

Zen Herbs: Herbs to Relax, Herbs for Energy



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PLEASE READ: The information in this handout has not been approved by the FDA and does not in any way intend to diagnose or prescribe. Always consult with your health practitioner before taking any remedy.

Above this, I also recommend that you...

1. Research an herb in at least three good sources before ingesting it (see website for sources),
2. Listen to your body/intuition to determine if an herb resonates or doesn't resonate with you.
3. Take proper steps to ensure that any wildcrafted or cultivated plant is what you think it is, AND
4. Check with your pharmacist for herb-drug interactions if you take prescriptions.

We live in a stressful world that can be hard to escape. Fortunately, certain herbs can tip the scales in our favor to help us move towards a more relaxed, balanced lifestyle. Keep in mind, though, that herbs are only ONE PART of the puzzle. If you're stressed because you work in a terrible job, relaxing and energizing herbs may help alleviate some of the stress, but you may want to consider a job change. Stress can be caused and aggravated by many things. It's helpful to use herbs while also addressing the source of the stress. This will be most effective for creating long-term balance and mental wellbeing.

Nervous System Herb Continuum

Most Stimulating		← Adaptogens →		Less Stimulating	
High Caffeine	Low Caffeine	Stimulating Adptogen	Semi-Stim. Adaptogen	Balancing Adaptogen	
Guarana*	Black Tea*	Red Ginseng*	Codonopsis	Maca	
Kola Nut*	Chocolate*	White Ginseng*	Eleuthero*	Schizandra*	
Coffee*	Oolong Tea*	American Ginseng*	Jiogulan*	Reishi*	
Mate*	Green Tea*	Rhodiola*	Aralia spp	Chaga?	
	White Tea*	Cordyceps*	Licorice	Shatavari	

Balancing/Neutral		Calming		Most Sedating	
Calm Adapt/Brain	Mild/Mood	Relaxing	CNS Relaxers	CNS/Musc. Relax	
Ashwagandha*	Fresh Milky Oat	Chamomile	Passionflower	California Poppy	
Holy Basil*	St. John's Wort	Lavender	Skullcap	Valerian (warming)	
Gotu Kola*	Damiana	Lemon Balm*	Blue Vervain	Pedicularis	
Bacopa*	Albizia/Mimosa	Catnip	Wood Betony	Hops (cooling)	
	Roses	Linden	Kava	Wild Lettuce	
	Turmeric	Motherwort	Jujube/Ziziphus	Jamaican Dogwood	
	Vanilla		Pulsatilla (low dose)	Melatonin	

* Memory/Brain Boosting/Attention Properties

L ~ Locally Available, W ~ Wild Herb, G ~ Garden Herb, S ~ Store Herb, + easy to find, - harder

WHAT'S THE BIG DEAL ABOUT STRESS?

Sympathetic Nervous System: Fight or flight system. Adrenaline is the prominent hormone/neurotransmitter. Cortisol kicks in with long-term stress. Most of us experience stress in this system.

What happens during sympathetic nervous system mode (STRESS)?

- Adrenaline may flood both nervous system and endocrine system pathways. Adrenaline is strong partly because it acts as both a neurotransmitter and as a hormone. There are many receptor sites throughout the nervous system that adrenaline can bind to.
 - ↳ Stress hits us quickly but can take a while to subside.
- Blood is shunted to the heart, brain, lungs, muscles.
 - ↳ We think and breathe better, muscles work better (at least initially).
- Heartbeat goes up, increased force of contraction. Blood pressure & viscosity increases.
 - ↳ Increased blood pressure, stress on the heart
- Lungs, bronchi dilate to bring more air and more O₂
- GI peristalsis slows. Digestive sphincters contract to keep food in spot.
 - ↳ Poor digestion and constipation
- Liver glyconeogenesis (breaks down stored sugar) and glycogenesis (new sugar made from fatty acids, not glucose) for ATP (cellular energy) production.
 - ↳ Initially: increased energy levels, increased blood sugar
 - ↳ Long term: blood sugar issues, poor storage of nutrients, abdominal obesity, insulin sensitivity
- Mental activity increases.
- Immune system decreases.
- Libido decreases
- Wound healing (over time) goes down
- Detoxification slows
- Metabolism increases
 - ↳ Initially: weight loss
 - ↳ Long term: blood sugar issues can cause abdominal obesity

Some Stress Culprits:	Lack of social connections	Not saying no
Outlook on life	Poor nutrition	Not enough time in nature
Stressful jobs	Inactivity, sedative lifestyle	Negative past experiences
Multitasking	Too much structured time	“Wired” for it

ADAPTOGENS FOR STRESS RELIEF & ENERGY

Anti-stress herbs to the rescue! The term “adaptogen” was coined by a Soviet researcher studying substances that would increase productivity and performance of soldiers, athletes, and workers without the side effects of stimulants. Panax Ginseng and Eleuthero (formerly called Siberian Ginseng) are the two herbs best researched for this.

An adaptogen...

1. is relatively non-toxic.
2. has broad action on body systems and is non-specific. It provides resistance to a broad spectrum of biological, chemical, and physical factors. *For example, hawthorn is a great plant, but it's not an adaptogen because it targets the cardiovascular system. Ginseng is an adaptogen because it affects blood sugar, sex hormones, cardiovascular health, muscular health, etc. It also appears to protect the liver from poisons, the body from states of extreme cold or extreme heat, the mind from over stimulation, etc.*
3. can regulate or normalize body functions. Ginseng may increase or decrease blood pressure according to what the person needs.

4. is likely to work by regulating hormones, particularly stress hormones, via the hypothalamic/pituitary/adrenal (HPA) axis, and the sympatho-adrenal system (loosely, what we talked about in the first part of the lesson). Adaptogens seem to be able to raise or lower adrenaline, cortisol, and a variety of other hormones. They may also affect the nervous system directly.

Adaptogens, by their nature, are generally safe to take long-term. However, for optimal action, they are recommended to be taken in courses. 3 months on, 3 months off. Weekdays on, weekends off. 2 weeks on, 1 week off. Whatever makes sense in the situation.

Stimulating Adaptogens

Ginseng: Chinese Ginseng (*Panax ginseng*) and American Ginseng (*Panax quinquefolium*)

~ *The Classic (but Overused) Adaptogen L-G-S*

I rarely use the ginsengs because they are rare, over-harvested, poorly cultivated, and expensive. However, they are the classic adaptogens by which all others are measured. They are among the most popular medicinal herbs in the world for good reason. After the Chinese all but depleted their wild ginseng, they sent word to North American missionaries to look for similar plants. In 1718, a Jesuit priest “discovered” American ginseng. Long before Americans caught on to this whole herbalism thing, up to 55 TONS of this slow growing root was shipped from Boston Harbor to China in just one year. Most of the ginseng on the market now is cultivated, but it is hard to grow, and is often sold too young. Wild roots are much stronger, but no longer ethical to purchase. If you use ginseng, try to find woods-grown cultivated roots and buy the whole root so that you can count the leaf scars (each indicating a year of growth). Good roots should be at least seven years old. All that said, here is why the ginsengs are so amazing: *Panax ginseng* has been shown to protect against high cholesterol, radiation, tumors, viruses, chloroform, amphetamines, and other toxins. (Kids, don’t try this at home.) Both ginsengs are used to fight fatigue. They appear to reduce blood sugar in diabetics (controversial), increase hematocrit in post-op patients, increase nerve growth in animals. *Panax* has the reputation as a libido herb, may increase the weight of prostate glands, seminal vesicles, increase sperm count and pregnancies. One study on red (steamed) *Panax ginseng* found it effective for erectile disorder. In our culture, most people use ginseng to get through a stressful day with more energy. Ted Kaptchuk, author of the Chinese medicine book *The Web That Has No Weaver* said once “Ginseng is for those who are old or for those who are young but feel old.” In the continuum of adaptogens, ginsengs are mildly to moderately stimulating, and somewhat warming. Cured “red” Asian ginseng, Uncured “white” Asian ginseng, and American ginseng are, in that order, most warming and stimulating to least. Use: Some people simply chew on a dried root. Though not necessary, frying your ginseng a little before making a tea or tincture can increase its strength. You can follow general dosage information. For a tasty snack, you can sauté root slices or mini rootlets and then cover them in honey to preserve them as an energizing snack. Cautions: Overuse can cause over stimulation in some people. May aggravate mania, especially when combined with the drug phenelzine. Not recommended for people with anxiety disorders. Use caution in hypertension; some studies have shown benefit, while others found it aggravated high blood pressure.

Eleuthero, Formerly Siberian Ginseng (*Eleutherococcus senticosus*) ~ *Energy/Body Tonic L-G-S*

Formerly called Siberian Ginseng (it is in the same family, but not the same genus, as ginseng) eleuthero increases resistance to environmental stress. It is used to enhance physical and mental performance. Studies suggest it supports adrenal stress hormone function, stimulates immune response (immune modulating), and protects the liver against toxins. Eleuthero was studied on nearly 5000 people in Russia, starting in 1962. The studies found it increased people’s ability to withstand adverse conditions (heat, noise, motion, work load increase, exercise, decompression); to improve auditory disturbances; to increase mental alertness and work output; and to improve the quality of work under stress conditions and athletic performance. It was generally helpful and well tolerated by people with neurosis, arthrosclerosis, acute disease, diabetes, pyelonephritis, hypertension, hypotension, rheumatic heart disease, chronic

bronchitis, cancer, etc. Use: General herb doses. Tincture, pill, decocted tea. Cautions: Virtually no acute toxicity (studied on thousands of people in Russia). Uncommon side effects include insomnia, headaches, and elevated blood pressure. (Elevated blood pressure only occurred in people who were taking very high doses: 4.5-6ml/1-2x/day. In lower doses, it tended to reduce blood pressure in people with hypertension, raise blood pressure in people with hypotension.)

Rhodiola (Rhodiola rosea) ~ Mental & Physical Energy, Stimulating S

Also called arctic root or golden root. Traditionally used in Siberia for more than 100 years for energy and longevity. Becoming popular in the US for mental and physical energy. In studies, it improved performance and reduced fatigue in night shift workers, and improved test-taking ability of students during exams. May be helpful for chronic fatigue syndrome, in part due to improved synthesis of ATP (energy for cell function). Appears to work by modulating stress hormone production, reducing the effects of stress on the body and mind. May improve weight loss in conjunction with an exercise routine. Use: Tincture or other alcohol extract (infused brandy, vodka, wine). Astringent and very aromatic; not a good tasting tea. Popular in capsule form from 100 to 500 mg dose. 200-300 mg 2x/day is probably adequate for most. Tincture, standard dose. High doses are used for short term energy. General herb doses. Cautions: None known. The herb is still new to western herbalism. May cause irritability and insomnia in high doses (1-2 g/day), and may induce manic stage in bipolar disorder. It's astringent and aromatic, which can stimulate digestion and upset the stomach if taken w/o food.

Codonopsis (Codonopsis spp) ~ Poor Man's Ginseng G-S-

Also called Dang Shen and often referred to as "poor man's ginseng." Used similar to ginseng, but it is much less expensive and easier to grow. It's a lovely garden plant. Similar uses as Eleuthero, but less research to support it. Useful for energy, longevity, and immune support. Also used for poor appetite, gastric irritation, ulcers, fatigue. Commonly used in protocols to strengthen an extremely compromised immune system: AIDS, cancer, mono. One of the "Fu Zheng" therapies used to prevent side effects from chemotherapy or radiation. Increases hemoglobin and red blood cells. Use: General herb recommendations. I tend to decoct it as a tea with fresh ginger root slices, sometimes adding astragalus, cinnamon, cloves, etc. It would make a nice honey extract. Cautions: None known.

Calming or Balancing Adaptogens

Ashwagandha (Withania somnifera) ~ Nerve Tonic, Pain/Inflammation Support L-G-S

Popular in Ayurvedic (Indian) medicine for a variety of conditions. Considered a "relaxing adaptogen" meaning that it appears to both relax and improve energy, but not stimulate (as ginseng might). Useful for anxiety and nervousness. Strengthens immunity and vital force. It may increase thyroid production and help balance hypothyroid conditions. have found it reduces the immuno-suppressive action of some drugs and restores immune health more quickly. Often used in formulas for people with chronic pain, perhaps due to anti-inflammatory action. May be helpful in fatigue-related disorders as well as nervous system-based diseases like multiple sclerosis, chronic fatigue, Lyme, and fibromyalgia. Appears to improve the action of reproductive, nervous, respiratory, and digestive systems. Appears to be helpful for bacterial or fungal infections, as well as inflammation. It is often called "the Ginseng of India" though it is not considered as stimulating as ginseng. (It is also in the nightshade family, not the aralia/ginseng family.) Use: It is traditionally prepared in ghee (clarified butter) or decocted in milk, which suggests that the constituents are more fat-soluble; however, western herbalists tend to use it as tea, tincture, capsules. General herb doses. Cautions: Generally considered to be safe; however it is not recommended during pregnancy. Nepalese traditional medicine calls Ashwagandha herbs in the *Convolvulus* species, which have similar actions as *Withania*. However, the *Convolvulus* species that grow locally (bindweeds that look like morning glory) are associated with toxicity.

Maca (*Lepidium meyenii*) ~ Nutrition, Hormone & Stress Support S

Recently “discovered” turnip-like root grown as a food crop in the Andes Mountains. Extremely nutritious (high in minerals, protein), and tasty, it is used in a variety of dishes. Traditionally used to raise libido and increase fertility. Small studies show it does improve libido but does not appear to affect sex hormones directly. Used as a nourishing energizer and stress reducer. Use: Tasty and eaten in many forms in the Andes. General herb doses. Powder mixes well in smoothies, home-made energy nut butter balls, etc. Cautions: Generally very safe; used as a food in some cultures. Some sources recommend cooking/heating it first or using a special pre-heated powder to discourage gas/stomach upset from eating a raw cabbage-family root.

Reishi (*Ganoderma lucidum*) ~ The Mushroom of Immortality, Adaptogen, Immunity LWG-S

Reishi’s moniker “the mushroom of immortality” tells you how valued it is in Asia. But don’t let it’s exotic history intimidate you, various interchangeable species of *Ganoderma* grow wild throughout the United States: red reishi (*G. tsugae*) on hemlock trees in the northeast, *G. curtisii* on hardwoods further south, and *G. oregonense* on conifers in the northwest and New Mexico. These varnished shelf mushrooms grow in varying shades of red and brown, and look like the perfect spot for a fairy to stop and rest. Reishi has similar health benefits as shiitake (immune strengthening/modulating, anti-cancer, useful in allergies and autoimmune disease) as well as the ability to lower blood sugar in diabetics. Hobbs notes that it also provides emotional and stress support for insomnia, anxiety, and fatigue, much like our herbal adaptogens. Reishi also has an affinity for the lungs, decreasing susceptibility to bronchitis and strengthening respiratory function and oxygen utilization when taken as a daily tonic. I use it for clients with “weak lungs,” often alongside cordyceps. When you roll all these benefits into one, you can see how regular use of reishi can help us feel vital and prevent disease as we age. Unfortunately, it’s not very tasty. Besides being too tough to eat, it’s rather bitter. “When you drink reishi tea, you know you’re drinking something medicinal,” warns Maine expert Greg Marley. Use just a few thin slices in tea and broth blends or try a specially prepared tincture or capsule. Other potential mushroom adaptogens include cordyceps (which is much zippier and noted for its libido-enhancing, physical endurance-enhancing, and oxygen utilization properties) and perhaps also chaga (a mellow fungus used as an immune and respiratory tonic among other benefits). Cautions: Reishi is generally safe; however, it may interact with blood thinners, and some people simply don’t tolerate mushrooms well or are allergic to them.

Schisandra (*Schisandra chinensis*) ~ Balancing Stress Support, Liver & Respiratory Tonic G-S

Also called “schizandra” and “wu wei zi” or “five-flavored fruit.” In Traditional Chinese Medicine, it is believed to have all five flavors (pungent, sour, bitter, salty, sweet), making it a broad remedy for a variety of constitutions and conditions. It has an affinity for the lungs, digestive system, liver, and immune system. Most research on the herb has focused on its liver benefits: it has been shown to protect the liver from poisons and assist in liver regeneration, it increased the cytochrome P-450 antioxidant system and improved the health of liver mitochondria (energy-producing parts of cells) in rats, it lowered elevated liver enzyme levels in patients with chronic viral hepatitis, and so on. Studies in Russia indicate that it is an adaptogen—an herb that reduces the body’s reaction to stress, improves overall health, and has few/no side effects. Studies on people and animals found that it improved work and athletic performance. The herb also acts as a tonic to the immune system, reduces inflammation, and normalizes the nervous system. It is used to both energize, relax, and improve memory, and so it will be found in both sleep and energy formulas. Practitioners use it to work with irritability, palpitations, night sweats, disturbed dreams, and insomnia. TCM practitioners use it for weak lung conditions, like wheezing, chronic cough. It can be used as a digestive bitter to stimulate the digestive system. Historically, Chinese practitioners believed this herb (among others like ginseng) prolonged life. Use: General dose recommendations. Tangy berries can be chewed on. Possible to grow as a garden plant in our climate. _

Cautions: No known toxicity. However, as with any liver herb, it may slow or speed metabolism of pharmaceutical drugs.

Gotu Kola (*Centella asiatica*) ~ Nerves, Connective Tissue, Circulation & Brain Support L-G-S

Traditionally used as a brain and memory tonic (mental clarity). It is one of the herbs known as “Brahmi” in Ayurvedic medicine (the other is *Bacopa monnieri*). Studies show it increases circulation to brain, as well as in heart and leg veins (vascular insufficiency, used in varicose vein formulas). Useful for wound healing, appears to improve connective tissue/collagen repair. In Nepal, it is given to children on the first day of school. It is a gentle, but broad remedy. Studies have found it useful in decreasing anxiety. Used for children and adults with attention deficit disorder(s). Herbalists often use it in protocols for fatigue, fibromyalgia, and similar disorders via topical and internal applications. Ayurvedic practitioners use it to cleanse the system of toxins and inflammation. Use: Fresh or dry tincture from organic herb, capsules, standard doses. Topically as a liniment (combine with comfrey tincture for consistency), oil, or cream. Edible as a salad green & possible to keep as a house plant. It resembles Swedish ivy and requires lots of sun, nutrition, and water. Zach Woods Farm in VT is one source of organic gotu kola plants. Cautions: None known. However, it grows prolifically in questionable sludgy conditions in India (can have high amounts of *E.coli* and other bacteria). Gotu kola may impair fertility. Purchase only organic gotu kola to ensure good growing conditions.

Holy Basil (*Ocimum sanctum*) ~ Zen Herb for Mind/Spirit, Blood Sugar Balancer L-G-S

A versatile herb. It is also called Tulsi, or holy herb (after the god), and is considered sacred in Ayurveda. Frequently planted in temples in India. It is a pretty purple, slender basil with a somewhat similar fragrance to basil. Easy to cultivate. Used for a broad range of conditions in India, including memory, colds, indigestion, asthma, and fatigue. It is best known in the U.S. for reducing stress and cortisol levels. This is due to both the research and the marketing hype produced by New Chapter and Paul Schulick. It is believed to enhance parasympathetic/relaxation response. I have heard of it being drunk as a tea before yoga or meditation. It also appears to have anti-inflammatory properties, perhaps via COX-2 inhibition. Lab studies suggest that it has antioxidant properties. In animal studies, it increased endurance, inhibited ulcers, and protected against radiation. Human studies suggest that it can help modulate blood sugar in non-insulin dependent diabetes. It is possible, but not proven, that our culinary basil has similar properties. I find it incredibly useful for calm energy and reduced sugar cravings. It's nice a nice adjunct (to diet and exercise) for weight loss. Use: General herb doses. Also available as a carbon dioxide extraction (stronger) from Gaia, New Chapter, and other herb companies. Makes a pleasant aromatic tea. The Tulsi brand offers it in teabag form solo and in blends. Holy basil is easy to grow (though hard to germinate) as an annual; all three varieties can be used similarly. Cautions: None known.

Now, instead of energizing the body and helping it adapt to stress, we'll look at how to encourage the relaxation response (parasympathic nervous system), quelling anxiety, improving sleep, and improving mood.

And now on to...

THE SEDATIVES: RELAXATION, SLEEP & MOOD SUPPORT

Why Do We Need to Relax?

Parasympathetic Nervous System: Sometimes linked to “The Relaxation Response.” (Visit Herbert Benson’s Mind Body Medical Institute www.mbi.org for more info.) The parasympathetic nervous system controls relaxed situations and normal functioning of organ systems.

- ➔ Increased digestion, easy defecation and urination
- ➔ Healthy metabolism and blood sugar balance
- ➔ Relaxed mental activity
- ➔ Relaxed heart
- ➔ Active, healthy immune system
- ➔ Improved detoxification & wound healing

Techniques for evoking the relaxation response:

- Imagery
- Progressive muscle relaxation
- Repetitive prayer
- Mindfulness meditation
- Repetitive physical exercises
- Time in nature
- Breath focus
- Regular sleep
- Moderate exercise
- Yoga
- Tai chi, Qi gong
- Pleasing aromas
- Herbs, of course!

Basic Mood Enhancers

- Exercise – As good as Zoloft, with less likelihood of relapse!
- Sunlight
- Proper sleep
- B vitamin complex—Bs play a role in nervous system function and the ability of the body to make energy (ATP).
- Omega 3 fatty acids (especially eating fish) decrease inflammation, boost mood, and enhance the health of nerve lining/function
- Adequate nutrition – quality protein, balanced complex carbs, good fats, vita/min including Bs & C, Omega 3s, vitamin D, magnesium, calcium
- Anti-inflammatory diet & lifestyle (including turmeric!)
- Meditation
- Chocolate
- Herbs, of course!

About Those Adaptogens

Even though adaptogens (stress-busting herbs) aren’t the focus of today’s talk, they’re still a valuable component in blends. Here are some nice cross-overs...

Calming Adaptogens that can be used in combination with anti-anxiety, mood-boosting, sleep-enhancing and relaxing herbs... they’re particularly nice to keep a relaxing blend from being *overly* sedating during the day:

- Holy Basil
- Ashwagandha
- Gotu Kola
- Schizandra...

Energizing Mood Boosters that can be used in for depression when we need a kick in the pants (but *may* aggravate insomnia and anxiety):

- Stimulating Adaptogens: American & Asian Ginsengs, Eleuthero, Codonopsis, Rhodiola...
- Caffeine Herbs: My favorites being cocoa/dark chocolate/cacao and green/white tea. Maybe also yerba mate and coffee. I don’t tend to use guarana and kola nut.

Nervine Tonic Herbs ~ Gently Calming & Mood-Boosting

Lemon Balm (*Melissa officinalis*) ~ Uplifting & Relaxing L+G+S

Lemon balm is a delightful, multipurpose herb. Used to relax the nervous system in anxiety, insomnia, agitation. Used in formulas for attention deficit in children and adults. Mild uplifter for depression and “funk”s. Antiviral and well-researched as a topical treatment for herpes (cold sores, genital herpes, shingles, chicken pox). (May be used internally for herpes as well.) Slightly bitter and used to improve digestion, especially where stress and indigestion are mixed. Used to lower thyroid. Lemony flavor borders between pleasant and Lemon Pledge-like, mixes well with mints and lemony herbs in tea. Use: Great as a tea herb or fresh tincture. The dried herb loses its potency quickly as the essential oils do not stick around long. Your dried herb should have a lemony flavor and scent. The tincture holds well and should have a lemon custard after taste. One of the few herbs I recommend as a fresh herb tea. Bring a pot of water to a light boil, remove from heat, toss in a handful of fresh lemon balm—mints, lemon verbena, lemon thyme, and tarragon also mix well in this fresh tea—cover, let sit 5-10 minutes, strain & drink. The essential oil is very expensive (close to \$100/ounce) and often adulterated; however, it is considered a potent mood lifter. For a cheaper thrill, keep the plant in your windowsill or garden and brush by it often. Cautions: Generally safe, but use caution in anyone with hypothyroid and during pregnancy.

Milky Oat Seed (*Avena sativa*) ~ Nerve Tonic & Addiction Support LCS

This gentle tonic is made from the same plant as oatmeal. When fresh, the milky oat seed contains small amounts of alkaloids that seem to have a relaxing, tonifying effect on the nervous system. The only way to utilize these constituents is to do a fresh extract (usually in alcohol, though some use glycerine). Water extracts (tea) are not useful. It is useful for the burnout caused by living on stress & adrenaline. As Michael Moore colorfully described, we use it for when “You drive from Bangor, Maine, to Phoenix, Arizona in a Geo with two kids and a parakeet in the back, stopping at every Denny’s along the way for coffee. By the time you get there, you can light lightbulbs with your finger tips.” Coffee-slugging cubicle workers may also find it useful. It combines well with skullcap. It has historically been used to help treat addictions, including morphine, tobacco, and opium. Some studies support this use. The dried oat herb, while not a potent nervine, is high in minerals, particularly silica. It is often added to nutritive teas. Oatmeal is also nourishing, and lightly calming & energizing. It is considered safe for children. Use: General herb doses. Fresh herb tincture only. (Dry is much less effective.) Glycerine extractions ok. You can try a vinegar extract. Or try blending fresh oats with water or “milk” (cow or other) and then freezing it. Cautions: Generally safe, except possibly oat allergy.

Sedative Herbs ~ Calming, Sedating, Sleep, Anti-Anxiety

Chamomile (*Matricaria recutita*) ~ Bitter Relaxer ~ For Digestion, Relaxation & Babies LGS+

German chamomile flower tea is best known for its calming and digestive properties, making it doubly good for a nervous stomach. It is a key herb for children, assisting with colic, teething, irritability, and insomnia. It may even protect the stomach from ulcers. Fresh or freshly dried chamomile has a light pineapple-y scent and flavor with grassy undertones. (If your tea tastes like hay, your chamomile is old and useless.) The flowers of Roman chamomile and wild pineapple weed are used similarly. Cautions: Chamomile is usually well-tolerated; however, some people do experience hayfever-like symptoms from it. In rare cases it can cause contact dermatitis and anaphylaxis. If you react to ragweed and composite plants, while it is *unlikely* that you’ll react poorly to chamomile, use caution at first.

Catnip (*Nepeta cataria*) has a somewhat similar action as chamomile – it’s bitter, calming, improves digestion, sleep, is often used for babies and kids, and it’s also diaphoretic (helps break a sweat during fever). It’s also easier to grow/harvest in abundance and less apt to aggravate allergies.

Passionflower (*Passiflora incarnata*) ~ Overall Relaxation & Mild Heart Relaxer L-G-S

This stunning flower (find a picture of it or a live plant in a nursery) was named Passionflower by missionaries who believed it to symbolize the Passion of Christ. The leaves, vine, and flowers can be used. It grows in Central America and the southern U.S., and is also called Maypop. It is considered to be cooling and sedating to the CNS. Often used where there is pain, anger, frustration, agitation, insomnia. Also believed to sedate the upper GI, cardio-pulmonary, and vascular systems. Unlike heavier sedatives like kava or valerian, it's less likely to make you sloppy-feeling. Considered safe for children. Michael Moore recommended it for adults, teens, and children who get angry and don't want to calm down. Generally "pissy" dispositions. (It's one of the herbs he used himself.) He also recommended it for people who become agitated and stressed switching from blue collar, physical jobs to white collar desk jobs. It is helpful for essential hypertension because it seems to relax the diastolic of the major trunk arteries. Moore felt that it relaxes and increases the flexibility of arteries. It can be used for heart palpitations and sleep disturbances due to nervousness. Use: Tea or fresh tincture. The dried herb can lose its potency quickly. Blends well with skullcap, lemon balm, motherwort. Cautions: Not recommended during pregnancy or in conjunction with sedative drugs or alcohol.

Skullcap (*Scutellaria lateriflora*) ~ Nerve Sedative & Reduces Hypersensitivities LWCS

Sometimes spelled "Skullcap." Though little-researched, herbalists use this herb in many conditions where a nervous system relaxant is called for. Traditionally used to calm down an excessive nervous system response, whether in the form of anxiety, restlessness, oversensitivity to light/smells/etc. Traditionally used to control seizures. Used to help ease insomnia, nervous exhaustion/burn out, and for nervous system irritation of the cerebrospinal nervous system. Herbalists consider it to be a gentle yet effective over-all sedative and often use it for children and the elderly. Use: Tea or tincture. It is a bit bitter as a tea, but blends well with lemon balm and mints. It's a common garden plant. Cautions: No known cautions. Commercial skullcap may be tainted with germander, a similar looking (and easier to pick) but liver-toxic plant. HERB CONTROVERSY: Due to past contamination of skullcap and a lack of research on it, some sources will warn against the herb, saying that it can cause liver damage and does not work.

Wood Betony (*Stachys officinalis*) & Blue Vervain (*Verbena hastata*)

~ Antispasmodic, Nervine, Digestion-Enhancing Herbs LWGS-

These two lovely purple-flowered herbs can easily be cultivated and enjoyed as bitter/digestive, relaxing, antispasmodic herbs with a range of uses for the mood and overall health even though they are lesser known in commerce. Both can be used during the day without risk of oversedating yet are useful at night for sleep. I particularly think of them when headaches (esp betony), chronic pain, spasms, and neck/muscle tension (esp vervain) are happening or are preventing good sleep. They can help with anxiety and depression and may need some careful tea blending to be palatable – or use them as tinctures. In the garden, blue vervain prefers rich, damp soil (it grows wild along waterways) and wood betony will tolerate almost anything. Cautions: Generally safe, but watch for herb-drug RX. Note that wood betony is not the same as another plant called betony or lousewort (*Pedicularis* spp) – less common around here – even though both are great for skeletal muscle pain/relaxation. If you find someone talking about betony, check in to see which one they're using. Other species of vervain (*Verbena* spp) are sometimes used similarly.

Pulsatilla & Anemone (*Pulsatilla patens* and *some* other species) is a DROP DOSE herb for acute anxiety, hysteria, and when people basically go berzerk and need to be brought down to reality. We just use one to five DROPS (not dropperfuls) as needed. It is safe at this dose but toxic with significant side effects in more typical herb doses. It's commonly used in homeopathy for the same purpose. There's a really nice blog on this herb at <http://blog.chestnutherbs.com/anemone-medicine-poison-pollen-and-melodrama> I do a fresh plant tincture (aerial parts in flower). It tends to lose potency within a year or few.

Herbs to Consider for Anxiety Attacks

Most of the previously mentioned herbs can be used on an ongoing basis to quell anxiety and balance the mood. But these following two have a greater impact in an acute anxiety attack:

Motherwort (*Leonurus cardiaca*) ~ For Anxiety that Manifests in the Heart LWGS-

Rosemary Gladstar devotees coin this herb by saying it is for “mothers and people who need a little mothering.” Nervous system sedative and cardiogenic. It’s especially helpful when the heart is affected by the nervous system—for example heart palpitations, hypertension, or tightness in chest due to anxiety or stress. Michael Moore recommended it for “Flakey and strong mood swings that start self-indulgently and then go out of hand. You know you’re acting out, but can’t prevent it... Fierce passion, uncontrolled emotions, physical agitation, OCD-type tendencies.” Antispasmodic. Also used in hyperthyroid conditions. Can be used for premenstrual cramps and hot flashes, and to bring on delayed menses. May be useful for herpes/cold sore nerve pain. Use: Standard herb dose. It’s very bitter and generally taken in tincture form. 2 squirts can bring down a low-grade anxiety attack in some people. Cautions: Contraindicated in pregnancy (emmenagogue/uterine stimulant), and in people with HYPOthyroid disorders (often combined with bugleweed & lemon balm to help balance HYPERthyroid).

Kava (*Piper methysticum*) ~ Anxiety Herb & Pain/Muscle Support ~ The Friendly Herb S

This root is a well-known, fast-acting nervous system sedative used for anxiety, stress, insomnia, muscle tension, and asthma. Unlike many sedatives, kava does not seem to impair cognitive abilities, and it is traditionally used during meetings to foster friendliness. It appears to act through similar mechanisms as anti-anxiety drugs (binding to GABA receptor sites). It is numbing as well as muscle relaxing, and has been used for tension headache, urinary tract pain, muscle spasms. It is used in attention deficit formulas. It is one of the best herbs we have for panic attacks. Use: General herb doses. Ceremonially drunk in Polynesian cultures as beverage (though it does numb the tongue). While long-term use may be fine, I recommend using it as a short-term herb for symptomatic situations. **HERB CONTROVERSY:** Kava has recently met with controversy and is banned in several countries because of several cases of liver toxicity in Europe. Large doses of 9 grams or more per day can elevate liver enzymes (reversible when the herb is discontinued). Caution is advised in anyone with a liver condition, a family history of liver disease, or with anyone who uses other liver-toxic substances (alcohol, ibuprofen) regularly. Most of the cases of liver toxicity in Europe seemed to be complicated by 1. the person using other liver toxic substances at the same time, 2. extracts standardized to unnatural concentrations of kavalactones, and 3. companies using cheaper aerial parts of the plants to make standardized extracts instead of the roots; the aerial parts contain liver toxins that the root does not. Cautions: I recommend only using kava products made by herbalists and avoiding standardized capsules, and using it for more short-term conditions. Long term consumption in large doses can cause dry, pigmented, scaly skin on the palms of the hands, soles of the feet, forearms, back, and shins. This goes away when the herb is discontinued. Kava enhances the effects of alcohol and other sedatives. It is not recommended during pregnancy or nursing.

Sleepytime Sedatives

Most of our above herbs can also be used to help with sleep. Because they are so strongly sedating, they may aggravate sleep and are likely to interact with some meds, especially sedatives, psych meds, and pain meds. It’s also worth noting that **melatonin** is the hormone produced by our body to help regulate our sleep cycles. You can take it as a supplement, which is especially useful when sleep cycles are off. **Tart cherry juice** contains notable melatonin levels, and studies show it does help promote sleep (2 glasses taken daily), whether via melatonin or anti-inflammatory effects, we don’t know. Also, St. John’s wort contains some melatonin (as well as serotonin).

Valerian (*Valeriana officinalis*) ~ Warming Sleep Herb & Muscle Relaxer L+G+S+

This fragrant garden heliotrope has stinky, earthy, sweet-smelling roots that are harvested in the spring or fall. It is one of our more useful sedative herbs, best known for insomnia. The research is limited, and many of the studies combine it with other herbs like hops and lemon balm. However, herbalists rely on it as a muscle relaxer and CNS depressant. It is used in restlessness, emotional stress, pain, insomnia, anxiety, nervous palpitations, nervous irritation, cardiovascular arrhythmias, high blood pressure, ADHD, menstrual cramps, sciatica, jerking, backache, and shingles. Its action seems to be partly due to volatile oils and alkaloids, as well as amino acids

like arginine, GABA, glutamine, and tyrosine. Use: I find it most useful as a simple for insomnia. It appears to work better for people who are slight, nervous, and tend to be cold. General herb doses. Teaspoon to tablespoon doses for extreme pain. Cautions: Larger, hot people may find it agitating rather than relaxing. Not recommended to combine with sedative drugs, barbiturates, or alcohol. May aggravate depression.

Hops (*Humulus lupulus*) ~ Cooling Sleep Herb, Anti-Inflammatory, Estrogenic LW-CS

For those hot-blooded peeps who do NOT do well with valerian, hops is a worthy herb to consider – though it can also be combined with valerian. We use the fresh or dried strobiles (which are kind of like flowers but actually the seed cones of this marijuana relative that is also used to make beer) of this vine. Hops is strongly sedating as well as pain-relieving/anti-inflammatory and energetically cooling. It's such a strong bitter with a tea that resembles the taste of beer, you'll probably prefer to take it as a tincture or capsule, and it's also sometimes slipped into dream pillows, placed underneath your pillow to enhance sleep and dreams (especially in combination with mugwort). Hops has some other interesting uses – as a source of phytoestrogens, it can be useful for balancing excess or deficient estrogen levels and improving sleep and night sweats during menopause. And some preliminary studies suggest it helps with weight loss. Both the strobiles and the leaves of hops are antimicrobial and can be used topically for this use – the bitter flavor and antimicrobial action is partly why they use it in beer. It grows voraciously curling up trellises in one growing season and can be a target of hungry caterpillars. Cautions: The intense bitter/digestive as well as the estrogenic properties means this herb isn't always best for everyone. Watch for drug RX, especially with sedatives, psych meds, and pain meds.

California Poppy (*Eschscholzia californica*) ~ Sleep, Pain, Twirling Thoughts LCS

California poppy grows wild in the dry fields and plains of the southwest and Mexico, but it's also relatively easy to grow from seed in the northeast garden by direct sowing. The seed packets are widely available in spring. We use the aerial part in flower or the whole plant (the taproot is a fascinating translucent orange). It's not addictive or dangerous like some of its poppy relatives; however, we do owe some of its calming and pain-relieving benefits to a mild fuzz of safe opiate compounds. It's even a popular sedative for kids with some anti-brat properties (helpful for bratty adults, too!). It can be used for anxiety and the like but is most popular for sleep, particularly when insomnia comes with whirling thoughts and/or pain that keeps you awake. The tincture is most popular, but it could be used as a tea or capsule. Cautions: Relatively safe, but watch for depression and drug RX like the other sleep herbs. While it's unlikely that poppy could aggravate opiate addictions, I'd be cautious. I've seen mixed info on whether or not it could give a false positive on drug tests.

Serotonin & Mood Boosting

Serotonin is one neurotransmitter that plays a key role in mood and sleep, though of course it's not the only thing at play. **Tryptophan** (available in complete protein and as a supplement) and **5-HTP** naturally boost serotonin levels. Beyond the serotonin connection, most of our adaptogens do well for mood and depression, as do some of our nerviness and gently calming herbs (though those that are overly sedating may worsen depression). Decreasing inflammation also boosts mood (and increased inflammation worsens it) – an anti-inflammatory diet, **omega-3s**, and anti-inflammatory herbs and spices might help.

St. John's Wort (*Hypericum perforatum*) ~ Depression & Nerve Pain/Skin Issues L+W+CS+

St. John's wort is a SUN HERB. It blooms on the longest (sunniest) day of the year (near summer solstice and the feast of St. John). It has yellow flowers with red pigments in the buds. It brightens the mood and helps with burns and burning pain. Topical use can act as a mild sunscreen and help soothe sunburns. In rare cases, internal use can cause photosensitivity (sun rash). There is a lot of lore around this plant, for example, that it protects against witchcraft. Historically St. John's wort was used for nerve pain, neuralgia, injuries to the spinal cord, sciatica, shingles, facial neuralgia, etc. More recently, German researchers brought it to the forefront as a medication for mild to moderate depression. It appears to increase serotonin. The constituent hyperforin is a serotonin, dopamine, noradrenaline, GABA and glutamate reuptake inhibitor. The constituent hypericin appears to raise the concentration of melatonin. It generally takes 2-6 weeks to see improvements in depression, though some people notice improvements more quickly. It is also used in protocols for fear, insomnia, anorexia, anxiety, and poor self esteem. The bright red infused olive oil made from the fresh buds is used topically for nerve pain, burns, muscular pain, ear aches, and diaper rash. Use: General herb doses. The generally recommended dose for depression is 300 mg 3x/day of SJW standardized to hypericin. Cautions: Generally safe. In extremely rare cases, it may cause photosensitivity & rashes. (More likely to occur with fair complexions.) Do not use with pharmaceutical drugs. SJW affects the cytochrome P450 pathway, which metabolizes many drugs (cardiac, contraceptive, anti-rejection, etc.). Taking SJW with medication may make the medication less effective. It is also not recommended to combine it with SSRIs, MAO inhibitors, or other anti-depressive drugs. It is not recommended in pregnancy due to emmenagogue and abortifacient effects.

Mimosa (*Albizia julibrissin*) ~ Antidepressant, Anti-Anxiety "Tree of Happiness" L-W-CS-

Albizia, known in Chinese medicine as the "tree of collective happiness," has long been used to boost mood, quell anxiety, and promote joy. It is not as well known in the West even though it grows here abundantly. Only a handful of highly preliminary studies have been done, but they support traditional use. In my own practice, I find fresh or freshly dried bark tincture of mimosa fast-acting and among my most reliable herbs for depression and anxiety without over-sedation – often better than St. John's wort. The pink powder puff blossoms can also be used but are not as strong. You can make your own medicine or find "Albizia" tincture from a few herb companies. Cautions: It appears to be very safe, but use caution when combining it with pharmaceutical antidepressants and mood drugs.

Turmeric (*Curcuma longa*) may not come to mind as an antidepressant... more for its antioxidant, anti-inflammatory, and liver detoxifying properties. Yet it has performed exceptionally well in recent clinical studies on major depression. In one, 500 mg curcumin capsules taken twice a day for eight weeks significantly improved major depressive disorder symptoms. Another study found that this same dose improved the efficacy of antidepressant medications in major depression. Researchers compared 1000 mg of curcumin with 20 mg of Prozac or a combination of the two. Individually, both treatments had nearly 65 percent improvement, combining them bumped success to nearly 80 percent. Cautions: It's generally very safe but may interact with blood thinning medications.

AROMATHERAPY

Fragrances have a profound impact on our psyche. Pure essential oils are highly concentrated plant preparations that contain a plant's aromatic properties. EOs can be inhaled, diffused, added to the bath, etc. (It is always best to dilute essential oils before putting them in contact with your skin.) Or simply rub the real plants in your hands and then inhale. Mmmm...

- **Lavender:** relaxing, calming, soothing, antimicrobial, wound/burn-healing
- **Citrus (Lemon, grapefruit, orange, tangerine...):** uplifting, anti-depressive (Can cause phototoxic skin reaction if not well diluted)
- **Rosemary:** clear-thinking, memory, invigorating, antigerms
- **Peppermint:** energizing, uplifting, clear-thinking
- **Sandalwood:** grounding, relaxing (Old growth, oft poached!)
- **Vanilla:** soothing, uplifting (EO is expensive, but you can use the kitchen extract, too)
- **Lemon balm:** uplifting, anti-depressive, anti-anxiety, calming (EXPENSIVE!)
- **Jasmine, Neroli &/or Rose:** soothing, relaxing, romantic (EXPENSIVE!)

Easy Aromatherapy Mist

Combine the following in a spray bottle & shake before using.

- 50% distilled water
- 50% vodka/vanilla extract/etc.
- 10-20 drops essential oil(s) per ounce of mist
- 1-5 drops flower essence(s) per bottle (optional)

FLOWER ESSENCES

In contrast to the highly concentrated essential oils, flower essences are highly dilute extracts of flowers preserved in water and brandy. They're more like homeopathic remedies in that they have almost no chemistry yet offer vibrational healing that encourages the body to heal itself. A typical dose is 1-3 drops on the tongue or 3-5 drops added to a water bottle or tincture mix. You can even add them to your aromatherapy spray, though the flower essence itself doesn't have an odor. Bach Flower Essences is a popular commercial brand. Also see lichenwood.com.

- **Rescue Remedy:** A blend of five flower essences used for stress, trauma, and anxiety. Helps any stressful situation where you need to be able to collect yourself and be in charge of your emotions.
- **Elm:** Helps you when your responsibilities overwhelm you. You feel depressed and exhausted with low self-esteem.
- **Blueberry:** Resiliency. This fortifies us emotionally, physically, spiritually to bounce back.
- **Aspen:** Helps you when you feel fearful without knowing why.
- **White Chestnut:** Your mind is too cluttered with thoughts/worries that you can't fall asleep.
- **Lavender:** Spiritual calm. Consider it for anxiety, insomnia, headaches, and pain.
- **Valerian:** Deep peace. Much like the valerian tincture, consider it for anxiety, insomnia, and a general restlessness of the soul.
- **Peppermint:** Mental Clarity. Much like the scent of peppermint, this essence helps bring the mind into focus, alert, and energetic.
- **Gentian:** Frustration and despair due to set-backs.
- **Impatiens:** You feel irritated, impatient and other people's lack of speed get on your nerves.
- **St. John's Wort (*Hypericum perforatum*):** Protection from the Sun. Consider this herb for nightmares and when you feel over-exposed and easily affected by others emotionally. Interestingly, St. John's wort has been used to protect from witchcraft and evil in historical lore.
- **Lady's Slipper (*Cypripedium* spp):** On the Path. This deep, meaningful essence helps people find and live their true life's purpose. (Made WITHOUT harvesting the plant)
- **Dandelion (*Taraxacum officinale*):** Joy & Tension Release. This essence helps ceaseless "doers" step back and enjoy life, as well as to release tension from our muscles and listen to your body.
- **Comfrey (*Symphytum officinale*):** Deep healing. Consider it for longstanding and acute health problems and pain.

Adaptogen Recipes *(remember to check for herb-drug RX)*

Energizing Bonbons

Mix 2/3 nut butter 1/3 honey and a couple teaspoons of dry herb powders (maca, shatavari, ashwagandha, codonopsis, cacao, hawthorn, turmeric, bacopa, holy basil, gotu kola...). Roll into balls, coat in cacao powder, toasted sesame seeds, or toasted coconut.

Deep Energy Immune Chai

In 16 ounces of water, simmer 1/2 teaspoon each adaptogen/immune herbs of choice (ashwagandha, codonopsis, chaga, astragalus, slice of reishi), 1 teaspoon each nettle and oat straw, with 7 whole cloves, 2 cardamom pods, 1 star anise pod, 2 cinnamon sticks, and an optional "coin" or slice of ginger for 20 minutes. Strain and add milk/sweetener as/if desired.

Sweet-Tart Immune Tea

Steep 1 teaspoon each elderberries, hibiscus, and schizandra berries in 16 ounces hot water for 15+ minutes with a good dollop of honey.

Ashwagandha Golden Milk

Simmer or stir into hot milk: 1/4 teaspoon ashwagandha powder, 1/4 teaspoon turmeric powder, pinch each of nutmeg and black pepper and 1/2 teaspoon of honey or to taste. (For milk, use whole cow's milk, almond, coconut, hemp, oat - the fat in these milks aids absorption).

Holy Green Tea

Add to your favorite green tea (I love jasmine green, especially pearls) 1 teaspoon dry or 1 sprig fresh holy basil (tulsi). Steep 3-5 minutes. Also check out Organic India's Tulsi Teas in stores.

Sleep Tea

Steep 1/2 tsp each lemon balm, skullcap, passionflower & spearmint in 4-6 ounces of hot water for 15-20 minutes. Strain, sweeten with honey as desired.

Broth: reishi, astragalus, ashwagandha, codonopsis...

Smoothies: maca, ashwagandha, codonopsis, gotu.

Herbal Teas: Infusion (Steep)

This method is best for delicate parts of a plant, leaves and flowers. When you make tea from a teabag, you're making an infusion. Use 1 tsp to 1 Tbsp of dried herb per cup of water. Cover and let steep for 5-20 minutes, strain, and drink. Larger amounts of herb and longer steeping times make stronger tasting teas, less herb and time makes a lighter tea. For **Fresh Herbs**, use 2-3 times more herb, cover, let steep 30+ minutes.

Herbal Teas: Decoction (Simmer)

The decoction method is best for harder parts of herbs, roots, bark and seeds. These parts of the plant often make a weak tea if only allowed to infuse; simmering/decocting gets their properties out faster. Use 1 tsp to 1 Tbsp of dried herb per cup of water. Simmer for 5 to 20 minutes, strain, and drink. Larger amounts of herb and longer steeping times make stronger tasting teas, less herb and time makes a lighter tea. Soup is a tea! Great for tonics, nutritives, mushrooms.

Fresh Herb Tincture

Chop up fresh herbs or roots, and stuff them in a mason jar until you can't fit any more. Fill the jar to the brim with whole grain alcohol or high proof vodka or brandy. A day later, top the jar off again. Leave the jar in a dark place for at least one month (or as long as you like). Strain it out with a fine mesh strainer and muslin or cheesecloth to squeeze out the last bit. This method will give you approximately a 1:2 fresh herb extraction, meaning that for each ounce (weight, as shown on a kitchen scale) of herb, you add 2 ounces (volume, as shown on a glass measuring cup). Most herbs do well with a fresh tincture: lemon balm, echinacea, valerian... Most tinctures are shelf stable for up to 10 years, then lose potency.

Dry Herb Tincture

Powder your herb in a food processor if it isn't already in powder form. Per 1 oz (weight on a kitchen scale) of herb, add 5 ounces of alcohol/water mix. (Do NOT use whole grain alcohol unless you dilute it with distilled water.) The ideal alcohol/water ratio will vary by herb, but 40-60% (80-120 proof vodka or brandy) works for most herbs. Add about 10% vegetable glycerin for high tannin herbs like cinnamon. Combine your ingredients in a mason jar and shake your mixture as often as possible, aiming for 2xs/day. After no less than one month (more is fine), strain the mixture through a coffee filter-lined strainer. This is a 1:5 dry tincture. It works well for some aromatic herbs such as lavender, but is most often used for herbs that are primarily available dry: cinnamon, chocolate, cardamom, astragalus...

Capsules

Start with dry, powdered herb. If you have cut/sifted herb, grind it in a coffee grinder/bullet (then sift through a fine mesh strainer if you'd like). Using a capsule machine or your hands, fill the bottoms of empty capsules (I like "00" veg caps - make sure your machine matches). Snap on the top cap. Store in a glass container in a cool dark, dry spot for up to one year. One full "00" cap is about 500 mg.

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