

North America, Canada

Travels and Adventures through the Amazing World of Medicinal Plants

British Columbia

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Because not all herbs are equal in quality or grown in equal soils, or even equal ecosystems, I was on a mission to British Columbia, Canada, to find a consistent source of the highest quality organic herbs. My motto, "good quality herbs produce the best therapeutic results," was driving my quest. During the course of my trip, we visited a large area of British Columbia, visiting farms in the fertile, pristine valley of the Okanagan, in the southeastern part of the province. Our discovery was of some precious countryside and some amazing high-quality, organically grown herbs.



On the Pacific coast of Canada lies the spectacular beauty of British Columbia, Canada's second most-populated province. It is an area is larger than France and Germany combined. Yet, within the massive context of Canada, British Columbia is only 10 per cent, and

within this huge province lives only 4 million people. British Columbia's climate equals its topography for variety. The mild coastal region receives a lot of rain each year, while the interior has a continental climate and certain parts of the province are dry, almost desert-like, with very hot summers followed by cool or very cold winters. At the mountain Ski resort of Whistler, North America's number one ski resort, you can even ski glaciers in the summer!

The Okanagan Similkameen is British Columbia's sun drenched land of plenty. The Okanagan Valley is located 400 kilometres east of Vancouver in south central British Columbia, with its southern tip just grazing the US border. The Similkameen region is located west of the Okanagan Valley. This area is home to miles of farms, herb farms, orchards and vineyards. The wineries and vineyards of the Okanagan and Similkameen

valleys are internationally unknown and yet compare with the best in California and Europe, thriving in this ideal growing climate. This region emerged from the last ice age filled with fertile soils and remnant lakes. The valley connects BC's dry grasslands to the western American deserts.

Although basically in a dry belt, the Okanagan's natural vegetation is divided into two general categories. North Okanagan is dominated by a "dry rain shadow forest". It is, thanks to irrigation, a green and fertile region with a relatively wetter climate than the rest of the valley. Southern Okanagan has near desert-like conditions that produce a more arid but unique vegetation, unlike any other in Canada. Although the deltas in the area hold potentially fertile soil, the extremely dry conditions in the Okanagan keep soil nutrients from plants. This climate is characteristic of many valley systems due to air movement over mountain chains. As moisture-rich air moves from the Pacific across the Cascade Range, it cools and condenses into rain on the western mountain slopes. Air crosses and becomes warm and dry, leaving the eastern slope and valley in the shadow of the rainy side a 'rain shadow.' When the valley is deep it can result in desert-like conditions. In order to tap into the fertile soil deposits created by erosion, massive irrigation is required, the rivers and lakes are now drained extensively to create lush farmland.

We had travelled as a family to Vancouver, three thousand miles across a continent, to tour this fertile area for the best organic medicinal herb farms we could find. After a long flight we found ourselves delighted by Canada and the Canadian people. The cultural mix that hit us was the mix of English and French, and, surprisingly to outsiders Asians. Driving through areas of Vancouver, there were whole areas that seemed almost 100% Chinese. After the Chinese reclaimed Hong Kong in 1999, many had escaped, using their Commonwealth passports to resettle in Vancouver, swelling its existing Chinese community enormously. Every year, BC accepts 35,000 new immigrants to build their hopes of a new life. Coming from the United States, we were impressed by the cultural differences in Vancouver, and the first change that struck us all, was the simple politeness, which seemed more heart-felt than the regular 'English politeness' with

which I had grown-up. It made the contrast to my life in the US, to the lack of 'basic human kindness' that city-dwelling Americans lack, so stark in retrospect.

Steven, our gracious host in British Columbia, met us at Vancouver airport, where we rented our SUV. He then helped plan our itinerary, showing us where to travel and how to finally meet up with him again at his home 5 hours from Vancouver.

Our first destination was Whistler Mountain. This was the most spectacular scenic drive of my life; every turn in the road seemed to produce spectacular views. During the first half of the drive, climbing up the mountains would produce sudden and amazing views of the Pacific. Then as we continued on, waterfalls and other snow-capped mountains would stun us. We drove over and through the spectacular mountain range east into high desert, finally descending to the town of Vernon in the Okanagan.

We met up again with Steven in his hometown. Steven and I had spoken many times on the phone but had only met in person this first time in British Columbia. We were there to visit an organic medicinal herb farm that he had part ownership in. We were very impressed with the farm but more by Steven's straight-shooting answers and character: he just had a life-perspective about him that seemed to be on our own wavelength. It wasn't just that we both loved the medicinal plants, or the camaraderie of being in the same business; there was a sense of intrinsic trust between us.

He met us from the hotel in the morning, and we headed out to take a look at some local farms, out past Vernon into the dry rolling hills. These dry hills could produce huge high quality plants from their soil if only they could get one vital ingredient: water. Thus, many lakes and rivers have been used to irrigate and make lush green farmland. Steven and Nick's organic farm had this precious ingredient, ever-present as a water aquifer to be tapped into just below their land. They also had a pond with extremely high nitrogen content that they would use to produce a stunningly health crop of medicinal plants. One thing that had impressed us in general in British Columbia was how many organic farms there were, and how most hotels (certainly more hotels than back home) were offering organic produce in their restaurants. There seemed to be a heightened awareness in everyday people about the benefits of eating organic. The other interesting

feature of the farm was the permanent structure of a makeshift amphitheatre right in the middle of the farm, right in the middle of a sparsely populated area.

“Why is that there?” I asked. “Oh that! Well you see,” Steven said in soft slow Canadian tones, “Nick the owner used to travel all over North America in a traveling theatre group. Until he settled this land to farm, and once a year there is a festival and the group returns and puts on plays right over there, for about two weeks and then they go on their gypsy way.” Amazing, I thought: huge healthy organic medicinal herbs and a theatre to boot!

After a long day filled with farms, herbs, and many laughs (always a formula for a great day for me) -- a real day of getting to know each other -- Steven returned us to our hotel, with a kind invitation to dinner that night at his house. After a quick swim and shower we were back into Steven’s car heading for dinner at his house. After a great dinner, Carol, Steven’s wife, invited our girls to play some games in another room. Steven, my wife Po and I, were hanging around the dinner table and an amazing chilling story started to take shape, as Steven began to tell us about an event that had changed his life forever. As Steven told the story, we fell from boisterous, and energetic dinner talk, into a painfully hushed silence around the table, as the light faded from the dusk of night outside. Steven’s countenance had also faded, he had an air of pain and patience, horror and enlightenment, that accompanies many meaningful life experiences. We listened intently as the mood shifted and the blackness descended outside and inside. He had been bitten by a rattle snake, and had lived to tell the tale.

Every Crevisse givess a hisss

To warn uss of a snake’s kiss

This is our motto as we descend

Beneath the massive cliff

--Steven Lattey

“Who would have thought I would wake a sleeping snake to strike with no rattle to warn.

A snake would strike me unawares, as I surprised her in her slumber, dreaming of field mice to be devoured. And the walk towards the snake! The fateful walk. Carefully and

carelessly chosen steps; a stop and a go; a left and a right. I started down the trail to Kalamalka Lake and changed my mind and decided to climb the ridge so I could look down from the cliffs: east into Deep Lake and south down Kalamalka Lake and west over the range hills to Terrace Mountain.”

“So fast and unexpected, with no warning sound, the rattler whacked me hard in the ankle and then slid off into the bushes, as quietly as she had struck. Such a quiet moment. A stunned, quiet moment. I reach down and touch the innocuous two holes, so clean and surgical. I say to myself, ‘You’ve been bitten by a snake.’ I am trying to convince myself of the unbelievable truth. For a moment I think I’m all right the holes look so... so professional. But my heart is pounding and I keep repeating, ‘I have been bitten by a snake.’ I am trying to understand what has happened. I fall back a few steps and the poison hits me, rushes to my head and staggers me to my knees. I am reeling; only seconds have passed and the poisons are all through me. First, one poison goes straight to my head.

‘You son of a bitch I think you’ve killed me.’

I massage blood from the two holes in my ankle to get the poison out of my body. The dark blood comes from deep in my leg, a steady fountain. The two small holes are swelling into a purple welt. I take my shirt off and wrap it around my thigh but my hands are numb, my fumbling fingers can’t tie the knot; can’t twist the cloth tight. My legs are numb and I am shaking and so weak. And the worst feeling of all is this horrible sick buzzing in my head. The whole world begins to buzz. Got to slow things down. I know this. Got to stop my pounding heart. Slow my heart, cool down, slow now, steady. No time to panic like a fool. This is bad. God, this is bad. Death is near. I am already so awful sick with my limbs going numb and the sound of electrified blood rushing through my head. The sound is driving me out: high volume static inside my skull scorching the pathways between me and my body; destroying what hooks me up with my arms, my legs, my face, my tongue. Oh God, I will die. This feels so very much like death”At the top of the hill the world breaks open like a raw egg. I see lightfaces at the edge of my wavering circle. I see faces like light at the top of the hill: *three shining faces*. I call these faces "hoops" because they have thick rims of Hot Light and they are quiet and empty and deep through the centre. *The faces are way out there, at the edge of our world.* Try

to imagine three dark mouths blowing silver threads, across endless space. The shining faces blow a gentle web of silver threads across a great chasm. I am standing in the meadow and the threads blown from the faces wrap around me. But I am no longer me”

“I picked my way carefully up the ridge. I could have gone anywhere. I walked directly to the snake. *We were fated; an ill-tempered snake and me.* There is a certainty about the whole affair. Is this an affirmation of life? Is this a demand? What is this? My teacher, the snake, is ruthless. So fast and unexpected, with no warning sound, the rattler whacked me hard in the ankle and then slid off into the bushes”.

When Steven slipped into the coma in the hospital they did not know if he would return from his reptilian subterranean torment:

“ Death (was on me now) from the inside. I curl and wait. These are dark hours. The venom is tenacious in its cruelty. A vicious, unrelenting attack. I am days tossing in a subterranean ocean. The view is obscured by a murky turmoil of brown and red clouds but what I glimpse between the clouds is brutal, here is what I see: I see a compressed history of man: a short and nasty history of the world. The centuries are a rosy blur of savagery. I am looking inside my own poisoned blood and every droplet contains another horrid tale. There is no end to the carnage; *and the loving drops are so rare.* I am a captive witness There is no way to turn my head: Avert my eyes. I have No body: No head, No eyes to turn away. Death is always at our shoulder but only rarely does he tap us with his stick. And tap so firmly! And such a stick! Such a primordial stick. A stick so deeply rooted in the most ancient soil of our selves. A moment recorded on the walls of caves and in Egyptian manuscripts. I am brought, ankle to fang, to these old reptiles. These ancient ones who have stricken fear in our hearts since first we bit the apple and tasted pleasure in the flesh”.

Steven told us how tired he was, after he recovered, and how the soles of his feet were sensitive months after. In hushed tones he went on: “I walked on baby’s feet, sore little baby’s feet. I am a true tenderfoot. I go ‘ouch, ouch’ as I walk across the kitchen floor

and back to my couch to rest. My leg aches where the fangs sunk in. There are hard bruises deep in the flesh.”

He continued to describe how he felt months after his recovery from near death.

“I barely move. Electricity still rushes like a black flower up my spine. I laugh easily and cry too much. I cannot read a newspaper in public because I cry at any brave story (man saves children from house on fire) or heartfelt story (boy buys bell for church). I cry at any brutal tale or pitiful tale (prostitute/drug addict murdered).”

I recently asked Steven what he thought he had gained from going through such an **horrific** subterranean world of snake poisoned dreams and coma. He said with his down-to-earth way, in soft Canadian tones “You know..... when you get so close to leaving [death], it really changes how you see the world, how you see the little things. I feel changed on all levels.”

I asked Steve who the “shining **ones**” were in his near death experience he said, “ I think they maybe my ‘guides’ and I still feel them with me and I’m comforted by them, even now.”

I remember at the dinner table that night, after Steven had shared the full story with us, a moment that touches me even now. Carol, Steven’s wife, leaned close to us over the table, almost as if she was sharing a secret with us. ‘You know, Geoff, it is almost like Steven was ‘tenderized’ by the experience. He became more tender in his body, mind and spirit; it changed him forever”

Steven told how rattlesnakes are endangered and a nest had been found during the building of a development up in the hills, and the laws says they must be protected and they were brought to the park across from his house. They must have been especially territorial and aggressive following the move. What really worries him, is that school kids are brought to the park for nature walks against his protests, he still sees groups of kids going into the park, where the rattlesnake that bit him still lives!

“Damn I hate snakes!” Indiana Jones—The Temple of Doom

The Native American Indians were able to unlock the **chemistries** of Echinacea, with an almost ‘Harry Potter’ like magic, to use it as an antidote to the rattlesnake **venom**.

Echinacea (*Echinacea angustifolia* and *E. purpurea*)



Echinacea has been used for **centuries**, maybe even **millennia**, for rattlesnake bite. Of course, these days it is enormously popular in Europe and the U.S. as an **immune**-boosting herb. Yet it is absolutely astonishing how for millennia the rattlesnake and **echinacea** came to live side-by-side on the prairies of North America.

This is one of the amazing and thrilling stories of nature's (or Gaia's) **seeming master** plan or intelligence. In the central plain of North America, from where Steven was bitten to south-western Saskatchewan, Southern Alberta and British Columbia along the Californian coastline into

Mexico and eastward through the Dakotas, Nebraska and into Texas are the eight or so species of Western Rattlesnakes. We know from Steven just how poisonous and lethal **their** venom is. This pre-historic venom has a neurotoxin called **crotoxin**; it is a polypeptide protein of two modest components, one acidic and the other, basic. These two components produce a synergy in action. They both have to be injected into the victim together to kill, going into Steven's blood after the snake had bitten him caused great haemorrhage and sensory and motor depression followed by his collapse, shock and near death. Yet next door to each other, neighbours on the same prairie, lies the **antidote**, locked inside the chemistry of **echinacea** -- the chemistry of balance on the prairie. In the mesophyll compartments of **the** leaf tissue between the upper and lower epidermis **of the** *purpurea*, *angustifolia* and *palida* species of **Echinacea** is locked the life-saving 'first aid' and **antidote** to the rattle snake poison. This 'kit' is primed for rapid action. It is a glycoside-caked echinacoside. This glycoside is super water-soluble because it has a caffeic acid entity attached to it. This makes this medicine enter the blood stream with the speed of a life-saving bullet. In this first aid kit, together with echinacoside, are inulin, sucrose and betane, two isomers of 2 -methyltetradecadiens, echinacin (neotherculin, sanshool), and various resins and fatty acids. This arsenal 'kicks-in' the immune system, opens up the peripheral blood vessels, climbs into the

subterranean world of rattlesnake venom and wages war until the venom is detoxified, gangrene is held at bay and health is restored.

It is told that Dr. Meyer, a Nebraska doctor of the 1870's, was so confident that his patent medicine "Meyer's Blood Purifier" could treat rattlesnake poison, that he even offered to be bitten just to prove his echinacea based medicine would work! (Now that's confidence for you.) He claimed "Meyer's Blood Purifier" was "an absolute cure" for a multitude of ills, including rattlesnake bite and blood poisoning, gangrene, and leg ulcers.

In 1907, echinacea became the most popular herb in the United States, both among eclectic physicians and conventional doctors. In 1910, research found immune-stimulating properties of echinacea such as increasing white blood cell counts. Echinacea's reputation began to spread across the Atlantic to Germany in the 1930's, beginning a massive export trade from the US to Germany. With the discovery and production of antibiotics between 1940-1950, the popularity and fervor regarding echinacea decreased. Herbalists rediscovered it in the 1970's, and herbal product manufacturers began to produce echinacea products again. In Germany, doctors prescribed echinacea 2.5 million times in 1994 alone. Many scientific studies in the past decade have focused on its immuno-stimulant properties. In one study, a German team found that echinacea root seemed to reduce the severity and duration of cold and flu symptoms. After reviewing twenty-six human studies, a German researcher concluded that echinacea can stimulate the immune system. The studies show that it increases the number of white blood cells and enhances the process of phagocytosis (the gobbling up of invading organisms by immune cells). It may also block an enzyme that helps infections spread. There is some evidence that echinacea also stimulates cells called fibroblasts, which play a role in healing wounds. Echinacea's properties may offer benefits for nearly all infectious conditions. Perhaps the most important immune-stimulating components are those found to increase both the production of T-cells and other natural killer-cell activity. Simply put, this herb activates the immune system.

The greek word 'Echinos' means spine. When you run your thumb over the cone-head of the 'purple cone flower' or Echinacea, in the center is a bed of 'porcupine like' spiny quills. These help Echinacea's ingenious seed-dispersal-mechanism, it lives and survives

in a dry prairie province, by nailing unsuspecting animals into carrying seeds to another destination, hitching itself to fur to get a free ride. Echinacea also has amazing adaptive characteristics to withstand long periods of prolonged intense sunshine married to minimal moisture. They achieve this by having a rough hairy surface on the leaves, which reduces evaporation, and they have the further ability artificially to place the leaves at 'wilt point'. In this state the plant goes into semi dormancy. These factors combined with their thick, tough tap-root system makes the plant indifferent to the insults of summer. Nature has produced a true ally for us in echinacea. It is an efficacious antiviral, antibacterial, and blood purifier -- one of the most wonderful tools in our "wellness herbal pharmacy."

Dandelion (*Taraxacum officinale*)



This hardy weed grows almost anywhere. In lawns and gardens, it drives homeowners to employ many chemicals to kill it off. If only they knew how this herb can subtly and slowly cleanse the body, improving digestion and clean the skin, they would be thankfully digging it up!

Today, young dandelion leaves are often found in the grocery store in a combination with mixed baby greens. The leaves are very bitter and act as a mild potassium-sparing diuretic. This is very good for people with high blood pressure, congestive heart failure and detoxification. The long tap-root of dandelion has different medicinal properties than the leaves. The root exerts its effects on the liver and the gallbladder, where it stimulates bile production and release. Encouraging bile release helping detoxify the liver encouraging and coaxing it do its job more efficiently and rid the body of excess cholesterol. It also makes the stools larger and softer in a bowel movement. This is why dandelion is an effective agent for liver disease, detoxification, high cholesterol, skin disorders, constipation and gallstones. Used for centuries, dandelion is a detoxifying herb, though its exact mode of action is still largely unknown. Its major benefits are derived from the leaves, which produce a

diuretic action, yet contain high levels of potassium, giving the body back this much-needed mineral. The roots are also used as a liver tonic and digestive stimulant. They promote the flow of bile from the gall-bladder which aids in fat digestion. They are mildly diuretic and mildly laxative as well as useful in rheumatic conditions. The roots can be dry-roasted and ground to use as a coffee substitute. A fresh root decoction (tea) can be taken as a liver cleansing tonic to treat chronic toxic conditions in the body such as constipation, joint inflammation, acne, eczema, and gout.

Why our Livers need encouragement

We presently inhale, ingest and absorb more toxins, chemicals, and disease-causing foods than ever in the history of humankind! We come in contact with pesticides every day through the food we eat, the water we drink and the air we breathe. These substances enter our bodies through the skin, lungs, mouth and eyes. It is now more important than ever for our elimination and detoxification systems to be in top form. Of the five organs of elimination and detoxification (the colon, kidneys, liver, lungs and skin), the liver is the most important for detoxification. It has the astounding ability to process and breakdown natural and synthetic toxic compounds, and prepare them for elimination from our bodies.

The External Environment If the body cannot eliminate the toxins, they tend to be stored in body fat and accumulate over time. In 1989 alone, EPA estimates, in its Toxic Release Inventory National Report, that 1.9 billion pounds of chemicals were dumped into our nation's water systems. In that same year, 2.4 billion pounds of chemicals were released into the atmosphere; with the total chemical attack on the environment estimated at 5.7 billion pounds. Most Americans are subjected to 14 pounds of food additives, colorings, flavorings, pesticides, herbicides, anti-microbials, and, now, GMO toxins per year. 70,000 chemicals are commonly used in pesticides, foods and drugs according to Elizabeth Lipski, M.S., C.C.N., Digestive Wellness. Some of these chemicals can have a serious negative impact on our health, as well as cause neurological and psychological damage. Amazingly, less than 7% of chemicals used in high volume are thoroughly studied. [In the external environment, toxins surround us.](#)

WATER. Significant portions of our groundwater and surface water are now contaminated with pesticides, herbicides, fungicides and fertilizers, as well as their metabolites. These contaminants find their way into groundwater, wells, cisterns, and reservoirs, eventually coming out in home faucets. A 1995 study tested tap water for weed killers in cities across the U.S. [corn belt](#) and showed that major agricultural weed killers are routinely found in tap water at levels that exceed federal health standards.

AIR. The Environmental Working Group performed independent air monitoring, in eight California counties and found that toxic pesticides routinely drift from farm fields into surrounding neighborhoods and schoolyards.

INDOORS. The EPA has ranked indoor air pollution among the top five environmental risks to public health. According to the EPA, indoor air levels of many pollutants may be 2-5 times, and sometimes more than 100 times, higher than outdoor levels. A 1990 EPA study detected 32 different pesticides in air samples taken inside and outside homes. Indoor air had much higher concentrations. They estimated that 85% of the total daily [exposure, to airborne pesticides, comes](#) from breathing air inside the home. [On top of that, most](#) products used in homes contain either organophosphate or carbonate [pesticides, which](#) are acute nervous system toxins.

The Internal Environment The liver protects our body by filtering over one liter of blood a minute and produces up to one quart of bile a day. It metabolizes internal wastes such as harmful bacteria, fungi, viruses and parasites, while breaking down our hormones such as testosterone and estrogen, preventing build ups, that could lead to PMS or mood swings, and other hormonal imbalances. The toxins processed by the liver are excreted by the lungs, kidneys and through bile into the gall bladder and out through the intestines. So it makes sense to give your liver and gall bladder a little help from time to time. This is especially important for patients who suffer constipation as they are re-circulating wastes through their systems.

Is your Liver Toxic or Sluggish?

A toxic or sluggish liver can be the causative factor in a wide range of ailments. Common symptoms include: Eye problems with the eyes becoming sore, gritty and easily [tired](#).

Low energy, with general listlessness. Nausea with bloating and flatulence. Bowel disturbances. Chronic weight gain, caused by having trouble digesting fats. PMS with hormonal imbalances and menstrual irregularities. Depression. Headaches and migraines. Irritable Bowel Syndrome, Confusion, Impaired nervous function, Respiratory allergies. Increased risk of cancer. All these can be due in part to sluggishness of the liver's functioning.

Some substances limit the liver's ability to detoxify and are suspected in toxic reactions involved in immune dysfunction, which can cause: Allergies, Inflammatory States, Swollen Glands, Recurrent Infections, Chronic Fatigue Syndrome, Auto-Immune diseases. Some of the more common autoimmune diseases are systemic lupus erythematosus (SLE), sclerosing cholangitis, primary biliary cirrhosis, hashimoto's thyroiditis, vasculitis and rheumatoid arthritis.

Clean that Filter! If the filtering and/or detoxification system within our livers is overloaded or inefficient, this will cause toxins, dead cells and micro-organisms to build up in our blood stream. This will then increase the workload of our immune systems, which will become overloaded and irritated. Our immune system will then produce excessive inflammatory chemicals, and in some cases, auto-antibodies, because it is in a hyper-stimulated state. We should be motivated to cleanse our livers at least once a year, as we do not want these dangerous substances building up in the blood stream and moving to deeper levels in our bodies. That pesky weed that most people spend their gardening lives trying to obliterate from their yards and gardens actually proves to be quite a useful plant to help encourage and coax the liver to do its job!

What's a body to do?

Dandelion (*Taraxacum officinale*) makes one of the best natural diuretics. Some drugs cause kidney stimulation which causes a loss of potassium, which can cause an aggravation with any cardiovascular problem that you may have at the time. Because dandelion has up to a 5 percent amount of potassium, this loss is counteracted. In Chinese Medicine, it has many uses: to "clear away heat" and detoxify blood; to achieve weight-loss and as a diuretic; and to reduce swelling and dissolve clots. It is suitable for

food poisoning, inflammation of the liver and gallbladder, and kidney and gallbladder stones. Dandelion stimulates bile secretions, cleansing the gall bladder. Cleansing herbs have been defined as ‘blood purifiers’, herbs that facilitate and support the elimination of wastes from the blood through the skin, kidney, and bowels. Dandelion root opens up perspiration and both dandelion and help excrete wastes. What’s a body to do, then? Help the liver with herbs to help the liver detoxify and excrete harmful toxins from the body.

General Dietary Guidelines for Liver support.

Plenty of organic, unrefined, unprocessed foods. Fresh whole foods. Fresh vegetables, fruits, whole grains and unrefined carbohydrates should make up the majority of the diet. Avoid red meats, animal fats, sugars, refined white flour / pastas, and processed foods. Avoid caffeine, other stimulants and alcohol. No hot, spicy, greasy, fatty, oily, fried foods. Drink plenty of bottled water or diluted juice, at least two liters per day. A minimum of one daily serving of cruciferous vegetables and at least five servings of fresh fruit should be included in the daily diet. Protein sources can be obtained from lentils, soy, beans, nuts, seeds and fish and organic chicken.

“Organic growing is a process of attunement that calls for looking at and responding to whole ecosystems in which plants are growing, rather than concentrating on isolated aspects. “

--Dan Jason, 1991. Greening the Garden.

Why are organically grown medicinal plants and foods so important? Well for food as for medicinal plants, organically grown or cultivated, means avoiding the use of ‘man-made’ chemical fertilizers, chemical pesticides, chemical growth regulators/hormones and antibiotics. These substances are poisoning our planet and our bodies and our livers. Organic farming is based on a system of farming that uses production methods that minimize the impact on the environment. The primary focus is to maintain a healthy soil and develop a balanced farm ecosystem that is environmentally sustainable. “Certified Organic” in North America, means that a product has been produced in accordance with specific guidelines and organic standards, as established by



a certifying agency. Some studies have shown **many** more vitamins and trace elements **in organically grown** than conventionally-grown food and of course, it will not have been treated with any noxious chemicals. As for medicinal plants the same holds true and more healing compounds are produced and held by the plant. It is safe, healing, nutritious, and unadulterated food or herbs, produce the highest healing compounds. They do not use artificial chemicals, pesticides and fertilizers. Have you ever you have seen a picture of a farm worker spraying crops from inside a "space suit"? The **space-suit protects** them against some of the highest rates of cancer in the **country**; farm workers who are in constant contact with these chemicals are contracting cancer more often, than other groups of workers. **While pesticides may pose a health risk to consumers, the risks are far greater for field workers. A National Cancer Institute study found that farmers exposed to herbicides had a six-times greater risk than non-farmers of contracting one type of cancer. Field workers on conventional farms, due to their direct exposure, are the most vulnerable to illness as a result of pesticide use. Organic farms eliminate that risk by eliminating harmful pesticides and other chemical inputs from their practices.** I know I do not want to take any food or medicinal plants inside of my digestive system, that **have** to be sprayed with such powerful chemicals. Organic farming of medicinal plants relies on a modern and scientific understanding of ecology and soil science, while also depending on traditional methods of crop rotation to ensure fertility and weed and pest control. When you buy certified organic food and products, your **money** cast a vote for a healthier planet because organic agriculture and processing practices. We need to protect the health of our future generations. **The average child receives four times more exposure than an adult to at least eight widely used cancer-causing pesticides in food.** The food choices parents make today will impact their children's health tomorrow. It is a medical mystery marked "urgent." **All over** America, growing numbers of children are suffering from asthma, childhood cancers like leukemia, as well as learning and behavioral disabilities. Scientists are searching for clues to the causes of these illnesses, and a growing body of research suggests that everyday environmental toxins - what kids eat, drink, and breathe - may put them at risk. Medical investigators and health officials are just beginning to be engaged in the latest research on links between childhood illness and environmental contamination

We must protect our water quality it does after all make up two-thirds of our body mass and covers three-quarters of the planet. Despite its importance, the Environmental Protection Agency (EPA) estimates that pesticides contaminate ground water in 38 states, polluting the primary source of drinking water for more than half the country's population. Organic growers and processors use practices that eliminate polluting chemicals and nitrogen-leaching, and thus protect and conserve precious water resources.

“People call the soil mineral matter, but some one hundred million bacteria , yeasts, molds, diatoms, and other microbes live in just one gram of ordinary topsoil. Far from being dead or inanimate, the soil is teeming with life. These mirco-organisms do not exist without reason. Each lives for a purpose, struggling, cooperating , and carrying on the cycles of nature.”

--Masanobu Fukuoka, *The Natural Way of Farming*.

The Soil Conservation Service estimates that over 30 billion tons of topsoil are eroded from U.S. crop lands annually. The cause? Intensive mono-cropping (the planting of vast areas with the same crop year after year) and environmentally insensitive farming practices. The results? The worst topsoil erosion in history. Soil is the organic farmer's most revered tool. Rather than relying on synthetic fertilizers, they build their soil through natural amenities, such as composted manure, and by planting diverse crops. Organic farmers respect the soil and view it as the foundation of the food chain. Organic certification standards are the public's assurance that their food and products have been grown and *handled* according to strict sustainable procedures without **persistent** toxic chemicals. In the medicinal plant world this handling also means that if the plant is extracted, that non-toxic **solvent** are used, it means also that the **herb** supply has not been irradiated to lower bacteria counts, as this also lowers the plants healthy compounds and its energetic structure. Often medicinal plants are gassed with E.T.O. approved by Federal and State agencies to clean up raw materials such as herbs and spices **and** other food ingredients. ETO gas is used as a fumigation agent to kill pests. Ethylene oxide has also proven **to be** a carcinogen in animal experiments. Organically

grown and processed herbs are safe from these dangers. Some governments such as the Japanese protect their citizens with laws prohibiting the importation of products that use E.T.O. and irradiation.

Many EPA-approved pesticides were registered long before extensive research linked these chemicals to cancer and other diseases. Now, the EPA considers 60% of all herbicides, 90% of all fungicides, and 30% of all insecticides as potentially cancer causing.

Regarding heirloom seeds, the loss of a variety of species (biodiversity) is one of our most pressing environmental concerns. Many organic growers have been collecting and using heirloom seed varieties for decades. On the other hand, many conventional farms still grow hybridized vegetables and fruits, bred for uniformity, ease of shipping and cosmetic appearance. In the US we have even bred-out the bitter taste of soy beans, breeding-out many anticancer compounds in the process. Such "modern" concerns have ignored the value of preserving a diversity of seed varieties, and therefore a more balanced ecosystem. Top restaurant chefs across the country will tell you 'organically grown foods taste better'. Why? It's common sense - well-balanced soils grow strong healthy plants which taste great.



The organically-grown taste test. Before we left British Columbia, to come home, we decided to test the theory that organically grown, is tastier. We chose the Kelowna 'Summer Hill

Organic Winery' for the taste test. Summerhill is a Certified Organic Vineyard that ages its wines under a pyramid. They also add glacier rock dust to provide trace minerals to their soil. Remineralized soils are proving to produce more healthier and flavourful foods. The Okanagan Valley is a semi-desert with only eleven inches of rainfall per year and hardly any humidity in the air, in any

season. Lake Okanagan, creates what is perhaps the finest grape growing region in the entire world. This combined with cool evening temperatures allows the production of small grapes with high sugar content and acidity, versus fat watery grapes, for intensely flavored and aromatic wines. I wanted to put organically-grown wine to the taste test and I can report that as we sat on the veranda, enthralled the amazing view, with our successful mission under our belt, watching wisps of clouds passing along the valley below, tasting organic wines, I can assure you they more than passed the test!