

HERBAL ALLIES AND OTHER STRATEGIES FOR DEALING WITH ANXIETY

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Table Of Contents

1. What Is Anxiety
4. Who Suffers From Anxiety?
4. The Physiology Of Anxiety
5. Neurotransmitters and Anxiety
6. Hormones and Anxiety
6. Anxiety and Brain Activity
7. Symptoms Of Anxiety
8. Long Term Effects of Chronic Anxiety
8. Possible Causes Of Anxiety
12. Western Treatments
13. Lifestyle Choices For Dealing With Anxiety
16. Help From the Stone People
16. Herbal Alternatives
20. Aromatherapy and Anxiety
21. Flower Essences
23. Bibliography

WHAT IS ANXIETY

Six major types of anxiety disorders have been identified, each with its own symptoms.

Panic disorder is an acute type of anxiety, sometimes referred to as a panic or anxiety attack. It is caused when the body's natural "fight or flight" reaction occurs at the wrong time. A panic disorder may also be accompanied by agoraphobia, which is the fear of being in places where escape or help would be difficult.

Generalized anxiety disorder (GAD) is one chronic form of anxiety characterized by constant worry and fear that distracts from day-to-day activities, or troubling persistent feelings that something bad is going to happen. People with GAD are chronic worriers who feel anxious nearly all of the time, though they may not even know why. Anxiety related to GAD often shows up as physical symptoms like insomnia, stomach upset, restlessness, and fatigue.

Obsessive-compulsive disorder (OCD) is another type of chronic anxiety characterized by unwanted thoughts or behaviors that seem impossible to stop or control. People with OCD may be troubled by obsessions like recurring worries that they forgot to turn off the oven or that they might hurt someone. They may also suffer from uncontrollable compulsions, such as washing their hands over and over.

Phobias are unrealistic or exaggerated fears of a specific object, activity, or situation that in reality presents little to no danger. Common phobias include fear of animals like snakes and spiders, fear of flying, and fear of heights. In the case of a severe phobia, one might go to extreme lengths to avoid the thing one fears. Avoidance only serves to strengthen phobias.

Post-traumatic stress disorder (PTSD) is an extreme chronic anxiety disorder that can occur in the aftermath of a traumatic or life-threatening event. It can be thought of as a panic attack that rarely, if ever, lets up. Symptoms of PTSD include flashbacks or nightmares about what happened, hyper vigilance, startling easily, withdrawing from others, and avoiding situations that reminds one of the trauma.

Social anxiety disorder is a chronic debilitating fear of being seen negatively by others and humiliated in public, also known as social phobia. This disorder can be thought of as extreme shyness. In severe cases, social situations are avoided altogether. Performance anxiety (known as stage fright) is the most common type of social phobia.

Susun Weed distinguishes fear from anxiety. She notes that, while fear promotes health and protection, anxiety destroys health and increases vulnerability. It shortens breath, narrows blood vessels, and interferes with the functioning of the immune system. Fear is useful energy, calling on our courage, while anxiety promotes feelings of insecurity, helplessness and weakness. (Menopause)

WHO SUFFERS FROM ANXIETY

The following statistics come from Anxiety.org, an organization committed to making information accessible, inclusive, easy-to-find, and understand for anyone suffering from an anxiety disorder.

- Over 40 million American adults are afflicted by one of six types of anxiety
- 18% of the U.S. population is currently suffering from anxiety
- Anxiety is classified as the most common mental illness in the U.S.
- 40% of American adults have experienced anxiety at some point in their life
- Only 1/3 of adults suffering from anxiety receive treatment
- Only 1/5 of teenagers suffering from anxiety receive treatment

According to the Indian Journal of Pharmacology, anxiety affects an eighth of the total population of the world and twice as many women as men report having experienced anxiety. A state of excessive fear, anxiety is characterized by motor tension, sympathetic hyperactivity, apprehension and vigilance.

THE PHYSIOLOGY OF ANXIETY

The brain must be well balanced so the Central Nervous System (CNS), the body and the peripheral nervous system (PNS) can communicate properly to regulate the appropriate release of hormones and neurotransmitters.

The difference between a hormone and a neurotransmitter depends on where the molecule is released. A hormone is produced by an endocrine gland and released into the bloodstream and finds its target cells some distance from its site of release.

A neurotransmitter is released from a nerve terminal. An electrical impulse travels to the end of a nerve cell, stimulates the terminal of the cell to secrete a chemical signaling molecule at a synapse. Target cells receive the signaling molecule and produce biochemical responses.

Epinephrine / adrenaline is released by the adrenal gland into the bloodstream as a hormone and goes to the heart or the lungs.

Norepinephrine / noradrenaline is released as a neurotransmitter by neurons in the brain from a stimulated presynaptic nerve cell and acts on neighboring postsynaptic cell.

Anxiety is a problem with hormone and neurotransmitter balance. The brain responds to neurotransmitters that send messages to it about how to think, feel, act, and respond. When brain chemistry is out of balance, the body's communication systems become altered, leading to anxiety and other issues.

It's often impossible to determine whether poor neurotransmitter balance is a result of life experience or genetics. Both can occur in anyone living with anxiety, and in some cases a combination of both may be responsible for anxiety. (Calmclinic.com)

Neurotransmitters and Anxiety

Neurotransmitters and the adrenal glands buffer stress and help us cope. But stress depletes the body's adrenal glands and, if it exceeds the body's capabilities, the balance between body and mind becomes hampered, and our ability to deal with stress becomes diminished. This is what leads to anxiety.

Many key neurotransmitters have been linked to anxiety, including gamma-aminobutyric acid (GABA), Serotonin and Norepinephrine.

GABA is an inhibitory neurotransmitter that aids in relaxation and sleep. In the brain, GABA helps balance excitation with inhibition. Several studies have shown the hormone progesterone to have anxiolytic (anti-anxiety) effects by acting on GABA receptors in the brain.

Serotonin (5-hydroxytryptamine, 5-HT) carries signals along and between nerves. It constricts blood vessels and acts as a neurotransmitter. It is mainly found in the brain, bowels, blood platelets and serum. Serotonin constricts smooth muscles, transmits impulses between nerve cells, regulates cyclic body processes and contributes to wellbeing and happiness. Many regard serotonin as the chemical responsible for maintaining mood balance, and a deficit of serotonin leads to [depression](#).

Norepinephrine constricts blood vessels and increases blood pressure and blood glucose levels. Anxiety is strongly correlated to the imbalance of norepinephrine and epinephrine within the sympatho-adrenal system (SAS) that comprises one part of the autonomic nervous system (ANS). The SAS is a combination of both hormonal and neural systems that utilizes specific hormone messengers (e.g., norepinephrine) to regulate autonomic bodily processes such as blood pressure, body temperature, force of our heartbeats, and our heart rates.

Hormones and Anxiety

Hormones affect brain chemistry, neurotransmitter production and balance. If they are out of balance, anxiety may result. Following stressful events, the hormone **adrenaline (epinephrine)** is released by the adrenal glands into the bloodstream. It is the body's natural fight-or flight-mechanism. It generates the primitive response that can keep us alive in moments of trauma or danger. It slows down digestion, increases awareness, and diverts blood flow to important areas like the brain and muscles.

The event signals a shut-off mechanism in the brain, which prevents further adrenaline release. Chronic long-term stress can damage receptors in the brain, resulting in a disrupted shut-off mechanism that may damage the body's ability to control adrenaline. If adrenaline release mechanisms and regulation systems become disrupted, sudden adrenaline surges can occur, resulting in Panic Disorder and other types of anxiety.

When stressed, the human body manufactures the stress hormone **cortisol**. All hormones are made from essentially one parent hormone and, to keep up with stress, the body preferentially makes cortisol. Therefore, all other hormones suffer, chiefly progesterone, which is the calming hormone. So, the more stressed an individual is, the more suppressed progesterone production becomes, often exacerbating anxiety.

In a healthy cycling woman, hormones **estrogen** and **progesterone** exist in harmony, rising and falling at set times in a woman's cycle to control menses and keep her feeling well. With stress and age, progesterone levels drop. With estrogen dominance, there isn't enough progesterone to keep up with the amount of estrogen. Progesterone counterbalances the effects of estrogen and, whereas estrogen has an excitatory effect on the brain, progesterone is calming. This accounts for increased anxiety in women during peri-menopause and menopause. If anxiety occurs at this point, it is most likely caused by that drop in progesterone.

ANXIETY AND BRAIN ACTIVATION

There are two different parts to an anxiety disorder, and someone with anxiety may suffer from one or both. The first part is mental - verbal worries, nervous thoughts, etc. The second part is physical. For example, one with anxiety might experience a racing heartbeat, panic attacks, lightheadedness, pain, inability to sleep and other physical symptoms. (Calmclinic.com)

One can experience physical symptoms with less worry, and it's possible to worry often without many physical symptoms. Researchers have found that each way excites different parts of the brain. Those with worried thoughts showed more left-brain activity when nervous. Those with physical symptoms experienced more right brain activity. (Nauert PhD, Rick)

Another study looked at the way that those with phobias reacted to the belief that they would encounter their phobia. They found that the anterior cingulate cortex (ACC), insula, and thalamus of those with a phobia had their dorsal become more active than those without a phobia. (Straube T, Mentzel HJ, Miltner WH.)

A study at the University of Wisconsin - Madison found that those with generalized anxiety disorder appear to have a weaker connection between the white matter area of the brain and the pre-frontal and anterior cortex. This was compared to those without generalized anxiety disorder and the results appeared to be significant. (UWM)

Researchers have also found that those with panic attacks often have an overactive amygdala. While it's not clear what creates this over activity, the fact that that area of the brain appears to contribute to panic attacks indicates that some aspect of the brain is in control of the panic attack experience. (Calmclinic.com)

These are just some of the ways that anxiety can activate the brain.

SYMPTOMS OF ANXIETY

Acute and chronic anxiety present differently. Acute anxiety can result in:

- The sense of impending disaster or death
- Shortness of breath
- A smothering, claustrophobic sensation
- Heart palpitations
- Chest pain
- Dizziness
- Hot flashes and/or chills
- Trembling
- Numbness or tingling sensations in the extremities
- Sweating
- Nausea
- A feeling of unreality
- Distorted perception of the passage of time.

Chronic anxiety may be milder, more generalized, and symptoms may include a vague sense of anxiety much of the time, but the intensity of the feeling does not reach the levels of those in an actual panic attack. Other symptoms may be

- Chronic unease, especially around others
- Getting startled easily
- Headaches
- Chronic fatigue

Anxiety Symptoms and Ayurveda

Ayurveda, Sanskrit for “science of life,” is the comprehensive medical system practiced for generations in India and many other countries. It associates the adrenal organs with anxiety. In this system of health and longevity, Vata is the mobile dosha (vital energy), and it is involved in all pain. If the vata flow of energy is disturbed, pain will result. In the case of excess vata which is associated with anxiety, fear and insecurity, the result may be radiating, migrating, shifting, shooting, pulsating, fluctuating or vague pain, that comes and goes. It is aggravated by cold and relieved by heat. (Morrison)

Anxiety Symptoms and TCM

In Traditional Chinese Medicine (TCM), emotions are classified into seven categories: joy, anger, worry, anxiety, sadness, fear and fright, which are further merged into five categories: joy, anger, anxiety, sadness and fear, relating to the heart, liver, spleen, lungs and kidneys, respectively. TCM's *Canon of Medicine* states “Anxiety injures the Spleen.” The emotions injure the internal organs by disturbances of qi (vital essence) and blood. “Anxiety makes spleen qi depressed.” In clinical practice, however, these relationships are not absolute. Zang-fu is the collective name for all internal organs and there are five zang organs - the Heart, Lungs, spleen, liver and kidneys. The Zang organs are mostly solid, characterized by transporting and digesting food and drink and discharging the metabolites. These organs, although named on the basis of anatomy, are not confined to the anatomical entities. They can be regarded as functional systems. In TCM, anxiety causes a deficiency in both the heart and the spleen, and is manifested by insomnia, dream-disturbed sleep, loss of appetite, abdominal distention, loose bowels and lassitude. Besides disturbing qi and blood, the pathological changes caused by emotions may be transformed into fire, such as excessive heart fire. (Zhufan)

LONG TERM EFFECTS OF CHRONIC ANXIETY

Long-term anxiety may damage the brain and cause further anxiety. When an anxiety disorder remains untreated, the following decrease in size:

- Dorsomedial prefrontal cortex
- Anterior cingulate
- Hippocampus
- Dorsolateral prefrontal cortex
- Orbitofrontal cortex

The longer the anxiety goes untreated, the smaller and weaker they become. These changes affect symptoms and create anxious thoughts. Those with anxiety may feel their thoughts are completely natural when, in reality, the brain is contributing to the negative thinking. (Calmclinic.com)

POSSIBLE CAUSES OF ANXIETY

It's often impossible to determine whether poor neurotransmitter balance is a result of life experience or genetics. Both can occur in anyone living with anxiety, and in some cases a combination of both may be responsible for anxiety. However, there are some very tangible reasons why people suffer from anxiety.

Nutrient Deficiency is one such cause. When stressed, our bodies use up and excrete greater amounts of crucial vitamins and minerals.

Magnesium blocks stress-promoting neurotransmitters from over-firing, thus being 'Nature's tranquilizer.'

The adrenal glands, which buffer stress, contain some of the highest concentrations of **vitamin C** in the body and can shrink when vitamin C levels diminish. This can become a vicious cycle with anxiety, if these nutrient depletions are not addressed.

Chromium deficiency can produce nervousness, shakiness and other general symptoms of anxiety. Chromium deficiency is common among alcoholics and people who consume large amounts of refined sugars. Brewer's yeast is a rich source of this essential trace element.

Calcium keeps our brain function healthy, and a calcium deficiency can lead to anxiety and moodiness. The electrical pulses within the nervous system depend on calcium to perform properly. With a calcium deficiency, the chances of irregular moods and anxiety attacks increase significantly. Calcium deficiency can masquerade as anxiety or exacerbate symptoms in those who already have anxiety. Depression and anxious thoughts can result from calcium deficiency, as well as other symptoms associated with anxiety, like shaking and heart palpitations.

A deficiency in **iron** can lead to anemia, and anemia can lead to anxiety.

Vitamin B1 (Niacin) is important for blood sugar control and this has a major impact on anxiety.

Vitamin B12 plays a role in the development of anemia, nerve disorders, and cognitive deficits. It is one of the B vitamins that affects the brain and nerves the most. Deficiency can lead to mood problems, including depression and anxiety. It can affect nerve tissue and affect memory. Even if they don't reach the point of deficiency, they may have an effect on mental health. (Calmclinic.com)

Potassium helps with just about every bodily function. An imbalance of potassium can cause many different side effects, one being anxiety. Sodium and potassium are linked within the body. So if sodium levels are high, your potassium levels are low.

Selenium has been shown to elevate mood and decrease anxiety.

Vitamin B3 (Niacinamide) helps oxygenate the brain, and levels of 1500mg/day of niacinamide have been given for anxiety. It's made from the amino acid tryptophan and it has some benzodiazepine-like properties. And while niacin causes flushing of the skin, Niacinamide does not.

Tryptophan is the amino acid precursor to serotonin, which is low in people with depression, insomnia, anxiety and OCD. It helps stabilize blood glucose. A sharp drop in blood glucose causes depression and anxiety. This drop can also cause a hot flush; studies have found tryptophan helps with these. Serotonin is the precursor to melatonin our sleep hormone, and supplementing with tryptophan also helps with insomnia. Taking 250mg/day at night away from food high in protein is a good place to start. Tryptophan needs an insulin spike to push it into the brain, so it should be taken with about 1/4 glass of fruit juice. It also needs vitamin B6 and folic acid to convert it into serotonin, so if the tryptophan doesn't come mixed with B6 and folic acid, one should take 25mg B6 and 300mcg folic acid with it. The dose should be slowly increased in 250mg increments until one finds the optimum dose. Another dose with juice can be taken if one wakes during the night. It is safe to go up to 6000mg/day, but if on an antidepressant, one should consult with their health care practitioner first.

A lack of **Vitamin D3** causes anxiety and depression, plus a host of other problems. Research suggests that over 50% of people living 35 degrees above or below the equator are deficient. Blood levels should be 70-100ng/ml or 175-250nmol/L and not the 30ng/ml or 75nmol/L most labs and doctors regard as adequate. The minimum daily dose should be 5000iu's per day, although the research indicates it should be 10,000iu's per day.

Zinc is the second most abundant trace mineral in the body. It is a constituent of insulin, making it extremely important for blood glucose control. It is also found in many enzymes, including superoxide dismutase, a powerful antioxidant and liver protector. It is vital for a healthy immune system and is required for protein synthesis and collagen formation. An imbalance between zinc and copper can cause many issues, as well. Puberty in girls is especially difficult, as rising estrogen levels cause copper to rise, depressing zinc levels. If estrogen levels increase at any point due to the use of contraceptives, HRT, or after the birth of a child, a hysterectomy, menopause, or environmental exposures to copper, anxiety, depression, irritability and psychosis can occur. PMS is often caused by excessive copper levels and depressed zinc levels, due to the unbalanced ratio between progesterone and estrogen. 15mg/day should be taken and, if a deficiency is suspected 100mg/day should be taken to increase levels until symptoms pass.

Stress-regulating neurotransmitters such as Serotonin rely on Amino Acids. Events leading up to anxiety can heighten serotonin excretion leading to depletion. Without replenishing the precursor nutrients for the neurotransmitters that are being used in excess, the disorder will continue and perhaps even get worse.

Melatonin is a hormone that regulates natural sleep/wake cycles. It appears to improve sleep quality in people with reduced rapid-eye movement (REM) sleep. It also appears to reduce the time it takes to fall asleep and the number of sleep interruptions in elderly people with sleep-wake cycle disturbances and dementia. Some people say it also makes them sleep better. .25mg - 10mg/night can be taken.

Thyroid hormone appears to regulate the amount of serotonin, norepinephrine, and GABA produced and distributed to the brain, so problems with your thyroid may also increase your risk for developing anxiety.

Although a non-essential amino acid, **L-tyrosine** is one of the most important. It is the precursor to the stress hormones adrenaline and noradrenaline, the two thyroid hormones T3 (triiodothyronine) and T4 (thyroxine), plus melanin, the pigment found in hair and skin. It's involved in regulating and reducing pain, and increasing pleasure. Tyrosine is essential for any stressful situation, cold, fatigue, emotional trauma, prolonged work and sleep deprivation. It improves memory, cognition and physical performance. Levels drop when stressed. 250mg/day should be taken in the morning. The co-factors needed for conversion are vitamins B3, B6 and folic acid. 25mg B3, B6 and 300mcg folic acid should be taken, as well. The dose should be gradually increased until the optimum is found. It is safe to go up to 6000mg/day, but it's easy to exceed what is needed and then symptoms return, so dosages should be increased very slowly.

L-glycine is a calming amino acid. It helps with seizures, relaxes muscles, improves glycogen storage and, with the proper amount, increases energy. It is a precursor to glutathione, after vitamin D the most important cellular antioxidant. 500mg/day, together with 25mg vitamin B6 can be taken, and it's safe to go up to 6000mg/day.

Taurine is a very calming amino acid, particularly for the heart. There is more taurine in the heart than all other amino acids combined. In people who suffer from panic attacks, anxiety and chronic fatigue, the heart rate variability is erratic, and taurine helps to calm this. 500mg/day should be taken, increasing until the optimum is found. 25mg of the co-factor vitamin B6 should be taken with it. It is safe to go up to 6000mg/day.

Coenzyme-A is manufactured in the cells of the liver and other body organs from components transported by the blood. The highest concentrations of coenzyme-A are found in the liver, heart, kidneys, brain, adrenal glands, and skeletal muscles. However, literally every organ of the body has coenzyme-A in its tissues because every part of the body has a use for it. It plays an important role in the body's reaction to stress.

Anxiety is further aggravated by the presence of **xenoestrogens**, estrogen-like compounds that exist in the environment. They can be in the form of chemicals in household products, like shampoos and lotions. Harmful ingredients in these products include parabens, like methyl, ethyl and propylparaben.

People are also exposed to hormones through food. Hormones are injected into chicken and cows that are raised to be a part of the human food supply, and people prone to anxiety may be incredibly sensitive to these hormones.

The use of recreational drugs, like marijuana can also cause anxiety attacks.

Medications taken for other issues may have the undesired side effect of anxiety.

Taking tricyclic antidepressants such as nortryptaline, imipramine hydrochloride (Janimine, Tofranil) or imipramine pamoate (Tofranil-PM) in the presence of low serum levels of iron may increase the risk of developing anxiety later on.

CONVENTIONAL TREATMENTS

Benzodiazepines

All too commonly, anxiety is treated with prescribed benzodiazepine medications like Xanax (Alprazolam) and Ativan (Lorazepam). Benzodiazepines are a group of medicines sometimes used to treat anxiety, sleeping problems and other disorders. They work on the central nervous system, acting selectively on gamma-aminobutyric acid-A (GABA-A) receptors in the brain. They enhance response to the inhibitory neurotransmitter GABA, by opening GABA-activated chloride channels and allowing chloride ions to enter the neuron, making the neuron negatively charged and resistant to excitation. Benzodiazepines are similar in pharmacological action but have different potencies. They are used as sedatives, hypnotics, anxiolytics, anticonvulsants and muscle relaxants. They are the major class of compounds used in anxiety and they have remained the most commonly prescribed treatment for it, despite the fact that they may be habit-forming, can cause addiction, overdose, or even death.

The side effects are numerous. Below are only the most common side effects, and include some of which are symptoms of anxiety, itself, making one wonder how one benefits from taking such a medication:

Constipation, weight gain, nervousness, headache, skin rash, tremor, ataxia, depression, weight loss, dysarthria, memory impairment, cognitive dysfunction, drowsiness, fatigue, sedation, diarrhea, blurred vision, insomnia, anxiety, irritability, decreased libido, menstrual disease, increased appetite, and decreased appetite, forgetfulness; changes in patterns and rhythms of speech; clumsiness or unsteadiness; difficulty with coordination; discouragement; drowsiness; feeling sad or empty; irritability; lack of appetite; lightheadedness; loss of interest or pleasure; shakiness and unsteady walk; sleepiness or unusual drowsiness; slurred speech; tiredness; trouble concentrating; trouble speaking; trouble performing routine tasks; trouble sleeping; unsteadiness, trembling, or other problems with muscle control or coordination and unusual tiredness or weakness. (Drugs.com)

SSRIs (Selective Serotonin Reuptake Inhibitors)

Other anti-depressant medications such as Lexapro (Escitalopram) are also given to treat anxiety. This group of drugs are SSRIs, (Selective Serotonin Reuptake Inhibitors). They prevent reuptake of serotonin and leave this neurotransmitter lingering longer in the synapse of the nerve cell. SSRIs take the serotonin that is already there and alter its uptake mechanism, in order to produce the desired effects - that being mood regulation. Depleted levels of neurotransmitters are often the reason why symptoms and conditions of anxiety arise and medications are used. Amino acids, which are the natural precursors to these neurotransmitters, do not affect uptake mechanisms. Instead, they increase the total pool of the neurotransmitter.

SSRIs also come with unwanted side effects - again, many of the symptoms one is already experiencing with anxiety. In rare cases: Coma; confusion; convulsions; decreased urine output; dizziness; fast or irregular heartbeat; headache; increased thirst; muscle pain or cramps; nausea or vomiting; shortness of breath; swelling of the face, ankles, or hands. More common side effects are: unusual tiredness or weakness, diarrhea, nausea, ejaculatory disorder, insomnia, headache, drowsiness, and delayed ejaculation, decreased interest in sexual intercourse, diarrhea, dry mouth, gas in the stomach, heartburn, inability to have or keep an erection, loss in sexual ability, desire, drive, or performance, unusual drowsiness and trouble sleeping.

The good news is, there are many other, more holistic options for dealing with anxiety. One is not limited to traveling down the slippery slope of popping a pill to decrease one symptom of a larger problem only to create other symptoms that require yet another pill to pop.

LIFESTYLE CHOICES FOR DEALING WITH ANXIETY

Loneliness and isolation set the stage for anxiety. Reaching out to others, seeing friends, joining groups, or sharing with someone trusted are all healthy choices for dealing with anxiety.

Working with a psychotherapist in a somatic modality like Hakomi can also be a powerful way to address and release trauma and other stressful experiences that have become stuck in the body.

Relaxation techniques

Relaxation techniques help with anxiety.

If one gets angry, agitated, or keyed up when stressed, going into the "fight" response, a quiet activity like meditation, deep breathing, or guided imagery is a good choice. Breathing can help manage an acute attack.

If one becomes depressed, withdrawn, or spaced out under stress, going into “flight” response, stimulating and energizing activities are good choices, like rhythmic exercises, massage or yoga.

If one “freezes” or become “stuck” under stress, in the “fright” response, get the nervous system to a fight or flight response by running or dancing.

TRE™ (Tension/Trauma Releasing Exercises)

TRE is a relaxation technique that is comprised of six simple exercises to release tension in the muscles and relax the mind’s anxiety. A gentle vibration (called neurogenic tremors) reaches into the core and reverberates along the spine, releasing tension throughout the body. Blocked energy experienced as tension discharges, leaving a sense of wellbeing and peacefulness.

Exercise is a natural stress reducer and anxiety reliever. One should aim for at least 30 minutes of aerobic exercise on most days.

Lack of sleep can exacerbate anxious thoughts and feelings, so those with anxiety should get seven to nine hours of quality sleep a night. For troubled sleep, adopting smart sleep habits can make a big difference. Turning off all electronics at least an hour before bed, sleeping in a room that is completely dark and getting to sleep by 10 so the adrenal system can rejuvenate are all helpful in reducing stress and anxiety.

If one struggles with anxiety, reducing caffeine and alcohol intake or cutting them out completely will help.

Strategies like journaling, making art, dialoging with anxious thoughts, and learning to sit with discomfort and uncertainty can significantly reduce anxiety.

Diet

Another important lifestyle change includes diet. Eat foods that supply valuable minerals like calcium, magnesium, phosphorus and potassium. Include apricots, asparagus, avocados, bananas, broccoli, blackstrap molasses, brewer’s yeast, flaxseed, brown rice, dried fruits, dulse, figs, salmon, garlic, green leafy vegetables, legumes, raw nuts and seeds, whole grains, and yogurt.

Supplements

Supplementing with the following can also help decrease anxiety.

L-theanine is an amino acid found in tea. It has a calming effect and reduces physiological

responses to stress. It also raises levels of GABA, the calming neurotransmitter. It has properties that offer protection against environmental neurotoxins, as well. A typical supplemental dose of L-theanine is 50 to 200 mg. (The Antianxiety Food Solution, Trudy Scott)

Lactium is a supplement made from the casein protein in milk. It has been shown to reduce stress-related symptoms, including anxiety, social problems and digestive issues. This product also lowers levels of the stress hormone cortisol. (The Antianxiety Food Solution, Trudy Scott)

Sometimes classed as one of the B vitamins, **Inositol** can be helpful as it raises serotonin levels. It also helps stabilize blood glucose levels, by increasing the action of insulin and decreasing insulin resistance. It has a calming affect, helps in combating depression, panic attacks, mood swings, obsessive-compulsive disorder, bipolar disorder and anxiety. Stress often causes hair loss, and inositol can help. It is known as the anti-alopecia vitamin. 2000-4000mg/day is a typical dosage, but levels of 12,000-18,000mg/day have been given for OCD and depression.

DL-Phenylalanine (DLPA) consists of both D-phenylalanine and L-phenylalanine, and is much more potent than either of these amino acids taken alone.

L-Glutamine is in foods such as beef, chicken, eggs, cabbage, beets and spinach, and is the precursor to the amino acid GABA. GABA is the primary inhibitory neurotransmitter in your brain, meaning that it has a calming effect on your nervous system. Because glutamine increases GABA production, it is thought that glutamine can also help to decrease symptoms of anxiety.

If depression comes with anxiety and panic, then the amino acid **Gamma-aminobutyric acid (GABA)**, also the most calming neurotransmitter, can be taken. It can eliminate all feelings of anxiety and panic. Take 250mg/day initially, increasing till the optimum is found. Vitamin B6 is a necessary co-factor, take 25mg/day. It is safe to go up to 1000mg/day. GABA is difficult to administer, as it's easy to exceed what is needed and then symptoms return, so it should be increased very slowly.

HELP FROM THE STONE PEOPLE

Working with crystals has also been known to help calm anxiety.

The energy of the synthesis of azurite and malachite is said to give comfort by calming anxiety associated with dis-ease and allowing the thought process to follow course, enabling one to render emotionally charged thoughts ineffective, while facilitating the stability of the intellect to produce rationality. (Love is in the Earth)

Black tourmaline acts to stimulate the reflex points associated with the lower back. It can be used in the treatment of anxiety and can also provide for both the stimulation and balancing of the adrenal glands. (Love is in the Earth)

HERBAL ALTERNATIVES

Plants have long been used to treat central nervous system (CNS) disorders like anxiety. Many herbal allies are useful in tinctures and infusions, aromatherapy and as flower essences. The following are used internally as tinctures, infusions or decoctions:

Passiflora incarnata (Passionflower), known as the flower to pacify the spirit, is a wonderful relaxing remedy. It will relieve chronic insomnia and many stress-related symptoms. It is non-addictive and allows one to wake refreshed and alert in the morning. It is both sedative and antispasmodic, relaxing tension in the muscles, calming the nerves and lessening pain. For anxiety, David Winston combines Passionflower with fresh milky oat, blue vervain and motherwort. (Winston, 215)

For people with nervous tics and women with menopausal anxiety, ***Verbena hastata (Blue vervain)*** in combination with ***Withania somnifera (Ashwaganda)*** and ***Scutellaria lateriflora (Skullcap)*** can be very useful. (Winston, 207)

Wolfiporia extensa (Poria Cocos) is anti-inflammatory, anti-tumor, a topo inhibitor, immune system enhancer/modulator, insulintrophic/anti-diabetic; anti-emetic, and it improves learning and memory. The bark is used in TCM to enhance vital spirit. Taoist adepts assert it is useful when one strives to attain enlightenment by helping overcome anxiety, worry and fear. It is also an immune system tonic (spleen), and may improve memory and cognition in old age.

A body under stress is more vulnerable to free radical damage. ***Vaccinium myrtillus (Bilberry)***, ***Ginkgo biloba*** and ***Silybum marianum (Milk thistle)*** are all rich in flavonoids that neutralize free radicals. Ginkgo is an anticoagulant/blood thinner. A peripheral and cerebral vasodilator, it helps those with impaired circulation. It is often sold, however, as an aid to "intelligence" and used by students when cramming for tests, etc. Under these misguided uses it causes headaches. Milk thistle may inhibit hepatocytes in excess; pregnancy may alter therapeutic window. And without an ongoing stress, using Silybum or its extracted silymarins on general principle can actually depress normal liver function. (Moore)

Adaptogens

Adaptogens enhance mood and relieve stress. The following adaptogens are specifically helpful for their anxiolytic (anti-anxiety) effects:

- *Withania somnifera* (Ashwagandha)
- *Gynostemma pentaphyllum* (Jiagulan)
- *Ganoderma lucidum* (Reishi)
- *Schisandra chinensis* (Schisandra) are

Nervines

Nerve tonics (nervines) also have anxiolytic activity, and the following are helpful when dealing with stress:

- *Verbena* (Blue vervain)
- *Matricaria chamomilla* (Chamomile)
- *Avena* (Milky oats)
- *Crataegus* (Hawthorn)
- *Tilia* (Linden)
- *Leonurus cardiaca* (Motherwort)
- *Passiflora* (Passionflower)
- *Scutellaria* (Skullcap).

Some nervines also have antidepressant effects and can be incredibly helpful when dealing with anxiety that includes depression. These nervines include:

- *Melissa* (Lemon balm)
- *Hypericum perforatum* (St. John's wort)
- *Albizia* (Mimosa)
- *Lavandula* (Lavender)
- *Rosmarinus* (Rosemary). (Winston)

To help prevent panic attacks and promote relaxation, consider:

- *Nepeta Cataria* (Catnip)
- *Matricaria chamomilla* (Chamomile)
- *viburnum opulus* (Cramp bark)
- *Piper methysticum* (Kava)
- *Humulus Lupulus* (Hops)
- *Tilia* (Linden)
- *Leonurus cardiaca* (Motherwort)
- *Passiflora* (Passionflower)
- *Scutellaria* (Skullcap)

***Melissa officinalis* (Lemon Balm)**, known as the flower of bees, influences the limbic system in the brain that is concerned with mood and temperament. As a sedative, it enhances relaxation and induces natural sleep, calming tension and anxiety, and even mania and hysteria. It can be taken as a tea frequently throughout the day and at night to help with insomnia. (McIntyre)

***Foeniculum vulgare* (Fennel)** relieves anxiety-related gastrointestinal upsets, reduces flatulence and abdominal tension and relaxes the large intestine. It is most effective as a tea, before or after meals.

***Tanacetum parthenium* (Feverfew)** and ***Filipendula ulmaria* (Meadowsweet)** can both help with anxiety-induced headaches. Feverfew also relieves migraines. Neither have side effects.

***Hypericum perforatum* (St. John's Wort)**, known as the flower of light, is a wonderful remedy for the nervous system, relaxing tension and anxiety and lifting the spirits. (McIntyre) According to Weed, a dropperful of St. John's Wort tincture is the remedy to reach for when one feels like they are on edge and like anything will push them over it. The dose can be repeated safely several times an hour as needed. This herb is nerve nourishing and strengthening, and relieves immediate anxiety while helping prevent future distress.

***Scutellaria* (Skullcap)** or ***Valeriana officinalis* (Valerian)**, taken at bedtime promote sleep and aid in preventing panic attacks at night. Skullcap tincture is less addictive and often more effective.

10-20 drops of fresh plant tincture or 1-2 dropperfuls of dried plant tincture can be taken. Herbal tranquilizers are safer than prescription tranquilizers, but are best reserved for occasional use. Valerian is the best known. *Valeriana officinalis* (Valerian) is a nervine that may be used for any situation in which tension and anxiety cause problems, either psychological or physical. Its sedative actions are due to its content of valepotriates and the sesquiterpene constituents of the volatile oil. (Hoffman) The valepotriates are transformed into homobaldrinal, which has sedative properties. Sesquiterpenes have been shown to have a direct action on the amygdala, which is a brain structure in the limbic system. The amygdala is responsible for feelings of fear and anxiety. Valerenic acid has been shown to inhibit the breakdown of GABA in the brain, resulting in sedation. GABA is the principal inhibitory neurotransmitter in the nervous system. Another compound present in valerian extracts is a lignan, hydroxypinoresinol, and it binds to benzodiazepine receptors, which are GABA_A receptors and the target of benzodiazepines, i.e. tranquilizers and sedatives. (biology.stackexchange.com) It is important to note that the dried plant, used consistently for a period of time, can induce "Valerianism," a state of emotional lability similar to what was formerly encountered with bromide abuse. The condition reverses quickly if the Valerian is stopped. (Moore)

Because its action can be quite strong, it is best to begin with a five-drop dose, which can be repeated every 10-15 minutes until you are calm (and probably asleep). To avoid addiction, use valerian root as a tea or a tincture, not in capsules, and take it for no more than three weeks.

David Hoffman noted that Ellingwood considered ***Humulus lupulus (Hops)***, in the Cannabaceae family, specific for “marked cases of nerve irritation and wakefulness where anxiety and worry are the cause.” Anne McIntyre, in “Flower Power,” expands on this, noting that hops can relieve insomnia and ease anxiety by reducing tension in muscles throughout the body. It is a particularly good remedy for women, as it has an estrogenic action, making it excellent for any problem around menopause.

McIntyre recommends ***Cypripedium pubescens (Lady's slipper)***, also known as the flower of serenity, as a useful ally for anxiety, as it acts as a tonic to the nervous system. It is a good remedy for nervous exhaustion, for depletion after illness, for anxiety, tension, restlessness, over-excitement and insomnia. Its antispasmodic properties relax smooth muscle and relieve pain, making it excellent for exhaustion and anxiety following childbirth. And as a diaphoretic, it can be useful for fevers accompanied by restlessness and anxiety. It is an endangered species and must be used only when cultivated, never picked in the wild.

Lavandula officinalis (Lavender) relaxes the digestive tract, soothing away spasm related to tension and anxiety. (McIntyre)

Eschscholzia californica (CA poppy), the flower of gold, is a far less powerful cousin to the opium poppy, making it a safe and useful herbal remedy to calm excitability, tension, insomnia and anxiety. Its antispasmodic action relaxes muscles throughout the body. Through its calming action in the nervous system, it also influences the heart and circulation. It slows down rapid heartbeat and relieves palpitations and helps lower blood pressure. It can be thought of as a gentle balancer to the emotions and calming in times of stress. (McIntyre) According to Michael Moore, Poppy is a bradycardic/hypotensive and causes miscellaneous pregnancy weirdness.

McIntyre also talks about ***Matricaria chamomilla (Chamomile)***, the flower of equilibrium, as a symbol of energy and patience in adversity because of its great ability to restore equilibrium and support the nervous system. Its constituent azulene has soothing properties that calm anxiety and nervousness, making chamomile excellent for tense, stressed out people who tend to be hyperactive and highly sensitive, prone to digestive problems and allergies. It relaxes smooth muscle throughout the body. It is specifically indicated for people with erratic moods - agitated, fine and then anxious, all within minutes. (Winston)

Combining Chamomile with catnip, hops or valerian is especially useful for people who suffer from nervous stomach and diarrhea due to stress. Chamomile can also be mixed fifty/fifty with apple juice and given to children who deal with nightmares. (Winston)

An iced tea infusion of the bulk herb (as opposed to tea bags or capsules) ***Urtica dioica (Stinging nettle)*** seasoned with salt, strengthens the adrenals, relieving anxiety and building focused energy. (Susun Weed)

Avena sativa (Oatstraw) infusion is another herb used for anxiety. It has a softer, more mellow taste, and is good with honey. Making a green oat tincture is much more powerful than drinking the infusion. It is especially useful for those whose anxiety is combined with excessive nervous energy. Another alternative is a hot bath with lemon balm or oatstraw; an ancient remedy for bad cases of the "nerves." According to David Winston, "fresh milky oat extract is a superb food for the nervous system. It is a slow-acting tonic that calms shattered nerves, relieves emotional instability, and helps restore a sense of peace and tranquility to overstressed, angry and chronically upset people."

Leonurus cardiaca (Motherwort) tincture can also be used to fight anxiety. It will does not induce mind numbing or sleepiness, and a dose of 10-20 drops can safely be taken as often as every ten minutes, as needed, to calm and soothe sore spirits. The tincture can be taken every day.

Rosmarinus officinalis (Rosemary), the flower of loyalty, makes a great heart, brain and nervous system remedy when taken as a tea. Renaissance herbalist Wilhelm Ryeff, wrote of rosemary: "The spirits of the Heart and entire body feel joy from this drink which dispels all despondency and worry." (McIntyre) By increasing flow of blood to the brain, it relaxes tense muscles. Its warming effect stimulates the heart and general circulation, improving overall vitality.

Salvia apiana (White sage) may act like valium to relieve anxiety. Some Salvia species contain cineole and camphor that are pain and anxiety relievers. Diterpenoids in sage relax gut smooth muscle.

"Sage is our everyday plant. It is a spirit plant. If you don't have it, everything is going to bother you. You drink it by putting a leaf in cool water everyday. You are going to be calm enough to be rational. It will enhance any medicine you take and protect you for the toxicity of medicines. It tickles your spirit, your conscience, and helps you keep your integrity."
Chumash Healer Cecilia Garcia

Garcia's prescription for anxiety is fascinating:

Sleep with a quarter pound of sagebrush leaves and stems in a sack, and avoid meat for one week. On the seventh evening, boil seven leaves of **Eriodictyon crassifolium (Yerba Santa)** and seven leaves of **Datura wrightii (Datura)** in two quarts of water until the house is filled with fragrance. Make a tea with half teaspoon of California sagebrush leaves and a mug of water. Drink the tea while vaporizing over the gently steaming leaves of *Eriodictyon crassifolium* and *Datura wrightii*. Before bed that evening, get a massage with the oil made of four leaves of **Nicotiana glauca (tobacco)** and four leaves of **Salvia apiana (White sage)** brewed in two quarts of seawater that has been steeped in the sun for several hours. Then gently boil the sun tea until the house smells of the fragrance. Add a portion of this to baby oil to make the massage oil. Massage especially under the arms and butt. For the next two

or three weeks, drink hot chocolate every night made as follows: Melt two tablespoons of traditional hot chocolate, like Chocolate Ibarra, in a mug of hot water. Dissolve the chocolate and add a leaf of *Salvia apiana* (White Sage) and a leaf of **Artemisia douglasiana (Mugwort)** and steep for several minutes before drinking. As the anxiety attacks decrease, continue for the next week or two drinking white sage tea made as follows: Boil a mug of water and add a stick of cinnamon and a leaf of *Salvia apiana*. Mugwort is a uterine vasodilator, so it's contraindicated during pregnancy.

Garcia also suggests that a tea made from the flowers and leaves of **Trichostema lanatum (Woolly bluecurl)** may relieve anxiety, working like benzodiazepine drugs.

She adds that a tea made from **Rose californica (Rose)** may soothe people and lighten their loads. Drinking the tea relieves anxiety so they're not so irritated in the world.

AROMATHERAPY AND ANXIETY

"Aroma is the interface between spirit and matter."

Mindy Green at the 2015 AHG Symposium

The smell of roses has been used for centuries to ease anxiety, and **Rosa (Rose)** is a metaphor for paradise and spiritual unfolding; exquisite beauty and purity of rose flowers, placed on a thorny branch rooted in the earth symbolizes the mystic path to the divine. (Sufi's) The doctrine of signatures - the unfolding rose petals, mirrors the unfolding consciousness.

"Rose is sent to earth by the gardeners of paradise for empowering the mind and the eye of the spirit." Rumi

Original rosaries were made with real roses. Rose, the heart of Christian mysticism, was a metaphor for conscious unfolding. The word bead is derived from Middle English "bede," meaning prayer. Rose is used in ceremony to invoke higher states of consciousness and open the heart. Avicenna, the Persian polymath regarded as one of the most significant thinkers and writers of the Islamic Golden Age praised the effects of rose water on the mind and spirit: it has beneficial effects on brain function and cognitive power, saying "it enhances comprehension and strengthens memory." Susun Weed suggests "a touch of rose essential oil on the seam of your sleeve will wrap you in calming fragrance all day. Getting a massage with rose-scented balms will magnify the effect and can cause a marked decrease in anxiety."

Melissa in addition to being very helpful for anxiety as an herbal remedy, is very helpful in aromatherapy. It has been known to reduce high blood pressure and palpitations. Its relaxant properties act as a tonic and rejuvenator, calming nervousness and anxiety, releasing tension and relieving insomnia. (McIntyre)

Rubbed into the skin, ***Pinus sylvestris* (Pine)** is calming and refreshing and can be used for exhaustion, debility, anxiety and stress-related problems. (McIntyre)

***Salvia officinalis* (Sage)**, when used as an herbal remedy, is a wonderful tonic to the nervous system. In Ayurveda, it promotes calmness and clarity. Recent research has shown it has strong antioxidant properties that help reduce the harmful effect of free radicals. However, used in excess as an essential oil, its constituent thujone may cause epileptic fits, convulsions or paralysis.

***Salvia sclerea* (Clary sage)** contains a much lower concentration of thujone and, as an essential oil, is a much gentler remedy. In fact, clary sage is highly recommended as an essential oil for relieving muscle tension and anxiety, as well as other stress-related problems. (McIntyre)

FLOWER ESSENCES

Patricia Kaminski, co-director of the Flower Essence Society, has observed a common theme in all who suffer from anxiety. "The underlying soul predicament with anxiety is fear, and underlying that fear is a lack in the ability to meet the world, to take on the world. The virtue that is lacking is courage." She notes that, in contrast to depression, where the body shuts down in a lethargic condition, anxiety is a speeded-up condition, with the body going into overdrive, as typified by heart palpitations, rapid pulse, and sweating. The challenge with anxiety is to gain emotional objectivity and not allow certain emotions to take over. "People with anxiety disorders need to step back from a kind of hyper-emotional reaction to life," Kaminski states. "They need calming, but not as in shutting the doors and not going out into life. They need to develop courage to meet life, and to trust life on its own terms."

Flower essences can be very helpful in this regard. 1-4 drops, as needed, can be put in water or taken directly on the tongue. Anne McIntyre, in her book, *Flower Power*, has identified many herbal allies for dealing with anxiety in the form of flower essences:

- *Populus tremble* (Aspen) for those who are anxious about the future
- *Mimulus* for anxiety about the past
- *Aesculus x carnea* (Red Chestnut) can help when feeling anxious about the safety of others
- *Ulmus* (Elm) for overwhelming anxiety
- *Cistus* (Rock Rose) when anxiety escalates into panic
- *Lavandula* (Lavender) can balance the emotions, relieve anxiety, depression and reduce stress and conflict. It's also valuable in spiritual practices, as it calms the mind and helps ease emotional conflicts blocking spiritual growth. It activates the crown chakra; stimulates awareness and alertness and helps connect people with their higher self

- *Allium sativum* (Garlic), the flower of power, is recommended particularly for those who are plagued by fears and anxieties and are emotionally drained as a result. It helps restore wholeness and strength, imparting courage to help overcoming fears and increasing resistance to parasitic and poisonous influences. It has a stabilizing and harmonious effect.
- *Matricaria* is a strong herbal ally for anxiety. It also makes a great flower essence. As an essence, it is known as a remedy of the sun, soothing tension and anxiety, stopping it from accumulating throughout the day to cause restlessness, insomnia or nightmares.
- *Passiflora*, as an essence, helps ease tensions within and calms the spirit. According to McIntyre, it opens both the throat and heart chakras. The throat chakra is associated with taking responsibility for one's personal needs and for nourishing one's inner self, while the heart chakra is the center through which we love.

David Dalton, in Stars of the Meadow has also identified specific flower essences to use for specific types of anxiety.

- *Verbena hastata* (Blue vervain) is indicated for anxiety due to overwork or feeling obligation to live life as a leader, role model or provider; and for those unable to relax.
- *Cirsium vulgare* (Bull thistle) is for anxiety about authority or fear of being controlled. One might choose
- *Asclepias tuberosa* (Butterfly weed) for those who are anxious about commitment.
- *Melissa off.* (Lemon balm) is useful for mental turbulence, producing a calmness that allows for deeper emotional exploration.
- *Eupatorium purpureum* (Gravel root) for anxiety over friendships and relationships.
- *Pulmonaria* (Lungwort) is useful for those who lose their breath in anxious moments. It helps move blockages, so energy flows properly in rhythm with the breath.
- *Amaranthus cruentus* (Pink amaranthus) can be used when one feels anxious in love
- *Anagallis arvensis* (Scarlet pimpernel) has been known to help for many aspects of difficult emotions like anxiety, obsession and fear. It helps one understand and transform intense emotions, and release blocked energy of the heart.

There is no magic pill when working with anxiety, and alleviating symptoms is an exercise in trial and error. As with all ailments, one must treat the entire person and take into consideration one's past, family history, trauma and current life circumstances. Herbs without lifestyle changes in diet, exercise, sleep and supplementation, will only do so much toward helping. But for the individual committed to a holistic life, willing to put in the effort by making changes, anxiety can be eliminated without pharmaceuticals and they can again enjoy a peaceful inner landscape.

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