

The Local Connection: Natural Therapeuticsⁱ for Preventing, or Reducing the Severity of, Influenza Infection.

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A wealth of evidence clearly shows that simple steps to support general health are a highly effective way of significantly reducing the likelihood of influenza infection and of markedly lessening the severity of symptoms should infection occur. Here's a simple guide to stacking the odds in your favor.

1. Food as medicine

- We eat three times a day. Why not have food be your medicine? A truly coherent diet not only supports your health but the wellbeing of everything and everybody around you – local soils, water, flora, fauna and community. Vitamin and mineral content of food varies enormously depending on the methods used to raise that food: the micronutrient content of American fruits, vegetables and meat products has declined significantly during the last fifty years. Even among those of us eating balanced diets, chronic, commonplace, nutritional deficiencies confirm that most commercially-sourced foods are now ‘anemic’, simply lacking the nutritional density of their forebears. *A sound diet is therefore keenly alert not only to the balance of its ingredients, and the aptness of its preparation but, crucially, the integrity of its source.* Your best medicine is local food raised on well-stewarded soils.

2. Support healthy digestion year-round.

- We strongly recommend a diet consisting of whole foods that are fresh, nutrient-dense, properly prepared and raised by local growers you trust. During the flu season (typically October thru March with a spike in December-February) we emphasize daily dietary inclusion of fresh, local [vegetables](#)ⁱⁱ – the more colors, the better - including greens in abundanceⁱⁱⁱ; and yes, *fresh, locally-grown fruit*^{iv} in moderation. [Raise](#) as much of your own food as you are able.
- We encourage a diet rich in properly-prepared whole grains, nuts and legumes. What does ‘properly prepare’ mean? The [Weston A. Price Foundation](#) is highly regarded by nutrition experts as an extensive, trustworthy source of information on traditional foods.

What this guide clarifies

- *The immune response of your respiratory tree is directly related to the micronutrient density of the foods you eat.*
- *This quality is, in turn, directly determined by the integrity with which those foods and the soils on which they are raised, are stewarded.*
- *Wherever possible, source your vegetables, meat, dairy, eggs and grains from local growers you trust.*

3. Fat soluble vitamins

- All traditional cultures went to great lengths to obtain foods rich in the major fat-soluble [vitamins](#), A, D, E and K. All of these vitamins are essential for optimal health and studies show that most people are now deficient in them to varying degrees. (In addition, Vitamins A and D play a critical role in supporting the immune system.) Traditional cultures found these vitamins in organ meats such as [liver](#), seafood, fish liver oils, fish eggs and insects. Where religious preferences allow, regularly include one or more of these foods in your diet. Crucially, for the vitamins to be available in meat products they must be wild or pasture-raised. See our guide to locally-sourced, pasture-raised foods, below.^v
- Use [butter](#) frequently on vegetables and [bread](#). Fat-soluble vitamins A and D found in animal fats like butter, lard and cream increase the absorption of calcium, phosphorus, iron, B vitamins and the many other vitamins and minerals that other foods provide. Use butter from animals that are pasture-raised.
- [Eggs](#) are a 'super-food', jam-packed full of important nutrients, especially the fat-soluble vitamins and essential fatty acids. (By natural design, eggs contain all the nutrients, in balance, necessary to build a life.) Pastured eggs, meaning eggs from chickens that are free to forage for grass and insects, are of much higher nutritional quality than eggs from confinement chickens.

This fall and winter...

- *Eat a balanced diet of properly prepared foods, including fresh vegetables and fresh fruit, from local sources you trust.*
- *Support your intestinal microflora.*
- *Where necessary, supplement your diet with a balanced array of micronutrients to support your immunological health.*
- *Reduce co-factors which increase your susceptibility to infection such as lack of sleep, sugar intake and food allergies.*
- *Use herbs appropriately - adaptogenic, tonifying herbs throughout flu season; and 'stronger' herbs such as Echinacea only in the face of direct threat of infection.*

4. Intestinal microflora

- Healthy intestinal microflora support intestinal health and immune function. A large percentage of the nutrients we need for our bodies to function properly are absorbed or transported into our bodies through our large and small intestine. To maintain this proper balance we recommend eating fermented foods, such as sauerkraut, kimchi, miso or yogurt, daily. Fermented foods are simple and inexpensive to make. The definitive text on the topic, [Wild Fermentation](#) by Sandor Ellix Katz, happens to be highly approachable.
- To support healthy intestinal microflora, include inulin-rich foods in your diet. Jerusalem Artichoke, Yacon^{vi}, Burdock and [Dandelion](#) root all contain high levels of inulin. Inulin is significantly more concentrated in fall-harvested root. Eat these roots steamed/sauteed or included in soups. A strong decoction of dandelion drunk regularly (a cup or two a day) adds an abundance of inulin to the diet.
- If you suspect your intestinal flora is out of balance or if you have recently been on a course of antibiotics and/or have a high sugar diet, consider taking a pro-biotic supplement to reset the balance quickly. We recommend [Jarro-dophilis](#) available refrigerated at Evergreen Nutrition and local health food stores.

5. 'Deep-immune foods'

- Garlic is not only a wonderful immune system booster, it also has anti-viral and anti-bacterial properties. Eat it. Those with religious objections to its consumption can include other deep-immune herbs and foods. Onions, along with all alliums, have been traditionally used to

Every home a brothal

A good strong stock or [broth](#) can provide you with many vital minerals in forms that can be easily absorbed. Stock can be used as a base for soups and sauces.

Throughout the fall Sonja regularly cooks a deep-immune soup, made with a stock base and rich in seasonal vegetables and deep immune foods.

Sonja starts her immune soup with a few cups of stock, adds water and some or all of the following ingredients: burdock root, kale, carrots, onion, garlic, dandelion root and leaf, rutabaga, parsnips, Jerusalem artichoke, beets, yacon, garden greens, astragalus, shitake, fresh turmeric root, ginger and other available fresh produce.

She simmers the soup until the veggies are cooked to taste - adding a tablespoon of miso to her bowl when serving for added flavor and health benefits.

support lung health. The common Chinese herbs Astragalus and Codonopsis ('the poor man's Ginseng') can be added to the daily diet, taken as tea, tincture, or added to soups. 1-2 sticks of each herb per quart of soup is a good dose for prevention. Astragalus has a long history of herbal use as a gentle but profound tonic for the immune system and in treatment of chronic weakness of the lung; and is safe to use during pregnancy.^{vii} Traditionally, we halt taking Astragalus and Codonopsis if an infection occurs. Local herb companies [Pharmacopia Herbs](#) and [Terra Firma Botanicals](#) offer an Astragalus decoction-preservative-extract, and Astragalus tincture, respectively.

- Although Reishi and Shitake are the mushrooms best known for their immune-enhancing qualities – and can also be added to the daily diet as tea, tincture or added to soups, and halted when infection occurs - a broad array of mushroom extracts supporting immunological function has come available in very recent years. The Pacific Northwest is a world leader in the development of mycological medicinals. Capella currently has the most extensive selection in town, from [Fungi Perfecti](#).

6. Micronutrient supplementation

- Deficiencies in the following micronutrients, all needed for healthy immune function, are widespread in both children and adults: Vitamin A, C, D and E; Zinc; Selenium and Iron. Given that our soils and food cultural practices are failing to provide us with these micronutrients in adequate and balanced form, and that efforts to re-establish a nutrient-dense diet require time and practice, we recommend a daily supplement of:
 - Vitamin A
 - Vitamin C
 - Vitamin D
 - Iron (only when a diagnosed deficiency is present)
 - Vitamin E
 - Zinc
 - Selenium

- Many if not most micronutrient supplements leave much to be desired. We have tried and like *Answers From Nature Total Immunity III* (currently on sale at Sundance for \$12.25, reduced from \$22.25), Biotics Research Company's *Pro-Multi Plus* (available at Guthrie Chiropractic on 10th and Charnelton). Thorne also has a solid multi-vitamin line and is available at Evergreen. All of these companies produce their products without binders or fillers.

7. Vitamin D

- Vitamin D (or 'cholecalciferol' in the form in which it is physiologically available to our bodies) has a major role to play in supporting the immune response of the respiratory tract. Vitamin D is most commonly metabolized by the body from sunshine. Most of us do not live outdoors enough to maintain adequate 'vitamin D levels' and it is extremely difficult to supplement this shortfall using diet alone. Vitamin D supplementation is therefore commonly considered an important constituent of a flu-prevention strategy.

- Depending on your lifestyle exposure to sunlight, age, weight, skin color and diet – your supplemental dosage requirements will differ. Nick is white-skinned, 6'4", 200+lbs, gets plenty of

sunlight and is taking 4,000 IUs a day into the fall, along with vitamin A supplementation (see below). Given the lifestyles of most of his friends and family, he believes they are 'vitamin D' deficient and strong candidates for vitamin D3 supplementation. He is pointing them at [research](#) which suggests it appropriate to begin taking 8,000-10,000 IUs a day for 4 weeks, continuing with between 4,000-6,000 IUs daily, prefigured with a [25\(OH\)D test](#). Wanting to test your 'vitamin D' levels but are without access to a doctor? The [Vitamin D Council](#) offers inexpensive testing and a wealth of information about how to interpret results in easy-to-understand form. Over the long-term, shed the pills: spend more time living outside.

A daily supplement protocol for optimal immunity

- *Drink enough water. How much? Eight 8oz glasses a day is a good starting place for most adults. Thirst comes after people are already dehydrated. Chapped lips are almost always a sign of dehydration. If drinking a caffeinated beverage, drink twice that amount of water to top up. Hydrate before and after exercise. Urine should be copious and clear. Some supplements, such as B vitamins, will turn urine yellow. That's OK. Avoid water 20 min. before and after food. Don't go overboard: over-hydrating is something to be aware of.*
- *Vitamin A (25,000 IU's as beta carotene)*
- *Vitamin C (500-1000 mg)*
- *Vitamin D (4,000-10,000IU)*
- *Vitamin E (100-200 IU)*
- *Zinc* (25 mg)*
- *Selenium (200 mcg)*
- *Iron* (10 mg...only when a diagnosed deficiency is present)*
- *Cod Liver Oil (1 Tablespoon)*
- *Garlic (2-3 cloves)*
- *Pro-biotic (2 x daily 20 min. before meals).*

**Women are more likely to be deficient in iron and men in zinc.*

8. Balancing vitamin A and D intake.

- Most foods high in vitamin D are high in vitamin A. Very recent research confirms that vitamin D and vitamin A are molecular partners and that balanced intake of both supports healthy bodies. Vitamin A is found in large amounts in liver and cod liver oil.
- Long's Meats will grind percentages into your order. Ask for 10% liver in your ground meat.
- Throughout the countries bordering the North Atlantic Ocean, seasonal consumption of one tablespoon a day of cod liver oil to prevent colds and flu in winter is an established cultural phenomenon. Cod liver oil not only provides vitamin A and vitamin D, but essential fatty acids, all of which can improve general immunity. [Cod liver oil](#) is available from a variety of local sources. We recommend [Blue Ice](#), available at Sundance. Take at mealtimes.
- Looking for an inexpensive, high-quality Vitamin D3 supplement? We recommend [Carlson's Ddrops](#), a liquid or capsule form available from Sundance and Evergreen. 2000IUs per drop, 365 drops for a little over \$20.
- Freeze-dried liver tablets are a favored source of vitamin A supplementation. Sundance carries [Dr. Ron's Liver Tablets](#) (180 for \$24) and Evergreen carries Standard Process Liver Tablets.

Whole-person immunity

- *While many regard immunity primarily as a defense system, from a holistic perspective we consider the proper functioning of the whole organism. Over time, anything that is not functioning well in the body tends to weaken our immunity. Consider your strengths and weaknesses. What do you tend to get sick with? Respiratory infections? Digestive disturbances? Stress or mental instability? Where it is within your abilities, correct apparent deficiencies. Support your individual constitution by supporting the health of your diet, lifestyle and environment. One simple step in the right direction will typically support many of the co-factors supporting your immunological health.*
- *Strengthening the lymphatic system can increase ones ability to ward off infection. Proper lymphatic flow can be supported by exercise, hydrotherapy, lymphatic massage and herbs. Tonic herbs to support lymphatic health include Red root (Ceanothus spp.), Cleavers (Galium aparine, fresh, not dried), Garlic, Astragalus and Reishi.*
- *Lung health is important for general immunity. The breathing mechanism aids in pumping lymph, and shallow breathing increases circulating carbon dioxide and decreases available oxygen, affecting general health and decreasing immunity. Breathe deeply: exercise and/or meditate.*
- *Your mucous membranes are your body's first physical line of defense against respiratory infection. Keep them hydrated. Marshmallow tea is a demulcent that soothes and nourishes your mucous membranes.*
- *Spice up your life by ending showers with cold water beating on your breastbone (15-30 sec) to stimulate your thymus to produce white blood cells, your major immune-fighters.*

9. Food allergies

- Food allergies compromise immune-response. If you are suspicious surrounding an allergy to a particular food, cut the food out of your diet in the face of influenza threat.

10. Smoking and Sugar

- Increased influenza mortality is strongly associated with smoking. Smoking paralyzes the cilia in your respiratory tract (cilia are little hair-like structures that “sweep out” mucous-encased particles that line your lungs). They are one of the first defenses against the flu and are inactive for up to 24 hours after smoking.
- Sucrose is strongly associated with decreased immunological response. Immune cell activity decreases immediately and remains compromised for many hours after ingesting just a small amount of sugar. Greatly decreasing or cutting out refined sugar and high glycemic foods during flu season would be wise.

11. Sleep, exercise and lifestyle

- Lack of adequate sleep reduces the presence of circulating immune cells as well as slowing many important physiological functions. 8-10 hours of good solid sleep per night is ideal. If getting adequate sleep is a challenge, spend time working on a healthy sleep protocol. For example: limit the amount of unnatural light you are exposed to for 2 hours before sleep (computer screens and TV monitors included); start your relaxation process an hour or two before bed; support sleep with calming herbs such as *Pedicularis*, Lavender, Hops, Skullcap or Chamomile.
- Exercise pumps lymphatic fluid throughout the body and greatly aids in detoxification taking a load of the liver and increasing immunity. The increase in body temperature – of up to 104 degrees Celcius - during vigorous exercise could ward off viruses.
- It cannot be emphasized sufficiently: where possible, reduce stress and support lifestyle choices which support your sense of well-being. Do work that feeds your soul. If you have a spiritual practice, tend to it.

12. Steam/Sauna/Netti pot

- The influenza virus typically dies between 98-99 degrees Celsius. Regular steams, saunas or using a netti pot with hot water might be a beneficial preventative treatment - particularly if you suspect or know you have been exposed. In case of saunas, hydrate and be aware of exhaustion. To steam: fill a basin or large soup pot with boiling hot water. Add a large amount of aromatic herb such as thyme or sage or, if these are not available in your garden, peppermint or oregano. If using a good quality essential oil, use only 2-3 drops and be cautious of the tendency of aromatic herbs to ‘dry out’ your respiratory tree when you are seeking to keep your cilia moist. Find a comfortable position, cover your head and the pot with a towel and breath in the steam for 15-20 minutes. Do not go out in the cold air right after a steam: instead, keep warm and rest.

13. Herbs for prevention^{viii}

- As herbalist Paul Bergner wryly observes, “People don’t catch flu because they have a deficiency of Echinacea.” Resist the tendency to rely on herbs or anything else as a medical bandaid, ‘effective’ though they may seem. Rather, focus on the long-term fundamentals of supporting a healthy lifestyle-diet. In time, as the slow, patient work of nurturing a truly healthy life pays off - giving you far fewer occasions to ‘fight illness’ - the focus of your experience and expertise will shift from treatment toward prevention or, as it may correctly be described, ‘nurturing your innate healthfulness.’
- Having said that, herbs are traditionally used to support general immunity and, specifically, the immunological function of the respiratory tree in the face of direct infection.
- Clinical trials show that Elderberry (*Sambucus nigra*) syrup is very effective against influenza infection, appearing to halt the spread of the virus, quickly^x. We also use it as a preventative^x, using tea or juice rather than tincture – syrups of the juice are commonly available. We prefer a honey-based rather than sugar-based syrup from local companies Terra Firma and Pharmacopia Herbals, available at Sundance, in 2-4 oz. sizes for \$8.25–\$13.95. They taste spectacular. Dose: 1 tsp. twice a day. The syrup will cause nausea if taken in large doses.
- A variety of immuno-modulatory herbs are traditionally used to improve general host-immunity in the face of direct exposure to infection. Here is a formula shortlist^{xi} with an emphasis on historical use supporting respiratory health in the face of infection:
 - 2 parts Echinacea *Echinacea spp.*
 - 1 part Boneset *Eupatorium perfoliatum*
 - 1 part Osha *Ligusticum grayi*
 - 1 part Western Red Cedar *Thuja plicata*
 - 1 part Spilanthes *Spilanthes spp.*
 - (to taste) Licorice *Glycyrrhiza spp.*
- Tinctures are easy to take and easy to carry and ‘immune-tinctures’ are commonplace in local health food stores. [Immune Quick Control](#) from Pharmacopia Herbals, available at Sundance, contains herbs strongly associated with supporting immunological health of the respiratory system. Anecdotal experience from experienced herbalists suggests that frequent, small doses over the course of day are more effective than large doses taken once or twice daily. Take 10-30 drops in a small glass of water 3-6 times daily, depending on the degree of your exposure to infection.

14. Complementary approaches

- We are consulting with experienced hands in complementary healthcare fields such as Homeopathy, Traditional Chinese Medicine and modern medicine, and hope to include their suggestions here, shortly. Although we strongly emphasize the use of natural therapeutics in the prevention and treatment of influenza infection, we encourage everyone to embrace a form of self-care that works within – not against or in disregard of – their individual system of belief. The taking of pharmaceutical vaccines and anti-virals such as Tamiflu (Hoffman La Roche) and Relenza (GlaxoSmithKline) does not preclude the complementary use of natural therapeutics outlined above.

Tea, anyone?

Alcohol-based herbal tinctures lend themselves well to ease-of-purchase, ease-of-use, and life on the move. But alcohol and Nick don't agree, no siree. Furthermore, his home-based lifestyle supports his proximity to his tea-making tools throughout the day. And so he makes herbal teas, growing, harvesting and processing most of his tea herbs. As cold weather approaches, he drinks teas for comfort, delight and to support his innate immunity.

Winter-long teas: a focus on adaptogens

Herbs are the only medicinal agents which bestow adaptogenic properties – a newly recognized action which increases the body's resistance to, and endurance in the face of, a wide variety of adverse stressors regardless of their specific nature (physical, chemical, biological, psychological and so on). Essentially, adaptogens reinforce one's vital infrastructure, working to render it immune to the damaging effects of long-term stress. They appear to work through hormonal regulation of the stress response which, in turn, has a modulating effect on the human immune system, assisting the body's ability to cope and adapt.

Nick begins drinking herbal teas as the weather cools and usually includes a couple or more of these adaptogenic herbs, non-toxic and safe for long-term use, in any tea he makes. As well as their adaptogenic properties, each one of these plants has a broad array of herbal actions which together, include, but are by no means limited to, their historical use in Indigenous, African, Ayurvedic, Chinese and Western traditions, as delicious, nutritive, anti-bacterial, anti-viral, anti-fungal, immuno-modulatory, alterative, anti-inflammatory, anti-allergenic and lung tonic herbs:

Holy Basil *Tulsi spp.*
Spilanthes *Spilanthus spp.*
Nettle *Urtica spp.*

Devil's Club *Oplopanax horridus^{xii}*
Astragalus – *Astragalus membranaceus*

He may also include fresh Garlic, fresh Dandelion root, fresh Cleavers and Lemon Balm.

'Feeling-threatened' teas

If he begins feeling susceptible to respiratory infection, Nick's teapot lid moves from walk to canter. He drinks teas more often, and begins incorporating herbs which do not lend themselves to frequent, long-term use. Each of the following herbs has traditionally been used to support a broad array of herbal actions which, together here, include but are by no means limited to their use as immuno-modulatory, synergistic, anti-viral, liver-stimulant herbs in the face of and during acute respiratory infection.

Echinacea *Echinacea spp.* (whole plant)
Oregon Grape *Mahonia spp.*
Boneset *Eupatorium perfoliatum*
Osha *Ligusticum grayi*
Spilanthes *Spilanthus spp.*

Western Red Cedar *Thuja plicata*
Licorice *Glycyrrhiza spp.*
Garlic
Elderberry *Sambucus nigra* (honey-syrup).

At the same time, he clears up any dietary sins and immediately boosts his consumption of raw, fresh, greens. This usually does the trick.

15. Related links:

- The latest version of this protocol, and an array of supporting articles and resources, can be found at: <http://www.seedambassadors.org/avalon/influenza.htm>
- Please see the accompanying endnotes on following pages, which include further pointers to local resources.
- Sonja and Nick are continuing to refine a generalized treatment protocol^{xiii} for acute influenza; a prevention and treatment protocol for mothers-to-be; and a treatment protocol for advanced clinicians^{xiv}. Nick and friends currently have a video about the ethics and practice of medicine-making with *Sambucus nigra*, in the pipeline.

16. Hyperlinks in this document:

Support healthy digestion year-round:

<http://www.seedambassadors.org/avalon/fall2009offerings.htm>

<http://www.seedambassadors.org/avalon/winter2009.htm>

http://www.westonaprice.org/foodfeatures/be_kind.html

Fat-soluble vitamins:

<http://www.westonaprice.org/basicnutrition/vitaminprimer.html>

<http://www.westonaprice.org/foodfeatures/liver.html>

<http://www.westonaprice.org/foodfeatures/butter.html>

<http://www.grain.org/seedling/?id=471>

http://www.cholesterol-and-health.com/Egg_Yolk.html

Intestinal microflora:

http://www.wildfermentation.com/books_wildfermentation.php

<http://www.seedambassadors.org/Mainpages/Guardian/dandelion/dandelion.htm>

http://www.jarrow.com/product/123/Jarro_Dophilus_Original

Every home a brothal:

<http://www.westonaprice.org/foodfeatures/broth.html>

Deep-immune foods:

<http://www.pharmacopiaherbals.com/>

<http://www.terrafirmabotanicals.com/>

<http://www.fungiperfecti.com/mycomeds/info.html>

Vitamin D:

<http://www.seedambassadors.org/avalon/influenza/Epidemic-influenza-and-Vitamin-D.pdf>

<http://www.vitamindcouncil.org/health/deficiency/am-i-vitamin-d-deficient.shtml>

<http://www.vitamindcouncil.org/>

Balancing vitamin D and A intake:

<http://www.westonaprice.org/basicnutrition/cod-liver-oil-menu.html#brands>

<http://www.carlsonlabs.com/p-234-ddrops-2000-iu.aspx>

<http://www.drrons.com/thyroid-adrenal-liver-pancreas-glandulars.htm>

Herbs for prevention:

http://www.pharmacopiaherbals.com/store_i10292535.html?catId=357597

Endnotes:

http://www.seedambassadors.org/kindmind/?page_id=32

<http://www.seedambassadors.org/avalon/winter2009.htm>

<http://www.seedambassadors.org/Mainpages/Guardian/SeedingGuide/springseeding.htm>

<http://www.seedambassadors.org/Mainpages/thefutureofwinter.htm>

<http://www.eugenepermacultureguild.org/main?p=408>

<http://www.deckfamilyfarm.com/resources.html>

<http://www.localfoodmarketplace.com/eugene/ProductList.aspx>

<http://eugenefriendlyfarmers.ning.com/>

<http://www.lanefood.org/directory/lgd.php#search>

<http://www.eatwild.com/products/oregon.html>

http://en.wikipedia.org/wiki/Jerusalem_artichoke

<http://www.ronnigers.com/>

<http://www.seedambassadors.org/Mainpages/still/kapulerfieldtrip/Yacon.htm>

<http://www.seedambassadors.org/avalon/influenza/Influenza-1918.pdf>

<http://home.teleport.com/~howieb/treats/wildcrtf.html>

ⁱ Given the depressing ubiquity of snake-oil salespeople, accredited as well as non-aligned; the [materialist limits](#) of the scientific method, and the cahoots of the legal community in sustaining the tyranny of the biomedical worldview and the institutions it exclusively validates, the following disclaimer is par for the course. ‘The information contained in this guide is based on the experience and research of the authors. It is not intended as a substitute for consulting with your physician or other health-care provider. Any attempt to diagnose, prevent or treat an illness should be done under the direction of a health-care professional. The authors are not responsible for any adverse effects or consequences resulting from the use of any of the suggestions, preparations, or procedures discussed in this guide.’ Much as we encourage you to know your food and those who grow it: we also encourage you to know your medicine and your medicine-makers. Our experience is that taking responsibility for your food and medicine, as best you are able, is a foundational dynamic standing at the heart of a coherent life.

ⁱⁱ An excellent guide to the nutritional profile of vegetables can be found in the vegetable section of Paul Pitchford’s [Healing with Whole Foods](#).

ⁱⁱⁱ See our [Guide to Fall, Mid-winter & Over-wintering crops for the S. Willamette Valley](#) and, for details of storage crops raised through our summers, and eaten through winters, see our [Spring Seeding Guide](#), which also includes a planting calendar. Consider attending the free workshop on winter-cropping, held annually at the Food For Lane County Youth Farm in Springfield, in early June. Curious about how trends in the global seed business are compromising the winter immunity of Pacific Northwesterners and what you [can do about it?](#)

^{iv} Keeping varieties’ of apples can be purchased from local orchards as they are picked through October and November. Placed in ziplock bags, stored in a plastic tote box with lid, and stored under the northern eaves of a house throughout the winter with no additional protection, good keeping varieties will hold easily through March. Consider growing your own. We recommend Goldrush, Granny Smith, Mutsu, Northern Spy, and Fuji among others. As a rule, pears are harder to store throughout the winter, though we are experimenting with dessert varieties which will hold easily through January and cooking varieties which will hold through late spring, with varietal exceptions in each category carrying over longer. Scion wood for keeping varieties of apple and pear, and other tree fruits, and appropriate rootstock, can be sourced at our local annual [Spring Propagation Fair](#) at LCC.

^v Pasture raised meats, eggs and dairy can be sourced directly from local farms such as [Deck Family Farms](#) and from [local markets](#). Locally, residents of urban [neighborhoods](#) are beginning to share food. For a comprehensive list of local farms supplying meat, eggs and dairy, see pg. 39 of the *Willamette Farm and Food Coalition’s* annual [directory](#). And [father afield](#), too.

^{vi} [Jerusalem artichokes](#) can be purchased from [Roningers](#) or are freely and readily available for propagation from local gardeners. Local seed stewards are endeavoring to significantly boost the varietal diversity currently available to us. [Yacon](#), an Andean root crop popular among local avant-gardeners, can be found at local seedswaps.

^{vii} A prevention and treatment protocol for mothers-to-be differs from a generalized protocol. We hope to share such a protocol, shortly.

^{viii} Whatever form of self-care you embrace – alternative, conventional or a hybrid of the two – if you uncertain about how to proceed, check in with a health professional. They bring a vast storehouse of experience, knowledge and resources to your care. Around herbs, ‘natural’ doesn’t necessarily mean better: as with drugs, that which can help can hurt. If you are using herbs, wherever possible, establish an ongoing relationship with someone *experienced* in the use of botanical medicines.

^{ix} Mumcuoglu M. *Sambucus nigra* (L), Black Elder berry Extract: A breakthrough in the treatment of influenza. Skokie, Illinois: RSS Publishing, 1995; and, Zakay-Rones Z, Varsano N, Zlotnik M, Manor O, et al. Inhibition of several strains of influenza virus in vitro and reductions of symptoms by an elderberry extract (*Sambucus nigra* L.) during an outbreak of influenza B in Panama, *Journal of Alternative and Complementary Medicine*. 1995; 1(4):361-9. For a brief synthesis of these two papers, see Paul Bergner in *Medical Herbalism*, [Vol. 16. No. 1. Spring 2009](#), Pgs 2-3.

^x In North American herbalism, a general application for the prevention of influenza is to administer the herbs or formulas that might be used to treat it, but in lower doses. A scientific review concludes that the overall support for this method is slight, due mainly to a lack of investigation rather than to negative outcomes of trials. (Guo R, Pittler MH, Ernst E. Complementary medicine for treating or preventing influenza or influenza-like illness. *Am J Med*. 2007 Nov; 120(11):923-929)

^{xi} There is no one 'herbal pill' for the flu. Influenza is a highly complex illness and its effective prevention and treatment, using herbs, requires an approach drawing on different groups of herbal actions, in formulas, which we modify in response to our own condition and the progression of the disease. Crucially, an approach such as this requires a thoughtful, time-consuming, hands-on engagement in which we assume accountability for assuming the burden as well as benefits of our self-care. In other words, the effective practice of home-based herbal medicine asks for an alternative style of thinking and behavior and not simply 'alternative inputs'. We hope to address the cultivation and use of the major influenza herbs, in detail, in our treatment protocol.

^{xii} As herbal teacher Howie Broustein clarifies, "Wildcrafting is stewardship." At minimum, safe and sustainable wildcrafting of herbs [demands](#) a sensitivity to and rich understanding of local ecology. For example, inland stands of Devil's Club are isolated and not for collection.

^{xiii} Our generalized treatment protocol for acute influenza can easily be followed by beginning and intermediate herbalists and will suffice to successfully manage the vast majority of influenza infections, seasonal or pandemic – assuming the symptom profile continues to emulate those of influenzas of recent decades. The greater your experience with herbology, the more helpful will likely be the tailored herbal management of your illness as it uniquely presents itself.

^{xiv} For the most part, medical herbalism remains very poorly understood and naively conceived - a prejudice reinforced by a cultural affinity for bad media, the disinformation and hucksters who dominate them and, of course, the antagonism of prevailing epistemologies and the immense array of institutions they sustain. However, botanical medicines can be highly effective in the prevention and treatment of influenza and furthermore, hold great promise for further clinical research. In this regard, our 'advanced 'protocol for clinicians' is perhaps better described as an attempt to synthesize the insights of acquaintances making and using rarely-used botanical medicines, together with anecdotal herbal literature analyzing approaches which proved effective during the 1889-90 and 1918-20 pandemics, both of which involved symptoms far more varied and difficult than those recorded in influenza pandemics which have followed.

For example, the 1889-90 pandemic or 'Russian flu' expressed itself in highly varied ways with patients' primary symptoms falling into discrete categories: neurological, gastrointestinal, febrile (involving fever), inflammatory and respiratory. Within these distinct groupings, symptoms included: almost unbearable pain in the head, back, joints, and limbs (some committed suicide to escape the pain, many suffered prolonged or permanent mental status changes); nausea, vomiting, severe abdominal pain and diarrhea lasting for up to a month; fever lasting for several weeks; severe rheumatoid pains in the joints; violent, paroxysmal coughing (fits left people exhausted) and, where respiratory symptoms were uncomplicated, the illness lasted less than two weeks but patients were left weak and frail for much longer, sometimes for months. Respiratory complications took the lives of most of those who died, most of whom were elderly.

For reasons that remain unexplained, after its first mild wave the 'Spanish flu' pandemic of 1918-20 was unprecedented in its virulence and mortality, affecting 'healthy young adults' with an unusually high mortality

rate. The abruptness of the onset of the disease and the 'explosive' degree to which it overwhelmed the patient—the technical descriptive term is “fulminating”— certainly offers cautionary lessons to those of us who perceive influenza as an always reliably homey, familiar illness.

Many herbalists brought experience of the 'Russian flu' to treatment of the 1918 influenza. Symptoms of what came to be diagnosed as 'primary viral influenza in its most fulminating form' did not fall into the discrete categories exhibited during the Russian flu. Rather, patients suffered from many different and difficult types of symptoms. Many and perhaps most people did not catch the flu or were asymptomatic (did not show symptoms); most people symptomatic with the virus suffered extremely unpleasant symptoms for several days then recovered in about ten days. But in a minority of cases, and not just in a tiny minority, the symptoms were exceptionally virulent and often fatal: extreme muscular pain, severe headaches, direct attack of the lungs.

Extreme earaches were common (“rupture of the drum membrane was observed at times in a few hours after the onset of pain”); as were body aches ‘so intense they felt like bones breaking’; along with headaches, mostly frontal, ‘as if someone were hammering a wedge into their skulls just behind the eyes’. As with hemorrhagic viruses such as Ebola, some bled - in this instance from the ears, throat, lungs and most notably, the nose (“blood sometimes spurted from the nose with enough power to travel several feet”). Coughing could be so harsh and severe that autopsies would later reveal torn abdominal muscles and rib cartilage. Although it is not precisely clear which pneumonia pathogens caused the severe pulmonary (lung) complications largely responsible for killing people, the best explanations suggest a viral-bacterial pneumonia combination. Herbalists of the time reported that patients would typically present with an initial fever, intense headache, aching backs and legs, a cough, drippy nose and sore throat. “The first fever extends from 3-5 days and declines for 1-2 days then the second fever presents with the same severity lasting 1-3 days. It is during this phase the patient is apt to contract pneumonia...” In essence, patients suffering from pneumonia died a hypoxemic death (lack of oxygen) and literally drowned in their own bloody secretions.

While Pandemic (H1N1) 2009 - except in its rare form - remains a mild form of the influenza virus and has, so far, shown no evidence of change in its ability to cause generalized severe illness, it is our sense that our ongoing efforts to piece together an advanced local herbal protocol are merited, providing useful insights into the potential for botanically-based prevention and treatment of severe forms of influenza, and severe complications arising from poorly-managed milder forms. It is our hope our endeavors will complement the strengths of a great array of coherent therapeutic approaches and technes, conventional and otherwise, that together provide a highly supportive context for local prevention and treatment of influenza infection, in an inherently sustainable form.