Flousish

HEALTHY BODY, MIND, AND SPIRIT



Stress Management:

Feeding the Brain

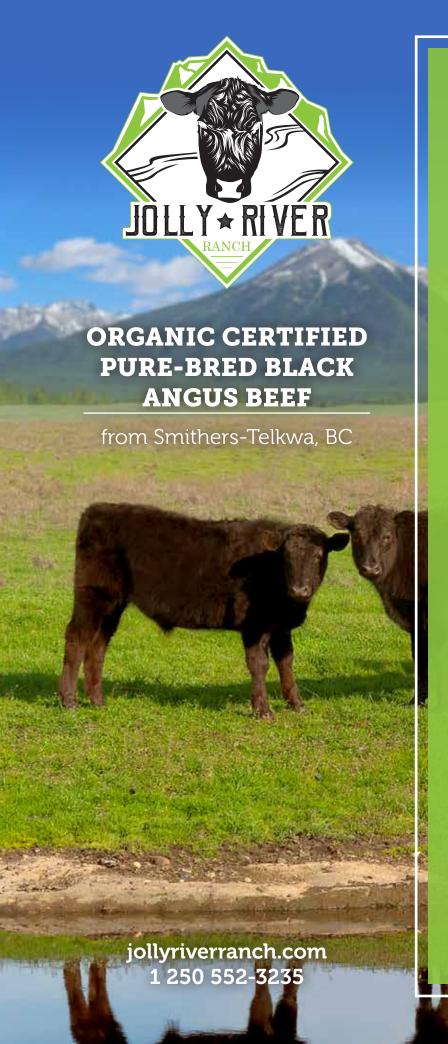
Cell-Phone Use

Five Health Impacts

Why Detox for Fall?

A TCM Approach for Cold and Flu Prevention and More!

Vol. 2, No. 6 · Free Autumn 2018



Our beautiful **CERTIFIED ORGANIC** ranches in the pristine Bulkley Valley, in the Smithers-Telkwa area, are in two locations: One valley ranch named Jolly River Ranch (4,009 acres) bordering the Bulkley River for 8 km, and the Jollymore Ranch (1,310 acres) alpine location, nestled in the higher elevations near Smithers, BC.

Available for Order:

Ground Beef

Steaks

Filet Steak · Ribeye Steak · Sirloin Steak · T-Bone Steak · Skirt Steak · Strip Steak · Flank Steak

Brisket

Roasts

Chuck Roast · Arm Roast · Round Roast · Rump Roast

Stew Meat

Kabob Meat

Beef Short Ribs

Beef Back Ribs

Offal also available upon request.

Online orders available starting in September.

Minimum quantity is a front quarter or hind quarter (approx. 110 pounds) in four boxes with everything from ground beef to tenderloin (filet mignon).

Both ranch locations are certified organic by Pro-Cert.



Pictures, ordering information, prices, and more at jollyriverranch.com

Any Questions?

Please call Mary at 1 250 552-3235













Table of ContentsAutumn 2018

O5 Pillow Talk: Nutrients for Sleep Hygiene

O6 Lavender for Back-to-School Stress

O8 Cell-Phone Use: Five Health Impacts

Stress Management: Feeding the Brain

The Fermented Gang: Avengers in Your Plate

Under the Microscope:
The Story of *Lactobacillus rhamnosus*

21 Back to School... Seven Tips to Help Your Kids Eat-to-Learn

24 Back-to-School Yin Yoga

Why Detox for Fall?

A TCM Approach for Cold and Flu Prevention and More!

28 Culinary Corner



Editor's Letter



Already September... But what a beautiful summer!

I can't remember ever having such a busy summer... Between my kids' many soccer games, their swimming lessons, going back and forth to day camp, and other commitments, it left me

with little spare time. However, that doesn't mean that I didn't take advantage of the beautiful weather—in fact, I do not think I've ever spent so much time outside! Whether you're enjoying summer on the beach or on a park bench is of little importance, as long as you are where you want to be. With the presence of the heat and sun throughout the season, I couldn't ask for more. Furthermore, this wonderful weather even followed us into Western Canada when we had our family vacation in July!

Fall is quickly approaching, and for many, it's a period of returning to routines and some less-summery obligations. If this transitional time of year causes you stress and requires you to adapt, this issue dedicated to the fall season will be particularly interesting. Several topics—such as sleep disorders, stress management, child nutrition, and yin yoga—will be addressed to help you manage this transition period.

Additionally, you will notice that this issue indicates "Autumn 2018" on the cover page; from now on, *Flourish* will be available to you with every change of season. In the meantime, our blog will be updated regularly with new articles for you to discover monthly.

Enjoy your reading, and have a great start to the school year!

Sonia Lamoureux Editor-in-Chief

Flourish

Flourish magazine is published four times per year and distributed throughout Canada.

Editor-in-Chief

Sonia Lamoureux

Graphic Designer

Cédric Primeau

Translation/Revision

Guillaume Landry • Marie-Jo Mercier • Amanda Noory • Cédric Primeau • Gordon Raza

Contributors to this Issue

Angeli Chitale • Theresa Nicassio • Katie Thomson Aitken • Angela Wallace • Melissa West

Advertising Sales

Sonia Lamoureux | 450 424-9486 ext. 262 lamoureuxs@newrootsherbal.com lamoureuxs@flourishbodyandmind.com

Total Copies Distributed

58,000 (English and French)

Legal Deposit: Library and Archives Canada

Legal Deposit: Bibliothèque et Archives Nationales du Québec ISSN 2371-5693 (Print Version)

ISSN 2371-5707 (Online Version)

The content of this magazine may not be reproduced without written authorization. *Flourish* magazine declines all responsibility concerning the ad content published in its pages. Opinions expressed in the articles are not necessarily shared by the Editor. The information in the articles do not replace the advice of a health-care professional.

Flourish magazine is the exclusive property of Naturopathic Currents Inc.

In-House Contributors



Heidi Fritz, MA, ND

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.



Guillaume Landry, MSc, Naturopath

A native of the Jura mountains of eastern France, he shares his passion for the wonders of nature and natural medicine.

Pillow Talk

Nutrients for Sleep Hygiene

by Gordon Raza, BSc

It's a term with many interpretations, the main one being a little light conversation to clear your head prior to becoming the sandman's captive. Today, pillow talk is often interrupted by the sound of a bottle cap popping or whatever alert or vibration your wireless device employs to notify you.



We're all aware of the negative effects being wired 24/7 can have on slumber: Some folks even treat bedtime like an international flight. fully clad in a sleep-time blindfold and ear plugs. Falling asleep and getting a restorative night's rest can be difficult, and we all have own unique "bedtime story."

There are, however, many botanical, mineral, and hormonal options which can help you establish and maintain healthy sleep patterns.

Let's begin with your pillow. Hops, chamomile, and lavender are a trio of botanicals with a traditional history to ease sleep onset. Their scents are even marketed for aromainfused pillows; however, for a more potent therapeutic effect, they're available in supplement form standardized to contain a specific potency of their beneficial flavonoids.

Passionflower is recognized for supporting production of gamma-aminobutyric acid (GABA), the compound that suppresses brain activity to induce relaxation. Its history for use as a pain reliever and sedative dates to ancient Aztec civilization. Flavonoid-rich passionflower extracts are popular for use as sleep enhancers.

Skullcap (Scutellaria lateriflora) is among the botanicals recognized to calm the nervous system; look for a potency-validated flavonoid content to ensure effectiveness.

Panax notoginseng, also known as San Qi, is a mainstay of traditional Chinese medicine. It strengthens nerve cells within the cerebral cortex, which insulates the brain from stressors that can delay sleep onset.

Melatonin is among the most effective natural selections for insomnia; it's the hormone responsible for establishing the sleep/wake (circadian) rhythm. Production of this sleep hormone requires darkness, and as many people experience a lifestyle-related shortage, supplementation can be an early form of intervention that delivers results.

Addressing a magnesium deficiency is among the simple interventions that can benefit conditions such as insomnia and restless leg syndrome. The neuroprotective benefits of a highly bioavailable form, such as magnesium bisglycinate, can soothe nerves and set the stage for slumber.

Whether taken individually or in synergistic formulas, these are among the side effect-free and natural nutrients worthy of "pillow talk" for folks with occasional insomnia to those with sleep deprivation that can lead to more severe health concerns.



Lavender for **Back-to-School** Stress

by Guillaume Landry, MSc, Naturopath

We have barely begun to enjoy a well-deserved summer rest, when we're already bombarded with insidious reminders from the media and store shelves that turbulent times of the back-to-school season are soon to come. The start of the school year is often, for children and parents alike, a stressful time of transition. Here are some tips to sail through the back-to-school storm and on to smooth seas!

A multitude of methods exist for managing stress, but some are particularly effective, such as that of cardiac coherence, which can reduce your cortisol level by 25–35%. This simple technique of breathing and concentration allows the heart rate to drop in a span of a few minutes to levels close to those obtained at rest without stress factors—so effectively, that even French Air Force pilots use it. Remember the "3-6-5" technique: 3 times a day (or during stress), 6 deep breaths per minute (5 seconds for each inhalation and exhalation), for 5 minutes. This technique is extremely simple and life-saving!

Reducing fatigue while improving concentration and the ability to handle disruptive events sometimes requires only a few basic steps, like sufficient hydration and sleep. Exercise and the hormone balance it creates also contribute to better coping with daily troubles, as does a joyful, regular, and colorful diet! Organizing your agenda can also help you avoid unnecessary and stressful setbacks. New relationships at school can be disruptive, so work on your communication skills and listen empathetically to those around you. Faced with new events and people, keep an open heart and avoid withdrawal. If the blues set in, you can always tone your cheekbones with a comedy of your choice and end the evening with a warm, Epsom-salt bath.

Finally, to wrap up the antistress tips, nature offers us many plants to help quiet down, such as lavender.

Several studies clearly confirm the empirical knowledge of the medicinal properties of this plant, considered a panacea among herbal medicines. The unique mosaic of natural phytochemicals of its essential oil (EO) includes linalool and linalyl acetate, which are its main active compounds. Linalool has a soothing effect on smooth-muscle tissue by inhibiting the release of acetylcholine, a neurotransmitter that acts within the neuromuscular junction. It has also been demonstrated that lavender EO supports the activity of gamma-aminobutyric acid (GABA), the amino-acid neurotransmitter that regulates brain activity and relaxes the body and mind. Various studies have shown its calming

effect on people in stressful situations: isolated, in hospitals, or exposed to anxiety-inducing videos. One of these studies demonstrated that as little as 80 mg/d of lavender EO regulates synaptic (nervoussystem) functions in the hippocampus, a part of the brain linked to anxiety. In short, lavender essential oil is traditionally used to help relieve agitation and mild symptoms of mental stress and exhaustion. It is also a remedy that helps find a restful sleep, making it an ideal ally for easing back-to-school stress.

Many species of lavender exist, but the most efficient at calming remains true lavender (*Lavandula angustifolia*); broad-leaved lavender (*Lavandula latifolia*) is good for insect bites and burns; Spanish lavender (*Lavandula stoechas*) is a good anti-infective; and the lavandin hybrid (*Lavandula* × *burnatii* or × *hybrida*) seems more appropriate for contractures and muscular cramps.

Externally, you can diffuse true lavender to create a soothing environment and increase concentration: Put a few drops on your pillow before sleep, but also in your bath (20 to 30 drops mixed with an emulsifier) to release the day's stress, or in an antifatigue foot bath. You quickly benefit from its relaxing effects with a few drops applied on the wrist face or on the solar plexus.





Five Health Impacts

by Dr. Katie Thomson Aitken, ND

Every time I turn around, someone else has published a news article saying that cell phones are rewiring our brains, stealing our creativity, and making us unable to focus—and by some measures, even decreasing our intelligence. But are they really?

In January of 2018, The Globe and Mail published an article titled: "Your smartphone is making you stupid, antisocial and unhealthy. So why can't you put it down?" The charges laid against the cell phone included damaging our minds, relationships, attention spans, brain power, work/life balance, memory, and creativity, among others. But is it really? A review article on smartphones and cognition published in Frontiers in Psychology comments: "For all the media attention that this subject garners, the supporting literature is still in its nascent stages." For all the time we spend with phones and all the speculation about how they may be impacting our brains, the research is all still very new. After all, the first iPhone was only released 10 years ago...

Here is what we do know about cell phones.

Cell Phones Increase Stress... At Least in the Short Term

Imagine this: You are sitting with a friend in a coffee shop, waiting for another friend to arrive. Your phone vibrates it your pocket. You grab it, thinking your friend is texting because they are running late. Or maybe you aren't thinking much more than: "What's up on my phone?" In that moment, you are responding to your phone. Depending on how many notifications you have turned on with your phone and what apps you allow to send you push notifications, your phone might go off a little or a lot in a day, each time demanding a piece of your attention—even if you choose not to respond.

Here is another situation: Same coffee shop, this time neither of your friends are there yet. Now, your phone hasn't made any sounds, it's not vibrating in your pocket, but you check it anyway-in case your friend has texted you, or to see how many likes your recent Instagram post has, or just to be distracted from the fact that you are stuck waiting for a few minutes. Either way, you put your phone down just to check it again.

Compulsively checking your phone for updates puts your body in a state of stress. The constant having to respond or wanting to know what's new is a very new phenomenon, and our bodies aren't wired for it-remember, the iPhone is only 10 years old! We are not used to being on call all the time, and it's stressful.

Cell Phones Are Stealing Your Sleep... Probably

If you feel like you are losing sleep to your cell phone, you are not alone. Cell phones have been implicated in impacting a variety of sleep measures. Much of this research has been done in teens, where teens report staying up at night to message friends. Obviously, anything you are doing instead of sleeping (say reading mystery novels) is going to impact sleep; however, the impact of cell phones on sleep seems to go beyond the effects of reallocated time. Even students who used phones more during the day report being more tired than students who don't.

Beyond just reports of sleep, a few researchers have tried to discover how cell phones affect observable sleep differences like brain waves, cerebral blood flow, and rapid eye movement during sleep. So far, the research has been mixed, with some authors reporting no effects of cell phone frequencies and other showing that it's taking people longer to fall asleep and changing the brain-wave patterns and eye movement during sleep. However, so far, no one has studied both brain changes and perception of sleep together. We know that people that use phones report worse sleep, and that cell-phone use prior to sleep may affect how your brain functions during sleep, but the dots still need to be connected.



Cell Phones Take Your Attention, Even When You Try to Ignore Them

Attention is a hot topic right now. ADHD rates are increasing as we have more technology. The average person's attention span has decreased since the advent of smartphones. Cell phones use alerts to get your attention. While you are using your phone, you are less attentive. This is why rules around distracted driving are in place, but the big concern is not just if your cell phone affects your attention in the moment, but if I can impact attention over time when you are away from your phone. The problem with cell phones and attention is that even when we try to ignore them, they can still impact our attention. As a review article in *Frontiers in Psychology* on mobile technology habits and cognitive function notes: "Importantly, smartphones are capable of interfering with focused attention even when the user attempts to ignore them. [...] Simply hearing the sound or feeling the vibration that signified the alert was enough to distract the participants and decrease their ability to focus attention on the primary task." Interestingly, it seems the cell phone need not even ring or vibrate to decrease attention. Other research has shown that the simple presence of a cell phone is enough to cause a decrease in attention during difficult tasks. While short-term impacts of cell phones to attention are clear, the long-term results remain unknown. Away from a cell phone, does the user's attention improve? This has yet to be determined.

Cell Phones Are Changing How We Use Our Memory, Which Might Be a Problem (or Could Be Fine)

We live in a world where you have access to the entire content base of the internet in your pocket. This has led to the expectation that information will be accessible at another time. When the expectation is that we will be able to access information at a later time, our brain decreases storage of that information in long-term memory. Is this a problem? Or are we adapting to technology, remembering where information is stored rather than the information itself?

While looking it up may be a reasonable adaptation to our information-dense and highly accessible world, what about our personal experiences? Research has shown that taking photos reduces memory for observed objects. This is important because of how we use our cell phones to document moments of life with photos and videos to keep and share with friends. By taking these photos, we may be decreasing our own memories of our life experience.

Cell phone use is certainly changing how we remember things, although how much of a problem that is remains to be seen.

Cell Phones Are Habit-Forming and Possibly Addictive, Which Is a Problem Because **Overusing Your Cell** Phone Can Cause Other **Health Problems**

Whether or not you can be addicted, cell-phone behaviours are "addiction-like." Cell-phone users can display withdrawal from being away from their phone, have dependency on their phones to complete tasks, and exhibit

tolerance, where more time on the cell phone is needed to receive the same enjoyment as previous levels. Like other addictions, excessive cellphone use can cause teens problems with their parents and interfere with school. The Globe and Mail was spot-on when they said cell phones were addictive, "if not in the contested clinical sense then for all intents and purposes."

Whether or not someone is addicted, overuse of cell phones can cause a lot of problems. Importantly, cell phones have a major impact on mental health, putting excessive users at greater risk of depression, anxiety, and low self-esteem. They also are placing strain on our physical health, with many individuals suffering from "text neck" from poor phone posture. Overall, excessive cell-phone use has a significant impact on both physical and mental health, which is concerning for such a ubiquitous and possibly addictive technology.

So are cell phones making us "dumb, antisocial, and unhealthy"? Well, while impacts on cognitive function such as attention and memory seem to be impacted, I don't know that I'd go so far as to say smartphones are making us dumb. However, the health impacts of excessive cell-phone use should not be underestimated. Lack of sleep, poor posture, increased exposure to stress, and increased risk for both anxiety and depression are not "nothing." It would seem that cell phones, as we are currently using them, are having negative impacts on our health-especially to those who use them most. So, what can we do?



Considering everything discussed above, here are my common-sense recommendations regarding cell-phone use.

- Keep Them Out of Your Bedroom. Put your phone away, somewhere away from your bed, before you go to sleep. Extra points for putting it away thirty minutes or more before bedtime.
- Turn Off Your Notifications. As described above, every time your phone notifies you, it stresses your body out, even just for a moment. Why not remove as much of that stress as possible?
- Keep Your Phone Further Away from You. If you are dependent on your phone, this might take some getting used to, but your attention will improve for it. Leave your phone in a bag or desk drawer instead of having it on your desk. Give it a spot by your door with your keys, and leave it there when you come home, rather than carrying it around all the time.
- Be Mindful About Taking Pictures. Know that you may not remember something as well if you take a photo of it, and pay attention of how much of an event you are spending taking photos to just experiencing something.
- Use Your Phone Less. Overuse of cell phones put you at risk of an assortment of physical and mental health concerns. Avoid this by making sure you are a more moderate cell-phone user.



Dr. Katie Thomson Aitken, ND

A licensed naturopathic doctor practicing in Guelph, Ontario, Katie has a general practice and enjoys helping patients with all kinds of health goals achieve positive changes in their health and in their life. tranguilmindnaturopath.com

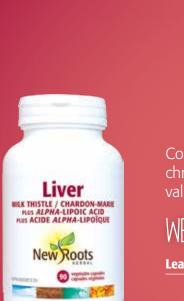
ND's Critic-

It's clear that putting the cell phone down more often is a good idea, or even to consider taking an extended break from screen use. Improvements in technology can quickly lead to unhealthy habits, leading to all types of health problems. This article was a wake-up call for many of us.

Dr. Ashley Kowalski, ND ashleykowalskind.com Hampton Wellness Centre, 1419 Carling Ave., Suite 209, Ottawa, Ontario



HOW CAN I TELL IF MY LIVER NEEDS ATTENTION?



Compromised liver function can result in symptoms that range from chronic fatigue to poor complexion. **Liver** is formulated with eight potency validated nutrients that decongest, detoxify, and strengthen your liver.

WE'LL REJUVENATE YOUR LIVER. YOU FLOURISH.

Learn more about Liver at newrootsherbal.com



Tested in our ISO 17025
Accredited Laboratory





Our society is overburdened with stressors of all kinds: tension in the workplace and long commutes; family and relationship difficulties; financial challenges; and poor lifestyle habits including too much caffeine, too little sleep, and not enough leisure time. The consequences of chronic stress are depression, anxiety, and insomnia. While it stands to reason that we certainly ought to reduce our stressful situations as much as possible and develop better coping methods, we also need to optimize our physical health to limit the effects of chronic stress on our mind and body. Providing the body with key nutrients that have been shown to improve neurological and mental function plays an important role in helping manage ongoing stress.

This article will discuss the effects of vitamin D, fish oil, B vitamins, and lavender on mental health.

Vitamin ${\cal D}$

Vitamin D is a steroid hormone with activity in the brain, and is called a "neurosteroid" by some. The vitamin D receptor (VDR) is widely distributed throughout the human brain, including the limbic system and prefrontal cortex, which are involved in regulation of mood and affect. One of the mechanisms of depression is thought to involve inflammatory processes in the brain, and interestingly, vitamin D is also known to have anti-inflammatory effects. Animal studies suggest that vitamin D may have a role in the production or maintenance of dopamine and serotonin levels in the brain. Finally, vitamin D has also been shown to influence the hypothalamic-pituitary-adrenal (HPA) axis, which is the primary system responsible for adaptation to stress. Although the role of vitamin D on adrenal function is not well known, one study found that prenatal vitamin D deficiency leads to an increase in maternal corticosterone hormone.

Clinical trials indicate that vitamin D supplementation is effective in treating depression and anxiety. A 2016 study of 158 girls with PMS-related mood symptoms and vitamin D deficiency found that vitamin D supplementation

was associated with significantly decreased anxiety score, irritability score, and a decrease in symptoms of crying easily and sadness. Another randomized study in 40 patients with major depressive disorder (MDD) found that vitamin D supplementation



(50,000 IU per week for eight weeks) improved symptoms of depression on the Beck Depression Inventory (BDI) compared to placebo.

Another study evaluated the effect of vitamin D when added to the antidepressant fluoxetine. A total of 42 patients with a diagnosis of major depressive disorder were randomized to receive daily either 1,500 IU vitamin D_3 plus 20 mg fluoxetine, or fluoxetine alone, for eight weeks. Researchers found that depression severity decreased significantly after intervention, with the vitamin D–plus-fluoxetine combination being significantly better than fluoxetine alone from the fourth week of treatment.

Among women at risk of depression in the perinatal (literally "around birth") period, lower vitamin D levels were significantly associated with higher reports of depressive symptoms.

Fish Oil

Fish-derived omega-3 fatty acids include eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). EPA exerts well-documented anti-inflammatory effects: EPA competitively inhibits the production of proinflammatory cytokines such as prostaglandin E_2 (PGE $_2$) from arachidonic acid (AA), and leads to the production of anti-inflammatory cytokines by the cyclooxygenase (COX) enzymes. EPA may also influence cell signaling and neurotransmitter production in the brain. EPA has also been shown to lower cortisol levels in patients with major depression, equally to antidepressants (fluoxetine).

An extensive body of research indicates that EPA exerts powerful antidepressant and mood-stabilizing effects. Data from many randomized trials and several meta-analyses show that EPA improves mood in patients with depression and bipolar disorder, as well as in patients with depressive symptoms but not necessarily meeting the criteria for major depression. Notably, a meta-analysis found that supplements with EPA content greater or equal to 60% showed benefit on standardized mean depression scores, with an effect size of approximately 50%, while supplements with less EPA were ineffective.



EPA has also been shown to improve the effectiveness of antidepressants. In one study, 42 subjects were randomized to receive 1,800 mg EPA and 400 mg DHA in addition to citalopram (antidepressant), compared to citalopram alone. After nine weeks, patients receiving both citalopram and EPA demonstrated significantly greater improvement in Hamilton Depression Rating scale scores over time, starting at four weeks.

Another study examined the effects of EPA alone (1000 mg), fluoxetine alone (20 mg), or both combined for eight weeks on patients with major depression. This study showed that EPA alone and fluoxetine alone were equally effective in managing the symptoms of depression; however, their combination resulted in the best improvement. The EPAand-fluoxetine combination was significantly better than fluoxetine or EPA alone from the fourth week of treatment. Response rates, defined as a 50% or greater decrease in baseline depression score, were 50%, 56%, and 81% in the fluoxetine, EPA, and combination groups, respectively.

B Vitamins

The family of B vitamins is important in the synthesis and metabolism of neurotransmitters and hormones such as estrogen. In addition, according to the homocysteine hypothesis of depression, elevations of the molecule homocysteine are implicated in the pathogenesis of depression.

Homocysteine is an intermediate metabolite of methionine circulating in the bloodstream. If there are adequate levels of folate, vitamin B_6 , and vitamin B_{12} available, it is metabolized to cysteine, a harmless end-product. In the event of deficiency, homocysteine

accumulates in the bloodstream, and has been associated with increased risk of stroke, and hypothetically, depression.

One study evaluated supplementation with one capsule of activated B vitamins among 330 patients with genetic polymorphisms of folic-acid metabolism and major depressive disorder (MDD). After eight weeks, 82.4% of patients showed a mean 25% reduction in homocysteine while on average, patients receiving placebo showed a small elevation in homocysteine. Patients receiving B vitamins also showed an average 12-point reduction in depression symptoms by week eight, while 42% achieved full remission.

Numerous studies show that supplementation with various B vitamins including thiamin, folic acid, and vitamin B_{12} improve symptoms in patients with depression, in patients on antidepressant medications and not.



Lavender

Finally, although not a nutrient, lavender is an herbal medicine with a high level of scientific evidence supporting its effectiveness in the treatment of anxiety and comorbid depression. In Germany, an oral lavender preparation is approved for the treatment of anxiety. Studies show that it is equal to common anxiolytic medications such as paroxetine (Paxil) and lorazepam (Ativan) in the treatment of anxiety.

In a study of 318 adults with mixed anxiety and depressive disorder (MADD) and at least moderately severe anxious and depressed mood, treatment with lavender 80 mg daily for 70 days improved symptoms significantly better than placebo. Patients taking lavender also showed more pronounced improvements of impaired daily living skills and health-related quality of life. A similar study found improvements in sleep quality and anxiety ratings among patients with restlessness, insomnia, and anxiety.

Conclusion

Natural health products have a role in supporting mood and stress management. Agents such as vitamin D, B vitamins, eicosapentaenoic acid, and lavender help provide fuel for optimal brain function, and show few side effects in comparison with some of the commonly available prescription medications.

ND's Critic

Stress is ubiquitous. Every patient I see is experiencing it in one form or another, and although it's built into to us through evolution, too much stress can have debilitating effects. This article outlines some of the best and safest ways to help protect our brain and bodies from the challenges we experience.

Dr. Evan McCarvill, ND choicenutrition.ca 105 Maclead Ave E. Melfort, Saskatchewan



Organic Fermented Ginger and Organic Fermented Turmeric

These cornerstone botanicals of Ayurvedic and Traditional Chinese medicine are naturally fermented for great flavour and ease of assimilation. They taste great as a warm, soothing beverage or incorporated into soups, smoothies, or innovative cuisine.

FEELING BETTER THROUGH NUTRITION NEVER TASTED THIS GREAT!

Learn more about our fermented products at newrootsherbal.com



The Fermented Gang Avengers in Your Plate by Guillaume Landry, MSc, Naturopath

As a budding alchemist, for almost two years I kept a small, airtight jar of umeboshi in my fridge. No, it's not some kind of miniature samurai chocolate, but rather a type of pickled plum, a great classic in Japanese cuisine. During that time, I was on the lookout for the slightest trace of the development of a disgusting greenish mold, wonky and viscous filaments, or other fascinating microbial activity that could feed my curiosity about natural phenomena. Nay, nada, "rien pantoute," as my cousins in Québec would say! So, I had to try the ultimate experience that would have made even a Marvel superhero pale: taste them! After a few long hesitations, with the tip of my tongue, the fear of intoxication subsided as soon as my taste buds were stimulated. These little shriveled prunes honoured their ancestral reputation as natural health gems. With them, my onigiri (rice balls wrapped in leaves of nori seaweed) were a delight, and I didn't wind up in the emergency room!

To each their own tastes, you might say; however, we all have our guilty pleasures when it comes to fermented food and drink. Consider cheese, sauerkraut, bread, kimchi, miso, wine, vinegar, kefir, yogurt, lassi, nuoc mam, beer, tea, condiments, kombucha, etc., For sure, you'll find yourself in these.

Ferment to Multiply the Power!

You guessed it, the object of this praise is none other than fermentation, which, unlike the masked Avengers of our millennial generation's screens, has contributed to the survival of various human civilizations for thousands of years. Today, nearly 5,000 different products are made through traditional and industrial fermentation—including cabbage, soybeans, corn, fish, garlic, beans, etc.—which can represent up to 40% of all food consumed in some regions of the world.

Fermentation includes three main types—alcoholic, lactic, and acetic (vinegar) and rely on microorganisms (yeast and bacteria) to operate in anaerobic biochemical transformations, degrading organic matter, releasing energy, and rendering the physicochemical environment unfit for the development of pathogenic bacteria. In the end, fermented foods can not only be preserved for long periods, but also acquire original organoleptic and nutritional properties which are multiplied tenfold; this makes them superfoods. Nutrients and antioxidants are created and multiplied, and they become highly bioavailable. Their new nutritional value and associated physiological benefits also make them "functional" foods.

Take the example of the incomparable concentrations of vitamin K₂ in nattō (fermented soybeans), a must in the list of natural solutions for osteoporosis; between grape juice and red wine, trans-resveratrol (a polyphenol antioxidant) is multiplied by 10; vitamin C and isoflavones, of cabbage and soybeans respectively, are tripled during their fermentation; etc.



Fermented foods have their nutritional profile rebalanced with reduced sugar content, and their protein and polyunsaturated fatty acids increased. Digestibility is increased through the probiotic effect, which also improves intestinal flora, provides vitamins, and supports the immune system. Moreover, fermentation tends to acidify foods, making minerals easier to absorb. Finally, fermentation eliminates pathogenic organisms through bacteriocins or lactic acid; it inhibits antinutritional substances such as lactose or potentially harmful fungal toxins, cassava cyanide, or phytic acid in vegetables and grains that limits calcium, magnesium, and zinc absorption.

For several years now, the natural health-product industry has promoted fermented "superfoods" that are predigested and boosted, offering valuable health benefits. Today, we find powders that include fermented turmeric or ginger that can garnish drinks, smoothies, sauces, or various culinary preparations. You can make yourself a fermented ginger drink at home, as the various recipes are very simple to prepare (refer to the one at the end of the magazine). They can even be an educational experience for children!

Ginger and Turmeric: Superspices

Let's briefly recall the valuable properties of ginger and turmeric, the universal stars of spice cabinets and natural remedies. Firstly, Burmese tradition says that the universe was created from turmeric—nothing less! From a more rational perspective, the rhizomes of these cousins of the Zingiberaceae botanical family have similar properties:

- Powerful antioxidant and anti-inflammatory;
- Lipid-lowering (lower cholesterol or triglycerides);
- Antiangiogenic and anticancer;
- Hepatoprotective;
- Antimicrobial; and
- Neuro- and cardioprotective.

Specifically, ginger (Zinziber officinale) also acts as a general tonic (notably sexual and cerebral, and slightly cardio), adaptogen, blood thinner, detoxifier, nausea remedy for motion sickness, and digestive aid. Ginger also helps calm morning sickness during pregnancy, can be prepared in a warming and soothing herbal tea for sore throats, or fight against migraine headaches.

Turmeric (Curcuma longa), also adds purging properties (promoting bile flow), and others which are low-dose antiulcer, anti-Alzheimer (destroying amyloid plaques and blocking their accumulation), and antiatherogenic (limiting vascular risks). Note that turmeric has poor intestinal bioavailability, which can be greatly enhanced by the addition of fat and especially of black pepper (Piper nigrum), thanks to piperine, of which the therapeutic dose is 5 mg for every 500 mg of turmeric standardized to 95% curcuminoids.

These plants are already powerful remedies, thus when fermented, they only become more powerful and effective. Let's illustrate this with some notes on research that show the health benefits of fermentation of these two rhizomes...



A study conducted in 2010 shows how fermentation of ginger (among others forming the 6-gingerdiol) not only multiplies its anti-inflammatory properties, but when mixed with red yeast rice was also found in experiments to be much more effective against cholesterol.

A study conducted in 2015 on fermented turmeric shows its considerable impact on not only reducing the risk of liver-cell injury, but also that of heart, muscle, and kidney. Furthermore, research has shown that fermented turmeric antioxidants minimize formation of fat, improving body composition and reducing obesity.

Other recent studies emphasize the enhancing properties of ginger and fermented turmeric; for example, several forms of curcuminoids develop with turmeric, among which the whiter-pigmented tetrahydrocurcumin is far more bioavailable than other curcuminoids. Moreover, an increase in phenols (reports of up to 1:40!), organic acids and other synergistic substances are shown in the following table.

Table 1. Nutrients Created or Increased After Fermentation of Turmeric and Ginger (Nonexhaustive)

	Turmeric	Ginger	
Phytonutrients	Eucalyptol, cineol, terpenes, phenols, flavonoids	Gingerols, zingerones, flavonoids, terpenes	
Organic acids	Acetic, gluconic, and succinic acids	Acetic, gluconic, and succinic acids	
Amino acids	Tryptophan	Glycine, valine, tyrosine, tryptophan	
Vitamins	A, B, C	B ₃ , B ₅ , B ₆ , C, K	
Minerals	Calcium, phosphorus, potassium	Calcium, magnesium, phosphorus, iron	
Enzymes	N/A	Hydrolase, lipase, amylase	
Other	Soluble sugars, alcohol, glycerol	Soluble sugars, alcohol, glycerol	

Turmeric and ginger have a well-established medicinal reputation. As for fermentation, its universal and immemorial usages not only inspire confidence, but also find their legitimacy in the observations of modern science, which validates the tremendous potential fermentation brings to health. Mix everything, and you get two fermented champions in the pantheon of superfoods, always ready to make your beverages and dishes a true healthy and gustatory adventure.

Finally, as the good-natured Gallic that I am, I also invite you to taste each day—to the extent possible and within reason—all things fermented, whether it be a sourdough baguette, sauerkraut, raw cheese, or glass of red wine!



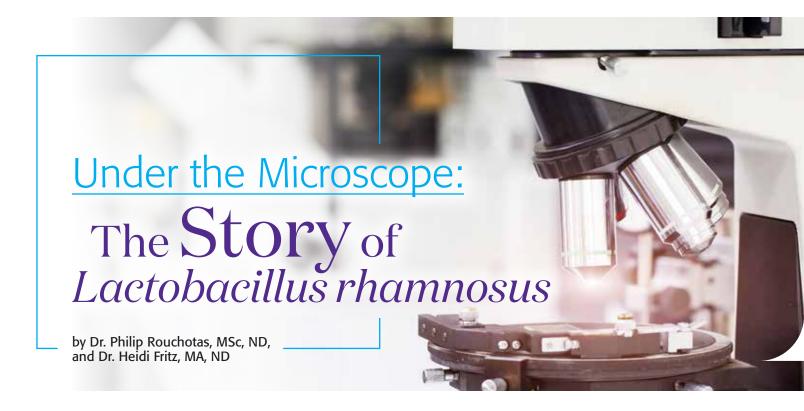


NFL Goes Vegan!

What started with one member of the Tennessee Titans' choice to adopt a vegan-based diet mushroomed into a 15-player plant-based meal movement last season. Derrick Morgan, a 250-pound middle linebacker, transformed his life in style with the help of Charity, his Cordon Bleu-trained wife. Before long, he was bringing in extra food for his teammates, until his wife Charity had to enlist two sous-chefs to meet demand for the 14 extra mouths to feed.

Players are leaner, faster, have more energy, and are quicker to recover from the aches and pains of their profession with natural anti-inflammatories like turmeric and ginger being incorporated into their cuisine.

With the Titans playoff run of last season, no one was asking "Where's the Beef?"



The focus of the scientific community on the many roles of the microbiome continues to expand. Every week, it seems another discovery shows the importance of a healthy gut flora and by extension, a possible role for probiotic supplementation. In this article, we turn our attention to a particular bacterium, Lactobacillus rhamnosus, which has shown promise in many scientific studies relating to women's health concerns. L. rhamnosus has been shown to benefit a widely ranging list of areas including vaginal health, the urinary tract, health in pregnancy, as well as mental health.

Vaginal Health

There is a wealth of clinical data supporting the use of probiotics applied vaginally or orally in the treatment of recurrent vaginal infections such as vulvovaginal candidiasis (VVC) and bacterial vaginosis (BV). Recurrence of BV after antibiotic therapy ranges from 30 to 40%. Lactobacillus species acidify the vaginal environment, making it more difficult for pathological species to establish themselves. In addition, Lactobacillus species have been shown to disrupt microbial biofilms, which can help combat reservoirs of chronic or recurrent infection.

In a randomized, double-blind, placebo-controlled trial, 55 women diagnosed with VVC through vaginal swab and treated with a single dose of fluconazole (150 mg) received either daily probiotic supplementation or placebo for four weeks. The probiotic contained *L. rhamnosus* and *L. reuteri*. After four weeks, the probiotic group had significantly less vaginal discharge and associated symptoms, compared to placebo (10% v. 35%), and lower presence of yeast on swab (10% v. 38%).

Another study—a randomized, double-blind, placebo-controlled trial—examined 544 women diagnosed with BV, allocating them to an oral probiotic containing L. rhamnosus or placebo daily for six weeks. Upon follow-up at six weeks, restitution of normal vaginal microbiota was reported in 61% of the probiotic group, compared to 27% of the placebo group.

Another study examined the effect of an oral probiotic containing L. rhamnosus on the Nugent score among postmenopausal women. The Nugent score is a rating system to diagnose BV, with a rating between 7 and 10 being consistent with BV. In this study, women had an average score of 4-6 at baseline. They were then randomized to receive probiotic or placebo for 14 days. After this period, results showed that women in the probiotic group had an additional three-point decrease, compared to no change in the placebo group.

The use of probiotic supplementation in addition to antibiotic therapy for BV has also been shown to result in higher rates of cure: 87% v. 50% in one study.



Urinary Tract Infection

Lactobacillus-based probiotics may be helpful in preventing recurrent urinary tract infections (UTI) as well as in repopulating the gut after antibiotic therapy. A recent meta-analysis summarized data from nine trials including 726 women. The review found that while there was a variation in the bacterial strains and routes of delivery used (vaginal or oral), "they demonstrated varying efficacy in the prevention of recurrent UTIs." Overall among all the studies, the risk of having "at least one recurrent UTI episode during the entire study duration was 0.684 (95% CI 0.438 to 0.929, p < 0.001)," indicating a significant effect in reducing the risk of recurrent UTI. Notably, L. rhamnosus and L. reuteri were the most frequently used probiotics.

A European pilot trial examined the effectiveness of a combined approach in preventing recurrent UTI. A total of 42 women with recurrent UTI were enrolled and instructed to take cranberry (120 mg containing 32 mg proanthocyanidins), L. rhamnosus (1 billion CFU), and vitamin C (750 mg) three times daily for 20 days. After 10 days off, they were told to repeat the cycle, with three cycles in total. After three months, 72% of the women were classified as "responders," having had no UTI during that period. At six months, 61% of women were responders. Researchers concluded that this approach may represent "a safe and effective option" for preventing recurrent UTI.



Pregnancy

Recent studies suggest that supplementation with probiotic *L. rhamnosus* from early pregnancy may decrease incidence of gestational diabetes mellitus (GDM). Preventing GDM is important because GDM increases the risk of preeclampsia, miscarriage, preterm birth, macrosomia (large body size of the infant, complicating labour), induction of labour, and caesarean-section delivery. Later in life, GDM increases the risk of obesity in both the mother and child, and their risk of type 2 diabetes.

In a double-blind, randomized, placebo-controlled trial, 423 pregnant women at 14-16 weeks of gestation were randomized to receive L. rhamnosus (6 billion CFU) or placebo daily. Results showed an overall trend towards lower rates of GDM in the L. rhamnosus group. More importantly, L. rhamnosus was associated with significantly lower rates of GDM in women aged ≥ 35 years and in women with a history of GDM.

A Finnish study of 256 women found supplementation with a *L. rhamnosus*–containing probiotic resulted in an additive decrease in GDM when combined with diet counseling. The randomized trial found that the rates of GDM were 13% among women receiving diet counseling plus probiotics, 36% among women receiving diet counseling plus placebo, and 34% among women receiving neither.

It is thought that gut microbiota influence glucose (sugar) metabolism. The gut microbiota is "profoundly altered during the three trimesters of pregnancy," becoming less diverse, and women with GDM exhibit the least bacterial diversity. Authors suggested that *L. rhamnosus* supplementation effectively "altered the composition and function of the gut microbiota in favour of improved insulin sensitivity and inflammation," resulting in less diabetes.

In addition to glucose regulation, some data support the use of probiotic supplementation with L. rhamnosus in women with vaginal or rectal group B streptococcus (GBS) colonization in pregnancy. In Canada, testing positive for GBS in pregnancy usually results in having to receive intravenous antibiotic therapy during delivery, in order to prevent transmission of the GBS bacteria to the infant.

A randomized, placebo-controlled trial evaluated 110 women who had tested positive for GBS at 35–37 weeks of gestation, allocating them to receive either a probiotic containing L. rhamnosus and L. reuteri, or a placebo, orally daily until delivery. All women were tested for vaginal and rectal GBS colonization again by GBS culture on admission for delivery. Results showed that the GBS colonization results changed from positive to negative in 21 women in the probiotic group (42.9%) and in nine

women in the placebo group (18.0%) during this period, and researchers concluded that "oral probiotic containing *L. rhamnosus* GR-1 and *L. reuteri* RC-14 could reduce the vaginal and rectal GBS colonization rate in pregnant women."

Another randomized trial of 60 pregnant women showed that supplementation with a probiotic containing *L. rhamnosus*, this time as a vaginal suppository, weekly for 12 weeks could reduce the development of "abnormal vaginal microflora" based on vaginal swabs, pH testing, and the "whiff test," as well as reduce parameters associated with risk of preterm birth, such as cervical length and dilation, and lower position of the fetus, compared to the control group.

A host of clinical studies also demonstrate positive effects on the infant's immune development associated with probiotic supplementation by the mother during and after pregnancy; however, a detailed discussion of this topic is beyond the scope of this article.



Mental Health

A recent randomized, double-blind, placebo-controlled trial evaluated pregnant women who were given *L. rhamnosus* probiotic from between 14 and 16 weeks of gestation until six months postpartum. This study found that those women who received the probiotic had a significantly lower incidence of postpartum depression and anxiety compared to placebo. The effect of probiotics on mental health is an emerging area of investigation, and this study at least seems to support their use. Overall, given the many benefits and lack of significant harm, probiotics appear to be a valuable strategy for promoting women's health.



OPTIMIZE THE BENEFITS OF YOUR PROBIOTICS!











If you've ever been a caregiver of young children, you know what an exciting time it is when a new school year begins...

Everyone is buzzing about the summer fun, with some sadness that fall has arrived. While most kids are nervous about the unknowns—like who their teachers will be, who their classmates will be, what their course work will be like, etc.—the anticipation of seeing old friends again and enjoying favourite school and after-school activities makes this time of year have a surprisingly celebratory quality about it.

A Great Time for a Fresh Start

With this energizing "fresh start" feeling in the air and the desire for joyous outcomes, this is one of the best times to strategize about ways you can optimally support your kids and their learning. The great news is that you can make some very simple lifestyle adjustments that can help your kids shine, both socially and academically, if you make the courageous decision to swim upstream by teaching them how to march to a different drum.

The Fuel You Choose Makes a Difference

I'm not trying to scare you, but we all know that the majority of food that is marketed for kids here in North America does anything but enhance their ability to focus and learn. It doesn't take a rocket scientist to know that the quality of fuel that we put in our engines affects the quality of our energy, performance, and learning. With the rapid rate of growth that school-age kids are going

through, along with the complex hormonal and neurological changes that go with the territory, their need for proper nutrition and physical activity are even more crucial.

The mere fact that you are reading this article tells me that you likely already know that foods filled with sugars, starchy carbs, sodium, caffeine, food dyes, and colours (not to mention other mysterious chemicals that are often difficult to pronounce) don't do the body good. Even though you know this, your desperate longing for convenience and "normalcy" for you and your kids during the busy-ness of life during the school year, especially if you have a child with special dietary needs, may lead you down the familiar path of nutritional compromise.

"Don't be afraid to stand for what you believe in, even if that means standing alone."

-Andy Biersack

You Are Not Alone

We've all been there, but that doesn't mean we have to stay there. It also doesn't mean that it has to be difficult for us to feed our children whole foods, with lots of beautiful fruits and veggies, when they're at school. If you are willing to go the extra mile, your efforts will be more than rewarded as you witness your kids focus and perform better at school, interact more appropriately in the classroom and on the playground with fewer behavioural or social challenges, manage their stress and other difficult emotions better, and demonstrate overall better brain functioning that is easily identifiable by their improved ability to learn.

The few minor changes you can make in order to see these benefits become mere drops in the bucket. Seeing your child thrive can give you one of the biggest dopamine highs this life has to offer. You'll never want to turn back.





Seven Simple Tips to Help You and Your Kids Eat-to-Learn

- Make Real Food Irresistible: As untrue as it is, there is still a societal belief that, in order for food to taste delicious, it must be unhealthy (e.g. filled with sugar, gluten, butter, etc.). The best way to teach kids that this belief is a myth is by allowing them the opportunity to discover how delicious real food can be. So, when you give your kids mouth-watering meals that don't have any of those offending ingredients in them, you can only imagine their surprise and delight to relish in delectable delights, especially if the recipes are easy enough for them to make themselves.
- Cook With Your Kids and Their Friends: Kids are more likely to want to eat food that they prepare themselves than food that is made for them. They are more invested in the process and also curious about what they have been able to create. Empowering and confidence-building, the benefits of teaching kids about the magic of creating meals from real whole foods is also good for their mind, spirit, and body. It's a bonus if they can share this experience with a friend and can make for a fun after-school play-date activity.
- Get Fun Cooking Tools Your Kids Will Love: Nothing will get your kids more excited about eating cucumbers, zucchini, or apples than letting them spiralize them into superlong noodles. It's literally magical what such devices—or even cute little cookie cutters to make sweet pepper and carrot stars, hearts, and crescent moons—can do to your kid's interest in fruits and veggies. We eat first with our eyes, and so helping your children make and then pack up colourful rainbow lunches will not only bring smiles to their faces when they prepare them, but will also engage them and their friends when they open their lunch bag filled with their beautiful creations at school.
- Once a Month (or More!), Let Your Child Choose a New Recipe from a Healthy Cookbook that You Can Help Them Learn to Make. Find recipe books that use whole-food ingredients and let your child peruse the pages and suggest new recipes to try. Learning how to cook real food is fast becoming a lost art, leaving many kids disabled in the kitchen. Help them build their confidence by walking through the process of learning something new first with you by their side. Before you know it, they'll be taking over the kitchen on their own, creating masterpieces that even you would think you'd have to go to a restaurant for. Teaching your kids the pleasure of slow cooking and mindful eating is a treasure they will take with them the rest of their lives.

- 5. Make Ahead and Refrigerate Grab-And-Go Lunch Items: Recreate convenience foods by prepackaging in small reusable containers lunch-sized portions of vegetables, fruit, dips, crackers, etc. that can be easily packed in lunches. Kids love this! If possible, create a variety of options that your children can choose from as they pack their own lunches, empowering them to select what their preferences are for that day.
- 6. Teach Your Kids How to Create Their Favourite Comfort Foods and Desserts, but Without the "Junk": Just like us, our kids and their friends have associations with certain foods. When they are craving ice cream or pizza or mac-and-cheese, it's really hard (if not impossible) to talk them out of it. Fortunately, there are now better and über-tasty innovations to create many of those very same old favourites that are indistinguishable from the versions that use unhealthy and even toxic ingredients. As many of you know, I personally dove into the world of such innovative recipe development in order to contribute to the solution to help as many people as I could with this challenge.
- 7. **Be Brave and Take It Slow:** Learning to try new things that are out of the familiar comfort zone isn't just hard for your kids, but can also be difficult for you too. Focus on trying one new thing at a time and stick with it. You can totally do this, even if at first it feels unnatural because it is unfamiliar.



Junk Food Bans

Just like any other habit change, it does require a commitment to a temporary period of time living out of your comfort zone. While a growing number of jurisdictions around the world have begun implementing junk-food bans at schools and sporting events that would make the choice for healthier options for our kids easier, it's mostly still a free-for-all in the majority of Canadian schools. Because there is a lack of policies that require healthier food for kids in schools, you may feel at times like you're trying to lead your children on awkwardly wholesome bicycles going against the traffic of cheeseburger- and pizza-filled trucks of social pressure, overflowing with sugary sweets, chicken nuggets, and ill-fated (albeit delicious) chips and fries.



You've Got This!

However tough it can be, those junkfood trucks are no match for your fierce love for your kids and their wellbeing. Your commitment and vision for your kids empowers you in ways you never would imagine, and they also equip you to guide your kids as a warrior as you teach them how to navigate the challenges that life presents.

Perhaps the biggest gift for your children will be the opportunity for them to witness the incredible being that *you* are through your example. Even if not in the moment, in the long run your kids will emulate you. Your willingness to defy the social conventions of parenting, because of your commitment to love them and live with as much integrity as you can, will be your legacy and will one day run through the marrow of your beloved children's bones the rest of their lives.



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.





They are the classic signs of yang in excess: too much activity, overthinking, stress, irritability, working too hard. Here are my five reasons why I love yin yoga, to bring all that yang energy back into balance at this crazy-busy time of year.

- 1. In yin yoga, we hold each pose for three to five minutes. These long holds allow us to slow down and experience a lace of rest and refuge amidst the rush of back-to-school.
- 2. Yin yoga asks us to find that just-right edge and soften into the pose with nonabandoning attention. This kind of approach gives us the space in our ambitious and aggressive lives to be gentle and kind with ourselves.
- During those long holds, we get to release the stress that accumulates in our bodies as tension. After a yin-yoga pose and session, we experience a release of the constriction as well as ease and peace in our bodies and minds.
- 4. There are so many things to think about during back-to-school, such as registering for courses, picking up supplies and books, and scheduling important meetings. During yin yoga, we can give our minds a break and practice mindfulness, simply focusing on one thing at a time, such as our breath or the sensations in our bodies.
- 5. By taking the time for yin yoga, holding those poses for five minutes with gentle attention, we create space to be present for ourselves. Instead of pushing through stress and anxiety, and going over and over our laundry list of to-dos, we soften into our experience and feel all the feels. Taking time to be still with these emotions, without judgment or criticism, is a beautiful act of care, consideration, and love that we can offer to ourselves during this wild and crazy time of year we call back-to-school.



Dr. Melissa West

She helps you restore your energy every Friday on YouTube with her library of over 400 restorative yin and hatha yoga videos.

melissawest.com



HOW CAN I ENSURE THEY'LL GROW UP BIG AND STRONG, FIT AND WISE, HEALTHY AND SMART?



The only things bigger than your kid's potential are the hopes and dreams you have for them. That's why we offer a full range of supplements to ensure that your kids are always healthy, happy, and ready to take on the world!

WE LOOK OUT FOR YOUR LITTLE ONES. YOU FLOURISH.

Learn more about our children's supplements at newrootsherbal.com









The Seasons and Health

In Chinese medicine, each season and its element-wood, fire, earth, metal, or water-govern the flow of qi (energy) in the body. Proper flow of gi is key for health maintenance. Acupuncture and herbal treatments regulate the flow of qi to organs via energetic pathways (meridians) to heal the body and restore balance.

So, Why Detox for Fall?

The short answer: Proactive prevention of illness, one season ahead. The Medical Classic of the Yellow Emperor puts forth the principle that one should cultivate yang energy in spring and summer, while protecting the yin energy in autumn and winter.

The fifth season: In Chinese medicine, there is a fifth season, called late summer. Ruled by the earth element, late summer is a time for nourishing and strengthening while shifting to the next season, fall.

A fall detox prepares the body for the fall and is done in the fifth season (third week of August to fall equinox).

In tune with the seasons: Late summer is all about centering and grounding by nourishing and strengthening our bodies. Continuation of intense summer activities-such as late nights, long days; spending time doing vigorous activities in peak sun; eating hot and spicy or heavy food; dehydration; lack of sleep or irregular sleep—all increase the fire element in our bodies, which can aggravate or create symptoms listed below.

- Anxiety, stress, worry (heart fire aggravated), agitation, mania, depression, nervousness, insomnia
- Exhaustion or weakness from summer activities
- Digestive issues such as reflux, ulcers, heartburn, acidity, or bleeding
- Headaches aggravated by heat, red eyes

One season ahead: The ultimate goal of fall detox is to nourish and strengthen the digestive system to prevent fall seasonal illnesses. A strong earth element (stomach and spleen) supports the metal element (lungs and large intestine) in the fall season when immune health becomes vulnerable (e.g. cold and flu, inflammation).

Season	Time of Year	Element	Organ
Spring	Begins at spring equinox (March)	Wood (new growth)	Liver / Gallbladder
Summer	Begins at summer solstice (June)	Fire (heat)	Heart / Small Intestine
Late Summer	Begins on the third week of August	Earth (nourish)	Spleen / Stomach
Fall	Begins at fall equinox (September)	Metal (harvest)	Lung / Large Intestine
Winter	Begins at winter solstice (December)	Water (cold)	Kidney / Bladder

Who can benefit from a fall (late summer) detox? Late summer, it is particularly important to strengthen digestive (stomach and spleen) health—especially if you have or have had any inflammation in your digestive tract, such as IBS; celiac disease; Crohn's disease; colitis; diverticulitis; food sensitivities, intolerances, or allergies; chronic constipation; or diarrhea.



Fall Detox for Prevention

In Western terms, a fall detox can prevent issues one season ahead by nourishing and strengthening:

- Immune health (for cold and flu prevention);
- Lung health (for fall seasonal allergy prevention especially to molds); and
- Digestive health (for colorectal cancer and prevention of polyps [extra tissue
 growing in the colon that can become cancerous, ulcerative colitis], ulcers
 of the colon and rectum, diverticulitis [inflammation or infection of pouches
 in the colon], and irritable bowel syndrome [an uncomfortable condition
 causing abdominal cramping and other symptoms]).

Fall Detox Foods

To support the earth element, eat nourishing, neutral, and sweet foods which support and strengthen the digestive organs—stomach and spleen. Generally, don't skip breakfast, chew well, eat slow, avoid overeating, and include the following in your fall detox.

Lentil Soups: Legumes and lentils build qi, blood, and fluids. They are high in protein and fibre, and they regulate blood sugar.

Winter Squash: Pumpkin, butternut, delicata, Hubbard, turban, acorn, and spaghetti squash are perfect nourishing foods.

Whole Grains: Quinoa, millet, buckwheat, brown rice, oats (steel cut).

Root Vegetables: Beets, carrots, parsnips, potatoes, onions, radish, and turnips.

Fruit: Berries, apples, peaches (avoid all tropical fruits and all fruit juices due to too much concentrated sugar).

Nuts and Seeds (go easy on the nut butters, as they are heavier to digest).

Some Leafy Green (warmed, lightly cooked in soups or stews—avoid raw in this season).

Warm Pungent Foods: Onions, cabbage, Brussels sprouts, mustard leaf, lavender, oregano, basil, savory, tarragon, rosemary, sage, bell peppers.

Essential oils of juniper and tea tree.

Remember: Health begins in your gut! Since your digestive system is the cornerstone of your health, if you manage and care for this one system—daily, monthly, yearly—you will be able to prevent many illnesses in the future. Think spring and fall detoxes for your body as a "tune-up" for your car or "cleaning out your garage" for your home—essential maintenance you benefit from throughout the year.



Angeli Chitale, BSc, ND

Dr. Angeli Chitale is a licensed naturopathic doctor, with additional training and qualification in treatment of both thyroid and endocrine conditions including fertility for men and women.

restorativemedicine.ca

ND's Critic-

Yes! This article hits the nail on the head. Too often, my patients are preoccupied with dealing with a problem once it has manifested itself, such as an infection. However, prevention is so much more important. This article identifies a great ritual and actionable strategies one can implement to protect against illness.

Dr. Michelle Lo, ND

drmichellend.com Naturopathic Living Clinic, 139 Main St. Unionville, Suite 204, Markham, Ontario



Marrakech Express

Flourish Original Recipe

This splendid spread is our summertime "house condiment," which oozes simplicity and fosters addiction. It goes great with grilled chicken and roasted vegetables, and stores well refrigerated for a couple of weeks.

Ingredients

- · One bunch of cilantro
- · One bulb of garlic (peeled)
- · 6 jalapeño peppers, stems removed
- · 1/4 tsp. cumin
- · ¼ tsp. sea salt
- · ¼ cup Heart Smart Olive Oil (or more for desired consistency)

Instructions

Chop, dice, blend, and enjoy!

Turmeric Golden Milk

Flourish Original Recipe

Ingredients

- · 1 can (400 ml) of coconut milk
- · 400 ml of water (use the coconut milk can)
- · 2 tsp. fermented turmeric
- · 1 tsp. ginger
- · 2 tsp. cinnamon

- · ½ tsp. cardamom
- · ½ tsp. nutmeg
- · 1 tsp. vanilla extract
- · 2 tsp. raw honey or coconut sugar (optional)
- · Pinch of fresh ground pepper

Instructions

Heat all ingredients on low to medium heat until blended.



Ginger Mojito

Flourish Original Recipe

Ingredients

- 1 litre of carbonated spring water
- · 1–2 sprigs of fresh
- · 1–2 sprigs of fresh sweet basil
- · 1 tsp. fermented ginger
- · 1 lime
- · 2 tsp. raw sugar or stevia to taste (optional)
- · Ice

Instructions

Slice lime in half; use one half to squeeze in, and slice the other half to throw in. Combine all ingredients. Gives about 1 litre.





Back to School Lunch

I am all about the "bento box"—styled lunches; in other words, a deconstructed lunch. We often get stressed thinking about packing and making lunches, but thinking "deconstructed" makes it easier. You can add a few different items that make it balanced and fun for your child. If you have a "fussy eater" at home, try packing a deconstructed lunch using one or two items you know they love and introducing something they are less likely to eat (cue veggies).

Example lunch: Avocado egg salad, crackers, edamame beans, or chia pudding with berries.

Avocado Egg Salad

Ingredients

- · 8 hard-boiled eggs
- · 1 ripe avocado
- · Salt and black pepper to taste
- · 2 tbsp. olive oil

- · 2 tbsp. lemon juice
- · ¼ cup green or red onion, minced (optional)
- · 1 tsp. chili flakes (optional)

Instructions

Mash avocado and mix with salt, black pepper, and seasoning of choice. Stir well to get a cream-like consistency.

Mash eggs with two forks. Add avocado mixture, green onions, lemon juice, and olive oil. Mix together well and adjust seasoning.

Serve with crackers or in a sandwich. Keep refrigerated up to 3 days. Serves 4.

Blueberry-Chia Seed Pudding

Ingredients

- · 3 tbsp. chia seeds
- · ¾ cup milk (I used canned coconut milk)
- · 1 tsp. vanilla extract

- · 1–2 tbsp. blueberry jam (or your child's favourite)
- · Fresh berries for topping

Instructions

Mix together chia seeds, milk, vanilla, and jam. Place in airtight container and refrigerate for at least 3 hours. It should become gel-like.

Serve topped with fresh fruit. Serves 2.



Angela Wallace

A registered dietitian with the College of Dietitians of Ontario, personal trainer, and family food expert who specializes in women and child nutrition and fitness, she loves helping families get healthy together.

eatrightfeelright.ca

Flourish

Blog Preview

Visit our blog to subscribe to our newsletter!

For more articles on health, lifestyle, and wellness—add to that delicious recipes!-all in a more dynamic and accessible format, visit our blog in the upcoming weeks at flourishbodyandmind.com



Anxiety and Insomnia: Breaking the Sleep/Anxiety Cycle

Anxiety is extremely common; in fact, the Centre for Disease Control and Prevention reports that anxiety disorders are the most common class of mental disorders. Aside from the anxiety, 60-70% of people with anxiety also report that they have trouble sleeping. [. . .]



Healthy Detox Soup

An original recipe developed according to the properties of selected vegetables, "like a formulation for pharmacological activity." This is a soup for the day after feasts and holidays, on occasion, for a mono diet or for a weight-loss diet as a "fat burner" soup, to be consumed preferably in the evening (one large bowl per person). [...]



Proteins: Retention of Muscle Mass and Strengths

Sarcopenia, the age-related loss of muscle mass, is not inevitable. We'll discuss the role of targeted protein supplementation and strength training for "aging strong"!



Flourish Four Times a Year!

Over the years, Flourish has become a thriving and informative magazine that includes original content, written by natural-health professionals and, judging by your feedback, many delicious recipes. In order to continue bringing you this quality content, our magazine will now be published four times a year; once per season.

We'd like to highlight that our blog has risen in popularity. Therefore, we invite you to visit it more regularly as additional content will be added. Be sure not to miss out, and subscribe to our newsletter!



(IS IT POSSIBLE TO RELAX WHEN YOU DON'T HAVE TIME TO STOP AND SMELL THE FLOWERS?





While roses get all the credit, it's lavender that does all the heavy lifting. Made with steam-distilled organic lavender essential oil, **D-Stress** offers a nonaddictive way to cope with restlessness, mental stress, and insomnia.

WE HELP YOU RELAX. YOU FLOURISH.

Learn more about D-Stress at newrootsherbal.com





