in for therapy is around communication difficulties. So often, couples find themselves stuck in a negative cycle when they try to have important conversations. Does that happen to you at times?

Often, those conversations about deeper emotions, about wants and needs, or issues we don't see eye-to-eye on, are the ones that leave us feeling frustrated and dissatisfied, and that can end in an argument.

Here are a few of my favourite tips to support you and your partner to navigate those harder conversations.

Reflect on Your Thoughts and Feelings Before Bringing Up the Conversation

Some topics are delicate and can invoke strong emotions. This may overtake the conversation, obscuring the subject, and lead to confusion and frustration when we can't properly express ourselves and feel understood.

- **DO:** Reflect on what your thoughts and feelings are. If you can identify how you are feeling, and how important this is for you, it can help you communicate more effectively. This will help your partner follow what you are saying, and understand you better.
- **DON'T:** Don't use this as a technique to prepare your arguments, counter-arguments, and defenses. This usually leads quickly to a fight, because the conversation will no longer come from a partnership approach. It will bring up self-defenses and what you want to communicate will get blocked, possibly leading to a negative spiral.

Find a Strategic Time to Talk

It can be so difficult, with today's life and family demands, to find time and energy for important conversations. But trying to have them when you are both exhausted or too stressed can set this up for failure.

- DO: Find a moment when there is enough time to talk. Try to pick a time of day when both of you aren't too tired, and limit distractions or interruptions as much as possible. Sometimes, it is easier if you both schedule in a time to connect and talk.
- DON'T: Try not to spring important conversation topics on your partner. This will overwhelm them from the start, and then it is difficult to listen to what you are saying. Avoid times like late at night or first thing in the morning (unless these are times when you both have energy!)

Pace the Conversation

Express yourself, and then check in with your partner throughout the conversation to see if they are in sync with you in this conversation. Sometimes we get overwhelmed by feelings that come up in a conversation—either by our partner's feelings or our own that comes up in reaction to what they are saying. When our brain gets overwhelmed, we no longer have the ability to stay present and listen.



- **DO:** Check in and see if your partner is overwhelmed or confused by feelings that are coming up in this talk. Shorter exchanges throughout the conversation might be a better pace as a couple for the conversation.
- **DON'T:** Don't "test" your partner to see if they are listening or criticize them.

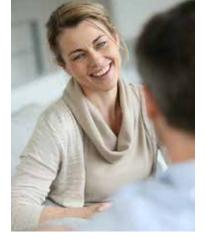
Take Turns

This is a conversation where both of you are working on coming together in understanding and supporting one another.

- **DO:** Leave room for your partner's thoughts, feelings, and responses. Resist the urge to interrupt. Give your partner a chance to respond and support you.
- **DON'T:** Don't assume your partner's thoughts and responses. This can lead to an argument instead.

Acknowledge and Validate What Your Partner Is Saying

Often, one partner doesn't believe that you hear them or understand what they are saying, even though you are. This can shift by making a point to let your partner know that you heard them. This doesn't mean you agree. It communicates that you are listening and paying attention. It helps your partner feel important and what they say matters to you too because it matters to them.



- DO: Indicate to your partner throughout the conversation that you are listening. Make eye contact, nod, verbal responses like "I think I get it" and "I'm listening—tell me more."
- **DON'T:** Don't assume you know what your partner is talking about. If this topic keeps coming up, it means there is something important that is being missed. If you stay quiet too long, your partner may think you are no longer paying attention.

Make Conversations a Habit

It doesn't mean deep and heavy talks all the time, but having a practice of talking will help the bigger conversations take place.

- **DO:** Talk often about things that matter and you want to connect on.
- **DON'T:** Don't let things build up and then come out all at once.

I hope these tips will help you and your partner have more successful conversations and connect in a deeper way!

Hye Kam, MFT



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Elderberry

Old Meets New–Traditional and Modern Medicine for Colds and Flus

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

Elderberry, the most common variety for medicinal purposes being *Sambucus nigra*, is found broadly across Europe and North America. It has a long-standing history of use by herbalists as a remedy for colds and flus. As will be described below, a significant and growing body of modern human clinical studies has confirmed an important role for elderberry in such settings.

Bioactive compounds in elderberry are considered to be polyphenols and anthocyanins. The content of these compounds has been shown to be considerably greater than that found in most fruits. Elderberry fruit, leaves, and flowers are all rich sources of these compounds. Studies have found these compounds are readily absorbed, with metabolites of them readily detectable in urine upon consumption of various preparations of elderberry.

Elderberry is valued for its nutritional content as well. It is a significant source of four organic acids, several minerals (potassium, calcium, magnesium, iron, and manganese), as well as significant amounts of vitamin C as well as *alpha-* and *gamma-*tocopherol (vitamin E). Elderberry also contains significant quantities of fibre, some of which have important functional benefits. Fibres present in elderberry include pectin, pectic acid, protopectin, calcium pectate, and cellulose. Elderberry also contains an impressive spectrum of amino acids, including nine of the essential amino acids. Glutamic acid, aspargic acid, and alanine are the dominant amino acids present. These important nutritional components are broadly distributed through all parts of the plant, including the berries, flowers, and leaves/stems. Lastly, elderberry seeds are rich in polyunsaturated fatty acids.

Clinical Evidence

The best documented use of elderberry is for prevention and treatment of colds and flus, specifically of a viral nature (influenza). A meta-analysis combines data from multiple human trials and mathematically combines them as though they were one large study. A recent meta-analysis of elderberry for colds and flus concluded the following:

"Supplementation with elderberry was found to substantially reduce upper respiratory symptoms. These findings present an alternative to antibiotic misuse for upper respiratory symptoms due to viral infections, and a potentially safer alternative to prescription drugs for routine cases of the common cold and influenza."



One specific study evaluating elderberry for colds and flus administered elderberry or placebo to 312 economy-class airplane passengers travelling from Australia to various destinations. Participants consumed elderberry or placebo for 10 days prior to travel and for four to five days after arriving at their destination. Participants receiving placebo experienced flu-like symptoms for 117 days, compared to 57 days for participants receiving elderberry. The total Symptom Severity Score in the placebo group was 583, compared to 247 in the elderberry group. Elderberry reduced the total number of colds by 30% (12 v. 17), yet this result was considered not to be statistically significant.

Another study administered elderberry or placebo for five days to 60 participants who had active symptoms of influenza for less than 48 hours. On average, symptoms resolved four days faster among participants receiving elderberry versus placebo. The need for additional medication during the course of infection was significantly reduced among individuals receiving elderberry. The conclusion of the authors was as follows:

"Elderberry extract seems to offer an efficient, safe, and cost-effective treatment for influenza."

A third study evaluated individuals confirmed to have influenza B during an outbreak in 1993 in Panama. During the active infection or during the resolution phase of the infection, investigators assessed blood samples for antibody production to the virus. Individuals receiving elderberry had significantly superior antibody production relative to individuals receiving placebo. Complete resolution of the infection was achieved after only two to three days for 90% of individuals assigned to elderberry! In comparison, complete resolution of the infection was achieved after six days for individuals assigned to placebo. Given the nutrient profile of elderberry, and the rich content of powerful antioxidant constituents, it is not surprising interest has also surfaced in the use of elderberry for metabolic and cognitive outcomes. Nilsson et al administered a berry beverage containing elderberry to 40 healthy participants aged 50-70 years for five weeks, compared to a control beverage. Outcome measures focused on cognitive function and cardiovascular risk factors. The berry beverage significantly decreased total and LDL cholesterol. The berry beverage had no impact on glucose control, whereas the control increased plasma glucose and tended to increase circulating insulin. The berry beverage also improved participants performance on the Working Memory Test of cognitive function.

Discussion

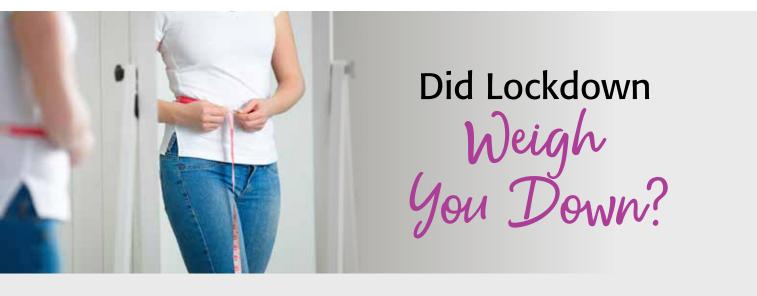
An ever-growing number of natural medicines are seeing their long-held traditional uses validated by modern, human clinical intervention trials. It is fascinating to consider that hundreds, sometimes thousands of years ago, a traditional healer would deduce that a certain plant or substance was appropriate for a particular problem, and sure enough, rigorous controlled human science confirms the same effect that has been known throughout human history. We are truly fascinated by such plants and substances, and feel they are among our most important tools as integrative health-care providers. Hundreds or thousands of years of safe use, validated by modern day rigorous human science: Is there a better place to turn to for guidance on treatment?

A handful of our favourite medicines meeting these criteria include chaste tree for issues relating to the menstrual cycle; ashwagandha for stress, anxiety, and fatigue; and black cumin seed oil for an array of problems including allergies, diabetes, cholesterol, and blood pressure.

Elderberry has been a cherished medicine for colds and flus for hundreds of years. Historical use included the wisdom to recognize that the entire plant delivered important benefit. One can use components in isolation (flowers, berries, leaves, stems), yet juices or syrups made from the entire plant also prove to deliver important outcomes. The safety of elderberry remains unquestioned, and coupled with its pleasant fruity taste, there is little confusion as to why it is also a highly prized remedy for use in children.



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For some people, gaining a few pounds is not a big deal; for others, it can lead to health issues... especially if it continues. If you are not happy in your skin, or need to shed a few pounds, keep the following points in mind.

- 1. Cut yourself some slack. With the stress levels we were under and the reduced options for activity, it is not surprising that many of us got off track. Do not blame yourself for being human during an extraordinary time.
- 2. Figure out what happened. Take time to evaluate what is going on. Are you moving less? Snacking more? Have you inadvertently shifted to more comfort foods? Have cravings got you buying junk food? You cannot change what you do not acknowledge, so be honest with yourself.
- 3. Start small. Work in small, manageable changes that pay off over the long run. Take the stairs. Slowly reduce sugar. Swap 30 minutes of screen

time for a 15-minute online exercise video. Replace a white starch with an extra green vegetable.

- 4. Be realistic. Determine what you can manage, given your current situation. Your plan should be manageable and your goals realistic, with the intent of steadily improving your health, not depriving you of happiness.
- 5. Be patient. Gradual and steady weight loss—about 1–2 pounds per week—is said to be healthier and produce sustainable results. Do not fall for extraordinary claims and promises of quick fixes. If something sounds too good to be true, it probably is. Rome was not built in a day!



Just a spoonful of stevia



Helps the calories stay down



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To ensure these products are right for you, always read and follow label directions.







Setagaya White Hot Chocolate Matcha

Ingredients

- One 13.5 oz can coconut milk
- 1/2 can boiling water
- 3 tbsp. cocoa butter
- •1 tbsp. coconut oil
- 1 tbsp. New Roots Herbal's MCT Coconut Powder
- 2–3 tbsp. pure maple syrup (or your favourite sweetener) for a sugar-free version, use New Roots Herbal's Sweet 'n Slim Erythritol or Stevia

Instructions

If you have a high-powered blender like a Vitamix, then add all of the ingredients to the blender and blend several minutes until very smooth and frothy. If you don't have a high-speed blender, then add all of the ingredients, except the cocoa butter, to a blender or food processor and process until smooth and frothy. It will only get frothy on a high speed and after a few minutes.

Add the mixture to a pot over medium heat, then add the cocoa butter. It is important to not use a tiny pot for this, as it will bubble. Once the mixture begins to boil, whisk continuously for a good 5 minutes so the cocoa butter melts and it cooks down slightly. It will seem very thin still after the 5 minutes because cocoa butter melts just like oil, so let the mixture sit for a few minutes before serving and it will thicken up more.

Whisk once more and serve. Top with whipped coconut cream for more healthy fats and a sprinkle of matcha. If you have any leftovers, store them in the fridge. It will get very thick, just rewarm and whisk it over the stove, and it will be as good as fresh.





Tammy-Lynn McNabb, RHNC

A registered holistic nutrition counselor and television host/producer of *Health Wellness & Lifestyle TV*, she believes that eating healthy shouldn't be difficult and should never compromise taste.



Turmeric Latte Scones

If you know me, you know I am always up for warm and delicious scones. This time, I made them with an anti-inflammatory boost by using turmeric (curcumin) and ginger. So why not load up on it? Here's an easy and delicious way to do so!

Ingredients

- · 1 chia egg (1 tbsp. ground chia with 3 tbsp. water)
- 2 cups unbleached all-purpose flour
- $\cdot \frac{3}{4}$ cup + 3 tbsp. unsweetened oat milk (I use Earth's Own)
- \cdot $\frac{1}{3}$ cup coconut sugar, plus more for garnishing
- · 1 tbsp. baking powder
- \cdot 1¹/₂ tsp. ground turmeric
- · 1 tsp. ground cinnamon
- · 1 tsp. natural vanilla extract
- ¹/₂ tsp. New Roots Herbal's **Fermented Ginger**
- $\cdot \frac{1}{2}$ tsp. salt
- · A few pinches of black pepper

- $\frac{1}{4}$ cup quick oats
- 6 tbsp. vegan butter or coconut oil at room temperature, not liquid

Instructions

Preheat oven at 400 °F (200 °C).

Prepare chia egg in a bowl (by combining 1 tbsp. of chia along with 3 tbsp. of room-temperature water). Once well-combined, add oat milk to it. Set aside.

In a separate bowl, combine all dry ingredients. Add vegan butter (or coconut oil) to dry ingredients and combine well with a fork until only a few small bits remain.

Stir the chia mixture once again, and add it to the dry ingredients gradually, while stirring with a spoon.

On a floured countertop, turn out and knead briefly to obtain a smooth ball of dough about one inch tall. Top with the a bit of coconut sugar, evenly.

With a knife, cut the dough into six parts and transfer them all to a baking tray lined with parchment paper. Bake for approximately 25–30 minutes, until golden and well-cooked inside.



Kate D. Bunting

British-Canadian healthy-living and food blogger at "Kate & Zest," vegan, world traveller... and pretty fancy. kateandzest.com

Vegan Candy Apples

This is more like a set of directions than a recipe, and although I prefer using apple slices, you can also use a whole apple. And the peanut butter caramel sauce is SO good—its a nice recipe to add to your repertoire!

Ingredients

- Chocolate of choice—on the darker side is best, like 60 or 70%
- · Apples
- Peanut butter caramel (¼ cup coconut nectar^{*}, ¼ cup smooth peanut butter or other nut butter, 3 tbsp. melted coconut oil, and 1 tbsp. hot water)
- Chopped peanuts, other nuts, or sprouted buckwheat
- ¹/₂ tsp. cinnamon
- *Or maple syrup, but add an extra 1 tbsp. of coconut oil

Instructions

Line a cookie sheet with parchment paper. Slice the apples vertically (I left the core in). Insert sucker sticks into the bottom. Dip the apple slices into the caramel, let excess drip off, and then place flat on the pan. Or place the apples on the pan and spoon the caramel sauce over top.* Place in the freezer for at least 1 hour.

*NOTE: When I took the apples off the pan, the bottom layer of the caramel didn't stay on the apples. I ended up scraping it off the pan and warmed it up with the leftover caramel sauce for the rest of the topping.

While the apples are in the freezer, melt your chocolate (I used a few cups of chopped chocolate) in a bowl set over a pot of hot water on the stove. Add a spoonful of coconut oil (I used about ½ tbsp.). When all is melted and smooth, dip the apples into the chocolate, and when coated, transfer onto a new parchment-lined tray. Make sure the chocolate covers all the way down to the stick to secure it, otherwise the apples may fall off the stick. Chill in the fridge for 20 minutes. Remove and dip half of the apple into the warmed caramel sauce, then sprinkle with chopped peanuts (or roll the apple in the peanuts). Set back on the pan and drizzle more chocolate on top. For the "white chocolate" looking drizzle, I just whisked melted coconut butter with enough hot water to make it smooth. Place back in the fridge again for about 10 minutes. Voilà! 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





Both our children attend high school, and we're concerned about their immune health, as we know peer pressure may trump common sense regarding social distancing. What could help keep their immunity strong? Great question! In addition to social distancing, mask compliance, and frequent washing of hands, there are a few old standbys worthy of consideration this fall. Let's begin with vitamin C; it's critical for biochemical processes that keep your immune system running at its peak. There is also a correlation between deficiency of sunshine vitamin (D₃ or cholecalciferol) and vulnerability to viral infection. Supplementation is simple, effective, and affordable. A broad-spectrum, enteric-coated probiotic rounds out the big three. It's estimated your intestinal flora accounts for over 70% of immune performance, so shoring up numbers of beneficial probiotics is definitely helpful.

I've decided to add medium-chain triglycerides (MCTs) to my workout routine. What should I look for? Are there alternatives to liquid form suitable for travel?

The preferred medium-chain triglycerides are caprylic (C8) and capric (C10) fatty acids. They're abundant in both coconut and palm. Once isolated, the most common blend for MCT products is 60% caprylic and 40% capric fatty acid. These easily-absorbed, healthy, keto-friendly fatty acids are identical, regardless of their botanical source.

Look for them in liquid or convenient powder form, great to keep in a gym bag or in carry-on luggage for air travel.

To your health!

You have a question you would like answered about your health and supplements? Gord would be happy to answer them! We could even feature them in this page if others could benefit from the information. Reach out to him at facebook.com/newrootsherbal or call 1 800 268-9486 ext. 237



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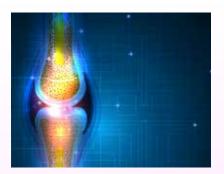
A Fresh Take on Hot Flashes

Farnoush Khodarahmi, ND, examines the physiological role of hot flashes during menopause. Her article proposes an "action menu" of lifestyle choices, including a discussion of natural alternatives for hormone replacement therapy (HRT).



Sumptuous Pudding with Benefits

Looking for new ways to work the fall harvest of local apples into your culinary routine? Registered dietitian, personal trainer, and family food expert Angela Wallace shares her chia pudding with cinnamon baked apple recipe.



Strontium Citrate and Bone Health

Dr. Philip Rouchotas and Dr. Heidi Fritz examine strontium citrate, spanning from its discovery to its well-researched role in bone growth and renewal, and include a discussion of current research for treatment of osteoporosis and osteopenia.



Probiotic Survey Winners

Thanks to all of you that participated in our Probiotic Survey. Here's the list of lucky participants and what they won:

Dianna Karpinski	Selection of exotic oils
Annie R	Selection of exotic oils
France Ménard	Selection of exotic oils
France Groleau (shown on left)	. Aromatherapy diffuser

Thanks for taking the time to read *Flourish*. Keep the comments and suggestions coming. All those who reach out to us will be entered in a quarterly draw. flourishbodyandmind.com/feedback



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