



HERBAL EXTRACT
COMPANY

THE NATUROPATH'S GUIDE — ANXIETY

**A focus on the herbal approach
for managing anxiety**

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PUBLISHED OCTOBER 2019

CHAMOMILE
(Matricaria chamomilla)

ANXIETY

Although anxiety is considered a normal reaction to the stress of daily life it can develop into a disorder when it becomes excessive.

In life's ups and downs most humans experience occasional anxiety and stress when feeling the pressure that comes with work deadlines, exams or personal issues. When people become anxious they typically feel upset, uncomfortable and tense however these feelings usually pass when the stressor is removed. For those who struggle with anxiety these feelings do not completely subside but rather become self-perpetuating and uncontrollable which can cause considerable distress and disruption to the person's life.

Condition Overview

The world is moving at an unnaturally fast pace and as a result anxiety disorders are at an all-time high. With anxiety the dominant emotional state of the 21st century one of the world's most famous art works, Edvard Munch's *The Scream* (1893), has come to represent an expression of the modern age wracked with anxiety and uncertainty. The future is shaped by two key trends, digitisation and urbanisation, but they come at a cost. The all-consuming world of social media, and the mountain of knowledge at our fingertips, has pushed many

people to new levels of anxiety due to screen dependence and overstimulation. Similarly, the rates of psychiatric disorders seem to correlate with urbanisation. Coupled with the culture of fear perpetuated since the so-called 'war on terror', and rampant consumerism becoming the new religion, it's no wonder anxiety has reached unprecedented levels.

As feelings of anxiety are so common it is important to understand the difference between feeling anxious appropriate to a situation and the symptoms of an anxiety disorder. Anxiety disorders are not just one illness, but a group of illnesses characterised by persistent feelings of high anxiety, a state of fear, worry or dread, extreme discomfort and tension. Anxiety is classified as a disorder if the response occurs frequently over a long period of time (at least six months), is out of proportion to the triggering situation and significantly affects everyday functioning. Anxiety disorders include generalised anxiety disorder, social anxiety disorder, panic disorder, specific phobias, obsessive compulsive disorder and post-traumatic stress disorder. Anxiety can reach its zenith with an existential crisis. Existential anxiety, also known as existential angst, is feelings of panic, agitation or dread about the nature of individual or human existence as a whole. People who do not meet the criteria for an anxiety disorder may still need treatment for anxiety symptoms in order to prevent more serious disorders developing.

In Australia anxiety disorders are the most commonly reported mental health problem affecting 3.2 million Australians (13.1%) in 2017 to 2018 (an increase, predominantly in the younger age groups, from 11.2% in 2014 to 2015), and many more people have periods of anxiety without seeking help. Up to 40% of the population will experience a panic attack at some time in their life, 10% of the Australian population experiences social phobia during their lifetime and around 12% of Australians will experience post-traumatic stress in their lifetime. Depression and anxiety often occur together as they share similar causes and symptoms, with more than half the number of people struggling with depression also experiencing symptoms of anxiety. Incredibly 40% of Australians think anxiety is a personality trait (rather than a mental health issue) and so can't be treated. In reality though it is possible to shift anxious thoughts and behaviours. The experience of anxiety is complex. Humans have been fretting for thousands of years because, after all, stress is a natural response to perceived or real threats. Physically stress activates the hypothalamus pituitary - adrenal (HPA) axis and triggers the release of a cascade of hormones and neurotransmitters, notably adrenaline and cortisol (the fight, flight, freeze response). These alarm reaction hormones increase the heart rate, breathing, blood pressure, metabolism, perspiration rate, muscle tension and dilate the pupils. Anxiety is the psychophysiological signal that the stress response has been initiated. This is a normal health response to stress. Moderate levels of anxiety make people alert and improve performance, and even high levels of anxiety will be appropriate when they are consistent with the demands of the situation. Most importantly, however, is that a healthy stress response involves a calming of these hormones once the threat has dissipated.

Common Symptoms

Anxiety disorders often come out of the blue with no apparent reason. Symptoms vary according to the type of anxiety disorder but are generally accompanied by intense physical sensations such as:

- Shortness of breath, difficulty breathing, hyperventilation, tightening of the chest
- Heart palpitations
- Sweating
- Trembling
- Nausea, feelings of choking
- Abdominal distress, diarrhoea
- Frequent urination
- Vertigo, dizziness, feeling lightheaded or faint
- Pins and needles, numbness
- Feelings of losing control and/or feelings of impending doom
- Feeling of unreality or feeling disconnected from the real world
- Fear of going crazy or dying
- Difficulty concentrating
- Restlessness, a feeling of being on edge, inability to relax, excess energy
- Mind chatter, obsessive thinking and compulsive behaviour
- Hot and cold flushes
- Dry mouth
- Constant worrying
- Muscle tension
- Insomnia
- Avoidance of social situations
- Depression
- Decreased libido
- Irritability
- Increased pain sensitivity
- Lack of appetite
- Blurred vision, eye tricks

Risk Factors

While there is no single known cause of anxiety disorders there are a number of risk factors or triggers that may contribute. These differ between the different anxiety disorders but, in general, the following factors may play a role in combination.

Genetics

Certain anxiety disorders appear to have a genetic component with some anxiety disorders running in families. This is similar to a predisposition to other illnesses such as diabetes and heart disease. People may also learn anxious responses from parents or other family members. However having a parent or close relative experience anxiety, or other mental health conditions, doesn't mean other family members will automatically develop anxiety. Despite comprehensive, high-quality neurobiological

research in the field of anxiety disorders these reviews indicate that specific biomarkers for anxiety disorders have yet to be identified.

Stress and Trauma

Stressful life experiences, and ongoing stressful circumstances, are associated with the development of some anxiety disorders, particularly post-traumatic stress disorder. Events such as a marriage breakdown, work or school deadlines and financial hardship can act as a trigger for the development of an anxiety disorder. Early life stress and trauma can also increase the likelihood of developing an anxiety disorder later in life.

Physical Health Problems

Chronic physical illness, such as diabetes, asthma, heart disease and cancer, can contribute to anxiety conditions. Some physical conditions, such as an overactive thyroid, can mimic anxiety conditions so it is important to see a doctor and be assessed to determine whether there may be a medical cause for feelings of anxiety.

Neurotransmitter Imbalance

There are likely millions of different chemical reactions occurring in the brain at any given time that are responsible for a person's mood and overall feelings. There would be no way to tell if someone truly had a chemical imbalance in their brain at a given time however there is a hypothesis that some anxiety disorders may be related, in part, to a chemical imbalance in the brain. Abnormal functioning of neurochemicals such as serotonin, norepinephrine, dopamine and gamma-amino butyric acid (GABA) systems as well as abnormal chemoreceptor reactivity might play a role in the upregulation or downregulation of anxiety disorders. GABA is an inhibitory neurotransmitter within the central nervous system and is a key target of pharmacotherapies in the treatment of anxiety. Tests that use urine, saliva or blood to measure neurotransmitters in the brain are controversial because they are unlikely to be accurate and therefore are an unreliable way to find out if there is a chemical imbalance in the brain. Currently marketed tests will not be able to distinguish between neurotransmitter levels in the brain and

neurotransmitter levels in the body. In addition neurotransmitter levels in the body and brain are constantly and rapidly changing. It is also possible that low neurotransmitter levels are just another symptom of anxiety not the cause.

Gender and Hormone Imbalance

Women have twice the lifetime rates of most anxiety disorders and depression. Thyroid, adrenal and sex hormone imbalances can all lead to mood disorders. Identifying and correcting hormone imbalances can correct the underlying cause behind anxiety. Hormones may be at the root of anxiety if the problem worsens around puberty, ovulation, menopause or premenstrually. Hormones may also be a problem if menstrual cycles are irregular or abnormal.

Brain-Gut Axis

The past decade has seen a paradigm shift in the understanding of the brain-gut axis which offers a greater insight into the connection between diet and disease, including anxiety and depression. The exponential growth of evidence detailing the bidirectional interactions between the gut microbiome and the brain supports a comprehensive model that integrates the central nervous, gastrointestinal, and immune systems with this newly discovered potent organ. This gives new meaning to the saying "gut feeling". Interestingly 90% of the serotonin (the feel-good neurotransmitter) receptors are located in the gut. There is a relatively new field called nutritional psychiatry where patients are taught to understand how gut health and diet can positively or negatively affect their mood. When someone is prescribed an antidepressant such as a selective serotonin reuptake inhibitor (SSRI), the most common side effects are gut-related, and many people temporarily experience nausea, diarrhoea or gastrointestinal problems. There is anatomical and physiologic two-way communication between the gut and brain via the vagus nerve. Despite considerable progress characterising the interactions between the gut microbiome and the central nervous system over the past 10 years questions remain regarding their relevance to the pathogenesis, pathophysiology and treatment of human brain and gut disorders, and

caution should be taken in prematurely extrapolating findings in rodent models to human beings. However this highlights the importance of a good diet not only for gut health but also for mood disorders.

Inflammation, Seasonal and Food Allergies

Increased rates of anxiety are seen among patients with conditions involving infections, allergies and other immune dysregulation/autoimmunity. This could be explained by the fact that increased cortisol production and inflammation/cytokine production can disrupt production of neurotransmitters such as serotonin. A history of seasonal allergies has been associated with significantly higher odds for lifetime anxiety and mood disorders. Multiple studies have shown that food allergy has a negative impact on the quality of life for both food allergic children and their parents, and many look at the role anxiety plays. The fear of accidental exposure to food allergens, the need to carry medication at all times, and the potential limitations on social activities could be sources of anxiety for food allergic children and their parents. Mothers of children with food allergy reported more symptoms of anxiety and depression in their children however the children themselves did not report increased anxiety.

Blood Sugar Imbalances

Observational evidence suggests that a relationship may exist between high glycaemic index (GI) diets and the development of anxiety and depression symptoms. A recent cohort study showed that

increasing odds of anxiety and depression have been associated with the consumption of foods that have a progressively higher GI and this relationship is maintained after controlling micronutrients known to play a role in mental health.

Nutrient Deficiency

The most common nutritional deficiencies seen in patients with mental disorders are of omega 3 fatty acids, B vitamins, minerals, vitamin D and amino acids that are precursors to neurotransmitters. Essential elements such as zinc, magnesium, lithium, iron, calcium and chromium are involved in anxiety and depression. Patients with suspected pyroluria allegedly have problems with the synthesis of haemoglobin, the protein that binds iron in red blood cells. People with this disorder are believed to produce too much of a by-product of haemoglobin synthesis called hydroxyhemopyrrolin-2-one (HPL or pyrroles). This by-product is then believed to bind to Vit B6 and zinc which are then excreted out of the urine making pyroluria essentially a disorder of Vit B6 and zinc depletion. Zinc and B6 are needed for production of neurotransmitters that help prevent anxiety. Many alternative health practitioners push for pyroluria to be a recognised disease although the condition is not supported by the conventional medical profession. It is controversial because the available scientific evidence does not yet support the hypothesis that pyrroles are responsible for all the symptoms and conditions ascribed to pyroluria.



Substance Abuse and Addictions

Decades of research in psychiatry have shown that anxiety disorders and substance use disorders co-occur at greater rates than would be expected by chance alone. Symptoms of anxiety often emerge during the course of chronic intoxication and withdrawal from a number of substances. Anxiety disorders are a risk factor for the development of substance use disorders when people may use alcohol or drugs to self-medicate symptoms. Similarly substance use disorders may modify the presentation and course of anxiety disorders. As generalised anxiety disorder symptoms can be mimicked by substance use or withdrawal, diagnostic complications can arise.

Personality Factors

People with certain temperaments, such as being a perfectionist, being easily aroused and upset, and being very sensitive and emotional, are more prone to anxiety disorders. People who as children were inhibited and shy may also be prone to develop certain anxiety disorders, such as social phobia. Patterns of thinking, and unhelpful coping strategies, characterised by anticipating the worst, persistent negative self-talk, difficulty accepting uncertainty and low self-esteem are often linked to anxiety. Sensitivity to the body's physical responses, such as increased heart rate, and misinterpreting these physical symptoms as indicating something catastrophic might also increase the risk of developing certain anxiety disorders.

Age

After the age of 50 a marked decrease in the prevalence of anxiety disorders has been observed in epidemiological studies.

How To Get The Correct Diagnosis

Sometimes people might receive a formal diagnosis from a GP or psychiatrist of a particular anxiety disorder but before such a diagnosis is made it is important to rule out other possible causes of symptoms or underlying medical conditions. These could include certain infections, thyroid disorders, anaemia, certain pharmaceutical medicines, substance abuse, adrenal conditions, a heart condition, asthma, stress and overwork, depression,

lack of sleep, poor eating habits or food choices resulting in dysregulated blood sugar which, in turn affects stress hormones and nutritional deficiencies. A detailed clinical history with questions about symptoms and medical history is important to ascertain the specific constellation of anxiety symptoms.

Doctors may do a physical exam to look for signs that anxiety might be linked to medications or an underlying medical condition. They may order blood, or urine tests, or other tests if a medical condition is suspected. Doctors may also use psychological questionnaires to help determine a diagnosis using the criteria listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), published by the American Psychiatric Association. All patients with anxiety disorders should be assessed for suicidal thinking and the risk of self-harm. The exact cause of anxiety may not be known and can be different for each individual. This is why it's important to make sure each patient is treated uniquely based on their own presentation. Patients may present with multiple anxiety disorders and, as stated above, anxiety can also be comorbid with depression and other mental health conditions. Menopause and hormonal conditions can also trigger anxiety-like symptoms.

Conventional Treatment & Prevention

Just sitting in the waiting room often helps to reduce anxiety because people know that a doctor is near. Although each anxiety disorder has its own specific characteristics most patients respond well to psychological therapy, medication or a combination of both. Psychological treatments often include multiple treatment elements. When developing a treatment plan, efficacy, adverse effects, interactions, costs and the preference of the patient are considered. In practice most people have had their disorder for years before seeking help and do not expect to get better instantly. Their most acute need is appropriate reassurance that their disorder has been recognised and that help will be forthcoming.

Cognitive behavioural therapy (CBT) is the psychological treatment with the most evidence of efficacy and is an appropriate first-line treatment

for almost all types of anxiety disorders. CBT is aimed at changing patterns of thinking, behaviours and beliefs that may trigger anxiety. Therapy may also involve gradually exposing a person to situations that trigger their anxiety (desensitisation). The right kind of psychological treatment can be very effective and help patients overcome anxiety however it takes a lot of motivation and determination and they take time to work. When medicine is necessary antidepressants, such as selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs), are the recommended first-line medicine of choice.

The general principle is start low and go slow. They play a role in the treatment of some anxiety disorders as well as treating associated or underlying depression. Sedatives and anti-anxiety medications, such as benzodiazepines like Valium and Xanax, specifically influence the neurotransmitter system in the brain. They can help relieve anxiety but they are not recommended for routine use because there is a risk of becoming dependent on them after just a few weeks of use. There are a number of other medications that can be used to treat anxiety but many of them are generally only considered if treatment with SSRIs doesn't work or isn't possible for particular reasons.

Medication will not cure anxiety disorders, or address the root cause, but it can keep symptoms under control while a person receives psychological treatment. It will usually take four to six weeks to see improvement, whether CBT or an antidepressant is used, and most people can tolerate this. Only rarely is there any need to prescribe medication for the acute relief of symptoms. The family and friends of people with anxiety disorders can often feel confused and distressed. Support and education, as well as better community understanding, are an important part of treatment. An interesting point is that the placebo response is endemic in sufferers of anxiety with approximately 25% receiving marked benefit from a placebo (dummy) intervention.

“It takes commitment and practice to slow things down and calm an overstimulated nervous system.”



Oats Seed
(*Avena sativa*)

INTERVENTION	Adaptogen	Antidepressant	Anxiolytic (thymoleptic)	Sedative	Nervine tonics	Nootropic (cognitive enhancing)	Relaxing nerves
Bacopa			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Californian Poppy			<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
Chamomile			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Ginko Biloba			<input type="checkbox"/>			<input type="checkbox"/>	
Gotu Kola	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Lemon Balm		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Magnolia			<input type="checkbox"/>	<input type="checkbox"/>			
Motherwort							<input type="checkbox"/>
Oats Green		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
Oats Seed		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
Passion Flower	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Withania	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Natural Therapies For Treatment & Prevention

Successful naturopathic treatment of anxiety typically requires a comprehensive, integrative approach and can be summed up by incorporating the fundamentals of health into the patient's plan: good habits, good life. It takes commitment and practice to slow things down and calm an overstimulated nervous system. It is an opportunity to examine the big picture and thorough case taking is necessary to determine the causes, onset and duration of the anxiety episodes, the level of impairment, comorbidities and their individual presentation.

Treatment begins with identifying and treating the underlying causes that can contribute to anxiety such as stress, trauma, inflammation, caffeine, alcohol and illicit drugs, pharmaceuticals or excessive work-to-rest ratio. This is followed by reducing anxiety symptoms, managing associated symptoms such as cognitive dysfunction, sleep disturbance, fatigue, muscular tension, enhancing immune function, reducing oxidative stress, supporting and restoring the nervous system and adrenal function and addressing secondary physical symptoms such as gut function.

Herbal medicines offer an additional safe and effective treatment option for anxiety disorders. They may complement conventional treatments, or provide an effective alternative for some people, however if taking pharmaceutical medicines concurrently with herbal medicines the risk of herb-drug interactions should be taken into consideration.

Patients should be given education about anxiety, especially the adaptive aspects such as explaining the fight, flight, freeze response. This information is often extremely beneficial because the person often feels that what they have been experiencing is frightening and unique to them. Education about management involves an outline of fear reinforcement cycles and feedback loops as an explanation of why anxiety has persisted and the need to eventually confront what is feared. A therapeutic approach could include these factors:

Diet

Fine tune the diet because food equals mood. Several studies suggest a relationship between

improved nutrition and better mental health outcomes both in general and adolescent populations. A number of possible mechanisms have been proposed for the effect of diet on mental health including the role of inflammation and oxidation, deficiency of micronutrients and glycaemic balance.

Foods to Include

Brain food which includes whole grains, lean meat, deep sea fish, green leafy vegetables, coloured berries (antioxidants) and nuts (walnuts and almonds). A low glycaemic index diet may be beneficial in stabilising blood sugar levels, which may in turn reduce the 'fight or flight' response of low blood sugar levels.

Certain nutrients are essential for the maintenance of neurotransmitters and neuronal structures of the nervous system:

- Omega-3 fatty acids improve symptoms of anxiety and depression through their anti-inflammatory properties, as well as involvement in the structure and function of neuronal membranes, receptors and signal transmission. Include some cold water fish, such as salmon or sardines, as well as walnuts, flaxseeds and chia seeds at least three times a week.
- Magnesium is required to control inflammation, reduce nervous tension, mood swings, irritability and to manage stress. High magnesium food sources include dark leafy greens, nuts, seeds, fish, beans, whole grains, avocados, yoghurt, bananas and cacao.
- Folate and the B vitamins are needed for the synthesis and metabolism of neurotransmitters with deficiencies in these nutrients linked to mental health issues. Some of the best sources of B vitamins are poultry, eggs, meat, seafood, bananas, legumes, leafy green vegetables and potatoes. Folate can be found in leafy vegetables, citrus fruits and legumes.
- Evidence suggests that adequate intake of protein may be required in the maintenance of mental health. Dietary protein provides amino acids, eight of which are essential. They cannot be synthesised by the body and must be supplied through the diet. Amino acids form the building

blocks of neurotransmitters. For example the synthesis of serotonin requires the essential amino acid tryptophan and dopamine synthesis requires tyrosine, which is produced from the essential amino acid phenylalanine. The lack of tyrosine and tryptophan leads to deficiencies of the respective neurotransmitters and has been associated with psychiatric disturbances.

Foods to Avoid

The consumption of a Western-style diet (increased intake of fast foods, fried foods, sweets, refined grains, processed meat and a reduction of fruit and vegetable intake) has been independently associated with a greater risk for the development of anxiety and depression which has led to this “mental health disaster”.

Decrease refined carbohydrates such as sugar, flour and unhealthy fats.

Avoid counterfeit support and stimulants such as caffeine, alcohol and recreational drugs which can exacerbate the physical symptoms of anxiety.

Inflammation

Address inflammation and food intolerances with an anti-inflammatory lifestyle. Common food allergens like gluten, soy and dairy can contribute to systemic inflammation which might be underpinning problems with the thyroid, immune system or adrenal function.

Gut Environment

Determine if there is underlying gastrointestinal pathology and treat accordingly to improve the health of the digestive tract and the absorption of nutrients.

Assess Nutrient Levels

Correct any nutritional imbalances and investigate oxidative stress. Supplement prescriptions most commonly include magnesium and omega-3 fatty acids.

Lifestyle

Optimise lifestyle habits.

Regular Exercise

Many people with panic disorder avoid doing aerobic exercise as the increase in heart rate and faster breathing may remind them of panic symptoms. Patients can gradually start increasing the amount of exercise they do as an important part of stress management. Prioritise some form of movement every day. Establishing and maintaining a routine of at least three sessions of exercise a week, doing enjoyable and varying activities, is recommended.

Improve Sleep Habits

Treat insomnia and support good sleep quality and patterns. Technology-free times and zones, especially at night time, improves sleep which plays a vital role in alleviating anxiety. Screen dependence, like caffeine, can make an anxious person feel wired so use in moderation is recommended.

Relaxation Techniques and Helpful Habits

Stress reduction techniques like yoga, meditation (apps such as Insight Timer or Headspace), tai chi, breathing exercises, such as conscious and slow breathing, keeping a gratitude journal, guided imagery, positive self-talk strategies, mindfulness and psychotherapy help relieve anxiousness. Other techniques include acupuncture, progressive muscle relaxation, massage therapy, aromatherapy, balneotherapy, calming music, forest bathing and taking in the natural world, taking time out for family, friends and recreational activities, reading a book or laughter (e.g. going to a comedy club).

Toxicity

Investigate toxicity and decrease environmental chemicals. Neurotoxicity describes neurophysiological changes caused by chronic or acute exposure to toxic agents which may result in cognitive changes, memory disorders and changes in mood (such as anxiety) or onset of psychiatric disturbances. Common toxic agents include certain heavy metals, drugs, organophosphates, bacterial and animal neurotoxins.

Potential Treatment Plans

Anxiety	Motherwort	Magnolia	Oats Seed	Passion Flower	Withania
Generalised anxiety disorder	Ginkgo Biloba	Gotu Kola	Oats Seed	Passion Flower	Withania
Anxiety and depression	Bacopa	Gotu Kola	Lemon Balm	Motherwort	Magnolia
Insomnia	Bacopa	Lemon Balm	Californian Poppy	Chamomile	Oats Green

Desired Herbal Actions and Potential Herbs Include:

Adaptogens

Provide increased adaptation to exogenous stressors via complex effects on neurochemistry and the endocrine system. Herbs such as astragalus, codonopsis, gotu kola, Korean ginseng, muira puama, passion flower, reishi, rhodiola, schizandra, shatavari, Siberian ginseng, withania.

Adrenal Tonic

Nourish and support the adrenal glands which may be weak due to chronic stress. Herbs such as liquorice, rehmannia.

Antidepressants

Depression and anxiety are different conditions but they commonly occur together. They also have similar treatments. Herbs such as damiana, lavender, lemon balm, oats green, oats seed, perilla, rosemary, schizandra, St John's wort, vervain.

Anxiolytic (thymoleptic)

Mood elevators which reduce anxiety symptoms. Herbs such as angelica, bacopa, Californian poppy, chamomile, damiana, ginkgo, hops, gotu kola, Korean ginseng, lavender, lemon balm, lime flowers, magnolia, oats green, oats seed, passion flower, paw paw, rhodiola, sage, St John's wort, schizandra, scullcap, Siberian ginseng, valerian, withania, zizyphus.

Nervine Tonics

They restore tone to the nervous system and assist in strengthening it. Herbs such as bacopa, baical scullcap, chamomile, damiana, gotu kola, Jamaica dogwood, lavender, lemon balm, mugwort, muira puama, oats green, oat seed, passion flower, rosemary, schizandra, St John's wort, valerian, vervain, wild yam, withania.

Nootropic (cognitive enhancing)

These substances improve problems with learning, memory, alertness and concentration that features with anxiety. Herbs such as bacopa, ginkgo biloba, green tea, lemon balm, muira puama, rosemary, sage.

Relaxing Nervines

These have a sedative effect on the nervous system and decrease nervous tension. Herbs such as Californian poppy, chamomile, hops, hyssop, Jamaica dogwood, lavender, lemon balm, lime flowers, mistletoe, motherwort, oats green, passion flower, scullcap, valerian, vervain, withania, zizyphus.

Sedative

Similar to anxiolytics but tend to be sedative at a higher dose. For restlessness and anxiety associated with poor sleep habits they soothe the nervous system. Herbs such as bacopa, boldo, chamomile, Californian poppy, hops, Jamaica dogwood, lavender, lemon balm, magnolia, passion flower, paw paw, scullcap, valerian, zizyphus.

Herbal Support Could Include:

HERB NAME	DESCRIPTION	ACTIONS
<p>Bacopa (<i>Bacopa monnieri</i>)</p> 	<p>Although bacopa is known for its reputed cognitive enhancing activity it has traditional use in treating anxiety and insomnia and has even been recommended in years past for the antiquated diagnosis of “insanity.” A double-blind randomised controlled trial using 300mg of bacopa demonstrated a marked reduction in anxiety compared with placebo after 12 weeks of treatment.</p>	<p>Anxiolytic</p> <hr/> <p>Sedative</p> <hr/> <p>Nervine Tonic</p> <hr/> <p>Nootropic</p> <hr/>
<p>Californian Poppy (<i>Eschscholzia californica</i>)</p> 	<p>Animal research has revealed that the Californian poppy produces anxiolytic and sedative effects. Californian poppy tea reduces anxiety, acts as a mild analgesic and helps prevent drug induced memory loss in mice. Animal studies also confirm that an aqueous alcoholic extract of Californian poppy has sedative effects at higher doses and anxiolytic effects at lower doses. These effects have been found in preclinical research to be caused by an affinity for GABA receptors.</p>	<p>Anxiolytic</p> <hr/> <p>Sedative</p> <hr/> <p>Relaxing Nervine</p> <hr/>
<p>Chamomile (<i>Matricaria chamomilla</i>)</p> 	<p>An eight-week clinical trial reported positive effects in anxiety treatment using 1500mg of chamomile (500mg capsule three times daily) in 179 patients with generalised anxiety disorder. At week eight 58% of patients met the criteria for clinical response in the chamomile group with significant reductions in mean anxiety across the entire sample. The response rate was comparable to those observed during conventional anxiolytic drug therapy.</p>	<p>Anxiolytic</p> <hr/> <p>Sedative</p> <hr/> <p>Nervine Tonic</p> <hr/> <p>Relaxing Nervine</p> <hr/>
<p>Ginkgo (<i>Ginkgo biloba</i>)</p> 	<p>A double blind randomised controlled trial of 107 people was conducted using a standardised ginkgo extract (480 or 240mg per day) or placebo for four weeks in adults with generalised anxiety disorder, or adjustment disorder with anxious mood. Results showed that the participants’ scores decreased significantly in both the 480mg per day and 240mg per day ginkgo groups, relative to placebo, in a dose dependent manner.</p>	<p>Anxiolytic</p> <hr/> <p>Nootropic</p> <hr/>

Herbal Support Could Include: (Cont.)

HERB NAME	DESCRIPTION	ACTIONS
<p>Gotu Kola (<i>Centella asiatica</i>)</p> 	<p>Gotu kola has been used for centuries in Ayurvedic and traditional Pan-Pacific medicine for treatment of anxious and depressive complaints. An open label study of 500mg of gotu kola twice daily for two months in 33 patients with generalised anxiety disorder revealed significant improvements in anxiety following 60 days of treatment, along with significant reductions in secondary measures of stress and depression.</p>	<p>Adaptogen Anxiolytic Nervine Tonic</p>
<p>Lemon Balm (<i>Melissa officinalis</i>)</p> 	<p>Traditionally used as a mild sedative and an antispasmodic. The results of a 2018 double blind placebo controlled clinical trial showed that eight-week supplementation with 3g of lemon balm can decrease anxiety, depression, stress and sleep disorder in patients with chronic stable angina.</p>	<p>Antidepressant Anxiolytic Sedative Nervine Tonic Nootropic Relaxing Nervine</p>
<p>Magnolia (<i>Magnolia officinalis</i>)</p> 	<p>The bark of magnolia is used in Oriental traditional medicine for anxiety and mood disorders. Magnolia has shown significant and dose dependent reduction in the anxiety response in in vivo studies.</p>	<p>Anxiolytic Sedative</p>
<p>Motherwort (<i>Leonurus cardiaca</i>)</p> 	<p>Historically motherwort is used for the treatment of several nervous afflictions such as anxiety, depression and stress. It has an affinity for the female reproductive system and is used for treating menopausal anxiety. The potential of motherwort for the treatment of anxiety and depressive disorders was evaluated in 2015 in in vitro studies by investigating the effect of motherwort and some constituents on the neuronal receptor GABA. The results suggest a potential neurological mechanism based on interaction to the GABA site of the GABA type A receptor.</p>	<p>Antidepressant Anxiolytic Nervine Tonic</p>

Herbal Support Could Include: (Cont.)

HERB NAME	DESCRIPTION	ACTIONS
<p>Oats Green (<i>Avena sativa</i>)</p> 	<p>Oats, in its various forms and extracts, has been traditionally used for its physical and psychological fortifying properties for centuries. The purported benefits include reduced anxiety, mild antidepressant effects and increased ability to cope with stress. Oats green has been used traditionally as a herbal sedative to aid sleep and for the relief of mild symptoms of mental stress. It supports long term nervous system health as it is rich in minerals.</p>	<p>Antidepressant</p> <hr/> <p>Anxiolytic</p> <hr/> <p>Nervine Tonic</p> <hr/> <p>Relaxing Nervine</p> <hr/>
<p>Oats Seed (<i>Avena sativa</i>)</p> 	<p>One of the safest and most popular nervines is the immature seed of oats. Many Eclectics considered oat seed to be of some importance for treating nervous debility. Many Western herbalists prefer to use oat seed tincture as a simple to quiet temporary, mild anxiety or to take the edge off moods that might otherwise be expressed as angry outbursts or losses of self-control. Oats seed has a more immediate effect than oats green and is considered more specific to people who are going through acute nervous exhaustion.</p>	<p>Antidepressant</p> <hr/> <p>Anxiolytic</p> <hr/> <p>Nervine Tonic</p> <hr/>
<p>Passion Flower (<i>Passiflora incarnata</i>)</p> 	<p>Traditionally used in the treatment of anxiety and neurosis. A 2017 double-blind randomised controlled trial of 40 dental surgery patients showed passion flower (260mg) orally administered 30 minutes before dental surgery reduced subjective anxiety along with physiological indicators (i.e., blood pressure and heart rate). This occurred to the same extent as midazolam (a short acting hypnotic sedative drug), however, with fewer cognitively impairing side effects.</p>	<p>Adaptogen</p> <hr/> <p>Anxiolytic</p> <hr/> <p>Sedative</p> <hr/> <p>Nervine Tonic</p> <hr/> <p>Relaxing Nervine</p> <hr/>

Herbal Support Could Include: (Cont.)

HERB NAME	DESCRIPTION	ACTIONS
<p>Withania (<i>Withania somnifera</i>)</p> 	<p>Withania returned positive results in a 2019 study where 66 schizophrenic patients with anxiety and depression symptoms were enrolled in a 12 week, randomised, placebo controlled, double blind trial and treated with 1000mg of standardised withania. A 2014 systematic review captured all previous studies of withania with anxiety/stress outcomes. This identified five human randomised controlled trials with 400 participants (range was 39 to 130). All five trials reported at least one significant benefit of withania in comparison to control conditions for anxiety and/or stress related outcomes. Doses ranged from 125 to 1200mg per day, over six to 16 weeks.</p>	<p>Adaptogen</p> <hr/> <p>Anxiolytic</p> <hr/> <p>Nervine tonic</p> <hr/> <p>Relaxing nervine</p> <hr/>

Conclusion

Anxiety disorders are common and are highly comorbid yet they remain under-diagnosed and under-treated. Prevention, early detection and treatment of anxiety disorders should be a priority. The drugs available to treat mild to moderate anxiety, particularly benzodiazepines, are problematic because they can produce side-effects and create dependence. Herbal medicine may provide a much better initial prescription for most of these patients allowing practitioners to reserve the stronger pharmaceuticals for more difficult and persistent cases of anxiety.

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