

In our culture talking about mental illness is a rather recent phenomenon, but the experience of mental illness is as old as human existence. Over the ages various emotional/psychological problems have been given many diverse names (madness, hysteria, "the vapors", lunacy, the blues, melancholia, etc.) and associated with many causes including being female, menstruation self-abuse (masturbation), emotional weakness, religious fervor, a full moon and many other equally flawed explanations.

We still have a relatively poor understanding of what is perceived as emotional/psychological illness and in many ways, even though we have a much greater knowledge of the brain and brain chemistry, it has become much more difficult to separate what is an emotional illness from a physical ailment.

Western medicine's reliance on either talk therapy or pharmaceutical medications such as SSRIs (Paxil, Prozac, Zoloft), SNRIs (Cymbalta, Effexor, Pristiq), tricyclic antidepressants (Amitriptyline, Doxepin, Nortriptyline), and occasionally MAOIs (Selegiline or Moclobemide) offers some benefits but often do not address the physiological, emotional, nutritional, familial or societal causes of depression. Over the years I have seen many patients who were helped by conventional treatments only to continue to stay in mind numbing jobs, bad relationships and unhappy circumstances. Perhaps they could function better, but they were still lacking in joy and contentment. In addition, adverse effects are common with medications and there is significant research showing that pharmaceutical medications for depression are not significantly more effective than psychotherapy alone, exercise, acupuncture or active controls (Khan, et al, 2012; Kirsch, 2009 & 2008; Turner, et al, 2008). The theory that all depression is caused by decreased serotonin, dopamine or norepinephrine is seriously flawed and overly simplistic. There are several ways that orthodox medicine classifies depression. The Hamilton Depression (HAM-D) scale rates the severity of depression. A score of 10-13 is mild depression, a score of 14-17 is mild to moderate depression (dysthymic depression) and greater than 17 is moderate to severe depression (major depression). Patients with severe depression (scores greater than 20) tend to be resistant to treatment. Other types of depression recognized by orthodox medicine include mixed anxiety/depression disorders, manic or bi-polar depression, seasonal affective disorder (SAD), post-traumatic stress disorder (which often includes depression and anxiety) and situational depression (also known as adjustment disorder with depression).

All of these disorders are very real, but from a more integrative perspective, it is important to understand the root causes of the disorder in order to effectively treat the person. First we look at personal health, family relationships, career and spiritual issues. Growing up in a family with a depressed parent is a major risk factor for you to be depressed. In some cases the issue may be genetic, but frequently depression is a learned behavior and coping mechanism. The tendency to become depressed and feel a certain degree of comfortability in one's depression can be unlearned. People in relationships with a depressed person are more likely to become depressed themselves – depression can be contagious! It is not enough for the depressed person to receive counseling and treatment, the entire family should be given help.

We live in a very stressful, complicated and often confusing world. Our expectations of ourselves, our significant others, our children and our lives are enormous. Many of us live isolated lives with unfulfilling relationships and careers. It is not uncommon for people to feel empty, with no direction, no realistic goals (winning the lottery is not a realistic goal), struggling to make ends meet and feeling a very real sense of desperation and hopelessness.

If this is truly someone's life, then I would suggest that depression is a very sane and rational response to the life and circumstances that person lives in. People in good relationships, people with a sense of purpose, a deep spiritual connection and who spend time in nature are more resistant to depression. Several human studies have found that as little as 20-30 minutes, twice per week of time spent in green spaces (parks, gardens, woods, etc.) elevates mood and helps relieve both depression and anxiety (Berman, et al, 2012).

When I work with a depressed person, I look at many factors and attempt to discern the underlying issues that contribute to this condition. Understanding the root cause and type of depression gives the clinician a strong starting point for effective treatment and changing the “root” of the problem.

GI-based depression - most competent herbalists, upon hearing a patient is depressed, inquire as to the state of that person’s digestion and eliminatory function. While this might seem irrelevant, it most certainly is not. Much of the body’s serotonin is produced in the GI tract, in the “enteric brain”. While this serotonin cannot pass the blood-brain barrier, associated precursor compounds can and do. A healthy intestinal microbiome is also essential for helping to maintain a healthy emotional state and gut dysbiosis has been linked to both depression and anxiety. So intestinal dysbiosis, dyspepsia, chronic constipation or diarrhea, IBS, IBD, leaky gut syndrome and other GI tract disorders can directly affect mental health. In addition to chronic GI problems, the person with GI-based depression tends to be moody, lethargic or despondent. As an herbalist, I see certain herbs as being specific for GI related depression, especially Culver’s root, St. John’s wort, Wormwood, Saffron and Evening Primrose leaf/root.

Liver-based depression - in ancient Greek medicine, the word melancholia described a state in which a person had an excess of the black (melan) bile (choler). This humoral imbalance led to symptoms including irritability, depression (often with anxiety), angry thoughts, loss of appetite, insomnia, nausea and biliousness. This symptom picture is indicative of hepatic depression which can be treated with St. John’s wort, Wormwood, Rosemary, and Culver’s root.

Hormonal depression – in both women and men hormonal depression can occur. Post-partum, PMS and menopausal depression are the most common forms of hormonally-induced depression in women. Herbs such as Black Cohosh, Night Blooming Cereus, Bupleurum/Chai Hu, Tiger Lily and Pulsatilla are most likely to be effective for this type of depression (B-6 and vitamin D may also be useful). Puberty associated depression is not uncommon, and for this condition I use Mimosa bark, Lemon Balm, St. John’s wort and Black Cohosh. As men age, by their late 50s and 60s it is not uncommon for them to begin to re-evaluate their lives (mid-life crisis). While there are social reasons for this phenomenon, it is also a time of dropping testosterone levels, increasing cortisol levels and andropause. I find it is not uncommon for some men to develop what I call “grumpy old man syndrome”. They become increasingly isolated, irritable, with a lack of motivation and patience. Saw Palmetto, Black Cohosh, Muira Puama, Fresh Oat and Pulsatilla are useful for this condition. The supplement propionyl L-carnitine has also been found to relieve depression, fatigue and sexual dysfunction in andropausal men (Cavallini, et al, 2004).

Stagnant depression is a term I coined to describe a type of chronic situational depression. In these cases some type of trauma has occurred and it becomes the focus of their life. Literally their entire existence revolves around and becomes fixated on this event. In some cases it is a truly terrible tragedy-the loss of a child, parent or spouse. For some it could be the loss of a pet, a job or even something most of us would not consider especially significant. Post-traumatic stress disorder fits into the category of stagnant depression, as does chronic unrelenting grief. Several herbs have great benefit for this type of depression including Lavender, Rosemary, Damiana, Rose petals, Holy Basil and Mimosa bark.

Old-Age depression - is also a common disorder in the elderly. There are multiple causes for this, including fear of death and disease, loss of a spouse or friends, medication-induced depression (corticosteroids, pegylated interferon/ribavirin therapy, statin drugs,  $\beta$ -blockers), substance-induced depression (alcohol, ecstasy), malnutrition, cholesterol levels under 148 in men, lack of exercise, menopause, andropause and illness (diabetes, Alzheimer’s, congestive heart failure, stroke, etc.). Various herbs may be appropriate for depression in the elderly including Night Blooming Cereus, Damiana, Ginkgo, Mimosa bark, as well as adaptogens. Do not use St. John’s wort with elderly patients (or any person) taking warfarin, digoxin or cyclosporine. The supplement acetyl-L-carnitine (500 mg TID) has also been found to relieve depression in the elderly (Salvioli & Neri, 1994; Garzya, et al, 1990).

Thyroid-induced depression – is often caused by hypothyroidism. Symptoms of hypothyroidism include feeling cold, depression, modest weight gain, decreased libido, irritability, fatigue, coarse, dry skin, thinning hair, constipation, poor memory, muscle cramps and carotenemia in the palms and soles. Treatment with synthroid/levoxy/levothroid (synthetic T4/levothyroxine) is often effective. Other pharmaceutical options include Cytomel, Armour desiccated thyroid and thyrolar (synthetic T4/T3 in combination). For mild cases of hypothyroidism, L-tyrosine, iodine, selenium, Ashwagandha, Bacopa, Bladderwrack and Red Ginseng may be an effective treatment. These last three herbs plus Damiana are also used for hypothyroid-induced depression.

Cardiovascular-based depression - is common in people recovering from myocardial infarctions or strokes. Whether this is due to fear of death or the fact that the heart has endocrine function and receptors for many neuropeptides (or both) is unclear. Herbs that can help cardiac depression include Hawthorn, Night Blooming Cereus, Rhodiola and Jiaogulan. Herbs for stroke-induced depression include Bacopa, Rosemary and Holy Basil. Supplements that enhance cardiac function such as L-Carnitine, L-Taurine and Co-Q-10 may also have secondary benefits for cardiac depression.

Stress-induced depression – chronic stress can contribute to depression (or anxiety). With chronic stress you can have elevated cortisol levels, which can not only cause depression, but also HPA axis depletion, obesity, insomnia, hypertension, impaired digestion and decreased immune function. Lifestyle issues such as lack of exercise, poor sleep quality or lack of sleep, obesity and overuse of alcohol can exacerbate stress-induced depression. The most useful herbs for this condition are nervines such as Fresh Oat, Chamomile, Linden flower, Lemon Balm or St. John's wort. In addition, adaptogens such as Eleuthero, American Ginseng, Schisandra or Jiaogulan are appropriate. Stress reduction techniques such as meditation, hypnosis, biofeedback, yoga or Tai Qi can be very useful as well. The supplements L-Theanine, calcium and magnesium have also been found to help relieve chronic stress.

HPA axis dysfunction-induced depression – is similar to stress-induced depression, but is more severe with greater endocrine dysfunction, which has been found to be strongly correlated with depression (and chronic pain). In many cases blood sugar dysregulation may contribute or exacerbate this problem (see blood sugar dysregulation-induced depression) and chronic stress is often a major contributor (see stress-induced depression). Children, adolescents and adults with depression exhibit a heightened cortisol response (Aihara, et al, 2007) and HPA hypersensitivity (Stetter & Miller, 2011). While pituitary and adrenal response remained normal, they had an over-reactive response to stress and it is believed to result from dysregulation of the HPA axis negative feedback system and oversensitivity to corticotrophin releasing hormone (CRH) or ACTH/adreno-corticotrophic releasing hormone (Lopez-Duran, et al, 2009). Adaptogens such as Asian Ginseng, Cordyceps or Ashwagandha may be of benefit for this type of depression, as well as nervines.

Blood sugar dysregulation-induced depression - poor blood sugar control (hypoglycemia, metabolic syndrome and type II diabetes) is associated with increased risk of depression. Controlling blood sugar levels through improved diet, weight loss, exercise, increased fiber and supplements (chromium, magnesium, zinc) is essential. Adaptogens that lower blood sugar levels or decrease insulin resistance such as American or Asian Ginseng, Holy Basil and Codonopsis can also be useful for depression associated with blood sugar issues.

Nutrient deficiency-induced depression - many nutrients are essential to good mental health and common vitamin or mineral deficiencies can cause or exacerbate depression. These include Omega 3 fatty acids, vitamins C, D, B-1, B-2, B-6, B-12, niacin, folic acid, pantothenic acid and minerals such as magnesium, calcium, zinc, potassium, and manganese (Högberg, et al, 2012; Berk, et al, 2007; Sinclair, et al, 2007; Wilkins, et al, 2006; Rountree, R., 2004).

Seasonal affective disorder (SAD) is caused by a lack of sunlight and may be exacerbated by vitamin D deficiency. In the northern hemisphere, supplementing 2,000 i.u. per day of vitamin D can have a significant benefit for winter depression. Light boxes and full spectrum lighting in homes can also be useful. Herbs such as Lemon Balm with St. John's wort, as well as the supplement SAMe (400-1200 mg in the morning on an empty stomach) can be of great benefit.

Bi-polar or manic depression - is very challenging to treat. If the person cycles slowly, giving appropriate antidepressant herbs during the depressive stage and nervines and calming adaptogens during the manic phase can be useful. If the person cycles quickly, nervines (Fresh Oat, Hawthorn, Scullcap) and mild adaptogens (Eleuthero, Codonopsis) may be of some help. Omega 3 fatty acids (fish oils only) have been shown in a small clinical trial to be of benefit for bipolar depression but not mania (Sarris, et al, 2012; Frangou, et al, 2006). Oral magnesium has been shown to be as effective as lithium for treating rapid cycling mania (Sarris, et al, 2011). Several other nutrients have been shown to have modest benefits for the depressive state in bi-polar (NAC, folic acid) and for mania (branch chain amino acids).

### **Depression Materia Medica**

**Asafoetida gum resin** (*Ferula asafoetida*) – is used for GI-based depression with nervous irritation, hysteria, headache, dizziness and flatulence. The person's muscles are tight, ticklish or painful to the touch (body armour).  
Dose: tincture (1:5) - .25-1.5 mL TID

**Black Cohosh root** (*Actaea racemosa*) – is effective for "doom and gloom" depression, which is a hormonal depression (post-partum, menstrual or menopausal). Use it with Night Blooming Cereus and Tiger Lily. It can also be used with Ashwagandha, Pulsatilla and Saw Palmetto for andropausal depression, or what I call "grumpy old man" syndrome.  
Dose: fresh tincture (1:2) - .5-.75 mL TID

**Bupleurum root/Chai Hu** (*Bupleurum chinensis*) – is used in TCM for liver qi stagnation which causes female reproductive issues, including PMS mood swings, depression and anxiety. Animal studies suggest that this herb has antidepressant, anxiolytic and nootropic effects (Lee, et al, 2012).  
Dose: tincture (1:5) – 1-1.5 mL TID  
tea - 1/2-1 tsp. dried root, 10 oz. water, decoct 10-15 minutes, steep for 1 hour, take 4 oz. 2-3x/day

**Coffee bean** (*Coffea arabica*) – was used by the Eclectic physicians for nervous depression with dull thoughts and constipation. For heavy consumers of coffee, withdrawal can cause minor depression, headaches and constipation.  
Dose: as a beverage - 1-2 cups per day

**Cola nut** (*Cola acuminata*) – is indicated for neurasthenia with mental despondency and foreboding. The person is quiet or silent about their problems.  
Dose: tincture (1:5) - 1-2 mL QID

**Culver's Root/Leptandra** (*Veronicastrum virginicum*) – is used for depression with dull headaches, especially behind eyes, an enlarged liver and clay-colored stools. Leptandra is used with Rosemary and St. John's wort for "hepatic depression" and Evening Primrose herb, Wormwood or St. John's wort for GI-based depression.  
Dose: tincture (1:5) 2-5 gtt, every 2-3 hours

**Damiana herb** (*Turnera diffusa*) – is indicated for mild depression with a marked loss of libido. It can also be used for depression of the elderly, stagnant depression (use it with Lavender, Holy Basil or Rosemary), and depression associated with hypothyroidism (use it with Ashwagandha and Bacopa).  
Dose: tincture (1:5) - 2-4 mL TID  
tea - 1 tsp. dried herb, 8 oz. hot water, steep 30 minutes, take 4 oz. TID

**Evening Primrose leaf, root bark, flower** (*Oenothera biennis*) – the Eclectic indications for this herb are depression associated with chronic dyspepsia, vomiting and frequent desire to urinate. The person is apathetic, gloomy and despondent. This is one of the best herbs for GI-related depression. Use it with Culver's root, Wormwood, Saffron or St. John's wort.  
Dose: tincture (1:5) - 2-3 mL TID

**Fresh Milky Oat seed** (*Avena sativa*) – is useful for situational depression in type A, hyperactive people who are emotionally brittle from chronic stress. Use it along with calming adaptogens.  
Dose: fresh seed tincture (1:2) – 4-6 mL QID

**Ginkgo leaf** (*Ginkgo biloba*) – is useful for depression caused by vascular insufficiency due to old age or head trauma injuries. In a clinical trial of standardized Ginkgo, it helped reduce dementia-induced psychiatric symptoms including depression (Bachinskya, et al, 2011). Ginkgo has also been shown to reduce antidepressant-induced anorgasmia (in women) and lack of libido, use it with Damiana, Saffron, Asian Ginseng or Muira Puama.  
Dose: extract standardized to 24% flavonoid glycosides - 240 mg. per day

**Holy Basil herb** (*Ocimum sanctum*) – is an adaptogen used for stagnant depression. The person is fixated on a specific traumatic event, and complains of fatigue and mental fog. Use it with Lavender, St. John's wort or Rosemary.  
Dose: fresh tincture (1:2) - 3-4 mL TID  
tea - 1 tsp. dried herb, 8 oz. hot water, steep 15 minutes, take 1-2 cups per day

**Lavender flower** (*Lavendula angustifolia*) – is useful for mild depression with difficulty thinking, the person may remark that he/she is in a fog. I use it regularly for stagnant depression (the patient is fixated on a specific traumatic event), with Damiana, Holy Basil and Rosemary. In a human clinical trial Lavender was as effective as Imipramine for treating mild to moderate depression (Akhondzadeh, et al, 2003). In a more recent study, the combination of Lavender tea and Citalopram was slightly more effective than the pharmaceutical medication alone (Nikfarjam, et al, 2013).  
Dose: tincture (1:5) 2-3 mL TID  
tea - 1 tsp. dried flowers, 8 oz. hot water, steep 20 minutes, take 4 oz. TID

**Lemon Balm herb** (*Melissa officinalis*) – is a wonderful, pleasant-tasting mood elevator, mild enough to use in children. It can be used in combination with St. John's wort for SAD (Seasonal Affective Disorder).  
Dose: fresh tincture (1:2) - 3-5 mL QID  
tea - 1-2 tsp. dried herb, 8 oz. hot water, steep 15-20 minutes, take 2-3 cups per day

**Mimosa bark/He Huan Pi** (*Albizia julibrissin*) – is a profound mood elevator useful for deficient insomnia, moodiness, broken hearts, grief and post-traumatic stress disorder (use it with Hawthorn flowers/berries and Rose petals). The flowers (He Huan Hua) can also be used but are milder and less active.  
Dose: tincture (1:5) – 1-2 mL TID

**Muira Puama wood** (*Ptychopetalum olacoides*) – has a long history of use in South America as a male sexual stimulant and “nerve tonic”. There is some evidence that it does enhance libido and erectile function. Several recent animal studies show the herb also has antidepressant, neuroprotective and nootropic effects (Piato, 2010; Piato, 2009; Piato, 2008). I have found this herb of benefit for andropausal and old-age depression.  
Dose: tincture (1:5): 1-2 mL (20-40 gtt.) TID  
tea - 1 tsp. cut/sifted wood, 10 oz. water, decoct 20 minutes, steep 1/2 hour, take 2 oz. TID

**Night Blooming Cereus stem** (*Selenicereus grandiflorus*) – or cactus, as it was known by the Eclectics, is used for depression with excessive fear. It is especially useful in depression caused by menopause (use it with Black Cohosh and Tiger Lily), old age (use it with Damiana and Ginkgo) and heart disease (use it with Hawthorn and Rhodiola).

Dose: fresh tincture (1:2) -.5-1.5 mL in 4 oz. water, mix. Take 1 tsp. every 2 hours

**Pulsatilla herb** (*Anemone pulsatilla*) – the Eclectics used this herb for depression with nervousness, dizziness and restlessness. The person is fearful, sad, constantly weeping with frequent exclamations of sorrow or grief. It can be used with Black Cohosh and Tiger Lily. For “Grumpy Old Man Syndrome” use it with Saw Palmetto, Black Cohosh, Fresh Oat and Ashwagandha.

Dose: fresh tincture (1:2) – 1-1.5 mL in 4 oz. water, mix. Take 1 tsp. every 2-3 hours

**Rhaponticum root** (*Rhaponticum carthamoides*) – is also known as Leuzia or Maral root. It is used in Russia as an adaptogen, antioxidant, heart and liver tonic. In a human study, the decoction relieved depression in recovering alcoholics (Ibatov, 1995).

Dose: tea: 2 tsp. cultivated dried root, 10 oz. water. Decoct 10-15 minutes, steep 45 minutes, take 4 oz. 4 times per day.

**Rhodiola root** (*Rhodiola rosea*) – I use Rhodiola for treating stagnant depression (with Lavender Holy Basil and Rosemary) and cardiac depression (with Night Blooming Cereus, Jiaogulan and Hawthorn). In a RCT a standardized Rhodiola extract (SHR-5) was beneficial for people with mild to moderate depression (Darbinyan, et al, 2007).

Dose: tincture (1:5) - 4-5 mL TID  
standardized extract – 340 – 680 mg per day

**Rosemary herb** (*Rosmarinus officinale*) – is indicated for dull, lethargic depression, thinking is too much of a bother. The person is in a constant mental fog. It is also used for hepatic depression (use it with Evening Primrose and St. John’s wort), depression with cerebral insufficiency (use it with Ginkgo and Bacopa) and stagnant depression.

Dose: tincture (1:5) - 2-4 mL TID  
tea – 1/2 - 1 tsp. dried herb, 8 oz. hot water, steep 15-20 minutes, take 4 oz. TID

**Rose petals** (*Rosa* spp.) – can be used as aromatherapy or as a tea/tincture for mild depression, broken hearts and sadness. Use it with Mimosa bark and Hawthorn berries/flowers.

Dose: tea: 1/2-1 tsp. Rose petals (mix with other herbs), to 8 oz. hot water. Steep 20 minutes, take 2 oz. TID.

**Saffron stigmas** (*Crocus sativus*) – this expensive spice has a long history of use in cooking, dyeing and as a medicine. It is used in Iranian medicine as a carminative, diaphoretic, nervine, cardiac tonic and antiasthmatic herb. I find it especially useful for GI-based depression, as well as cardiac-induced depression. There are 5 placebo-controlled, randomized trials of Saffron showing it is effective for mild to moderate depression. Several trials also showed it was as effective as pharmaceutical antidepressants (Akhondzadeh, et al 2007; Noorbala, et al, 2005) and it helped relieve SSRI-induced sexual dysfunction in both men and women (Kashani et al, 2013; Modabbernia, et al, 2012).

Dose: tincture (1:5) - .25-.75 mL BID  
tea – 4-6 stigmas to 8 oz. hot water, steep covered 10-15 minutes, take 2 oz. BID

**St. John’s wort flowering tops** (*Hypericum perforatum*) – is useful for mild to moderately severe dysthymic or situational depression. It is most effective for GI-based or hepatic depression. The person has a dyspeptic outlook, a sour stomach and a sour attitude. Use it with Rosemary, Culver’s Root or Evening Primrose herb. I also combine it with Lemon Balm for SAD.

There are many studies showing that even when Hypericum is not used for its specific indications, it is still more effective than placebo and as effective as SSRIs for treating mild to moderately severe depression and atypical depression (Mannel, et al, 2010; Kasper, et al, 2006; Uebelhack, et al, 2004). Combining St. John's wort with SSRI's should only be done under a physician's supervision and with caution.

Dose: tincture (1:5) - 3-4 mL QID

tea – 2 tsp. dried flowers/buds, 8 oz. hot water, steep covered for 45 minutes, take 4 oz.  
4x/day

capsule – standardized extract: 300 mg TID

**Tiger Lily bulb and herb (Lilium lancifolium)** – is indicated for depression with anxiety. The person fears to be alone. Frequent muttering under the breath and weeping. Usually it is associated with hormonal (menstrual, menopausal or post-partum) depression. Use it with Night Blooming Cereus, Black Cohosh and/or Pulsatilla.

Dose: fresh tincture (1:2) – 1 mL in 4 oz. water, mix. Take 1 tsp. every 2-3 hours

**White Baneberry root (Actaea alba)** – is similar in use to Black Cohosh, but it is used in a lower dose. It can be used for depression in women caused by hormonal imbalances with insomnia, headache, spasticity and especially ovarian tenderness.

Dose: tincture (1:5) - .5-.75 in 4 oz. water, mix. Take 1 tsp. every 3 hours

**Wormwood herb (Artemisia absinthium)** – this very bitter herb has a long history of use for melancholia or hepatic depression. In two studies Wormwood was found to help people with Crohn's disease stay symptom free, and it also improved HAM-D scores (Krebs, et al, 2010; Omer, et al, 2007). Use it with Evening Primrose herb and St. John's wort for GI-based depression.

Dose: tincture (1:5) - .25-.75 mL BID

tea (infusion): 1/2 tsp. dried herb, 8 oz. hot water, steep covered for 30-40 minutes, take 1-2 oz. before meals

### **Adjuncts to Antidepressant Herbs**

#### **Adaptogens**

The following adaptogens can be used as adjuncts along with antidepressant herbs for depression associated with exhaustion, chronic stress, HPA axis depletion (dark rings under the eyes, quivering tongue, old age) and chronic illness such as CFIDS, fibromyalgia or autoimmune disease.

American Ginseng root (Panax quinquefolius) – use it for depression caused by elevated blood sugar levels or stress-induced depression.

Asian Ginseng root (Panax ginseng) – use it for depressed people who are deficient, cold and fatigued or stress-induced depression.

Ashwagandha root (Withania somnifera) – is especially useful for depression associated with hypothyroidism.

Cordyceps fungus (Cordyceps sinensis) - use it for depression from over-exertion or CFIDS.

Dang Shen root (Codonopsis pilosula) – use it for depression caused by elevated blood sugar levels.

Eleuthero root/stem (Eleutherococcus senticosus) – use it for stress-induced depression.

Jiaogulan herb (Gynostemma pentaphyllum) – is especially useful for cardiac depression.

Licorice rhizome (Glycyrrhiza glabra, G. uralensis) – use for GI-based depression or depression caused by

elevated blood sugar levels

Reishi mushroom (Ganoderma sinensis) – is indicated for depression with irritability or bad dreams.

Schisandra berry (Schisandra chinensis) – use it for depression with anxiety or liver disease.

## **Nervines for Depression**

Nervines can be useful for some types of depression (stress-induced depression) as well as anxiety. I frequently add nervines to formulas for people with mixed depression/anxiety disorders and some that we have not already mentioned have specific benefits.

**Hawthorn berries/flowers** (*Crataegus oxycanthoides*, *C. monogyna*) – is useful for cardiac-based depression, especially when recovering from a myocardial infarction.

Dose: tincture (1:5), 3-5 mL QID

tea (Infusion): 1-2 tsp. ground dried berries, 8 oz. hot water, steep for 1 hour, take 3 cups/day

**Linden flower** (*Tilia platyphyllos*) – this herb is a wonderful remedy for mild depression, especially in children. It can be combined with Chamomile, Lemon Balm and Holy Basil for moodiness.

Dose: tincture (1:5), 2-3 mL TID/QID

tea (Infusion): 2 tsp. dried flowers, 8 oz. hot water, steep covered for 30-40 minutes, take 2-3 cups/day

Also see Bacopa, Blue Vervain, Fresh Oat, Motherwort and Scullcap under Anxiety.

## **Anxiety**

Occasional anxiety is normal. Feeling anxious about a job interview, public speaking, a first date, are normal responses to a stressful situation. For many people, chronic stress and chronic anxiety are closely linked. Elevated stress hormones (cortisol, adrenaline) can cause or exacerbate anxiety. Like depression, anxiety can be a learned behavior. Growing up in a household with an anxious parent increases the chances of an anxious child (there may be genetic components as well). Some pharmaceutical medications and recreational drugs can exacerbate anxiety, as can some medical conditions including Graves' disease, anorexia, Alzheimer's Disease, PMS and menopause. As with depression, disorders of the gut (enteric brain and gut biome) can contribute to anxiety. There are several diagnostic categories for anxiety disorders, they include:

Asthma-induced anxiety – there are several reasons why people suffering from asthma have a significantly higher incidence of anxiety. The inability to breathe provokes instant fear and the chronic worry about having an asthma attack due to exercise, humidity, heat, cold, dust, allergy, etc. can “train” someone to be persistently anxious. In addition, common antiasthmatic medications (corticosteroids, antihistamines and bronchodilators all are known to trigger anxiety in some people. Herbs that are specifically useful for asthma-induced anxiety include Asafoetida, Schisandra, Lobelia and Licorice.

Cardiac-induced anxiety –heart and circulatory problems such as CHF, stroke, hypertension and arrhythmias can cause or exacerbate anxiety. Motherwort, Hawthorn and Night Blooming Cereus can be especially effective for relieving this type of anxiety.

Drug-induced anxiety – many pharmaceutical and over the counter medications can cause or worsen anxiety. Medications including beta-blockers, thyroxin, corticosteroids, bronchodilators, antihistamines, amphetamines, SSRIs and fluoroquinolone antibiotics can all cause anxiety. Illicit drugs including cocaine, MDMA (Ecstasy), cannabis or LSD can also cause anxiety disorders. The overuse of alcohol or coffee and withdrawal from cigarettes and alcohol can also trigger anxiety. Certain chemicals found in the diet such as aspartame can act as neuro-excitants, provoking anxiety, petit mal seizures and headaches.

GI-based anxiety - a healthy gut produces natural benzodiazepine-like compounds which keep us calm and relaxed. GI problems such as IBS, IBD, GI dysbiosis or leaky gut syndrome can interfere with the production of these substances. Human research also has found that probiotics (*Lactobacillus helveticus* and *Bifidobacterium longum*) had significant anxiolytic activity (Messaoudi, et al, 2011). Food sensitivities can also trigger anxiety, the most common problem foods are gluten (wheat, rye, spelt barley and triticale) and dairy. The gluteomorphins and caseomorphins found in these foods binds with opioid receptors and can provoke a neurological response.

Generalized Anxiety Disorder (GAD) – is characterized by chronic anxiety, constant worry, muscle tension, irritability and in some cases insomnia, sweating, headaches, muscle pain and fatigue. I use anxiolytics such as Bacopa, Motherwort, Chinese Polygala, Blue Vervain and Fresh Oat for treating GAD. Always look for underlying factors (gastrointestinal issues, especially gut dysbiosis, nutrient deficiency, HPA axis depletion, sleep issues, etc.) when treating GAD.

Hormone-induced anxiety – premenstrual and menopausal anxiety are the most common types of hormone-induced anxiety. Chaste Tree, Blue Vervain, Motherwort and Tiger Lily are especially useful for this type of anxiety.

Old-age anxiety – in our older years fear of death, increasing isolation, health issues (Alzheimer's, cardiovascular disease, diabetes) and impaired digestion, GI health can cause or contribute to anxiety. Night Blooming Cereus, Ginkgo, Fresh Oat, Gotu Kola, Holy Basil, Muira Puama and Bacopa may be of benefit for treating this type of anxiety.

Panic Disorder (anxiety attacks) – are intense, almost paralyzing episodes that can occur without warning. In patients with anxiety attacks, symptoms often include sweating, intense fear, difficulty breathing, fainting, dizziness, nausea, diarrhea, racing heart, hyperventilation, chest pain and headaches. For panic disorders, I add Pulsatilla to Bacopa, Chinese Polygala, Motherwort and Blue Vervain.

Stress-induced anxiety – chronic stress with elevation of cortisol levels can cause or exacerbate anxiety. Nervines and calming adaptogens are most appropriate for this type of anxiety, along with stress-reduction techniques, L-Theanine and magnesium.

Thyroid-induced anxiety – is usually caused by Graves' disease or other forms of hyperthyroidism. Medical intervention may be needed in severe cases, but herbs such as Bugleweed, Self Heal, Motherwort and Lemon Balm can help decrease over-active thyroid function and reduce symptoms including anxiety, palpitations and agitation.

PTSD, Social Anxiety (extreme shyness), and obsessive-compulsive disorder are also classified as anxiety disorders.

### **Anxiety Materia Medica**

**Bacopa fresh herb** (*Bacopa monnieri*) – is an effective anxiolytic, especially useful for "cloudy thinking", mental confusion with anxiety and nervous exhaustion with agitation. It is effective for old-age anxiety, GAD and stress-induced anxiety. In a RCT of elderly people Bacopa improved cognitive function and memory while reducing anxiety and depression (Calabrese, et al, 2008). It can also be used for hypothyroid-induced depression.

Dose: tincture (1:5) - 2-4 mL TID

tea – 1 tsp. fresh herb, 8 oz. water, steep 45 minutes, take 4 oz. 3x/day

**Black Haw bark** (*Viburnum prunifolium*) - can be used for anxiety associated with pregnancy. Use it with Fresh Oat and Rescue Remedy.

Dose: fresh tincture (1:2.5) 2-4 mL TID

tea - 1-2 tsp. dried bark, 8 oz. water, decoct 15 minutes, steep 1/2 hour, take 4 oz. QID

**Blue Vervain herb** (*Verbena hastata*) – is one of my primary herbs for PMS or menopausal anxiety, anxiety with nervous tics, tremors or spasms. Use it with Motherwort, Pulsatilla and Scullcap.

Dose: tincture (1:5) - 1-2 mL QID

tea – 1 tsp. dried herb, 8 oz. water, steep covered 40 minutes, take 4 oz. 3x/day

**California Poppy fresh root and herb** (*Eschscholtzia californica*) - useful in people with excess/hyper insomnia, with anxiety, nervous tension and stress headaches.

Dose: tincture (1:2) - 1.5-3 mL 3-4 times per day

tea – 2 tsp. dried herb, 8 oz. water, steep 1 hour, take 2-3 cups/day

**Chamomile flower** (*Matricaria recutita*) – is a time tested remedy for mild anxiety, anxiety-induced GI symptoms (constipation, nervous stomach, bowel spasms) and PMS anxiety. It is useful for people with highly labile emotions (use it with Fresh Oat) and an excessive vaso-vagal response. In a RCT trial Chamomile was shown to alleviate anxiety and reduce HAMA-A scores (Amsterdam, et al 2009)

Dose: tincture (1:4-1:5 or 1:2.5) 3-5 mL TID

tea (Infusion): 1-2 tsp. dried flowers, 8 oz. hot water, steep covered for 45 minutes, take 3-4 cups/day

**Chinese Polygala root** (*Polygala tenuifolia*) – is a very effective anxiolytic agent. I use it with Motherwort, Blue Vervain and Bacopa for general anxiety and add Pulsatilla to that formula for panic disorder. It is also used for insomnia, anxiety-induced palpitations and impaired memory.

Dose: tincture (1:5) - 1-1.5 mL TID

tea - 1 tsp. honey stir-fried Polygala, 8 oz. water. Decoct 5-10 minutes, steep 1 hour, take 2 oz. TID

**Fresh Milky Oat seed** (*Avena sativa*) – is useful for nervous exhaustion or neurasthenia with anxiety, irritability, labile emotions and people who are emotionally brittle. Use it with Scullcap and adaptogens.

Dose: fresh seed tincture (1:2) - 4-6 mL QID

glycerite (1:2) – 5-7.5 mL 4-5x/day

**Ginkgo leaf** (*Ginkgo biloba*) – Two randomized, double-blind, placebo-controlled studies found that the standardized extract of Ginkgo reduced agitation and anxiety in elderly patients with cognitive decline (Bachinskya, et al, 2011; Woelk, et al, 2007).

Dose: standardized extract – 240-360 mg per day

**Gotu Kola herb** (*Centella asiatica*) – has a long history of use in Southeast Asia as a nootropic, nervine and antiinflammatory. It enhances cerebral circulation and can be used to treat anxiety (Jana, et al, 2010), impaired memory, mental exhaustion, recovery from head trauma and early stage Alzheimer's disease. I find it especially useful for anxiety caused by either impaired cerebral circulation (old-age-induced anxiety) or drug withdrawal.

Dose: fresh tincture (1:2) – 1.5-2 mL TID

tea – 1-2 tsp. dried root, 8 oz. water, steep covered 45 minutes, take 4 oz. 3x/day

**Gou Teng spine** (*Uncaria rhynchophylla*) – Gambir spines are used for anxiety with spasms, tics and tremors. It also is of benefit for stress-induced bruxism, headaches and white coat hypertension. Use it with Blue Vervain, Scullcap or Gastrodia/Tian Ma.

Dose: tincture (1:4 or 1:5) – 1-2 mL TID

tea: 1 tsp. dried stem with hooks, 8 oz. water, decoct 10 minutes, steep 10 minutes, take 4 oz. TID

**Hawthorn fruit and flower** (*Crataegus oxycanthoides*, *C. monogyna*) – I use a mixture of Hawthorn berry, flower and leaf with Night Blooming Cereus and Motherwort for anxiety-induced heart problems, for chronic sadness and grief, use it with Mimosa bark and Rose petals. The solid extract of Hawthorn can be effective for treating ADHD.

Dose: tincture (1:5) - 3-4 mL TID

tea - 1-2 tsp. dried berries, 10 oz. water, decoct 15 minutes, steep 40 minutes. Take up to

3-4 cups per day  
solid extract - 1/4-1/2 tsp. BID

**Holy Basil herb** (*Ocimum sanctum*) – is used in Ayurvedic medicine as a Rasayana or restorative remedy. It has adaptogenic, anxiolytic, neuroprotective and antidepressant activity. It can be used to treat cloudy thinking, anxiety (Bhattacharyya, et al, 2008), stagnant depression, ADHD and to enhance recovery from head trauma injuries.

I find it effective for treating GI-based anxiety (use it with Chamomile, Hops or Catnip), stress-induced anxiety and old-age induced anxiety.

Dose: tincture (1:5 or 1:2) – 2-3 mL TID/QID

tea – 1 tsp. dried leaf, 8 oz. water, steep covered for 15-20 minutes, take 4 oz. TID

**Hops strobile** (*Humulus lupulus*) – is effective for nervous irritability or mild anxiety with wakefulness or gastric upset, use it with Chamomile, Valerian or Catnip.

Dose: tincture (1:5) - 2-3 mL TID

tea – 1-2 tsp. dried strobiles, 8 oz. hot water, decoct 5-10 minutes, steep covered for 15 minutes, take 2 cups/day

**Kava root** (*Piper methysticum*) – is indicated for anxiety with muscle tension, bruxism, restless leg syndrome and pain. It can be combined with Scullcap, Blue Vervain and Gambir spines. In human trials, it has been found to be effective for mild to moderate anxiety (Sarris, et al, 2009; Witte, et al, 2005).

Dose: tincture (1:5) - 2-3 mL QID

capsules - standardized (60 mg. Kava lactones) - 2-4/day

**Lavender flower** (*Lavandula angustifolia*) – can be used to treat anxiety, as well as depression. It is a nervine and carminative useful for stress-induced and GI-induced anxiety. In a RCT a lavender essential capsule was as effective as Lorazepam for treating GAD (Woelk & Schlafke, 2010). In a review of 7 clinical trials, this product was significantly superior to placebo for relieving anxiety symptoms (Kasper, 2013).

Dose: tincture (1:4 or 1:5) - .75–1.5 mL TID/QID

tea – ¼-1/2 tsp. dried flowers, 8 oz. hot water, steep covered for 15-20 minutes, take up to 2 cups/day

gelcaps – 80-160 mg of a Lavender oil preparation.

**Lotus seed** (*Nelumbo nucifera*) – is used in TCM for disturbed shen symptoms including anxiety, excessive or disturbing dreams and insomnia. It is usually combined with Gambir/Gou Teng, Zizyphus seed or Chinese Polygala. It is contraindicated for people with dry constipation.

Dose: tea: 1-2 tsp. dried seed, 10 oz. water, decoct 15 minutes, steep 45 minutes, take 4 oz. TID

**Mimosa flower or bark** (*Albizia julibrissin*) – is used for anxiety or irritability in emotionally brittle patients. Mimosa calms disturbed shen (bad dreams, fears), but should be used cautiously with patients with PTSD as it can bring up repressed memories.

Dose: tincture (1:5) – 1-2 mL TID

tea - 1-2 tsp. dried bark, 10 oz. water, decoct 15 minutes, steep 1/2 hour, take 4 oz TID

**Motherwort herb** (*Leonurus cardiaca*) – is an excellent nervine and anxiolytic. Use it with Verbena hastata for PMS, menstrual and menopausal anxiety. Add Pulsatilla for anxiety attacks.

Dose: tincture (1:2 or 1:5) – 2-4 mL TID

tea – 1 tsp. dried herb, 8 oz. water, steep 20-30 minutes, take 4 oz. up to QID

**Night Blooming Cereus stem** (*Selenicereus grandiflorus*) – is indicated when the person is nervous, sleepless, there is oppression in the chest and dyspnea and he/she fears they will die or stop breathing.

Dose: fresh tincture (1:2) - .5-1.5 mL in 4 oz. water, mix. Take 1 tsp. every 2-3 hours.

**Passion Flower herb** (*Passiflora incarnata*) – is indicated for irritation of the brain with nervousness, restlessness, sleeplessness with muscle twitching or circular thinking. It can also be useful for stress-induced occipital headaches. In a human clinical trial Passion Flower was as effective as Oxazepam for relieving generalized anxiety disorder (Akhondzadeh, et al, 2001).

Dose: fresh tincture (1:2) – 2-4 mL TID  
tea - 1-2 tsp. dried herb, 8 oz. hot water, steep 45 minutes, take 1-2 cups per day

**Pulsatilla herb** (*Anemone spp.*) – the Eclectics used this herb for anxiety with nervousness, dizziness and restlessness. The person is fearful, sad, constantly weeping with frequent exclamations of sorrow or grief. I use it with Bacopa, Chinese Polygala, Motherwort and Blue Vervain for acute anxiety attacks.

Dose: fresh plant tincture (1:2) – 1 - 1.5 gtt. in 4 oz. water, mix. Take 1 tsp. every 2-3 hours

**Sculcap herb** (*Scutellaria lateriflora*) – is very effective for nervousness or spasms due to mental overwork or physical exertion. The person gets angry, "flies off the handle" easily, has nervous tics or OCD symptoms.

Dose: fresh tincture (1:2) - 2-4 mL TID  
glycerite (1:2) – 4-6 mL TID/QID

**Tiger Lily bulb & herb** (*Lilium lancifolium*) – the Eclectic indications for this herb are depression with anxiety, the person fears to be alone, with frequent muttering under the breath and weeping. Usually it is associated with hormonal (menstrual, menopausal or post-partum) depression, use it with Night Blooming Cereus, Black Cohosh and Tiger Lily.

Dose: fresh plant extract (1:2) – 1 mL in 4 oz. water, mix. Take 1 tsp. every 2-3 hours

**Valerian root** (*Valeriana officinale*) – can be used for people who are restless, nervous and agitated with a pale face and cool skin. A combination of Valerian and Lemon Balm was effective in relieving restlessness in children (Muller & Klement, 2006) and several animal studies also suggest that it has anxiolytic activity.

Dose: fresh tincture (1:2) - 2-4 mL TID  
capsules – 1-2 500 mg capsules in the evening

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## HAMILTON DEPRESSION RATING SCALE

The total Hamilton Depression (HAM-D) Rating Scale provides an indication of depression and, over time, provides a valuable guide to progress.

Classification of symptoms which may be difficult to obtain can be scored as:

0- absent; 1 - doubtful or trivial; 2 - present.

Classification of symptoms where more detail can be obtained can be expanded to:

0 - absent; 1 - mild; 2 - moderate; 3 - severe; 4 - incapacitating.

In general the higher the total score the more severe the depression.

HAM-D score level of depression

10 - 13 mild; 14-17 mild to moderate; > 17 moderate to severe.

Assessment is recommended at two weekly intervals.

| HAM-D Rating Scale                            | Pre-treatment | 1st follow up | 2nd follow up |
|-----------------------------------------------|---------------|---------------|---------------|
| Symptoms                                      | Date          | Date          | Date          |
| 1 Depressed mood                              | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 2 Guilt feelings                              | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 3 Suicide                                     | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 4 Insomnia – early                            | 0 1 2         | 0 1 2         | 0 1 2         |
| 5 Insomnia – middle                           | 0 1 2         | 0 1 2         | 0 1 2         |
| 6 Insomnia – late                             | 0 1 2         | 0 1 2         | 0 1 2         |
| 7 Work and activities                         | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 8 Retardation – psychomotor                   | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 9 Agitation                                   | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 10 Anxiety – psychological                    | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 11 Anxiety – somatic                          | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 12 Somatic symptoms GI                        | 0 1 2         | 0 1 2         | 0 1 2         |
| 13 Somatic symptoms –General                  | 0 1 2         | 0 1 2         | 0 1 2         |
| 14 Sexual dysfunction - menstrual disturbance | 0 1 2         | 0 1 2         | 0 1 2         |
| 15 Hypochondrias                              | 0 1 2 3 4     | 0 1 2 3 4     | 0 1 2 3 4     |
| 16 Weight loss- by history                    | 0 1 2         | 0 1 2         | 0 1 2         |
| - by scales                                   | 0 1 2         | 0 1 2         | 0 1 2         |
| 17 Insight                                    | 0 1 2         | 0 1 2         | 0 1 2         |