

THE HERBALIST'S WAY

The Inaugural Issue ISSUE NO. 1, 2020

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MANAGER'S NOTES

THE INAUGURAL ISSUE

Dear Readers.

Through these very strange times we are living in, it has been difficult to adjust for many of us. Regardless of whether things on an individual level are slowing down or speeding up, we all have been facing major shifts. These shifts are occurring all around us and, undoubtedly, within as well. Despite our world shifting and changing around us, we have had to keep on moving through it.

As a community, it has been difficult. Many of us have had to close doors, while others have been busier than ever. Truly, we are greatly disappointed that our beloved herbal gatherings have had to be cancelled due to the COVID-19 pandemic restrictions. We are optimistic that perhaps our situations may improve towards the end of summer and hopefully grant the opportunity for at least some of our community to get together, in some form.

It has taken a lot more time and effort than initially assumed, but after putting the call out continuously, and reaching out to friends and colleagues, we have finally gathered our content for the first official release of The Herbalist's Way, an ezine created by the Ontario Herbalists Association.

We are so grateful to have so many wonderful people in our community who have offered to share their contributions. This has been a collective effort and we hope this medium allows for more of us to connect and share knowledge on a regular basis. We hope you enjoy this inaugural issue, and think about contributing to future publications.

Many thanks,

P.S. The content of this ezine will eventually also be published in

Lianna Vargas

P.S. The content of this ezine will eventually also be published for reading on our website, but please keep in mind it may take us a little while as we have many projects on the go that require countless volunteer hours. If you would like to help volunteer, please be in touch!



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FROM OUR PRESIDENT

My mother used to tell me stories of when she was a child in the 1930s, being quarantined during a scarlet fever outbreak - forbidden to leave the house for 3 weeks, with a sign of 'QUARANTINE' posted on the door and a warning banner across the door frame. Boxes of groceries were left on the door step, and the door opened inward so it could be taken inside. To me, these stories were like a fairy tale - something unreal, outside my experience and unimaginable.

Now it has happened -- to everyone. Even though the current quarantine was initially voluntary (and maybe seen not quite as extreme), it has gone far beyond the scarlet fever quarantine. The disruption to routine affects everyone.

As herbalists, we have tools to help people's immune systems maintain strong function and to deal with whatever virus comes our way. During the COVID-19 crisis, this knowledge has been focused on our families, clients, and friends, but as herbalists, many of us desire to share our knowledge with anyone who is interested and willing to listen.



Amid all the negative effects of COVID-19, there is an opportunity for Registered Herbalists to prove the effectiveness of herbal therapy.

After the Spanish Influenza of 1918-19, which killed 50 million people world-wide, the statistics were clear --The Eclectic Medical Physicians (using herbs, water, heat, etc.) and the British Homeopaths, had the best outcomes.

Registered Herbalists who are treating flu-like symptoms should keep excellent client case studies notes. After the panic is over, there will be reliable IgG serology testing to separate COVID-19 from seasonal influenza. Those who keep detailed, accurate case records and follow-up with patients will have results which can be published. This could provide documented evidence of the effectiveness of herbal therapy.

As we move forward into a world very different than what we lived in before the Ides of March, 2020, Registered Herbalists can help prove the effectiveness of properly applied herbs.

President, Ontario Herbalists Association

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Susan Elliotson, RH Clinical Herbalist

Susan has a private practice in Caledon, surrounded by the herbs she uses. She currently serves on the Board of Directors as Presicent of the Ontario Herbalists Association, and is also a professional member of the American Botanical Council. She has taught Herbal Pharmacy as a faculty member of Mohawk College (Hamilton), and Introductory Herbal Medicine and Advanced Herbal Medicine Applications at The Institute of Holistic Nutrition (Toronto). She regularly leads herb walks and speaks to private groups on different aspects of herbs.

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A VOLATILE SEASON

By Laura Holloway, RH

As winter ends and the sun slowly returns, vast coniferous forests awaken from their dormancy and put their evergreen exteriors to work. The longer days and intensifying sunlight is absorbed by the dark crowns of these trees; it warms their needles and the air above them, and ultimately releases an invisible weather-changing mechanism. You may have sensed this on early spring walks... as the sun gets stronger, so too does the smell of pine, spruce, and other evergreen trees.

Their distinct scents are fresh, sharp, and invigorating, but these scents are more than just ethereal mood-enhancers - in early spring these scents make it rain.

In order for water vapour to form into rain it must cluster around a particle, and the molecules that supply scent provide such a place for the vapour to form into droplets. These droplets eventually coalesce into clouds where they collide and merge to form raindrops which now have the weight to fall back to the earth.

With the release of this invisible arsenal, the sweet-smelling coniferous forests have the power to elicit their own rainfall and jumpstart their growth at the earliest signs of spring.

The distinctive scents of evergreen trees (and likewise other plant life) is thanks in large part to a group of chemicals known as terpenes. Terpenes come in a variety of types and sizes, but it is the simpler of the forms (the fragrant monoterpenes and sesquiterpenes) that are most familiar. They make up the largest part of a plant's 'volatilome' - the complex mixture of volatile organic compounds (VOCs) and essential oils (EOs) emitted by an organism.

"Coniferous forests get a head start on the growing season by unleashing their terpene toolkit to influence the weather..."



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Coniferous forests get a head start on the growing season by unleashing their terpene toolkit to influence the weather, but the main functions of this volatile 'aura' among other plant life is more complex. Terpenes attract pollinators and seed dispersers, provide defense against herbivores and pathogens, and act as signals in plant-to-plant communication. The volatile chemicals can also provide indirect defense by luring the predators of the herbivores that have chosen to make a meal out of the plant.

VOLATILE ATTRACTION

Some flowering plants harness the power of the wind to aid in their reproduction, but most (about 85% of angiosperms) rely mostly on insects for the all-important transfer of pollen. As such, they employ their volatilome to lure bees, butterflies, and other insects to a sweet meal of nectar, the plant's pollen then hitching a ride to the next sweet spot. The volatile terpenes are among the most commonly used floral volatile emissions, and this is because these same chemicals are synthesized by the insect pollinators themselves as part of their own chemical communication systems.

Insects use terpenes to relay information among their own species (facilitating sexual contact, marking food sources, and signaling danger, for example) and to communicate to other insect species (to mark territories). One study found that up to 90% of the terpenes synthesized by plants were also synthesized by at least one insect family, exemplifying their intertwined evolution.

Bumblebees, for example, synthesize and excrete monoterpenes and sesquiterpenes (1,8-cineole, ocimene, and farnesol in particular) after successful foraging trips, in order to recruit their hivemates into pursuing the found food. A plant emitting those same terpenes ultimately hijacks the insect's communication channels in order to ensure its own reproductive success.

SENSUAL DEFENSE

Although pollinator insects provide a vital service to plants in exchange for a nectar-reward, other insects are interested in consuming parts of the



plant that aren't offered up as part of the agreeable arrangement. In this case, the plant will employ a cocktail of specialized terpenes that have defensive properties, be it via mere repellency or by outright toxicity.

Typically, the toxic volatile cocktails are encased in specialized structures in plant tissues (like the trichomes on the undersides of leaves and calyxes) and are released when an insect (and likewise other herbivores like mollusks and nematodes) begin eating and thus breaking the plant's tissues. Some of these terpenes will interact with the herbivore directly (via fatal central nervous system interaction), while others will become airborne in order to lure predators of the offending herbivore. These volatile compounds can also signal to the other organs of the individual plant, as well as to neighbouring plants of the presence of the

offending organism, stimulating increased terpene production among those plants in order to better defend against attack.

TERPENES AND THE HUMAN EXPERIENCE

Many of the volatile terpenes interact with the human nervous system and underlie the psychotropic responses we experience when we ingest these plants as food and medicine - though generally with much less toxic outcomes*. Despite the 'volatility' of these molecules, when ingested many tend to have calming and/or focusing effects on humans. The Lamaceae family of plants perhaps exemplifies this best. This fragrant and flavourful family boasts many of the most well-known nervine herbs, with relaxants like lavender (*Lavandula spp.*) and lemon balm (*Melissa officinalis*) and stimulants like rosemary (*Rosmarinus officinalis*) and various

mints (*Mentha spp.*) among the most frequently reached-for herbs for both medicine and food.

We humans also take advantage of the volatility of plants for our own defensive purposes. As plants use terpenes to protect against insects, we too use plants and plant extracts as pest repellents and insecticides (citronellol and pyrethrin, for example). Volatile terpenes are also employed by plants to protect against pathogens, and again, we mimic this function, utilizing this antimicrobial action in herbal medicine and in household applications. It must be noted, however, that despite the industrial imperative to isolate specific constituents for these important uses, typically it is the combination of volatile terpenes in plant emissions - rather than any one compound - that contributes to its effectiveness, thanks to synergistic and suppressive interactions among the terpenes.

So as the subtlety of spring blossoms into the vibrancy summer, take a moment to breathe deep and marvel in the weather-changing, insect-influencing, mood-enhancing volatility of the season.

*There are some notable examples of volatile terpenes being toxic to humans. Thujone, for example, which is present in cedar, wormwood, yarrow and sage (among other medicinal plants) is toxic at a dose of 30mg per kilogram of body weight, with cumulative toxicity. Internal use of thujone-containing plants must be carefully monitored.

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by Michael Vertolli, RH

Originally published in Vitality Magazine November 2001, and in a revised form in November 2014.

a lot of fear and anxiety. Although it could be a lot worse if we were dealing with a more deadly illness, it does necessitate a significant level of precaution and concern. Unless we take this very seriously and start thinking long-term, global pandemics could become more common in the 21st century. Factors such as global warming, habitat destruction, human overpopulation, extensive global trade and travel, and poor diet and lifestyle practices among much of the our population—due to poverty in some regions and affluence and over-consumption in others—make the possibility of global pandemics more likely in the coming decades.

The current COVID-19 pandemic has precipitated As with most things, awareness is what is most important. Potential pandemics have always been a reality of life. We've been living in a bubble for the last century thinking that we have everything under control. Neither living in denial nor living in fear is useful. There's no point fearing what we can't control. Fear not only reduces our quality of life, it is guaranteed to weaken our immune system and thereby make us more susceptible to viral and other types of infections. This can not be overstated. Fully living, loving and embracing each moment of our lives will do more to protect us from viruses than taking any number of herbs and supplements!

Unfortunately, we modern Western humans tend something to fear and tend to pretend that it's not to be obsessed with control. We live our lives in an illusion of control and fear anything that threatens that illusion. The antidote is living each moment to the fullest and embracing the Mystery! This is a recipe for a happier, healthier, more fulfilling life. We need to acknowledge that there are Natural Laws. We can manipulate them to a degree—sometimes to our benefit and often to our detriment—but what we really need to do is learn how to dance with Nature in a good way. Although we have convinced ourselves otherwise, life is not a free-for-all where we can do whatever we want whenever we want.

The current pandemic also shines a light on our relationship with death. We're all going to die. It is the only thing that we can count on with certainty. What we don't know is where, when and how. Traditional cultures get this. They grieve and mourn death, but they also accept it as a fact of life and see it as the next stage in our sacred journey. They also understand that death is part of the natural regenerative cycle that allows life to continue. In modern Western culture we do not have a good relationship with death. We see it as

going to happen. We want life at all cost—even if there is no quality to life and we are kept alive by drugs and machines; and even if it is at the expense of other people and future generations. Accepting our mortality is an important part of living well. This awareness allows us to live our life to the fullest right here and now. Whether we die tomorrow, next year, or in 50 years, what a waste it will have been if we have lived our life in fear of some hypothetical future rather than fully embracing each precious moment that we have.

When it comes to microbes, we need to stop seeing them as our enemies and realize that for the most part they are our friends. Life would not be possible without them and most of them are directly or indirectly beneficial to us. Even potentially pathogenic organisms are mostly good for us. We are exposed to millions of them every day and many of them live in and on our body all of the time. Mostly, they just provide 'exercise' for our body defenses— which is necessary for proper immune function.

"Most stress isn't inherent in situations. We create it through the stories that we tell ourselves about those situations. "

Once we realize that worrying about things we can't control isn't good medicine, we can address the things that we can affect to some degree in our dayto-day lives. During the current pandemic, aside from the important recommendations of various public health agencies—hand washing, minimizing travel, social distancing, self-quarantining if we have symptoms or have been exposed to confirmed cases—to help slow down the spread of the virus, there are principles and practices that we can implement on a personal level that will increase our resistance to viruses and other pathogens. The more of these that we put into practice, the greater the benefits. It doesn't mean that we won't get sick, but it does mean that we can potentially reduce the frequency, severity and duration of illness-and if some new disease like COVID-19 for which we have no immunity does come around, we can minimize the risks. That being said, it is best if we follow these guidelines as a means of living well rather than out of fear of illness.

HERE ARE MY RECOMMENDATIONS:

1. DIET

Eat a healthy diet focusing on whole, natural, certified organic foods including lots of vegetables and fruits. Eat grains and grain-like seeds whole as much as possible, not as flour products. Minimize consumption of processed foods, greasy foods, animal products (especially red meat and dairy products) and refined carbohydrates (sugar and white flour). If you eat dairy and/or animal protein, purchase them from good quality organic sources and consume small serving sizes of these foods. If you have any food sensitivities, avoid those foods as much as possible—preferably completely.

2. EXERCISE

Get lots of exercise. Walk a lot and include at least 30 minutes of moderate to strenuous aerobic exercise a minimum of 3-4 times per week. Also, minimize the amount of time you spend doing sedentary activities such as sitting at a computer or with a cell phone, watching TV, reading or driving for long periods of time. When these are unavoidable, stop, get up, move around and stretch for a couple of minutes every 20-30 minutes.

3. REST AND RELAXATION

Many people in our society are sleep deprived and many further exacerbate the situation by using caffeine to stay alert. Ideally, for most adults 7-9 hours is what is required depending on the person and their lifestyle. Children, adolescents and people who are sick need more sleep. People who claim that they can get by on less sleep are fooling themselves. The goal is not to "get by", it is to optimize our health. When you get enough sleep you will feel the difference. Sufficient sleep is absolutely essential for proper immune function. Most of our healing takes place when we are sleeping as well.

We also need down time. Watching action or violent TV shows and movies, playing video games, or text messaging are not down time! Taking long walks especially in Nature or more natural settings—or just sitting quietly in a park or our backyard is. The key is to do something we enjoy that is calming and doesn't involve a lot of excitement or mental chatter.



4. DE-STRESSING

Most people are way too stressed. Being calm about microbes, exercising and getting sufficient sleep and down time is a great start. We also need to learn to be fully present in our life. We don't need to be accessible 24/7, nor do we need to be constantly updated about everything our friends and family are doing, as this is not real relationship. It is just a distraction which keeps us from being fully present in our real life, which is what is happening right here and now!

As a result, one of the best ways many people can reduce stress in their life these days is to keep their cell phone turned off most of the time. When used in moderation with clear boundaries, these technologies are very useful tools that allow us to communicate with family and friends who we might not otherwise be able to see in person. For many of us they are also essential for our work. However, for many people the tool has become the master. Devices and social media have become a widespread addiction.

When dealing with stress it all boils down to priorities. Having clear priorities and boundaries is very important. For example, we don't need to work constantly so that we can accumulate lots of stuff. Beyond taking care of our basic needs, happiness doesn't come from "owning" lots of stuff. That's a capitalist/corporate story that most of us have bought into—regardless of what party we voted for!

We also need to realize that we create most of the stress in our lives through automatic maladaptive stress-response patterns that we have repeated for decades. Most stress isn't inherent in situations. We create it through the stories that we tell ourselves about those situations. When our mind spins out our emotions spin out as well. These patterns are learned and they can be unlearned by becoming more mindful and/or replacing them with better response patterns. This is not about blame, it is about awareness!

Disciplines such as meditation, prayer, yoga and tai chi can be helpful, as well as counseling, if necessary.

5. CONNECTING WITH NATURE

Although the modern paradigm tries to convince us otherwise, we are natural beings and we need to nourish our connection with Nature. It is a human need just like air, water, food, shelter, exercise and love. Being in and with Nature both fulfills this need and is one of the best ways to reduce stress. However, racing around in Nature on ATVs, snowmobiles and motorboats doesn't really count—and leave the cell phone behind!

6. PROBIOTICS

It is absolutely essential that we have a healthy population of friendly microorganisms living in and on our body. One of the illusions perpetuated by the modern world view is that we are individuals.





THE LIVING EARTH

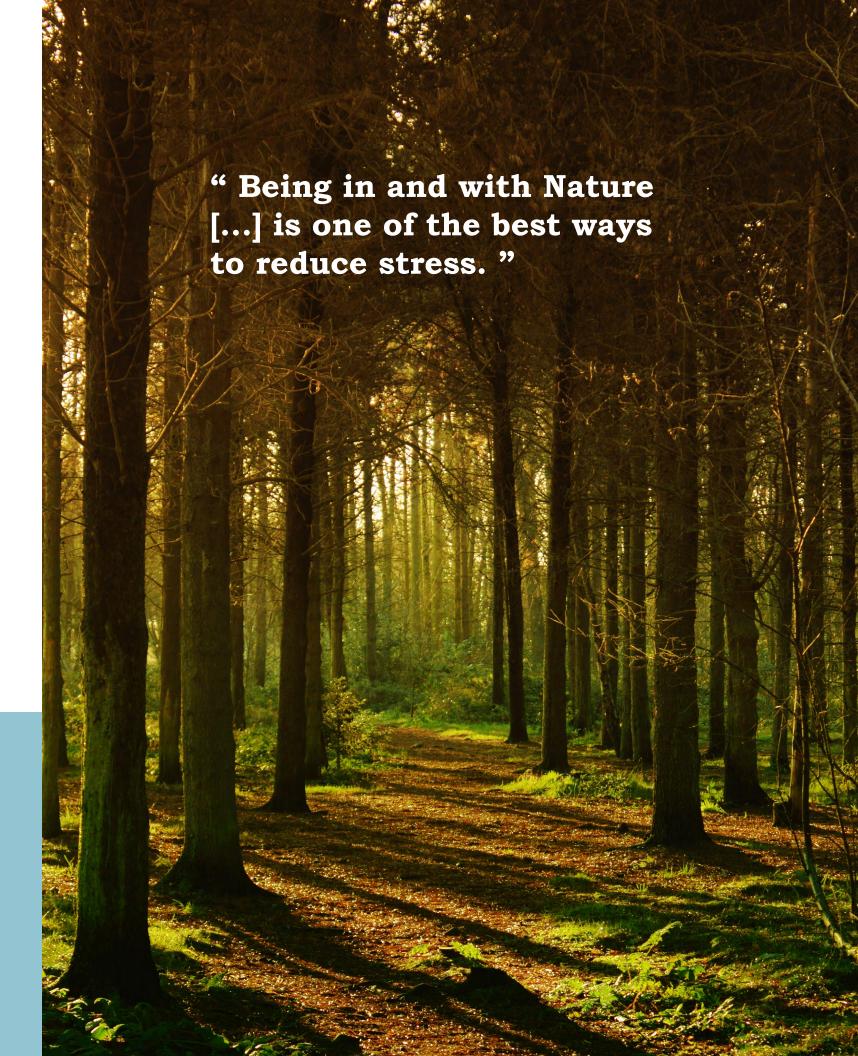
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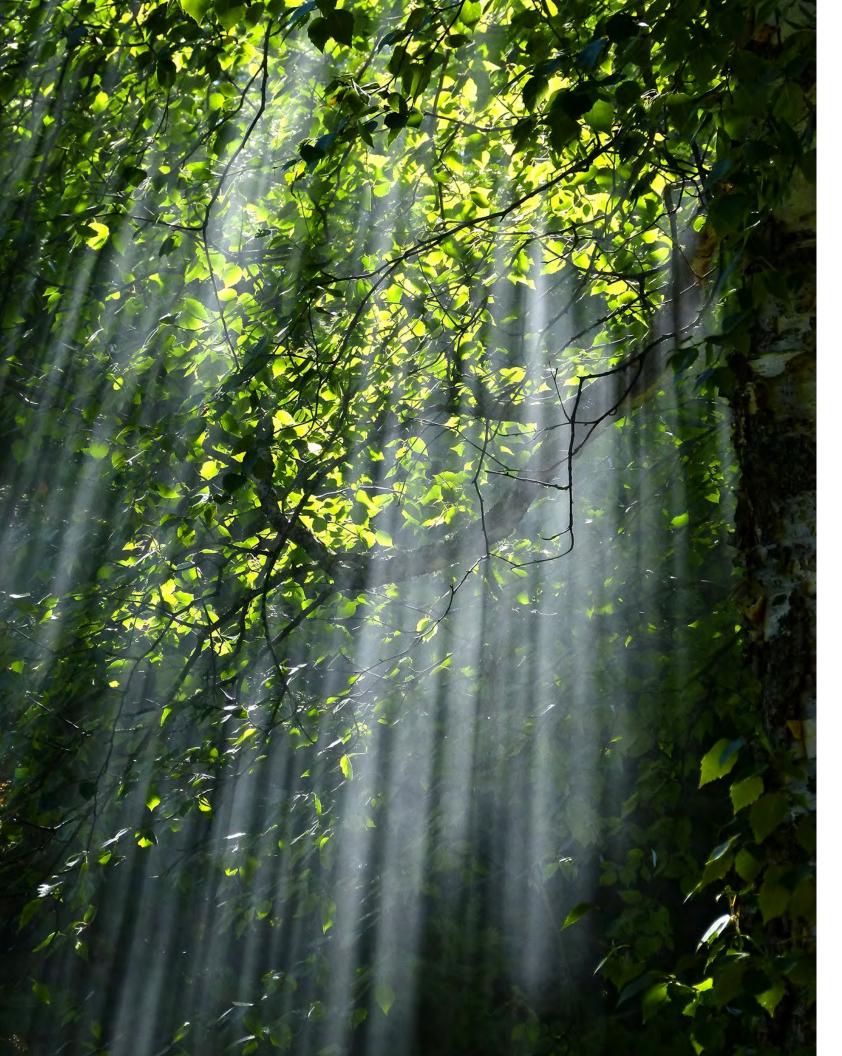
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In reality, we are intimately connected to the world improve our immune function and compete with that we live in, physically, emotionally, mentally and spiritually. Our body functions more like microorganisms that normally live in and on us work together with our body cells to help create an environment that is mutually beneficial for both. They also work with our immune cells and in some ways, act like an extension of our immune system.

There are many things that disturb our internal ecology. Antibiotics are the worst of these and should only be used when absolutely necessary which is very rarely, possibly never. Excessive use of natural antimicrobials can have a similar effect, especially when they are very concentrated such as essential oils. The current overmarketing and overuse of very potent herbs and herbal products—such as oregano oil—can disturb our microbiome.

We also need to eat lots of fiber—which is the main food of the friendly microorganisms in our respiratory and digestive tracts—and have a strong, healthy digestive system. When our digestive system isn't functioning well it will lead to unhealthy changes in our gut microbiome. The most important contributors to poor digestion are eating a poor diet and overloading our digestive system by eating too much, too often, or too close to bedtime. Our digestive system needs regular rest. The other major cause of poor digestion is too much stress.

A good probiotic supplement should contain at least 5-6 strains of bacteria, but 10-15 is much better. It should include Lactobacillus plantarum, L. rhamnosus and L. salivarius, and the potency should be at least 10 billion active cells. Probiotics must be refrigerated and they keep better in capsule form because the capsule helps to protect the culture from moisture and oxygen. However, it is essential that we open up the capsule and mix it with water when we take it because it is necessary to get the culture into our mouth and throat. From there it can spread deeper into our respiratory system. Getting the culture into our mouth, throat and respiratory system is the most important factor in terms of preventing viral infections as most viruses enter our body via this route. Friendly microorganisms

unfriendly microorganisms. Swishing the water with probiotic culture around in our mouth before an ecosystem than as an individual entity. The swallowing it will facilitate the culture getting established in our mouth and throat.

> Probiotics should be taken on an empty stomach at least 3 hours after eating, 1 hour after drinking anything other than water, and 30 minutes before eating or drinking anything other than water. Empty the capsule into 175-250 ml (6-8 oz) of water that doesn't contain chlorine. What works even better is to add it to warm water with a tablespoon of organic psyllium husks, whole flax seeds or whole chia seeds (or a combination of 2 or 3 of them) as mucilaginous fiber helps the culture to adhere to our mucus membranes and supports its growth. This type of fiber is prebiotic. The best time to take probiotics is first thing in the morning.

> Even if we eat well and have healthy digestive function, there are lots of things that can throw off the balance of our internal microbiome. For that reason it's a good idea to take a good probiotic supplement for 3-4 weeks, 2-3 times per year as a prophylactic. We should also take it any time we feel like we are getting sick, for the duration of the illness and at least one week afterwards. In some ways this is just important as taking herbs—but taking both is best! Probiotics are also recommended any time we travel a significant distance from home—starting a week before we leave and ending a week after we return—and, of course, any time that it is necessary to take antibiotics and for about a month afterwards.

> It is important to keep in mind that probiotics are not an antidote for poor diet and lifestyle practices. A healthy gut microbiome includes hundreds or even thousands of different species of microorganisms. Probiotics can help to restore balance, but supplementing a few species is not going to be able to compensate for the lack of microbial diversity that results from ongoing poor lifestyle practices. Eating fermented foods like yogurt, kefir, sauerkraut and kimchi are also beneficial for the support of a healthy microbiome and an excellent addition to a healthy diet. However, they are not sufficient for

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therapeutic purposes. When dealing with infections being said, the current COVID-19 pandemic is probiotic supplements are necessary.

7. HYGIENE

Connected to the probiotic issue is the health of the microbiome of our skin. One of the biggest challenges in this regard is our current microbe phobia. Yes, it is important to wash our hands whenever they are "dirty", however, the over-use of antimicrobial soaps, hand sanitizers and similar products—even if they are "natural"—is detrimental to the health of our skin, the organisms that live on it, and ultimately, to our health. Soap alone is antimicrobial enough, and even too much soap is not recommended. We tend to use too much of it, too often, and often on parts of our body that don't require it. In reality, unless areas of our body have been exposed to some oily or fat-soluble substance, water alone is all that is necessary to wash most of the surface of our body. Water will remove sweat and urine, and toweling dry will remove excessive sebum (skin oil) without drying out our skin too much. The only parts of our body that regularly require some kind of soap are our hands, armpits, anus, feet and hair.

Hand washing is important—but not in excess. Water alone is good enough after urinating or getting anything that is water soluble on our hands. Washing our hands with soap before we eat, after a bowel movement and after touching anything that could be contaminated—such as raw meat—is always a good idea. If we are concerned about microbes on our hands, periodically washing our hands with plain yogurt will help to keep our population of skin microbes healthy, which is an important natural way of preventing infection. Yogurt is also good for our skin! Unless there is good reason to believe that we can potentially be exposed to a serious illness, the general paranoia about touching money, doorknobs and shopping cart handles is unnecessary. Living in fear of microbes while in public places has a greater potential to increase our susceptibility to infection than touching doorknobs, and excessive use of soap and especially hand sanitizers compromises the microbiome and health of our skin, which is our body's first line of defense against infection. That

being said, the current COVID-19 pandemic is one of those situations when we need to be more vigilant. This virus has demonstrated the ability to remain viable on some surfaces for hours or even days. This is one of those times when washing our hands more often and the occasional use of (natural) hand sanitizers is a good idea, but I only recommend using hand sanitizers when we do not have access to soap and water. During times when it is necessary to wash our hands more, it is also necessary to regularly apply some kind of natural oil or moisturizing cream to our hands to keep our skin from becoming too dry.

A special note here to parents: these guidelines also apply to our children. Not only will our paranoia about their cleanliness encourage them to grow up to be anxious, fearful adults, there is a growing body of evidence (officially called the "hygiene hypothesis") that infants and young children need to be exposed to microorganisms from their environment especially soil—in order for their immune system to develop normally. Excessive hygiene at an early age is correlated with an increase in autoimmune conditions later in life. As parents we have a double responsibility to learn how to be more chill about these kinds of things. This will not only improve our personal health and wellbeing, but kids notice if we get anxious in certain situations and the response is contagious. We are teaching them to be oversensitive, anxious people, which will be detrimental to them through their lives.

8. SUPPLEMENTS

The issue of supplements is too complex to cover in detail, but there are many supplements that can help boost immune function. At the very least I recommend a good quality, low potency multivitamin with minerals (iron-free unless you know for sure that you need it); non-acidic vitamin C (mineral ascorbates as opposed to ascorbic acid); vitamin D; polyphenols such as flavonoids, anthocyanins and catechins; zinc; selenium; and omega-3 fatty acids. Minerals need to be taken in a form that is easily assimilated, such as citrates and amino acid chelates. Cheaper forms such as gluconates, carbonates and oxides are not well



assimilated and oxides, in particular, are potentially harmful. N-acetylcysteine (NAC) is another antioxidant that has a particular affinity for the lungs. It helps to reduce lung inflammation and break up thick mucus secretions. It could be helpful for anyone infected by the COVID-19 virus.

Melatonin is also important for the health of our immune system, but it is better to support our body in producing a sufficient level of its own melatonin rather than taking it as a supplement. This means plenty of exposure to outdoor light during the day (without sunglasses some of the time) and sleeping in an environment that is completely dark at night. Looking at devices during the last couple of hours before we go to bed is particularly detrimental. This is because they emit light with a lot of the blue/violet spectrum and the light is shining directly into our eyes. During that time if we want to engage with something like that, it is best to read a book or magazine in soft light (low blue/violet spectrum) that is shining from behind us.

It is best if people who usually need to get up at night learn to navigate their way to the bathroom in the dark rather than turning on lights. If that isn't possible, use a red nightlight that isn't very bright. The red light spectrum doesn't shut off our melatonin production as readily as other wavelengths. It is likely that one of the many reasons that immune dysfunction is so prevalent today is because our melatonin production atrophies with age largely due to stress, lack of sunlight, over-use of devices at night, and sleeping in environments that aren't completely dark.

Lack of sleep, however, is one of the major factors that reduces immune function. If we are going through a period when we are having difficulty falling or staying asleep it is very important that we do what we can to improve our sleep habits. Meditation and other disciplines that help us learn how to calm down our mind can be helpful if part of the issue is too much mental chatter. It is better that we improve our sleep habits through our own efforts than relying on taking something. However,

in the short-term taking something is better than not getting enough sleep. Taking melatonin periodically can, therefore, sometimes be helpful. It is best to take it in the form of a sublingual tablet. Start with a very low dose like 0.5-1 mg and slowly build up the dose, if necessary, until you find the minimum level that works for you. Taking too much is not good and sometimes less effective than taking a lower dose. In addition to getting more sleep, it is possible that the melatonin will have some additional immune-boosting benefits.

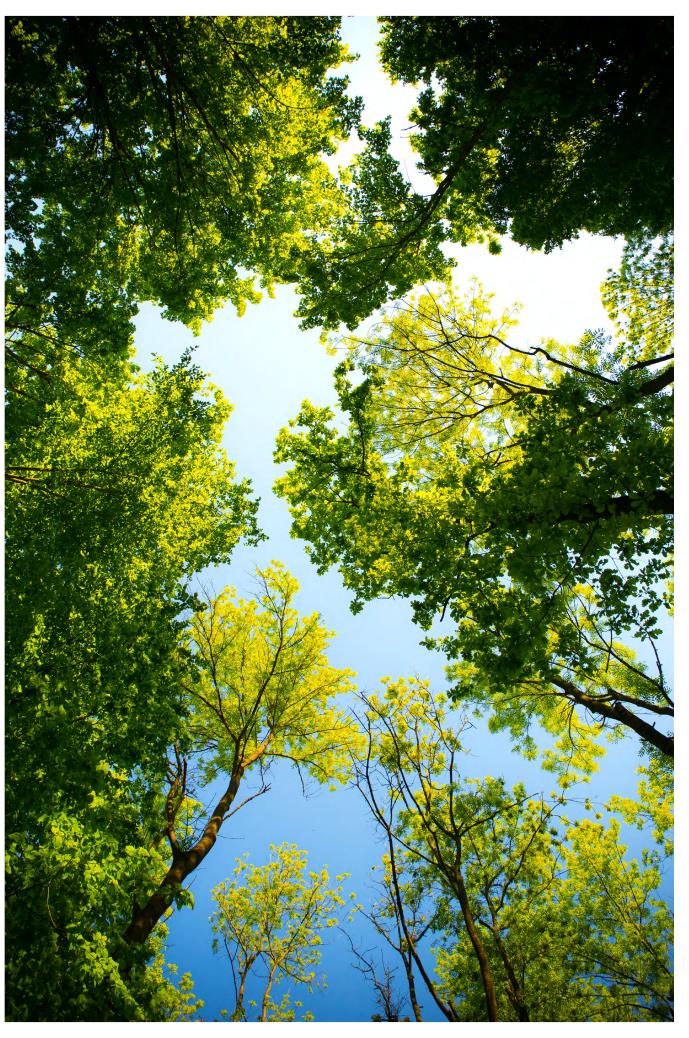
9. MINIMIZE EXPOSURE TO TOXICITY

Environmental toxins tend to accumulate in our body tissues leading to an increase in inflammation and disturbances of immune function. They include pollutants in our environment, work place and home, such as chemical solvents, air pollution and household cleaning products, as well as agricultural and food processing chemicals—but they aren't part of the diet that I recommend! We also shouldn't be drinking, breathing or bathing in chlorine. That doesn't mean we need to buy bottled water and fill up the world with plastic bottles. A simple carbon filter for our drinking water and shower will do.

It is also best to reduce our use of social and pharmaceutical drugs. This includes cigarettes, marijuana, "hard" drugs and pharmaceuticals (especially antibiotics). I know that it isn't going to go down well among the large number of people who are over-enthusiastic about marijuana these days, but inhaling burning resin on a regular basis is not a good thing. I am also fairly certain that the chemicals that people are inhaling from vaping products are unhealthy. If you consume caffeine, alcohol and/or marijuana, it should be in moderation. For coffee, once per day is acceptable. Two cups of tea in a day is roughly the same amount of caffeine as one cup of coffee. It's also better to drink dark roasted coffee because it contains less caffeine. Caffeine containing "energy drinks" are never recommended.

10. AIR QUALITY

Related to toxicity is air quality. There are two primary factors relating to air quality that have a significant impact on the transmission of airborne



viruses and our susceptibility to them. The first is pollution. Anyone who lives in areas where the air is significantly polluted is going to have some degree of compromised respiratory function and increased susceptibility to airborne pathogens. This means those of us who live in urban areas, industrial areas and regions where the landscape impedes air flow allowing localized accumulation of airborne pollutants. The good news is that the significant reduction in ground and air traffic during the current pandemic has resulted in significant improvements in outdoor air quality in many areas. This should help to reduce the susceptibility and severity of infections of the people who live in those areas.

Indoor air quality is another matter. It is well documented that indoor air quality can often be poorer than outdoor air quality even in urban environments, both in the workplace and at home. Some of the major sources of indoor pollution include: mold spores; other particulate matter; tobacco and marijuana smoke; incense; toxic cleaning products such as bleach; chlorine from chlorinated tap water, hot tubs and swimming pools (bromine is just as bad); chemical solvents; off-gassing from building materials, paints, varnishes, furniture, fixtures and textiles; synthetic perfumes and deodorizing products.

In the home and workplace poor air circulation and filtration is often a factor. It is very important that we purchase the best quality air filters for furnaces and air conditioning units and change them in accordance with the guidelines of the manufacturer. If indoor air quality is compromised for any reason, we can also benefit from using a good quality HEPA filter in areas where we spend a lot of time working or sleeping. Many vacuum cleaners now have HEPA filters as well. This is important to ensure that we aren't spewing unwanted pollutants into the air when we are vacuuming floors and carpets. Unfortunately, we have less control of air pollution in our workplace. Employees can do their best to discuss this with their employers. Although more challenging, we also have the option of changing where we work.

At home is another matter. Here we have a lot more control of our environment and can choose to avoid many of the sources of indoor pollution. It may not be possible to avoid all of them, but the more that we address, the better it will be for our health in the long run, and for our susceptibility to COVID-19 and other airborne pathogens.

The other major air quality factor is humidity. It is well-established that increasing humidity reduces the transmission of airborne viruses. It is likely that the increase in both outdoor



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and indoor humidity during the warmer months of the year is one of the factors that results in a significant reduction of airborne illnesses during that time of year. That being said, in recent years I have seen an increase in the number of people suffering from respiratory infections during the summer months. I suspect that this is partly due to the increasing use of air conditioning which, among other things, significantly decreases indoor air humidity.

When the humidity reaches or exceeds 40%, the transmission of airborne viruses is reduced. It also improves respiratory function. Wet saunas can help to reduce the duration and severity of respiratory infections as well. Although they share some of the health benefits of wet saunas, dry saunas and infrared saunas do not have significant benefits for respiratory infections and the dry air could actually have a negative consequences. Dry air doesn't just increase airborne virus transmission. It also compromises our respiratory function and increases our susceptibility to airborne infections.

Employers would benefit from less lost work time due to illness if they were to ensure an adequate level of humidity in the workplace during the months when indoor heating is required. Similarly, we would all benefit from more humid air at home. This is particularly an issue at night. Even though our immune system is most active when we are sleeping, it is very common for people who are suffering from respiratory infections to experience a worsening of their symptoms over night. This is because our respiratory system is less active at night and respiratory secretions and the capacity for this system to cleanse itself are reduced. In dry air environments this results in dryness of the respiratory mucus membranes in our sinuses, throat and upper bronchial passages, compromising the health of these membranes and the capacity of our immune cells to deal with infectious organisms. The end result is that the severity of respiratory infections often and is antimicrobial as well. worsens over night if we are sleeping in a low humidity environment. Even if it is not possible to significantly increase the humidity of the air in our entire home, there are significant benefits to using a humidifier in our bedroom at night— both in terms of prevention and reducing the severity of respiratory infections.

The one concern in relation to

humidity is mold, particularly for people who live in regions with very cold winters and who live in homes that aren't well insulated. Increasing humidity under these circumstances can lead to promotes the growth of mold. insulated walls, attics and windows, but is not always an option. It is, therefore, necessary to be vigilant about mold. There are also other creative solutions. For instance, we can sleep with a humidifier in our bedroom at night and then turn it off and dry out during the day.

11. CLEANING PRODUCTS

Cleaning and disinfecting surfaces during a pandemic can also be important to help reduce the spread of the virus. However, as I mentioned with respect to hand sanitizers, we don't need to go overboard with disinfectants—

especially the chemical kind. I use a very simple home made, all purpose cleaning product that can be used for almost anything



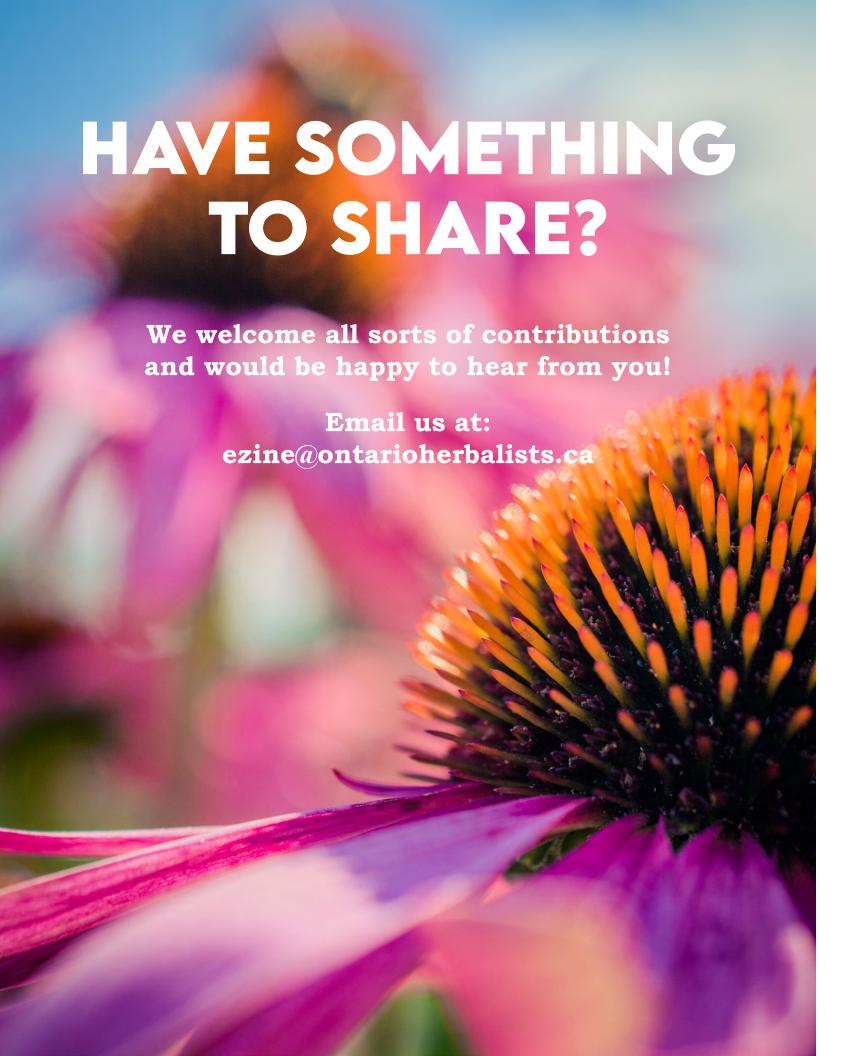
moisture condensation which In a typical size spray bottle (750 ml to 1L) mix 10% white vinegar The best solution is better with 90% water. Add 2-3 drops of natural dish detergent and 2-3 drops each of a couple of antimicrobial essential oils. It's good to use essential oils that you like the aroma of, and in this case we don't need to be concerned about respiratory properties. In addition to the essential oils that allow the moisture in the room to I already mentioned, lemon also works well for this purpose. If you want to make this more antiseptic during the current pandemic, use 50% vodka (40% alcohol), 10% vinegar and 40% water. This will make the solution 20% alcohol. This is sufficient in combination with the vinegar, dish soap and essential oils.

12. BREATHING

Our nasal passages are designed to filter and condition the air that we breathe. When we breathe through our nose, particulate matter and potential pathogens get trapped in the hairs and mucus. This helps to prevent them from getting deeper into our respiratory system where they are more harmful. They can then be eliminated when we blow our nose.

Many people have a tendency to breathe through their mouth. This increases their susceptibility to infections and chronic respiratory conditions. In the long-term it is important to practice nose breathing as much as possible. It is particularly important if we need to be in public during a pandemic. Breathing through our nose will not only reduce the likelihood that we contract an airborne infection, it will also reduce the potential for us to spread an infection to others if we are carrying it ourselves and don't realize it.

Some people recommend that we breathe in through our nose and out through our mouth. This can be useful during aerobic exercise when our oxygen demands are higher than normal, but we don't want to be only drawing air inwards through our sinuses. This will increase the likelihood that anything trapped there will penetrate deeper into our respiratory system. It's best to breathe in and out through our nose and blow our nose when mucus accumulates.



13. IMMUNE STIMULATING HERBS

Immune stimulants are short-term immunomodulators that stimulate an immediate response of our immune system. To give our immune system a boost, it is best to combine 3-5 of them and take them for short periods of time followed by a break. Their effectiveness drops off if they are used for more than a week or two.

An immune stimulant formula is taken 3-4 times per day. In general, herbs are best taken on an empty stomach for optimum assimilation. So, we take the immune stimulants 3-4 times per day on an empty stomach for 1-2 weeks and then stop taking them for at least another week. For the average person that might mean taking them one week per month during the time of year when they are most susceptible to infections, probably September to April for most people in the temperate regions of the Northern Hemisphere. In tropical areas and the Southern Hemisphere it can be different. For a stronger boost, an immune stimulant formula can be taken for 1-2 week periods followed by a 1-2 week break for several cycles. This is called pulsing. Taking them continuously for a longer period doesn't increase their effectiveness, but pulsing them longer does.

During a period of time when we are at a greater risk of getting sick such as during the current COVID-19 pandemic—or whenever there seems to be a lot of viruses going around—it's a good idea to pulse an immune stimulant formula one week on, one week off for the duration of the pandemic. If we do get sick it's necessary to shift from preventative to acute protocols.

When using immune stimulants according to acute protocols to treat an infection in progress, the sooner we start using them the more effective the results. We begin by taking the formula every couple of hours or maybe even every hour if the symptoms are very intense. Then we gradually decrease the frequency of the dose while the symptoms are resolving. Sometimes people who use immune stimulant herbs obtain poor results.

It's usually because they weren't taking enough and/ or they started too late or discontinued them too soon. Also, for acute infections it is more effective if we combine immune stimulant herbs with herbs that treat the specific kind of infection that we are suffering from.

Some effective immune stimulants that are versatile and easy to use include purple coneflower herb



and root (Echinacea spp.), elecampane root (Inula helenium) [maximum 30%], plantain herb (Plantago spp.), pot marigold flower (Calendula officinalis) [maximum 15%], boneset herb (Eupatorium perfoliatum) [maximum 20%], yarrow herb (Achillea millefolium) [maximum 20%], black elder flower (Sambucus nigra) and stinging nettle herb (Urtica dioica). The proportion limits are due to their level of bitterness, astringency and/or pungency (heat).

14. IMMUNE TONIC HERBS

Immune tonics work more slowly and deeply than immune stimulants. They must be taken continuously, 3-4 times per day for at least 2 months.

Immune tonics are not recommended for acute infections, but they are very good for chronic autoimmune conditions and as long-term tonics to boost our overall immune function when we aren't sick. They work best when following a period of time pulsing a good immune stimulant formulation.

Some of the immune tonics that I often use are Some common and effective antiviral herbs include North American ginseng (Panax quinquefolius), Siberian ginseng (Eleutherococcus senticosus), Chinese milkvetch (Astragalus membranaceus), turmeric rhizome (Curcuma longa) [maximum 30%], and a number of fungi including lacquered polypore or reishi (Ganoderma lucidum), artist's conk (G. applanatum), hemlock varnish shelf (G. tsugae), birch polypore (Piptoporus betulinus), tinder fungus (Fomes fomentarius) and turkey tail (Trametes versicolor).

15. ANTIVIRAL HERBS



There are many herbs that have antiviral properties. They weaken viruses and/or increase our resistance to them. They are important to include—along with immune stimulants—in formulations for the treatment of active viral infections such as colds and flu. During an outbreak of a particularly nasty viral infection they can be pulsed along with immune stimulants to boost our resistance, but immune stimulants are more important for prevention. The action of antivirals doesn't wear off in the same way as immune stimulants, but if they are used continuously there is a risk that viruses could develop a resistance to the herbs that we are using. Therefore, taking them continuously is not recommended and it's best not to use the same herbs all the time. When treating an active acute infection antivirals are combined with immune stimulants and taken more frequently according to acute protocols (see 'Immune Stimulants' above).

all of the immune stimulants that I mentioned above. with the exception of plantain and elecampane, as well as lemon balm herb (Melissa officinalis), hyssop herb (Hyssopus officinalis), heal-all herb (Prunella vulgaris), mad-dog skullcap herb (Scutellaria lateriflora), peppermint herb (Mentha x piperita), St. Johnswort herb (Hypericum perforatum), blue vervain herb (Verbena hastata) [maximum 30%], oregano herb (Origanum vulgare) [maximum 30%], marjoram herb (O. majorana) [maximum 50%], thyme herb (Thymus vulgaris), wild bergamot herb (Monarda fistulosa) [maximum 30%], sage herb (Salvia officinalis) [maximum 20%] and cinnamon bark (Cinnamomum verum) [maximum 15%].

When using antivirals for very serious conditions it is necessary to add a potentizing antiviral herb to the formulation. These are herbs that are less tonic and more intense and, as a result, tend to have some side-effects and potential toxicity associated with them if they are over-used or misused. We usually only include one of these herbs in a formulation at a proportion of about 10%, supported by some of the more tonic antivirals listed above. There are medium and high potency potentizers. I am only going to mention a few of the medium potency herbs because the high potency herbs are associated with a much greater potential for toxicity and should only be used under the guidance of a qualified herbalist or other practitioner who is experienced with the use of these herbs.

Some of the medium potency antiviral herbs that I recommend for this purpose include black walnut leaf or fruit husk (Juglans nigra), tansy herb (Tanacetum vulgare), creosote-bush or chaparral leaf (Larrea tridentata) and wild indigo root (Baptisia spp.) [all maximum 10%].

Another way to potentize a formula for an acute viral infection is using essential oils. These are very concentrated and the way some of them are being recommended these days is inappropriate. However, they can be added to tincture formulations to boost their antiviral properties. The best essential oils for this purpose are common thyme (Thymus vulgaris), marjoram (Origanum majorana), oregano (Origanum vulgare) and frankincense (Boswellia *spp.*). The dose is one drop of essential oil for each 50-100 ml of a tincture formula. Most of these products will indicate on the label that they are 'For external use only.' Under normal circumstances this is true as they are too concentrated for internal use. However, diluted in a tincture formula, this is safe as long as you don't exceed the dose that I recommended.

'Oregano Oil' products are a bit more complicated as these are usually diluted in some kind of oil base. They are still too concentrated for use as they are being recommended. People who want to use oregano for infections should be using the tincture, not the oil. The recommendations above for using essential oils to potentize a tincture formula are based on using the pure essential oil. If you are it more difficult to fall asleep. For children under adding one of these 'Oregano Oil' products to a tincture formulation, it is necessary to know the dilution of the product. For example, if it is 25% oregano essential oil, to potentize 50-100 ml of a tincture formula, you would need to use four times a much (4 drops instead of 1). The unsupervised use of all of these potentizing protocols is not recommended for children under three and the dose of potentizers should be half for children from 3-7.

All of the immune tonic herbs that I mentioned are antiviral as well. We don't use them in immune stimulant formulations or for acute infections, but we do get additional antiviral benefits from taking immune tonic formulations when we are healthy.

16. EXTERNAL TREATMENT

Although the herbal protocols for prevention are strictly systemic (internal) and the primary treatment for this kind of infection in progress is systemic as well, if we have a respiratory infection the treatment of the symptoms can be further enhanced by using herbal essential oils externally in addition to taking herbs internally. There are many essential oils that are both antiviral and can also help reduce respiratory symptoms. These

include all of the ones that I have already mentioned (thyme, oregano, marjoram and frankincense) as well as anise (Pimpinella anisum), English lavender (Lavandula angustifolia), eucalyptus (Eucalyptus globulus), peppermint (Mentha x piperita) and rosemary (Rosmarinus officinalis). The essential oils are added to a stable oil base (olive oil works well) and gently massaged over the surface of our chest, upper back and throat 2-3 times per day depending on the severity of our symptoms. It's best to combine two or more. The dilution is one drop of all of the essential oils combined for each ml of base oil (not one drop of each essential oil per ml). So if you add three essential oils in equal proportion to 30 ml of base oil, the amount would be 10 drops of each essential oil. Keep in mind that if you do this before bed, peppermint, eucalyptus and rosemary could be too stimulating for some people and make three years old use half the amount of essential oil per ml of base oil.

17. INHALATIONS

For anyone with an active respiratory infection, inhalations can also help to reduce the severity of the symptoms and speed up recovery. This involves filling a bowl with either an aromatic herbal infusion, or hot water with a couple of drops of essential oil added (or both). We need to breath the steam deeply for a few minutes. The best way is to place our face over the bowl (not too close) and put a towel over our head to create a contained space to breathe in the steam and herb vapours. All of the essential oils that I mentioned above are effective or we can use the herbs that they are derived from as infusions.

18. ESSENTIAL OIL DIFFUSERS

There are many kinds of diffusers that disperse essential oils in the air. There is some evidence that using antiviral essential oils in this way can help to reduce the spread of viruses in indoor environments. Any of the essential oils that I recommended can be used this way. It is better to combine at least two of them. In particular, I recommend combining either lavender and thyme, or lavender and marjoram.

Some diffusers use candles such as tea lights to warm the essential oils. When using this type of diffuser it is best to use natural wax candles such as beeswax as it is not good to be inhaling paraffin (a component of commercial waxes) when dealing with respiratory issues. This is also a source of indoor pollution that is best avoided in general. Some kinds of incense can also help to some degree as this is another way of dispersing essential oils in the air. However, I don't recommend incense for this purpose because it also disperses particulate matter which is not good for our lungs.

are feeling right now. The other

essential oils that I mentioned

also work, but many of them are

less calming and aren't necessarily

the best aromas that we might

want to use in our home or work

space.

Another common practice is smudging. This involves burning plants that are traditionally used for this purpose to physically and energetically clear a space. Some herbs are used more for clearing and others for bringing good energy into the space. All of them are useful but the clearing herbs are the most important under these circumstances. For that purpose I have found cedar, juniper and frankincense to be particularly useful. Keep in mind

To summarize the herbal recommendations, pulsing an immune stimulant formula for a period of time possibly followed by an immune tonic taken for 2-3 months is an excellent way to improve our immune function and prevent illness. If we are sick with a respiratory viral infection, combining immune stimulant herbs with antiviral herbs and taking the formula according to acute protocols—which means larger doses more often—a little bit longer than the duration of the illness is far more effective. It also might be a good idea to take a break for a week and then pulse with an immune stimulant formula a couple of times to give our immune system an extra

There are many immune, cold/ flu and antiviral formulations available over-the-counter. They vary from region to region. For convenience it is possible to purchase these products rather than attempt to make your own formula. Although some of them might be effective, unfortunately, most of the formulations that I have seen out there aren't that great. Many of them include chronic immune tonic herbs in acute formulations. They also

boost after being sick.

which is an excellent herb for bacterial, fungal and parasitic infections, but is a poor immune if used too often in a confined therefore, not appropriate in these kinds of formulas. It is also a medium potency herb and not suitable for small children. Some over-the-counter formulas also include higher potency herbs that are not recommended for unsupervised use. Some are just poorly formulated. If you follow the basic principles provided, you are likely to end up with a formula that is better than most of the products that you can purchase— and learn something in the process!

> In general, I prefer to use tinctures that are made from fresh herbs. Although other forms will work, in my experience these get the best results. Nevertheless, dried herb tinctures and infusions (teas) can be used as well. The individual dose depends on the potency. Use the guidelines on the label of any products that you purchase. Keep in mind that they will usually be guidelines for chronic use. For acute use the dose and frequency of the dose needs to be higher. Also, when making a herbal infusion for therapeutic purposes, the herbs need to be infused (steeped) longer than when making a tea for beverage purposes, typically 15-20 minutes.

> Anyone pregnant, nursing, with serious health condition, taking pharmaceuticals should consult with a qualified herbalist or other natural health

care practitioner who is trained in the use of herbs severe symptoms should not rely exclusively on selfbefore using any of these protocols. Similarly, if you try any of these herbs and have an unusual reaction or don't get sufficient results, your condition may be too complicated for self-treatment and it's best to consult with a practitioner. If you are giving herbs to children the doses are lower, roughly corresponding to body weight. Potentizing herbs should not be used for children except under the guidance of a qualified practitioner.

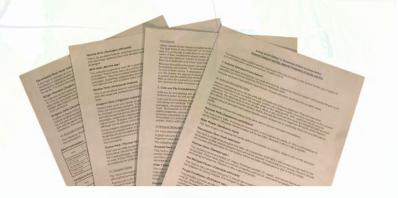
During the current COVID-19 pandemic we also need to follow the guidelines being provided by government health agencies to help to control the spread of this illness. Anyone with moderate to

treatment. They should consult with a doctor for regular health care, and with a qualified herbalist or other natural health practitioner for natural health

The issue of viruses and infectious disease is very complex. The most important thing to remember is that there are a lot of positive things that we can do if we choose to. To live a healthy life means living in balance and that comes from the quality of our relationships—with our body, our food, our family and community, and with Nature. So, live well, be aware, and most importantly, do your best not to live in fear!

A link to this article and further supplemental resources can be found on Michael's blog.

michaelvertolli.blogspot.com





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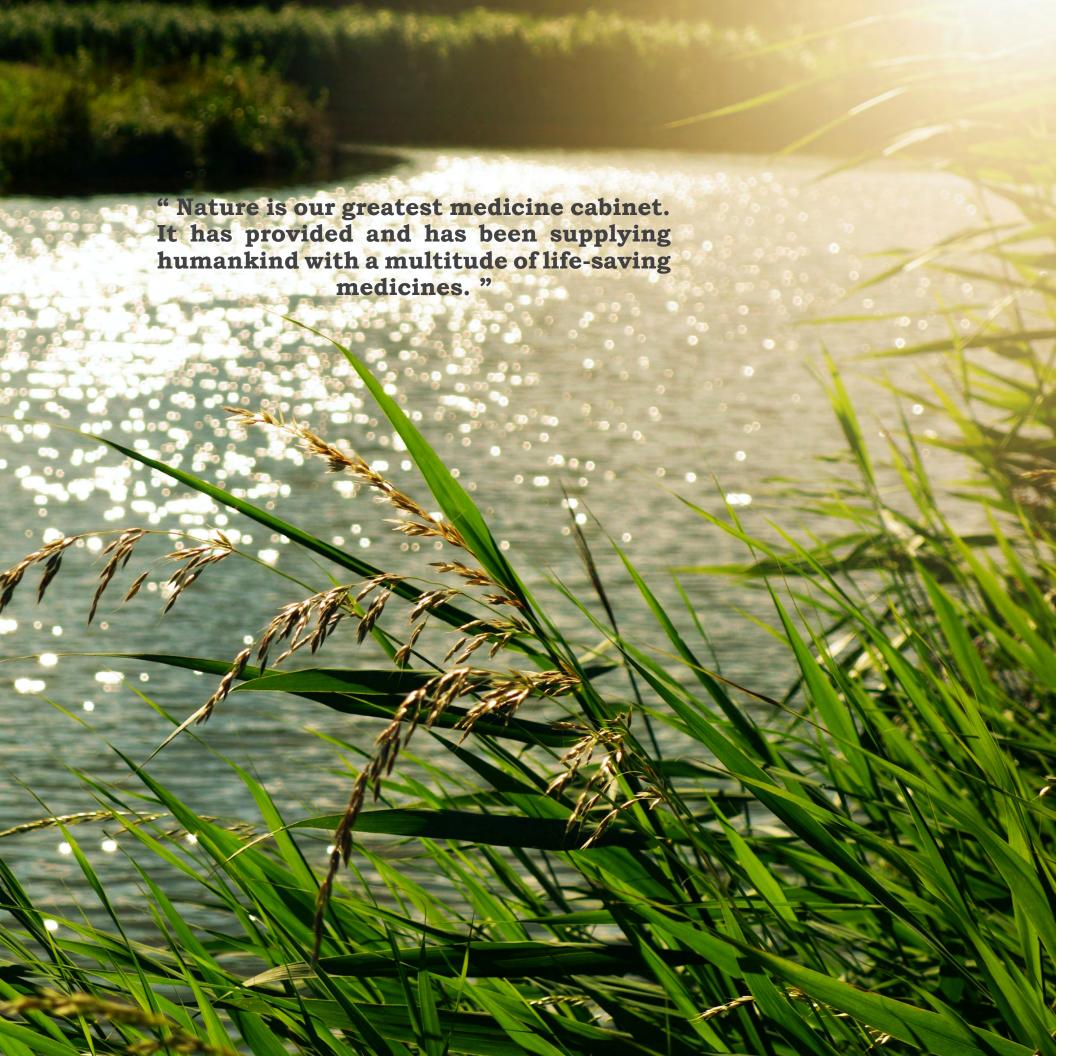
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NATURE'S GIFT

By Shanthi Balasubramaniam, RH

Mother Nature - a term used to personify Nature that focuses on the life-giving and nurturing aspects of nature by embodying it, in the form of the mother. There is no question that Earth has been a giving planet. Everything humans have needed to survive and thrive - food, water, medicine, materials for shelter - is provided by Mother Nature.

The science of Ayurveda aims at a perfect harmony between man and nature, since it believes that man is an epitome of the universe. The science describes this life force and its manifestations with our entire psychophysical system; we are all made of five elements, or *Mahabhutas*, as is the natural world — earth, water, fire, air and space.

The five elements can be seen to exist in everything in this universe both organic and inorganic. When they enter into a living organism - man, for example - they acquire a biological form. The five elements are combined to form three biological forces which govern all life processes. These three forces are known as the three doshas -*Vata* (air), *Pitta* (fire) and *Kapha* (water). The tridosha regulates every physiological and psychological process in the living organism.

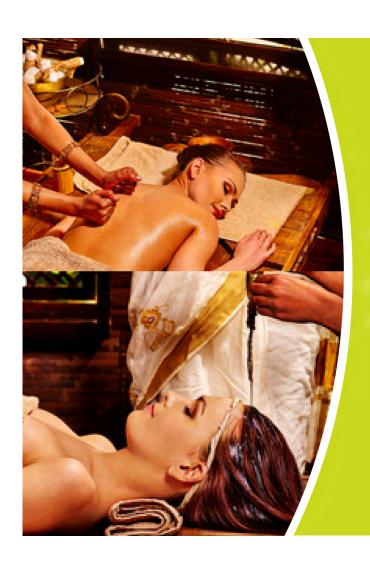
Each individual has these three elements, but ayurveda considers everyone is unique. This individuality is knowns as "*Prakrut*i"

or basic constitution, and is based on the predominance of doshas in the parents at the time of birth. This predominance determines the character, disposition, and health of an individual.

A harmonious state of the three doshas creates balance and health; an imbalance, which might be an excess or deficiency, manifests as a sign or symptom of disease. The balance here is not a mathematical proportion as these are physiologically influenced by factors like age, season, time, food taken, sleep, etc. It proves that the disease is not always because of external factors, but we suffer when we fight the rhythms of nature and thrive when we live in harmony with them.

Nature is our greatest medicine cabinet. It has provided and has been supplying humankind with a multitude of life-saving medicines. We're not only connected with Mother Nature - we are her. Our body comes from her and returns to these great elements. Claiming this connection with life as a whole is the real basis of healing, not manipulating nature and life force with artificial drugs and substances that unbalance and spoil us.

Ayurveda encourages healthy relationships with nature and one's community, as well as using the gifts of nature to promote healing and balancing of the elements.



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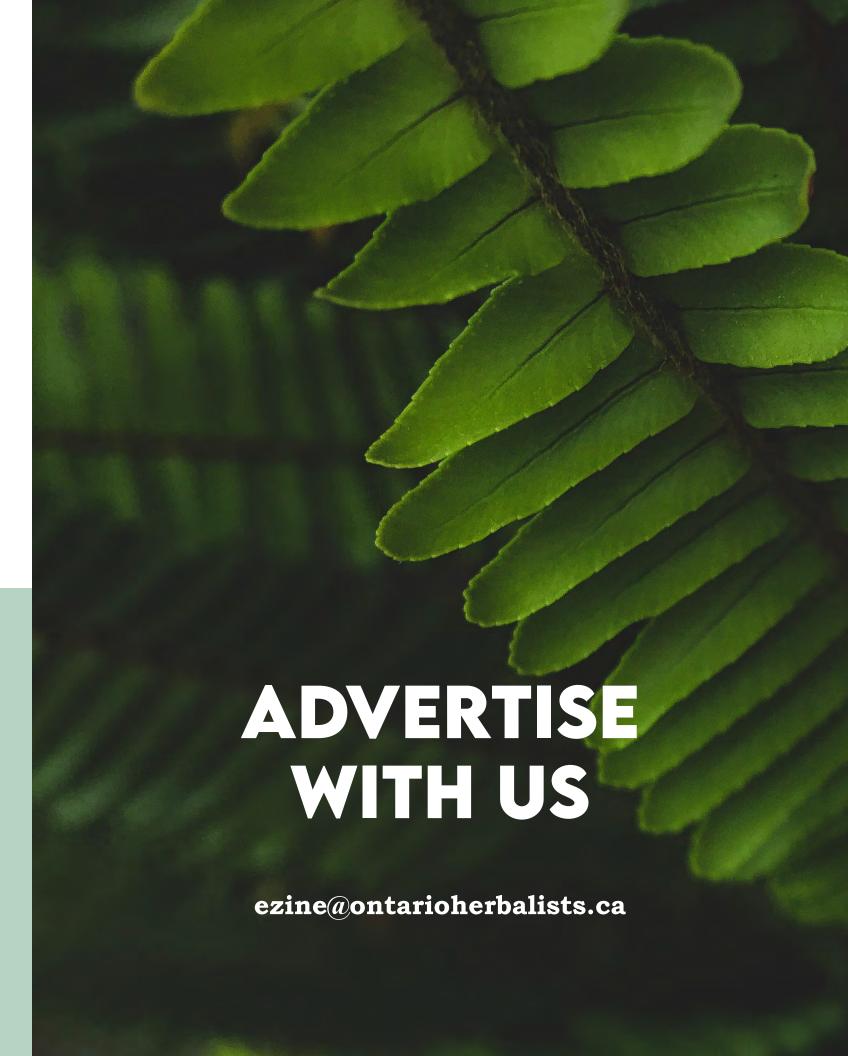


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With over 25 years of experience, Shanthi is the founder of Ajara Ayurvedic Wellness Center. She is an Ayurvedacharya from the University of Madras, India where she served both as a Professor and medical officer. Before moving to Canada, Shanthi was head of the Department of Obstetrics and Gynecology at the renowned college for Ayurveda, Sri Jayendrasaraswathi Ayurveda College, India. She has been conducting lectures for students and the general public about the values of this ancient science. Her objective, while living and working in Toronto, has been to make a difference in the Holistic Health Care System by applying her education and professional wisdom.

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UNEARTHING LIBIDO AND CREATIVITY USING BOTANICAL, SUPPLEMENTAL AND ENERGETIC ELEMENTS:

AN UNPARALLELED EXERCISE IN SYMBIOSIS

By Nicole Morizio, RH

Carl Jung articulated this concept in the early twentieth century and to this day it remains unmatched - libido encompasses the totality of psychic energy, not limited to sexual desire. To expand, this consistently inspiring source of endless personal power lives within the psychological veins of erotica. By definition, it is the phenomenon of sexual desire through artistic expression that provokes emotional and sensual arousal, inseparably physical and mental; it is the ultimate subconscious aesthetic judgment.

Svadhisthana, otherwise known as our sacral chakra, is located between the hips and is directed by the principle of pleasure. Its associations are with the emotional body, sensuality and creativity. This energetic vortex, much like all chakras, is sensitive to imbalances when it is under or overactive or if the energy is misunderstood and misdirected. Low vibrational feelings of frustration may arise when



these naturally harmonious passions intertwine behind a veil and go unacknowledged. It is of equal importance to be ever conscious of our outlets for both creative and sexual expression, especially acknowledging how they can influence one another. Identifying these individualized and continuously changeable levels in our sacral chakra should be prioritized as a welcomed challenge and can be supported by the plant and mineral kingdoms that surrounds us.

Aphrodisiac herbs are said to increase sexual desire. Some work directly with these organs as stimulants (including irritants), which drive the primal need for physical arousal and relief. Others work to directly influence an individual's energy. Both actions are to be enjoyed amongst playmates. Enhancing this desire can and should be translated not only into our sexual beings but our creative selves as well, harnessing it for both for inspiration and innovation.

On a molecular level, boosting our libido represents the need for abundant testosterone in all individuals. With estrogen dominance, both testosterone and estrogen are required to maintain lubrication. Testosterone is produced in the adrenal glands, testes and ovaries, ultimately ruled by the pituitary gland in terms of production volume and frequency of release. Testosterone primarily binds to two proteins, albumin or sex hormone binding globulin (SHBG), or it can remain nonattached; albumin and free testosterone are the most bioavailable to the body and levels can be assessed through blood tests.

It is important to note that the sexual hormones consistently interact with each other in ways that may prove to be of a disservice. An example being



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xenoestrogens, one of many xenohormones that are either naturally occurring or artificially created that mimic hormones within our bodies. Dairy and most plastics contain xenoestrogens that will increase levels of estrogen in the consumer and in the process will bind to free testosterone creating the illusion of decreased levels when in fact your production is not underactive, it is simply being sabotaged by environmental toxins.

HORMONE DETOX

Of all sensory mechanisms for taste, the bitter receptors are the least known and most significant as they lay along the entirety of our gastrointestinal system. Considering such vast amounts, the major role they play on tone and function is in part due



to the fact that they stimulate appetite, release digestive juices, detoxify the liver, engage and regulate pancreatic hormones and lastly, repair the gut wall. Bitters are "naturally" bitter in taste and these principles range in molecular structure including monoterpenes, iridoids, sesquiterpenes and alkaloids that primarily trigger a response on the receptors located on the back of the tongue.

Organs of elimination, especially the liver must be considered when discussing overall systemic health and detoxification. Hepatics are herbal remedies that are traditionally known to tone, strengthen and increase the flow of bile, and are necessary for holistic preventative health. The lack of defined mechanisms for such herbs on a biochemical level does not affect their empirical evidence.

For estrogen dominant individuals, emmenagogues are plants that are used in regulation of the female reproductive system that affect both function and specific tissues.

HORMONE DETOX HERBS:

Dandelion (*Taraxacum officinale*)

Leaf and root - bitter, hepatic and tonic.

Root tincture is most favourable for these actions as opposed to the leaf which is primarily used as a safe and reliable diuretic.

Motherwort (*Leonurus cardiaca*)

Aerial parts - hepatic and emmenagogue. Not to be used with cardiovascular medications.

Mugwort (*Artemisia vulgaris*)

Leaf and flowering top - bitter. Not to be used during pregnancy or with stomach hyperacidity and intestinal ulcers.

Yarrow (Achillea millefolium)

Aerial parts - bitter and hepatic. Not to be used during pregnancy.

APHRODISIACS

The following holistic suggestions have been sourced through empirical evidence collected and documented over centuries by accredited herbalists and should always be experimented with gratitude and caution. Should these alternatives entice you, it is wise to consult a practitioner well versed in these therapies to determine proper dosing protocols and a schedule to monitor progress.

"Enhancing this desire can and should be translated not only into our sexual beings but our creative selves as well, harnessing it for both for inspiration and innovation."



BOTANICAL ELEMENTS:

Damiana (Turnera aphrodisiaca) acts on estrogen dominance by increasing lubrication, sexual desire and intensifies the climactic peak. Testosterone dominants will feel a surge in endurance during performance and has been used to reverse Horny Goat Weed (Epimedium alpinum) does impotence.

Fenugreek Seeds (Trigonella foenum-graecum) has been observed (through empirical and clinical assessments) to act on both sex hormones in successfully heightening libido. It is not to be used with blood thinners.

Maca (Lepidium meyenii) is rich in plant sterols that are biochemically related to both estrogen and testosterone, another aphrodisiac for all to enjoy.

Ginkgo (Ginkgo biloba) acts on blood vessels by both relaxing and increasing flow, as well as enhancing individual orgasm; a small study was conducted for those on antidepressant medication suffering from libido loss. It proved successful for over 80% of participants.

Cumin (Cuminum cyminum) has been involved in recipes that enhance libido for years; just a pinch on a daily basis will guarantee ample sexual ability for all the years of one's life.

'She who has a hundred husbands' (Asparagus racemosus) is comprised of sharavarin and sarsasapogenin, both precursors to estrogen and progesterone, and used as a hormonal tonic to balance while simultaneously increasing lubrication.

Kava-Kava (Piper methysticum) exudes a physical action upon the sexual organs in a way that stimulates and also subdues the sensation, making it one of the most pronounced aphrodisiacs. Used primarily in ritual, when sex is being explored spiritually.

Cubeb Berries (*Piper cubeba*) have a long history of sexual association as an aphrodisiac; proven at regular dosages to prolong erection, increase passion as well as the physical activity of sex, primarily for testosterone dominant individuals.

Bindii (Tribulus terrestris) has been used historically and within a clinical scope to increase sex drive for both estrogen and testosterone dominant individuals (at varying dosages), including increased sperm count and infertility.

exactly as the common name suggests, it enhances libido for all who choose to participate in its naturally crafted chemical constituents including active flavonoid icariin - another go-to for reversing impotence.

Cacao (Theobroma cacao) contains a chemical constituent phenethylamine, which interacts with the central nervous system to stimulate a sense of excitement and arousal.



SUPPLEMENTAL ELEMENTS:

Zinc is a master mineral responsible for metabolizing nutrients, maintaining our immunity, creating DNA, produing protein and cell division. It is a necessity as it provides aid to enzymes in the absorption of nutrients, which is why it plays a crucial role in the production of testosterone.

Vitamin D3 is a hormone produced in our body upon stimulation of sunshine, which also contributes to testosterone production and naturally raises hormonal levels where there may be a deficiency.

Omega-3 fatty acids are an essential fatty acids we source primarily through fish and flax seed oils, in particular of importance as it is a precursor to general hormone production.

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ENERGETIC ELEMENTS:

Garnet is the stone of physical love; it revives intimate connections with self and others while increasing passion by clearing our root chakra fear-based perceptions. The original stone for engagement proposals, it grounds spirit force within the body to direct and stimulate creative energy.

Orange Carnelian invokes and recharges the sacral chakra to provide added vitality especially for estrogen dominant individuals.

Red Jasper invigorates the libido and prolongs sexual excitement while cleansing and instilling balanced boundaries of the sacral chakra. It is a stone that raises kundalini energy, the center of receiving any and all vibrational stimulus.

Smoky Quartz enhances the acceptance of sexuality as a natural, healthy and enjoyable activity while increasing virility in testosterone dominant individuals. It initiates movement of our primal forces within the body, known as a stone of ultimate power.



ABOUT THE AUTHOR

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As a phytotherapist, Registered Herbalist, and Reiki Master, Nicoleacknowledges the need for heightened awareness and elevated education surrounding the health of our hormones and how delicate the balance between them is. Through clinical consultations she identifies deficiency or excess within the endocrine system and creates custom formulas using dried herbs. Her company, Libidinous offers infused oils designed to arouse our more sensitive areas. She does Reiki healing and Astrology readings upon request.

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DOES WITCHCRAFT RELATE TO MODERN WESTERN HERBAL MEDICINE?

By Jennifer Shannon, RH

In the last number of years there has been a resurgence in the interest in, and practice of, witchcraft. Its staying power is evidenced by the National Institute of Medical Herbalists (NIMH) increasing number of articles written in reputable suggests that the curriculum taught to herbalists broadsheets, such as The Guardian and BBC Online, in modern music, popular novels, and However, there are a number of practitioners in the successes of brick and mortar stores such as Hauswitch in Boston and The Occult Shop in Toronto.

With this underground swell of interest in witchcraft, Ontario Herbalists Association (OHA) members have found themselves being asked, "Does witchcraft relate to Modern Western it can be argued that, historically, there was a Herbal Medicine?"

Discussions with various members of the OHA, the American Herbalist Guild (AHG), and the does not generally include the esoteric arts. who have used their formal herbalist education as a steppingstone to pursue their interests in the esoteric arts.

There is no formal qualification in herbalism that anoints a person a witch. However, in the Venn diagram of esoteric arts and Western Herbalism, degree of overlap.

To start, some would argue that Herbalism IS an esoteric art because of the role of herbs in tasseomancy, ceremonial magick and alchemical and astrological preparations. Many herbalists describe themselves as White Witches, Green Witches, Kitchen Witches, Hedge Witches and more. Nicholas Culpepper, who many regard as the forefather of Western Herbalism, also a Medical Astrologist, was himself accused of witchcraft during the English Civil War. Headlines such as "Is Herbalism Another Form of Magic?" (Irish Times, 2016) continue to pepper the news in countries with a strong history of both superstition and herbal practitioners. And one cannot forget that a number of Herbalists were killed as witches during the spate of witch trials across Europe.

Depending on the personal, historical or cultural perspective, the witch is seen as a threat or a healer.

One only need read Shakespeare for evidence of this. However, today the witch is increasingly seen as the symbol of self empowerment, of feminist power, and the symbol of grassroots uprisings. Herbalism was long regarded as the people's medicine, another grassroot movement, that took place out of necessity to empower the underclasses who could not afford medical care.

While the OHA does not represent or teach herbalism as witchcraft, it does have a class and resource list that, from time to time, touches on the esoteric arts (such as spagyrics). Above all, we focus on the healing capabilities of herbs.

If you are interested in learning more about the OHA and the work of its practitioners, please consult ontarioherbalists.ca for reputable publications and classes.





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Jennifer is a Registered Herbalist who trained under Diane Kent. She qualified in 2019. Her interests include the intersection between TCM and Western Herbalism's use of the same herbs, and she wrote her thesis on licorice. Jennifer was due to continue her education in Asia until the COVID-19 outbreak and looks forward to pursuing this when travel restrictions are lifted.

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NETTLE, MARS AND LUST

By Abrah Arneson, RH

and it carries so many of Mars' attributes it is hard to find a plant more suited to any planet like Nettles. Shall we begin with lust!

Let's begin with this story as told by Clarissa Pinkola in Women Who Run with the Wolves:

Once upon a time there was Coyote Dick, and he was both the smartest and dumbest creature you out into the woods, where - Oh no! - it hopped could ever hope to meet. He was always hungry for something, and always playing tricks on cried. "Ow, ow, ow!" it screeched. "Help! Help!" people to get want he wanted, and any other time he was always sleeping.

In the western paradigm, nettle is ruled by Mars Well, one day while Coyote Dick was sleeping, his penis got really bored and decided to leave Coyote and have an adventure on its own. So, the penis disattached itself from Coyote Dick and ran down the road. Actually, it hopped down the road, having just one leg and all.

> So it hopped and it hopped, and it was having a good time and it hopped right off the road and right into a grove of stinging nettles. "Ouch!" It

The sound of all this crying woke up Coyote Dick, learn the secrets of nature understood by women. Or and when he reached to start his heart with the in other words, he encouraged the witch hunts and accustomed crank, it was gone! Coyote Dick ran down the road holding himself between the legs, and finally came upon his penis in the worst trouble you can imagine. Gently, Coyote Dick lifted his adventurous penis out of the nettles, patted him and soothed him down, and put him where he belonged.

The moral is that those nettles, even once Coyote Dick got out of them, made his cock itch like crazy forever after. And that's why men are always sliding up to women, and wanting to rub up against them with that "I'm so itchy" look in their eyes. You know the universal cock has been itching ever since that first time it ever ran away.

While Venus and her plants support female genitals, associated with womanly curves, seduction and fertility, Mars rules the male genitals with passion, sex and aggression. While the story about Coyote's penis is funny, there is nothing funny about a man rubbing up against a woman in a subway, elevator, movie theatre... you get the picture. Mars carries the energy of lust and conquering.

Let's turn to Europe and the Renaissance, a time when Europe went from darkness to light, science replaced superstition, Michaelangelo's creativity soared, New Worlds were discovered, and many of the greatest thinkers, authors, and statesmen in all of human history thrived, as per Wikipedia. The Renaissance was driven by the energy of Mars, a creative, passionate fire with a lust for progress at all costs. Remember, Mars comes with creative fire and great destruction.

Take for instance Francis Bacon, a great thinker of Renaissance in England. Bacon is often called the Father of Empiricism. He brought forward the idea that science was based on inductive reasoning through observation of nature's order. He was knighted by England's King James (who was also his lover), and became the Attorney General of the kingdom, a position which carried enormous power. Unfortunately, in the end he was caught taking bribes and was sent to the tower. What is not mentioned by Wikipedia is that he encouraged the torturous and murderous techniques of the inquisition in order to

inhumane treatment of women who did not carry his beliefs. Some estimate more than 9 million were murdered during the Renaissance, the time when darkness was taken over by light, as it is written. However, we all know that history is written by the victors - and Mars insists on winning.

BUT WHAT DOES THIS HAVE TO DO WITH NETTLES?

During the Renaissance, nettles were offered as an aphrodisiac. Nettles was believed to fortify those who had little sexual power. It is, after all, a plant carrying Mars' energy. But there is more to it. Let's unbury these hidden times in our history and see where nettles and Mars fits in.

Nettles is a very common plant. It grows close to humans. Often when a plant grows close to humans, herbalists say it offers friendly medicine. This means that one can use it with little fear of side effects or causing any harm. Friendly plants are good for everyone.

There is an expression amongst herbalists: "When in doubt, offer Nettles." I don't agree with this offthe-cuff saying. Nettles carries the energy of Mars and, well, too much Mars can cause trouble. For instance, once I was speaking about women's health to a group of women (of course) and mentioned nettles. A woman spoke up and told me she was allergic to nettles. This seemed very curious to me as it's not the kind of plant that causes allergies. Often nettles is used to calm allergic reactions. Mars is reflected in the immune system's actions and nettle subtly, yet profoundly, effects the immune system, helping it work more efficiently and less erratically. After the talk, I asked the woman why she thought she was allergic to Nettles.

She told me she had been drinking nettle tea to increase breast milk - reasonable, as it does increase the nourishment in breast milk growing strong babies (Mars supports growth). After a few weeks of drinking 3 cups a day, she developed terrible stomach pains and could not eat anything.



heard of nettles having such a dramatic effect on a stomach, I asked the woman if I could see her tongue. The tongue offers a glimpse into what is going on in digestive systems.

Her tongue was bright red, raw looking, and hard. This is a sign of too much heat in the body, plant is contra-indicated in this situation. Nettles aggravated the heat, making the imbalance in her body worse. (As an aside, in this situation, alfalfa, During the Renaissance, the Christian church seized a cooling nurturing plant of Venus, would be much better to nourish both the woman's body and breast milk.)

Nettles, growing close to humans and helping us in many ways, is one of the best green fertilizers any Women were the councillors in the village. They gardener could want. But anyone who, like Coyote, has had a run knows, nettles' bite is real and painful.

She stopped drinking the nettle tea and the pains Back to the Renaissance. This is a time in Europe went away. Even more curious now, as I had never when women made fabrics for clothing in their home. They spun, wove and sewed everything. Many different types of material were used to make clothing. Obviously wool, and if they had status, perhaps cotton and silk—but many used what was close to home. Nettles grow close to home. Nettle makes a tough fabric that can with stand strain and time-like the Nazi uniforms made from nettle specifically the digestive system. Taking a hot Mars stalks, which still stand in museums appearing good as new.

> power. Medicine moved from a woman's home and into the hands of men — monks in monasteries where plants were given those annoying botanical names, and the names the (women) healers of the time had used for centuries were discarded. supported broken hearts, advised on issues affecting their communities, and practiced rituals to foresee the outcome of events. Simply put, they were responsible for the physical and spiritual well

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being of their communities. They were very busy, as you can imagine. They did not have time to go to special places for prayer and guidance, nor did they have time to take time out of their day to pray and meditate. They did this while they worked. As spinning and weaving carry a meditative quality, these activities became one of their favoured times for prayer. And they put their prayers into the fabrics they made.

In her thorough and moving book Witches and Pagans: Women in European Folk Religion, 700 -1100, Max Dashu records one prayer or chant as: "May iron not bite the one who wears this."

I can't help but think the women who chanted this prayer while spinning with nettle stems to make strong clothing for their boys called by the church and king to march off to war. (Again that ugly Mars theme arises - remember the Nazi uniforms). Curiously, nettle itself is rich in iron and used frequently to help build iron levels in the blood after a heavy bleed. Nettles also helps to stop bleeding. It is not one of the most effective herbs, but combined with other known styptics, it certainly helps. Mars, of course, rules blood— both the planet and the fluid that carries life in our bodies being red.

The meditative focus and intention infused into nettle thread as it spun, the tough nettle fabrics woven, and nettle shirts sewn, brought to the plant a magical aura. All those good intentions created the belief that nettles protects people from ill wishes by others. Or, as it was said, nettles has the power to break curses and wards off the evil eye. Women were known to carry and give away small swaths of cloth to help and shield the ones they loved.

This finely woven relationship between nettles and women lasted for centuries, until the Renaissance and the movement away from the darkness of superstition and into the light of science.

The energy of Mars must have been so strong at that time. The blood thirsty quest for power by the Church and State was brutal and vicious. These male dominated institutions were so threatened by a woman's power to spin her prayers into the threads she wove together to make clothing for loved ones,



WHAT IS THT?

Tradition Not Trademark stands for all traditional herbal formulas, terminology, recipes, remedies, etc. to be trademarkfree and in the public domain.

We want to keep our herbal traditions within our communities so we can continue to share knowledge, formulas, and recipes freely, and have the option to sell herbal products under their traditional names.

Fire Cider is a recent example of preserving a traditional remedy in the U.S., where the result was considered a precedent-setting case; 'Fire Cider' was deemed a generic term.

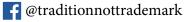
A generic term is a term that the general public understands. (Like the term "Kleenex" which is often said in lieu of 'tissue'.)

The name 'Fire Cider' has been used for a blend of herbs and apple cider vinegar used by thousands of herbalists across the world. Let's keep 'Fire Cider' generic in Canada too!

HOW YOU CAN HELP:

- like and share our <u>facebook posts</u>
- sign our petition (change.org)
- spread the word about Fire Cider at events you attend.

Let's get fired-up!



that they tortured and murdered 9 million women desire to paint naked women, when pornography over a 300 year period. Clearly, this seems dark and irrational for the time of light and reason.

whether burning, drowning, or any number of absolutely horrible deaths, the clergy dressed them in nettle shirts. By doing this, they believed the nettle shirts would protect them from any curse she tried to throw at them during her final moments on earth. The belief that nettles offer spiritual protection runs In 1562, Dutch painter Maerten van Heemskerck deep in the veins of human beings.

The irony is that at the same time in history, nettles was believed to be a plant that encouraged lust. While the Victorians take credit for the language of flowers, this language is seen throughout artwork In 1622, English painter Anthony van Dyck paints leading up the Renaissance and into the age of Enlightenment.

In 1526, Albrecht Altdorfer made the painting of Susanna in the Bath and the Stoning of the Elders. His painting is based on a biblical story of a young woman accused of adultery after refusing to have clothing as she collapses into herself and turns to sex with two senior court officials. In Altdorfer's painting a beautiful young woman is preparing to bathe in an orchard while being spied up by two lecherous men. A patch of nettles grows between Susanna and the Elders. Altdorfer's placement of the nettles makes it difficult for the Elders to get any closer to Susanna.

women intensified over the next hundred years,

was strictly forbidden by the Church. Susanna's plight being recorded in the Bible provided a perfect way around the Church's restrictions. However, few When the women were taken to their execution, painters were as kind to Susanna as Altdorfer. No other artist offered Susanna nettles as a protector and as the hysteria around hunting out witches and burning women intensified, so were the sufferings Susanna endured.

> painted Susanna naked with one elder fondling her breast while the other grabs her waist. Susanna's face turns away from the viewer with a look of resigned

> Susanna with eyes flashing wild with fear while one elder pinches the flesh on her upper arm as if testing it for texture and plumpness.

> By 1647, Dutch painter Rembrandt Harmenszoon van Rijn, paints the elders pulling at Susanna's the viewer with pleading eyes.

> Did Altdorfer foresee the women being burnt to death wearing shirts made of nettle? One has to wonder. Was his painting a warning? A warning to women to be aware and protect themselves.

One word often used to describe the energy of As the hysterical hunt for witches and burning of Mars is anger. As an expression of speech, to nettle someone is to annoy, irritate and anger them. Anger, European painters portray Susanna's suffering like nettles, can form a protective barrier around a many times. Scholars suspect Susanna's popularity woman. No one wants to mess with a bitch. Every amongst painters of that time was driven by their woman, although Mars is considered male energy,

Herbal treatment involves relief of:

- symptoms of PMS, menopause, BPH
- gall bladder disease, kidney stones
- heartburn and digestive conditions
- allergies, asthma, respiratory issues
- enhanced or suppressed immune response
- stress: skin conditions
- detox: elimination of subclinical symptoms
- improved quality of life for individuals
- living with chronic disease

carries the vibration of Mars. Every woman has the dire for most. A year after the voices of thousands of capacity to use anger to form a protective barrier around her. Writing this, I am reminded of a story a friend of mine told me about her mother who survived the Holocaust.

into the shtetl where her family had lived for generations and began to round up the people for deportation. Her mother began to cry, of course. are!" This expression nettles me. Sometimes, when Then she began to scream, of course. Then the three-year-old hurled herself at the soldiers, kicking, biting, scratching, and pulling hair. With that, the the boundaries, physical boundaries which nettles Nazis left her and her mother behind. They then made their way to Budapest and survived the war. This woman knows how to use the energy of Mars.

About a year ago, the #MeToo movement exploded on social media. The movement brought voice the thousands of women who have faced sexual harassment and assault. Everyone was talking about boundaries and a strong "no". this dirty secret women have endured for a very long time. Speaking out prior to #MeToo, although many did, was too scary and the consequence too

women were heard, every day in my clinic, I meet women and their anger. Anger that has been pushed down, that has not had words, that has been called to voice by the #MeToo movement.

When she was three years old, the Nazi's swooped While social media offered a platform for the #MeToo movement, there are many different views posted daily. For instance, "Karma is a bitch, only if you the bitch, a woman's Mars energy, is suppressed, karma becomes a bitch. With the energy of Mars, create, and the energetic boundaries that anger builds, can protect a woman and keep her away from harm.

> While being challenging for most women, as we are taught early on that a "bitch" —much like a "witch" -is scorned, Mars can create confidence, good

> Everyone should have a swatch of nettle cloth in their pocket.



ABOUT THE AUTHOR

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Abrah is a Clinical Herbal Therapist who has been in practice since graduating from Dominion Herbal College in 2007. After having practiced for many years in Alberta, Abrah opened a private practice in Ottawa. Besides seeing individuals in person, Abrah offers Zoom sessions on a "pay-what-you-can" basis. She has an apprentice program that offers students clinical experience with herbal medicine. She is the author of The Herbal Apprentice: Plant Medicine and the Human Being and The Herbal Apprentice Workbook. Abrah is committed to creating unique educational opportunities for practicing herbalists and students. She is also a member of Herbalists on Herbs. She currently serves as OHA Vice President.

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ETHICAL WILD HARVESTING

by Monika Ghent, RH

WHAT IS WILD HARVESTING?

Wild harvesting is the collection of plants from a native wild environment for medicine. This includes harvesting from natural ecosystems such as fields, marshes, and forests, as well as vacant lots and weeds from gardens and farms.

WHAT IS ETHICS?

Ethics help us decide how we ought to live and why things are important to us. Ethics refers to standards of right and wrong that prescribe what we ought to do, usually in terms of rights, obligations, benefits to society, fairness, or specific virtues such as honesty, compassion, and loyalty. The issue of value is core to the ethical debate; there can be no ethics without value.

WHAT IS MEANT BY ETHICAL WILD HARVESTING?

Ethical wild harvesting is a philosophy of gathering wild plants that includes a high degree of ecological awareness and consideration, sustainability and a deep respect for the plants, those beings that rely on the plants, the entire ecosystem, and the earth as a whole. It involves approaching the plants with knowledge, respect and reverence, and the understanding that you are not the only one depending upon that plant.

Ethical wild harvesting requires the understanding that the plants are part of a community—not an isolated object, free for the taking. A green virtue ethic is a relationship with nature which values and respects nature's autonomy from us. This consideration extends beyond the plant people, the ecosystem and Earth Mother, to the medicine (its quality), and to those who will use it, back in time to honour the ancestors and forward to future generations.

WHO SHOULD BE WILD CRAFTING?

Only wild harvest for your practice or home use. If you do sell herbs commercially, you should grow your own plants.

HOW TO ETHICALLY WILD HARVEST

Wild harvesting as ethically as possible is a constant work in progress. There is so much to learn that this is a lifetime process. Do your best to continue to deepen your education and respectful interaction with the plant people.

RESEARCH

Before you begin wild harvesting, educate yourself about the herb you will be gathering. This means knowing the ecosystem where it lives and the beings that share its world. Plants do not exist in isolation –every ecosystem is a complex web of interactions. Do your best to understand these interactions through reading and most importantly, spend time in the different ecosystems just being, feeling, and observing.

Make sure you have correctly identified the plant you intend to gather. This sounds obvious, but it is very important. If in doubt, do not harvest the plant but ask for assistance from an experienced wild harvester or herbalist.

HARVESTING

Learn as much as you can about each plant so that when you harvest them you can do so in a way that helps them out. Every type of plant will show positive benefits, when given the proper spacing to maximize their growth. Be sure to leave more than enough for the needs of the other beings that rely on the herbs you are harvesting.



When harvesting, cut the herb just above a set of growing leaves. Two new stems will grow around the original cutting, creating a "V" shape. Leave large tough old leaves at the bottom alone, they are the solar panels that power the plant's growth.

Consider your impact on the other plants and the soil compaction around the herb you intend to harvest, and minimize it as best as you can.

If an area is slated to be 'developed' harvest your herbs in that area so that they are used for their purpose rather than being ploughed under.

PROPER TOOLS

It's important to have the proper tools to ensure that the herbs are harvested and transported correctly. A sharp tool (such as a knife or scissors) should be used for harvesting leaves and flowers. Tearing the leaves or stems will leave jagged cuts that are hard for plants to heal, leaving it vulnerable to attack by insects and fungi.

Collect herbs in either cloth bags or plastic bags that are crinkly (not soft) as they are less toxic. Reuse your bags over and over again.

WHERE TO AND NOT TO GATHER?

Before harvesting in an area, check to make sure it is legal to do so. It is very important to be respectful to others that may use or own the land. If you wish to harvest on private land, ask for permission from the land owner.

Never collect a herb from an area if there is evidence that someone else has been harvesting the same species in the same area.

In general, herbs used in a herbal practice should not be wild harvested in urban areas because there are many potential contaminants that will affect the quality of the medicine.

Herbs for medicinal use should be harvested in healthy, wild areas of a significant size that are free of any obvious sources of pollution. Nearby factories, mining, and commercial farming run-off may contaminates herbs you wish to gather. Before you harvest in an area, do you best to find out what the land was used for before it became a wild space. If it was used for industry, do not harvest there. Really, everywhere is polluted these days and it is nearly impossible to find pristine wilderness. Just do your best to minimize toxicity as best you can.

- **2.** Harvest at least 200 m from any small-scale farming, unless it is an organic farm. If there is a factory farm nearby, leave even more space between them and your herbs.
- **3. Don't harvest under power lines** electromagnetic frequencies affect plants like they do people.
- 4. If a species of herb that you are harvesting is growing in or along the edge of water, there should be no major sources of urban, industrial, or agricultural pollution upstream or adjacent to any body of water where the herbs are being harvested.
- **5. Don't harvest in areas downwind from factories** as there could be chemical contamination via the wind. Do not harvest anywhere near a factory.
- 6. Don't harvest in areas that have been used as a dump legal or illegal.
- 7. Don't harvest in areas that have a history of being mined.
- **8. Don't harvest around houses and buildings** because of the toxic leaching from paint and other contaminants.
- **9.** If harvesting from a fallow farm field, **make sure** it has been fallow for a minimum of two years but preferably more. If the field was used for intensive factory farming, then wait even longer to give the soil and the plants more time to decontaminate.

In these areas, only harvest annuals or biannuals, because if a species is long lived, it may still contain toxins in its tissues.

- 10. In general, avoid harvesting in fragile environments such as eroding hills, fens, bogs, places with thin soil, etc.
- 11. It is best to source at least three different locations from which you can obtain each species of herb that you need to wild harvest so that you never harvest any particular species from any specific area more than once every three years.

WHAT PLANTS SHOULD YOU AND SHOULD YOU NOT WILD HARVEST

Before you begin harvesting in an area, take careful observation of the health of the area and how the plants are doing that year. If they are stressed for any reason (such as too much or too little rain, insect predation, long, cold winter, warm winter, etc.) do not harvest from that area even if it means not getting that plant that year. There are always plants that you can substitute.

- Never collect rare or legally protected plants. For all endangered plants, choose organically farmed sources, or grow them yourself.
- Only collect herbs that are common in the region that you are harvesting, and are common in general (i.e. don't harvest a herb that is common in a specific region if there are only a few regions where it is easily found).
- Collect invasive plants. Non-natives have not evolved locally with the same checks and balances that native plants have experienced and often displace native populations.





EXCHANGE AND GRATITUDE

It's important to be in a calm and relaxed, joyful space before beginning to harvest as your emotional state will affect your medicine. Also, you'll be able to hear the plants better and be able to honour them in the way they want to be honoured. If you find yourself getting impatient or irritated or any other emotion that takes you away from that inner calm, pause for a moment and breathe until you find your way back to that calmness.

Take a moment before you begin to harvest and really feel the flow of life in the area you are about to harvest. Feel if it is in fact acceptable for you to begin harvesting. Listen to your heart. Respect the answer you are given.

Make an offering to a strong, vibrant plant of the same species you wish to harvest. An offering of

tobacco is usually a good exchange, though listen to the plant and see if there is anything else they prefer.

Ask the plant for permission to harvest it and tell it your intentions. If you get permission, as you go from plant to plant, ask before you take anything. Though mostly the answer is 'yes', sometimes it is 'no'. Respect this answer and go on to another plant. If you open up to this inquiry, the plants will more and more support you and offer themselves to you.

Do not pollute the environment or your medicine with toxic insect repellents. Mix up your own using natural products.

Pick up any garbage you find as a way of thanking the plants, the Earth, and the Creator for providing your medicinal herbs. 58

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HOW MUCH TO HARVEST/ GATHER SUSTAINABLY

Take only the amount of herbs that you feel you will need for the year.

Before you go out harvesting, determine exactly how much of each plant you really need. Keep good records of your stock and from that figure out how much of each herb you need to gather this year. Bring a mechanical spring scale in the field to weigh your herbs to ensure you've got the right amount. When processing your plant, weigh the discarded portion and make a notation in your records. The next time you harvest the plant, determine by weight how much overage you will need to get the amount of finished medicine you want.

Can the stand of herbs spare the amount you would like to gather? The answer to this question lies mainly in experience and in returning to the stand year after year to assess the effects of your actions. Ideally you would want the stand to come back as strong or stronger each subsequent year.

Beginners should gather in small quantities while developing a relationship. Make sure that the amount of herb you harvest isn't going to detract from the overall health of the community. In general, harvest from only 10% of the plants in one location. If this is going to negatively impact the plant population, then take less, or none at all, depending on the plant. If the plant is a common plant growing in great profusion, you can harvest more. When finished harvesting, you should be leaving behind a vibrant, healthy plant community.

Maintain a record of harvesting sites. In it, record the site location, what medicinal plants are growing there, and what percentage of plants you can harvest to have the least possible impact on the population and environment. If you harvest from that site, record which plants you harvested and the amount. Revisit this site to observe the long-term effects of your harvesting.

Know how the plants grow. Observe their form and habits. Harvest in such a way as to allow the plants to regenerate and reproduce themselves:

- 1. Do not take all the healthiest and most robust plants in an area.
- 2. Collect only the parts of the plants you are going to use do not pull up the whole plant.
- 3. Learn the reproductive methods of the plants you are harvesting, so that you can help replant what you have taken. Annuals reproduce through seeds so you must leave lots of flowers so that the plants can set seed. Some perennials reproduce exclusively by seed, while others do so from rhizomes, crown division, or by a combination of reproductive methods.

To help ensure continued reproduction, when harvesting the aerial part of a plant, do not cut the whole aerial portion from the ground, but rather pick only the top portion (the top 25 – 40%) which usually has the greatest amount of medicinal value and life force. It is even more preferable to take only a few branches from the stalks of several plants instead of cutting off the top 25-40% of a few plants. Harvest the top portion of plants early in their flowering period. Annuals may produce more leaves and flowers if left with enough leaves to continue growth. Perennials can use the lower leaves to feed the root for the winter.

When harvesting, be sure to cut just above a branching. In this way, a plant can re-grow from that place and potentially flower again if it is early enough in the season. Gather leaves from several plants rather than stripping most of the leaves off of a single plant. If harvesting the root, do so after the plant has gone to seed and started to die back. If possible, replant a section of any budding rhizomes or root crowns. Some plants with tap roots will grow from a broken piece of root (e.g. *Taraxacum* or *Symphytum*). Or, if possible, gather only the lateral roots if the root branches. Scatter the mature seeds of the plant around to replace the ones you harvested.

- 4. Leave plants on the outer border of a patch so they can extend the boundaries of the community.
- 5. Avoid flowers from which insects are actively gathering pollen.



6. If collecting the bark of a tree or shrub, take the bark from pruned limbs, not from the main trunk. Learn about proper pruning methods for each species (there are many excellent books on pruning) so that your pruning will actually enhance their growth and not hinder it. Use a very sharp knife. When harvesting bark, go out in early spring or after storms and find branches that have been downed by snow or heavy winds. Make sure you seal up the wound with mud after the incision is made. This helps protect the tree from disease or bug infestation at the wound.

7. Be mindful of your impact on the soil around the plants you are harvesting. Be especially careful if harvesting after a rain or in the spring when the ground is very moist and most vulnerable to compaction and erosion. When gathering roots, carefully remove the soil around them and put it in piles in the order that it was removed. When you extract the root, put any material you removed from the plant in the hole and then carefully replace the soil in the opposite way that you removed it, so that the top layer is the grass or earth that was originally there.

WHAT ARE THE BENEFITS OF BEING AN ETHICAL WILD HARVESTER?

- Strong medicine.
- Herbs are harvested at their peak strength.
- Confidence in the quality of your medicine.
- Knowing that the land and the plants were treated in an ethical/moral manner.
- Greater relationship with your medicine.
- Greater connection to the natural world.

Out of necessity, as a wild harvester you learn to pay much more attention to the cycles of the seasons, to the weather, and to the general well-being and vibrancy of the land and all beings that live there. This can give you a deeper sense of the cycles that govern your life, connectedness on a grander scale, and a sense of being grounded and present. Developing a greater awareness and attunement with nature not only strengthens you as a herbalist by increasing your intimate knowledge of the plants, but it anchors your knowledge in your spirit so that you have more confidence in your medicine—more courage as a human being and as a healer.

This attunement with the natural world occurs not only on an emotional level, but much deeper on the spiritual level. As we listen to the plant people, as we offer our tobacco and our gratitude, as we honour them by harvesting and preparing our medicines in an ethical and respectful way, we come to realize that we are, in fact, honouring ancient, sacred agreements with the plant people that were made a long time ago and that we are fulfilling our part in this sacred agreement. And as we honour the plants, we honour ourselves. This honouring is a doorway into our hearts, our inner-knowing, our sense of right place and right time.

When we choose to see the plants as beings, when we listen to them and honour our relationship, we come to know that the Earth is alive, and that we humans are a seamless continuum of that life, an important part of that web. As a wild harvester, you come to know that everything is inter-related, and have the opportunity to be in good relationship with a wise and loving presence. It is to come home to ourselves in the presence of these beings that know

us, and know themselves—that know the value and purpose of their medicine and who graciously and generously offer these precious gifts to us and our people.

Wild harvesting is a sacred doorway. It offers an antidote to the restless dissatisfaction and disassociation rampant in our society. That hint of a taste of something that you can't quite name. It is an entrance into the grace of the divine. It is a pathway home.

Through ethical wild harvesting, we can learn our own sense of ethics, of morality, of our place. Ethical wild harvesting is really a philosophy of living that leads us back to the original state of wonder and magic that we were born into. Through our loving, inter-relatedness with the plant people, we can learn to open our hearts so that we can live in the great mystery of the "all that is"—part of a vibrant, interconnected, respectful community.





ABOUT THE AUTHOR Monika Ghent, RH, PSM

Traditional Herbalist, Plant Spirit Medicine Practitioner

Monika is a Western Traditional Herbalist, Plant Spirit Medicine Healer, Distance Healer, Teacher and Counselor. She has a private practice in the west-end of Toronto and in Maple, ON. Monika is an advocate of being in respectful relationship with the Divine Natural World and all living beings. As a healer, Monika supports her clients in awakening to the beauty of their uniqueness and living their truth to its fullest expression in health and wholeness. Monika also runs Living Earth School of Herbalism, with her husband, Michael Vertolli, which offers certificate and diploma programs in Western Traditional Herbalism and related fields of study, general interest workshops and online classes.

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GIVING BACK IT'S GOOD FOR YOUR SOUL

by Penelope Beaudrow, RH

"Spring is sooner recognized by plants than by men."

~Chinese Proverb

Deep within my soul I have a love of plants and nature so deep that they are a part of me, not knowing where one begins and the other stops. A constant yearning to be out of doors; see the land awaken after a long cold winter, feeling the warm winds upon my face, hearing the geese flying overhead and walking with my dogs through fields and forest. But my favourite is the beautiful smell of spring: the scent of rain and mud, leafy greens and herbs, and blossoms --- ahhhh sweet, musky and floral scents of wild flowers on the breeze.

With spring upon us everything is full of promise it's the perfect time we can consider giving back to nature! The amazing plants of the fields and forest



give us so much: intoxicating fragrances, life giving oxygen, herbal medicines, materials and amazingly, inspiration for the arts; many a painter's muse. But alas, we keep taking. We take from Mother Earth's precious water resources and natural habitats, to make room for factory farming and ever-expanding cities. And we can't forget our own shame – the overharvesting from the wild for our herbal medicines. As a herbalist or anyone who uses herbs, it is our responsibility to ensure the replenishment of a diverse plant species. Remember the plant kingdom is not sustainable if we only take and do not give back.

So how are we giving back? We have been tilling, digging, dividing and planting on our lovely little farm for over thirty years. Planting any native plant species that are not already thriving on the land. Only a small portion of our 100acres is actually "farmed". We have taken over 60 acres of workable land and given it back to nature. Trees, shrubs, wildflowers and herbs are all thriving, increasing the natural habitat for the surrounding wildlife. Common sightings are deer, rabbits, coyotes, wild turkeys, hawks, raccoons, and rare sightings of bob cats, bears, and even a cougar. In the last several years we have really been focusing on planting "At Risk" medicinal plants. Some of the plants we have reintroduced into the wild are Echinacea, Ramps, Trilliums, Black Cohosh, Blue Cohosh, Arnica,







Goldenseal and Bloodroot. Our most honoured "at risk" plant in the sanctuary came all on her own. One day I was leading a herb walk discussing the "at risk" plants and I happened to ask the photographer, who was out with us, what had been her favourite plant and she said, "the yellow one". I said, "what yellow one?" She quickly scrolled back through her camera and showed me a glorious photo of a



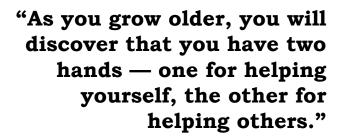
Lady's Slipper Orchid. I was stunned! We never my work with the plants, nurturing and loving our planted this orchid ~ I guess the saying "Build it botanical sanctuary as much as I do. Until then, I and they will come" is true. I had no idea when we will continue to pour my heart's love into this land, first started planting that our efforts would turn into our own botanical sanctuary! We are thrilled to

say that since 2015, we have been a Botanical Sanctuary Member of United Plant Savers. Our mission is to protect native medicinal plants and their native habitat while ensuring an abundant renewable supply of medicinal plants for generations to come. Our future goals are simple: to increase the number of "at risk" plant colonies annually. It is my dream that years from now someone will carry on

giving the only way I know how to.

Now, what can you do?

- Plant "at risk" or "at watch" medicinal plants while hiking and walking
- Scatter "at risk" or "at watch" medicinal plant seeds while hiking and walking
- Donate to United Plant Savers
- Become a member of United Plant Savers
- Save plants that are being destroyed by development transplant them
- Do not purchase wildcrafted "at risk" or "at watch" herbs
- Do not forage "at risk" or "at watch" herbs



I am incredibly thankful every day, for my work within the herbal community introducing people to the many uses of herbs and seeing them begin to use them daily - for themselves and their loved ones (human and pet), but more importantly now is to spread the message to give back - it is truly my life's





ABOUT THE AUTHOR

Penelope Beaudrow, RH Registered Clinical Herbalist

Penelope is the founder of The Ginkgo Tree, a small herbal business (Education, Teas & Tinctures) which also facilitates Herbal Courses. She is Product Development Specialist and Herbal Educator at Faunus Herbs.

She is a board member of the Association for the Advancement of Restorative Medicine, moderator at The Annual International Restorative Medicine Conference, and has lectured as an educator at many conferences and gatherings.

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TEACHINGS FROM GRASS

by Monika Ghent, RH

As I walked down a dusty country laneway one morning, Timothy Grass (Phleum pratense) drew my gaze. "I have medicine for you," it said (which is a pretty typical experience for me since becoming a Plant Spirit Medicine Healer). I thanked the Timothy Grass while offering tobacco and promised to return later to dream its medicine.

As I sat with Timothy Grass that afternoon, I was given a beautiful medicine about determination, perseverance, the over-coming of obstacles and growing into your greatest potential. I thanked Timothy (who appeared to me as a feminine spirit!) for her powerful medicine and her generosity.

Four years later I was sitting in a field feeling bereft of spirit having just experienced a difficult interaction with someone that brought up old disempowering beliefs. Grass spoke to me again, reminding me of her medicine and gifted me a wonderful teaching:

Though Grass is mowed down, pulled up, eaten, trampled, and generally disregarded and disrespected, it continues to hold to the vision of its perfection. Regardless the challenges, abuses and traumas it may have experienced, it endures. growth nor thwart its purpose; it does not become I came back to a place of power. twisted and deformed into a vague resemblance of its true nature. It begins over and over again, The teaching of Grass encapsulates the gift that Plant determined to express its truth to the fullest, to



hearing this teaching and feeling the loving presence The vicissitudes of life do not permanently stunt its of Grass, I felt a strong energy move through me and

Spirit Medicine has given to me and the people who blossom and spread its seed so that it may continue come to me for this medicine. I have always desired to fulfill its purpose and be of use to all life on Earth. as a healer to help people come to know the beauty of their uniqueness and live it fully. Since becoming Grass taught me that no matter what has happened a Plant Spirit Medicine Healer, I have experienced in our lives, it is possible to shed ourselves of those the joy of witnessing the plants help my clients come experiences that have kept us from our true nature, home to themselves and shine their truth out into allowing us to live in our fullest expression. After the world like Grass throwing its seeds to the wind.

WANT TO CONTRIBUTE?

We would love to hear from you if you have something you would like to offer. Our aim is to help connect the herbal community by sharing information and creating a common knowledgebase.

We are currently looking for specific types of submissions, but are also open to new ideas and suggestions. We are always looking for content, so please be in touch!

We are seeking:

- articles
- artwork
- blog posts
- book reviews
- case studies
- monographs
- photos
- recipes
- student thesis
- other ideas!

Please send submissions to ezine@ontarioherbalists.ca

THANK YOU!

Please note that all submissions will be subject to approval by the Ontario Herbalists Association Board of Directors.

SAVE THE DATE!



Annual General Meeting

Oct. 4, 2020 10am - 4pm

Please note that due to COVID-19 restrictions, the format of the Annual General Meeting may change to an online platform, as necessary.