



HERBAL EXTRACT
COMPANY

THE NATUROPATH'S GUIDE — DEPRESSION

A focus on the herbal approach
for managing depression

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ST JOHN'S WORT
(*Hypericum perforatum*)

DEPRESSION

Depression is a common but serious mental disorder that is a leading cause of disability worldwide and is a major contributor to the overall global burden of disease.¹

Mental health is a key component of health and wellbeing. A mental illness can be defined as 'a clinically diagnosable disorder that significantly interferes with a person's cognitive, emotional or social abilities'. The most common mental illnesses are depressive, anxiety and substance use disorders. These three types of mental illnesses often occur in combination. For example, a person with an anxiety disorder could also develop depression, or a person with depression might misuse alcohol or other drugs, in an effort to self-medicate.²

However, a person does not need to meet the criteria for a mental illness or mental disorder to be negatively affected by their mental health. Mental health impacts, and is impacted by, multiple socioeconomic factors including a person's access to services, living conditions and employment status. Mental health affects not only the individual but also their families and carers.³

Condition Overview

Depression is among the most common of all

mental health conditions. It is different from the usual mood fluctuations and short-lived emotional responses to challenges in everyday life. Feeling sad, low or lacking in energy is a normal part of the human experience however people with depression experience these feelings more intensely and for longer. They can find it difficult to carry on with regular daily tasks during periods of depression. Especially when recurrent, and with moderate or severe intensity, depression may become a serious health condition. It can cause the affected person to suffer greatly and function poorly at work, at school and in the family. At its worst, depression can lead to suicide.^{4,5}

Suicide is, sadly, the leading cause of death for Australians between the ages of 15 and 44. Depression affects 1 in 16 Australians each year which is equivalent to 1.16 million people. Approximately 20% of Australians will be diagnosed with a depressive disorder in their lifetime. One of the most successful mental health initiatives in Australian history reflects the weight of these sobering statistics. R U OK? is a suicide prevention charity that has become a part of the everyday national vernacular. It encourages all Australians to notice the signs of mental health struggle and help those in need. This can be done by asking "Are you OK?" and having meaningful conversations with people who are struggling with life.⁶

Recently the impact of the coronavirus disease 2019 (COVID-19) pandemic on mental health and

wellbeing has been substantial and it has caused considerable mental ill health. Young people, those with fewer socio-economic resources and those with pre-existing mental health conditions showed the strongest associations with poor mental health during this time. The direct risks of the virus, the social and financial consequences of lockdowns, isolation and quarantine, and uncertainty about change exacerbated symptoms of depression and anxiety. A 2021 Australian longitudinal and nationally representative study of mental health found that exposure to COVID-19 itself did not harm mental health, but COVID-19-related financial distress and social impairment were associated with higher symptom levels of depression or anxiety throughout the first three months of the pandemic. According to Australian Psychological Society CEO Dr Zena Burgess "the effects of the pandemic on the mental health of our nation will continue for years to come."^{7 8 9}

The World Health Organisation (WHO) has projected that major depression will rank as the first cause of the burden of disease worldwide by 2030, making it a medical priority. As a consequence of this high prevalence, impact on function and risk to later ill-health and premature death, depressive disorders contribute the largest global burden of disease due to common mental disorders and place a substantial burden on the economy in terms of days lost to disability.^{10 11}

Depression is not a simple condition, with a single cause, which can be solved by a single drug or therapy. It results from a complex interaction of social, psychological, biological and environmental factors. People who have gone through adverse life events (unemployment, bereavement, traumatic events) are more likely to develop depression. Depression can, in turn, lead to more stress and dysfunction and worsen the affected person's life situation and the depression itself. There are interrelationships between depression and physical health. For example, cardiovascular disease can lead to depression and vice versa.^{12 13}

There are several types of depression and, while they are all characterised by intense low mood, there are also important differences.

- **Major depression** is also known as clinical depression or major depressive disorder. This can

be divided into single episode depressive disorder (the person's first and only episode) or recurrent depressive disorder (the person has a history of at least two depressive episodes). Major depressive disorder is a serious mental illness that affects how people feel, think and go about their everyday tasks. The condition can also impact a person's sleep habits, appetite and ability to enjoy life. Major depressive disorder is not something that eventually "passes." While most people feel sad at times in their lives, major depression is when a person is in a depressed mood most of the day, nearly every day, for at least two weeks. Some people feel depressed without knowing why. The onset can happen at any age, but usually begins in adulthood. The most recognised symptoms are a constant sense of hopelessness and despair, low mood and loss of interest in activities that were once considered pleasurable.

Sub-types of major depression include:

melancholic depression, a severe form of depression that includes physical as well as emotional symptoms; psychotic depression which includes hallucinations (hearing or seeing people or things that aren't there); delusions (false beliefs that other people don't experience or agree with); or paranoia (feeling suspicious of other people or feeling that everyone is against them). While it is not a formally recognised diagnosis existential depression may develop when a person is unable to stop ruminating on unanswerable existential questions (such as "What is the meaning of life?" or "What happens after death?"), leaving them in a constant state of despair. The individual may feel hopeless and fear that there is no meaning or purpose to life. A person experiencing these symptoms may be diagnosed with major depressive disorder.

- **Bipolar disorder** (formerly called manic depression) is characterised by extreme mood changes that disrupt daily life. This includes depressive episodes that alternate with periods of manic symptoms such as euphoria or irritability, increased activity or energy and other symptoms such as increased talkativeness, racing thoughts, increased self-esteem, decreased need for sleep, distractibility and impulsive reckless behaviour. Symptoms of depressive episodes are similar

to those of major depression. People who have bipolar disorder can also experience episodes of psychosis (hallucinations, delusions and/or paranoia).

- **Cyclothymic disorder** is sometimes described as a milder form of bipolar disorder. The person experiences changing moods for at least two years. They have periods of hypomania (a mild-to-moderate level of mania) and episodes of depressive symptoms. They may also have very short periods of even moods, with fewer than two months in between. Symptoms tend to be less severe and are shorter lasting than in bipolar disorder or major depression.
- **Dysthymic disorder** (also known as persistent depressive disorder) is similar to major depression but with fewer severe symptoms that persist for at least two years.
- **Seasonal affective disorder (SAD)** is a mood disorder (either depression or mania) that has a seasonal pattern. Depressive symptoms tend to start in winter and fade by spring. It can take several winters to diagnose this type of depression. SAD is thought to be triggered by changes in exposure to light in the winter and is more prevalent in countries with short days and long periods of darkness, such as in the cold climate areas of the Northern Hemisphere. SAD is very rare in Australia.
- **Perinatal and postnatal** (also known as postpartum) **depression** occurs during pregnancy or after the birth of a baby and affects up to one in every five women in Australia. It is associated with the challenges and demands of parenthood as well as changes in hormones. For men, new routines and roles can also trigger depression. While tiredness and irritability is normal during pregnancy and after the baby is born, if a mother or her partner experience low mood that persists for more than two weeks, it's important to talk to a GP about whether it may be perinatal or postnatal depression.

All types of depression can be treated and it is better to seek support earlier. It is recommended to seek help:

- if someone is feeling sad, teary or overwhelmed most of the time

- if these feelings have been with them for two weeks or more
- if the low mood affects how they cope at home, work or school.^{14 15}

Living with depression can feel lonely. People may be fearful or ashamed of being labeled with a serious mental illness, causing them to suffer in silence rather than get help. In fact, most people with major depression never seek the right treatment. Although there are known, effective treatments for mental disorders, more than 75% of people in low and middle income countries receive no treatment. Barriers to effective care include a lack of resources, lack of trained health-care providers and social stigma associated with mental disorders. But those struggling with this illness are not alone. It is one of the most common and most treatable mental health disorders. With early, continuous treatment, people can gain control of their symptoms, feel better and get back to enjoying their lives.^{16 17}

Common Symptoms

A depressive episode can be categorised as mild, moderate or severe depending on the number and severity of symptoms, including the impact on the individual's functioning. As well as physical symptoms, depression involves the way a person feels, thinks and behaves. People with depression may experience these physical symptoms:

- sleep problems: insomnia or hypersomnia (excessive sleeping) almost every day
- changed appetite: with or without weight loss or gain
- feeling tired, low in energy, run down or sick almost every day
- poor concentration, indecisiveness, forgetfulness
- vague aches or pains such as headaches, muscle pain, digestive problems, joint pain.

People with depression may feel:

- in a depressed mood most of the day (sometimes particularly in the morning)
- sad or teary
- overwhelmed

- excessive guilt
- restless, anxious
- irritable or angry
- lacking in confidence, low self-worth
- hopelessness about the future or disappointed
- empty, pessimistic
- thoughts about dying or suicidal ideation

People with depression may have recurring negative thoughts, such as:

- 'I'm no good.'
- 'It's all my fault.'
- 'Life's not worth living.'
- 'People would be better off without me.'

People with depression may also have altered behaviours such as:

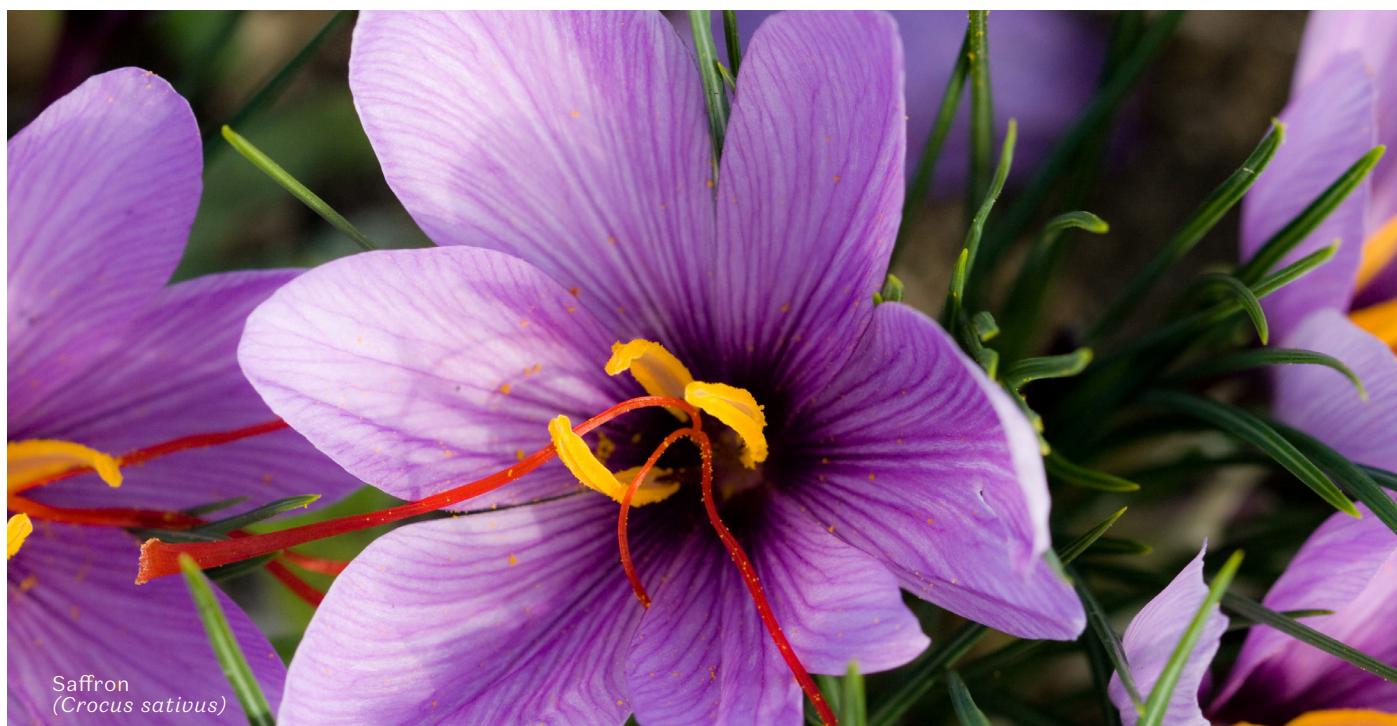
- not taking part in activities and hobbies they used to enjoy
- staying in, rather than going out socially
- being less productive at school or work
- drinking more alcohol
- diminished libido^{18 19}

Risk Factors

There are several theories about what causes depression. The condition most likely results from a complex interplay of individual factors.

Genetics (Family History)

Research has shown that the risk of developing depression is partly determined by genetics. Findings from researchers studying twins suggest that about 30% of the predisposition for developing clinical depression is due to genetics and the remaining 70% is thought to be due to other contributing factors. Identifying genes that predispose a person to certain types of depression is a growing area of research. One of the risk genes related to depression is the methylenetetrahydrofolate reductase (MTHFR) gene. This gene has the map or blueprint for the body to synthesise the MTHFR enzyme. The primary function of the MTHFR enzyme is to convert vitamin B9 (folic acid and folate) into a more active form known as 5-MTHF, methylfolate, or active folate. In this case the poor enzyme efficiency leads to slowed conversion of folic acid and folate into active forms like 5-MTHF. Folate is key for several biological processes, including DNA synthesis



and neurotransmitter production (including the neurotransmitter serotonin, which is acted upon by most antidepressants).^{20 21}

Gender

The prevalence rate of depression is almost double in women than in men although this may be due to the fact that more women seek treatment for their symptoms than men. This difference has been considered to be due to the hormonal differences, childbirth effects and different psychosocial stressors in men and women. Women are particularly vulnerable to depression during pregnancy and after childbirth, which is called postnatal depression, as well as during menopause.²²

Brain Chemistry (Biochemical Factors)

Neurotransmitters are chemical messengers that carry signals from one part of the brain to the next. There are many neurotransmitters serving different purposes. Three important ones that affect a person's mood are serotonin (the "happy hormone"), noradrenaline and dopamine. Other neurotransmitters can send messages in the brain, including glutamate, gamma aminobutyric acid (GABA) and acetylcholine. Researchers are still learning about the role these brain chemicals play in depression. One long-prevalent explanation suggested that abnormal brain chemistry played a primary role in depression. The serotonin theory of depression started to be widely promoted by the pharmaceutical industry (and indoctrinated

healthcare professionals) in the 1990s in association with its efforts to market a new range of antidepressants known as selective serotonin-reuptake inhibitors or SSRIs (such as Prozac). SSRIs block the reuptake of serotonin meaning there is more available to bind to receptors. As a side note, perhaps the upside of the pharmaceutical companies' plethora of television commercials at the time, touting the latest in antidepressants, may actually have had a beneficial effect by helping people realise they are not alone and that there is hope. However, considering the complexity of depression, one wonder drug does not always cure the condition. More recent findings indicate that depression is likely not the result of chemical imbalances in the brain. Current theories indicate that it is associated primarily with more complex neuroregulatory systems and neural circuits, causing secondary disturbances of neurotransmitter systems. While research indicates that serotonin levels may not cause depression, other neurotransmitters and interactions may play a part. Such findings represent a significant shift in the understanding of depression and call into question the basis for the use of antidepressants. However, this does not mean people taking antidepressants should stop their medication. More research is needed to fully understand what causes depression, how imbalances in these chemicals affect mental health conditions such as depression, how antidepressants affect the condition and what other treatments may also be effective for managing symptoms of depression.^{23 24 25 26 27}



Medical Conditions

The pain and stress that comes with certain conditions can take a toll on a person's mental state. Many chronic conditions are linked to higher rates of depression, including chronic pain, irritable bowel syndrome (IBS), sleep disorders, arthritis, heart disease, diabetes, thyroid disease, stroke, cancer, multiple sclerosis, Alzheimer's disease, dementia and Parkinson's disease. Research from last year (2022) supports the view that people who have depression should consult with their doctor to see if they have other illnesses that could cause inflammation, since there is evidence that increased inflammation can cause depressive symptoms. Elevated levels of proinflammatory cytokines have been associated with depression including interleukin (IL)-1 β , tumor necrosis factor-alpha, and IL-6. These patients also have increased oxidative stress which could be related to mitochondrial dysfunction.^{28 29 30}

Allergy

Allergic diseases appear to be associated with mood disorders. Allergic rhinitis is particularly associated with high risk of depression and anxiety. Food allergies, particularly for shrimp, egg, mackerel, crab, kiwi fruit, milk, banana and squid have also been shown to be risk factors for depression and severe psychological distress.^{31 32}

Personality Style

Personality can contribute to depression and is considered to be a significant determinant of psychological wellbeing. Research findings demonstrate that how an individual copes with the problems they encounter may be influenced by personality traits. Personality traits are most commonly classified under the 'Big Five': extraversion (versus introversion) which reflects talkativeness, assertiveness and activity level; agreeableness (versus antagonism) which assesses cooperativeness and compassion; conscientiousness (versus lack of organisation skills) which encompasses order, goal orientation and discipline; neuroticism (versus emotional stability) which denotes negative affect; and openness to experience (versus close-mindedness) which measures intellectual curiosity and creativity. For major depression, neuroticism is a well-established

risk factor given that individuals with high neuroticism tend to display emotional instability, higher reactivity to stress and proneness to anxiety, all of which are symptoms associated with major depression. There is also evidence that neuroticism accounts for cognitive traits such as rumination and evaluation, which can have a negative impact on mental health. On the other hand, extraversion, as characterised by sociability, assertiveness and high energy levels, has demonstrated an inverse relationship with major depression.³³

Ageing

Depression is not a normal part of aging and there is no evidence that ageing itself is a risk factor for depression later in life. However older people are at greater risk of developing mental health conditions because of the cumulative effect of numerous risk factors, including chronic illness and isolation. Depression often goes undiagnosed and untreated in older adults.³⁴

Social Isolation and Loneliness

Defined as a state in which an individual has few close relationships or limited contact within a community, social isolation is a risk factor for depression in older age. Tackling social isolation must be prioritised to safeguard the mental health of older adults worldwide.³⁵

Lack of Physical Exercise

A 2022 systematic review and meta-analysis of associations between physical activity and depression suggests significant mental health benefits from being physically active, even at levels below the public health recommendations. Health practitioners should therefore encourage any increase in physical activity to improve mental health.³⁶

Stress and Long-Term Pressures such as Abusive Relationships, Bullying and Work Stress

Stress and trauma can play a major role in the onset and/or continuation of mental health challenges. A vast body of literature has revealed that dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis, which is linked to long term stress, is associated with etiology of major depressive

disorder. People who were neglected or abused as children have a high risk for major depression.³⁷

Major Life Events

Even happy events, such as having a baby or landing a new job, can increase a person's risk for depression. Other life events linked to depression include losing a job, buying a house, getting a divorce, moving and retiring. The death of a loved one can cause great sadness, which is a major part of the grieving process. Some people will feel better in a matter of months, but others experience more serious, long-term periods of depression.³⁸

Substance Abuse, Addiction and Medications

In many cases, substance abuse and depression go hand-in-hand. Alcohol and drugs such as methylenedioxymethamphetamine (MDMA also known as ecstasy), crystal methamphetamine (also known as ice) and cannabis may lead to chemical changes in the brain that raise the risk for depression. Certain medications have been linked to depression including blood pressure medication, sleeping pills, sedatives, steroids and prescription painkillers.³⁹

Poor Nutrition

Eating a nutritious diet is important for brain function. Nutritional deficiency can occur due to malabsorption, increased nutritional needs such as during pregnancy and malnutrition due to lack of variation in the diet. Research suggests that eating a lot of processed foods may increase someone's risk of depression. Similarly, consuming too many simple carbohydrates is linked to symptoms of depression, especially in women. Studies have also found that people with depression may be more likely to have low blood levels of: vitamin B9 (folate/folic acid), vitamin B12, vitamin D, zinc, copper and manganese.

Vitamin D

Many people with depression have low vitamin D. This may be due to lifestyle factors such as inadequate nutrition and a lack of time outdoors. Growing evidence points to the role of vitamin D in the cause and treatment of depression. Serum vitamin D levels inversely correlate with clinical depression, however the evidence is not strong

enough to recommend universal supplementation in depression. People with a vitamin D deficiency can increase their levels with nutritional changes, supplements and increased sun exposure.^{40 41}

Gut-Brain Connection

The connection between the gut and the mind is known as the gut-brain axis and is a burgeoning research field that holds promise to further the understanding of disorders such as depression. Even though this field is sometimes thought of as novel, history shows that the notion of a connection between the gut and the mind has been recurring within medical science since ancient times. This is reflected in language such as the expression "butterflies in the stomach" as a term of worry appraisal, and the term having a "gut feeling". With 90% of serotonin receptors being located in the gut, disruption in the gut can lead to a cascade of events resulting in depression. Intestinal permeability can aggravate the immune system and imbalances in the gut can trigger inflammation-producing stress hormones resulting in a shift in mood. In relation to this, 2023 research has found that the presence of IBS (a chronic disorder of the stomach and intestines) is associated with an increased associated prevalence of psychiatric disorders such as anxiety, depression and suicide attempt/ ideation. The lead researcher said it has been long suspected that dysfunction of the gut-brain axis is bidirectional so that IBS symptoms influence anxiety and depression and psychiatric factors cause IBS symptoms. He suggests that medical professionals need to treat both ends of the axis.^{42 43}

Heavy Metals

Recently the association between environmental pollutants and depression has received a lot of attention. It is well documented that exposure to a wide range of chemicals, especially heavy metals, could lead to depression. Cadmium (a widespread environmental pollutant), lead, mercury and arsenic are related to the development of depression.^{44 45}

How To Get The Correct Diagnosis

Depression is a serious health issue and should be managed by a health professional such as a

primary care doctor. They will perform a thorough medical evaluation asking about personal and family psychiatric history and asking questions that screen for the symptoms of depression such as in energy levels, appetite, sleep and whether they are feeling restless, hopeless or sad. A mental health assessment usually involves a discussion or answering a questionnaire, as well as a physical examination. An individual must have five of the above-mentioned symptoms, of which one must be a depressed mood or reduced ability to experience pleasure (anhedonia) causing social or occupational impairment, to be diagnosed with major depression.^{46 47}

There is no blood test, X-ray or other laboratory test that can be used to diagnose depression. However, the doctor may run blood tests to help detect any other medical problems that have symptoms similar to those of depression. For example, hypothyroidism can cause some of the same symptoms as depression, as can alcohol or drug use and abuse, some medications and stroke.⁴⁸

In countries of all income levels people who experience depression are often not correctly diagnosed, and others who do not have the disorder are too often misdiagnosed and prescribed antidepressants.⁴⁹

Conventional Treatment & Prevention

Once mood and overall health have been assessed,

suggested treatment approaches are based on several factors including what type of depression the client has, how severe the symptoms are and whether they are experiencing a first or recurrent episode.⁵⁰

There are three main approaches to treating depression: lifestyle changes (including reducing substance use, improving sleep, exercise); psychological treatments ('talking therapies' such as cognitive behavioral therapy and mindfulness); and physical therapies (including medicines and electroconvulsive therapy: also called ECT or shock therapy that can be used if drugs prove ineffective or symptoms are severe). Often these treatments are used in combination. Other treatments for depression that is difficult to treat include intranasal ketamine or transcranial magnetic stimulation (TMS).⁵¹

A wide range of synthetic medicines are used in treating depression such as SSRIs, monoamine oxidase inhibitors, mood stabilisers such as lithium and tricyclic antidepressants. It usually takes at least two to six weeks of taking any antidepressant to see improvement. It may take several trials to find the medication that works best. Once the right medication is found, it may take up to a few months to find a proper dose and for the full positive effect to be seen. It is always important to monitor treatment closely during this time. Different medications are used for bipolar disorder. Health practitioners usually consider the possible adverse effects associated with antidepressant



medication, the ability to deliver the interventions (in terms of expertise and/or treatment availability) and individual preferences. Antidepressants are not the first line of treatment for mild depression. They should not be used for treating depression in children and are not the first line of treatment in adolescents, among whom they should be used with extra caution. Interestingly, of the 40.7 million mental health-related medications (subsidised and under co-payment) dispensed in Australia from 2019 to 2020, the majority were for antidepressants (72.1%, or 29.4 million).^{52 53}

When depression becomes very severe, dark thoughts can emerge and these can even lead to suicide.

Resources and support for someone in immediate danger of suicide:

- call triple zero (000)
- go to the nearest hospital emergency department

For someone having negative thoughts who needs someone to talk to:

- call Lifeline on 13 11 14
- call Beyond Blue on 1300 22 4636
- talk to: a GP, counsellor, psychologist or psychiatrist, family or friend, a teacher or coach, a work colleague, a religious leader.

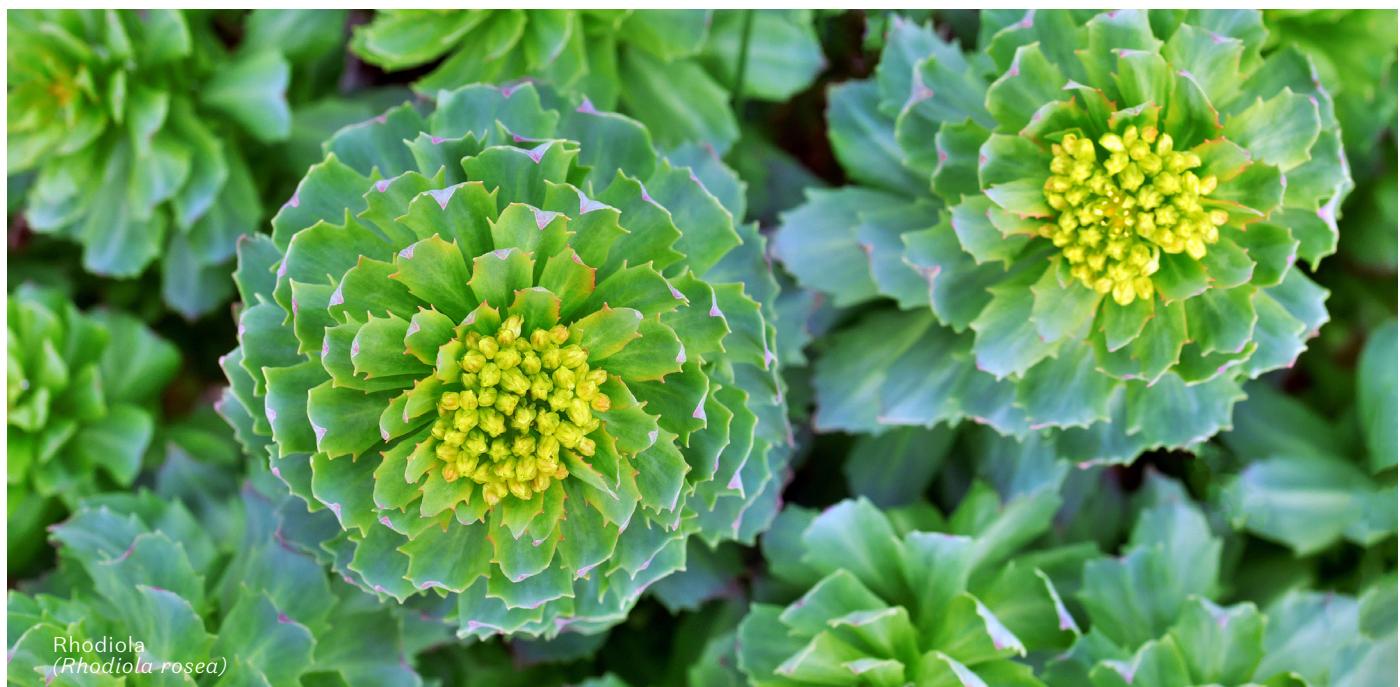
“Do you ever get a little bit tired of life

Like you’re not really happy but you don’t wanna die

Like a numb little bug that’s gotta survive.”

Numb Little Bug

Song released by American singer-songwriter Em Beihold in 2022 who wrote the song about being “numb” while on antidepressants when she was struggling with depression.



INTERVENTION	Antidepressants, thymoleptics	Adaptogen, adrenal restorative	Anxiolytics, sedatives, hypnotics	Nervines tonics, relaxing nervines, nervine stimulants, bitter nervines
Holy Basil	✓	✓	✓	✓
Lavender	✓		✓	✓
Lemon Balm	✓		✓	✓
Oats Green	✓		✓	✓
Passion Flower			✓	
Reishi	✓	✓		✓
Rhodiola	✓	✓	✓	
Rosemary	✓		✓	
Saffron	✓	✓	✓	✓
Siberian Ginseng		✓		✓
St. John's Wort	✓		✓	✓
Withania		✓	✓	✓

Natural Therapies For Treatment & Prevention

Depression is unlikely to go away on its own. To ensure safety of patients with severe depression they should be referred to the appropriate medical personnel however mild to moderate depression is suited to natural therapies. Having said this, herbs may play a supportive role in severe depression in terms of boosting vitality. Because depression is complex and a whole-body disease, complementary and alternative medicine is uniquely qualified to further the integrative approach to treatment through natural, holistic means. Proper nutrition, exercise programs and herbal and nutritional supplements can address the physical side of depression. Meditation, breathwork and massage promote relaxation and can help people learn to manage stress.⁵⁴

Australian psychiatrist, Dr Nicholas Burgess, says “medication cannot replace key determinants of psychological wellbeing such as good physical health, social connectedness, safety from violence and trauma, and security from poverty. A thorough consideration of the patient and their context should always be key in our approach to the formulation and treatment of symptoms of depression.” An alternative for using pharmaceutical drugs for depression, which mask the symptoms, involves investigating the underlying cause (which is multifaceted) and addressing the foundations of health. First line treatment can include guided self-help, cognitive behavioural therapy, lifestyle changes such as exercise and diet, mindfulness and meditation, psychotherapy and counselling.⁵⁵

From a clinical perspective the goal of treating depression is to as safely and quickly as possible reduce depressive symptoms and enhance mood. Naturopaths also aim to improve energy levels, promote positive balanced cognition and encourage beneficial lifestyle changes.⁵⁶

Depression is a highly complex condition to treat and individual treatment is paramount. What proves to be an effective treatment for one person with depression may not work for someone else. Even something that has worked well for someone in the past may become less effective over time, or even stop working, for reasons researchers are

still trying to understand. Researchers continue to try to understand the mechanisms of depression, including brain chemicals, in hopes of finding explanations for these complexities and developing more effective treatments.⁵⁷

There is a lot of research to support the use of herbs as natural remedies for depression. Different combinations are used to help support mood, sleep, anxiety or stress, depending on the individual symptoms. This flexibility to accommodate the natural rhythm of mood disorders is an advantage of naturopathic practice. When using herbs to support depression and anxiety the goal should not be to eliminate these feelings but rather use the herbs to work with and through them. In relation to herbal medicines the term antidepressant may be a misnomer as herbs won’t actually take away depression, however they may alleviate it by helping to uplift the spirit and instill an overall sense of wellbeing, mental clarity and positivity. In some cases they do this by regulating or supporting healthy HPA axis (the central stress response system) function.^{58 59 60}

The evidence regarding combining synthetic antidepressants and herbal medicines is currently evolving. Herbal medicine can have interactions with other medications and if not taken at correct doses may have unwanted side effects or no effect at all. Caution should be exercised particularly in patients taking synthetic antidepressants such as the commonly prescribed antidepressants SSRIs. New safety data and evidence is constantly emerging so it is imperative that practitioners investigate other sources, and do extensive research, to find out whether there are any new known safety concerns or interactions when prescribing herbal medicine for patients already taking pharmaceutical medicines. The clinical significance of many interactions is still unpredictable because of the variable chemical composition of products. Precaution should be exercised when prescribing ANY herbs to a patient on powerful drugs with a narrow dose range between efficacy and toxicity. It is said that in fact most natural products (herbs and food) can interact with prescribed drugs. St. John’s wort in particular is contraindicated with multiple pharmaceutical medications including anticonvulsants, antidepressants, barbiturates and

benzodiazepines.^{61 62 63}

Once an integrative treatment plan has been established then it should be communicated honestly, realistically and compassionately with the client. Moods should be monitored closely through follow ups and clients should be encouraged to call if they worsen. Prescriptions can be modulated according to any changes in symptoms such as insomnia, changes in appetite or energy.⁶⁴

The key treatment goals include:

- Reduce depression, regulate and stabilise mood, promote positive cognition
- Improve nutritional status
- Modulate the body's response to stressors in life and improve coping strategies. Regulate the HPA axis.
- Address associated contributing factors. Minimise exposure to allergens (including *Albizia lebbeck*) as well as general supportive management of the immune system (including *Echinacea spp.*). Improve antioxidant status (including *Pinus pinaster*), decrease inflammation and mitochondrial dysfunction.
- Improve energy levels
- Improve the quality of life and vital health
- Refer to a counsellor

Diet

Nutritious foods benefits the mind and body. While no foods can cure depression certain food choices can benefit mental well-being.

Improve Digestion and the Microbiome

There is a strong link between the gut and brain in conditions like depression. The diet affects the quality of the microbiome, so this will influence the gut-brain axis and mood. High fibre fruits and vegetables help to feed the microbiome and other specific foods have also been shown to affect learning, memory and mood.

Eat:

- a Mediterranean style, nutrient dense, wholefoods diet: Include plenty of protein, good fats and complex carbohydrates. These will help to keep

blood sugar levels stable. When blood sugar levels fluctuate, so does energy and mood. Proteins and fats are essential to make hormones and neurotransmitters in the body, necessary for mood support. The Mediterranean diet is also generally anti-inflammatory and so will help to reduce neuro-inflammation, now implicated in mood disorders.

- Probiotic foods such as sauerkraut, kefir, yoghurt, kimchi, miso and aged cheese and prebiotic foods such as dandelion root and leaf, oats, onion, garlic, leek, asparagus and seaweed.
- Foods with nutrients considered to be a protective factor against depression. This includes foods containing omega-3 fatty acids, such as fatty fish, walnuts and chia seeds, foods rich in B vitamins, such as beans and whole grains, foods with magnesium, which is found in nuts, seeds and yoghurt and antioxidant rich foods such as berries.
- Along with proper food, sufficient water intake plays a vital role in maintaining proper chemical balance in the body. Even mild dehydration can cause fatigue.

Avoid:

- Harmful levels of alcohol: Alcohol is a nervous system depressant that worsens symptoms and has been identified as a potential risk factor for depression. Regular drinking interferes with neurotransmitters in the brain that are needed for good mental health. It also depletes the body of magnesium and other nutrients, and interferes with enzymes and brain chemicals.
- Caffeine: This includes coffee, soft drinks and energy drinks. Green tea and herbal teas are preferable.
- Cigarettes and recreational drugs
- Processed and packaged food
- Artificial sweeteners: Evidence shows that aspartame can alter metabolism and is linked to mood disorders. It may affect feelings of depression and anxiety. Reducing sugar is important and so using sweeteners such as stevia and xylitol are safer and healthier options.
- Allergens: Identify and avoid food allergens and

intolerances.⁶⁵

Lifestyle

Recent evidence supports that lifestyle modification can help to improve mild-to-moderate depression.⁶⁶

Psychological Treatments

Psychological intervention (such as cognitive behavioral, interpersonal or existential therapy) is an important component of treatment for depression. Logotherapy is a meaning-centered approach to psychotherapy compatible with cognitive behavior therapy. Its founder Viktor Frankl was an Austrian neurologist and psychiatrist as well as a Holocaust survivor. He was able to use his experience in concentration camps to observe the way that both he and others coped (or didn't) with the tragedy. Logotherapy involves helping a patient to find personal meaning in life. Frankl believed that humans are motivated by something called a "will to meaning", which equates to a desire to find meaning in life. He argued that life can have meaning even in the most miserable circumstances, and that the motivation for living comes from finding that meaning. Frankl saw the obsession with the pursuit of happiness as a self-defeating goal and believed that the role of psychotherapy was not to make people happy but to enable them to deal with real life and its unavoidable hassles. Referral to a clinical psychologist or highly trained counsellor is advised.⁶⁷

Sleep Hygiene

People with depression often have trouble sleeping however it is vital to get enough sleep each night. This can vary from person to person but typically ranges between seven to nine hours.

Exercise

Although depression can make a person very tired it is essential to be physically active. Exercising, especially outdoors and in moderate sunlight such as walking, can boost the mood. New research this year (2023) has found exercise is better than counselling and medications for managing depression and should be used as a mainstay approach.

Focus on Self-Care

Control stress with relaxation techniques such as meditation (guided meditation apps such as Insight Timer or Headspace), yoga, tai chi, breathing exercises, such as conscious and slow breathing and guided imagery. Meditation helps with emotional regulation. Other techniques include acupuncture, progressive muscle relaxation, massage therapy, aromatherapy and balneotherapy.

Practice Gratitude

Write down three things to be grateful for every day in a gratitude journal. It can help to keep perspective and to appreciate even the smallest things.

Affirmations

These are positive, self-affirming messages to oneself. If the client is feeling anxious for example, a calming and positive internal dialogue may be helpful. Try "all will be well and this will pass", or "I always cope, just breathe and relax".

Schedule Some Downtime

When someone is stressed or overwhelmed their mood is affected. Set aside a little quiet time each day. It may be to sit quietly and watch the birds, listen to calming music, reading a book or a hobby or craft such as drawing, painting or knitting.

Set Small, Achievable Goals

Set realistic goals to build confidence and motivation. A goal at the beginning of treatment may be to make the bed, have lunch with a friend or take a walk. Build up to bigger goals as the client feels better.

Know the Warning Signs

Have the client recognise depression triggers and talk to their practitioner if they notice unusual changes in how they feel, think or act. Write down how they feel day-to-day (moods, feelings, reactions) to spot patterns and understand their depression triggers.

Postpone Important Decisions

This includes getting married or divorced or changing jobs. It is best to wait until the clients feel better.

Educate Family and Friends about Depression

They can help notice warning signs that the depression may be returning.

Seek Support

Stay sociable to avoid becoming isolated. Whether the client finds encouragement from family members or a support group, maintaining relationships and social connection with others is important, especially in times of crisis or rough spells.

Stick to the Treatment Plan

Even if the client feels better they should not stop going to therapy or taking their medication. Abruptly stopping medication can cause withdrawal symptoms and a return of depression. Work with a doctor to adjust their doses or medication, if needed, to continue a treatment plan.

Laughter

Endorphins secreted by laughter can help when people are uncomfortable or in a depressed mood e.g. going to a comedy club.

Encourage Upright Posture instead of Slumping

A recent study concluded that an upright posture could improve mood and reduce fatigue in people with depressive symptoms.⁶⁸

Environmental Issues

This includes urbanisation, exposure to air, water, noise and chemical pollution and the increasing human interface with technology.

Connect with Nature

Spending time in nature is linked to both cognitive benefits and improvements in mood, mental health and emotional well-being.^{69 70}

Potential Treatment Plans

Depression	St. John's Wort	Lavender	Reishi	Siberian Ginseng	Saffron
Depression with Low Vitality	St. John's Wort	Rosemary	Oats Green	Reishi	Siberian Ginseng
Depression with Insomnia	Holy Basil	Oats Green	Passion Flower	Withania	Saffron
Depression with Anxiety	Passion Flower	Rosemary	Rhodiola	Holy Basil	Lemon Balm

Desired Herbal Actions and Potential Herbs Include:

It should be considered that medicinal plants can have synergistic or additive effects with conventional drugs, leading to several adverse effects. Evaluating the safety of concurrent use of medicinal herbs and conventional medicines is necessary.^{71 72}

Antidepressants

Herbal antidepressants are indicated in mild to moderate depression. They may need to be taken for a month or more before the full therapeutic effect is experienced. Herbs include bacopa, damiana, holy basil, Korean ginseng, lavender, lime flowers, lemon balm, magnolia, muira puama, oats green, reishi, rhodiola, rosemary, saffron, St. John's wort, schizandra, turmeric, valerian, vervain, withania.

Adaptogen, Adrenal Restorative

Adaptogens modulate the response to stress (physical, environmental, or emotional) and help regulate the interconnected endocrine, immune, and nervous systems. Depressed clients are often low in vitality. These herbs will help restore the natural stress response and address fatigue. Herbs include bacopa, holy basil, Korean ginseng, liquorice, muira puama, rehmannia, rhodiola, saffron, schizandra, Siberian ginseng, withania.

Anxiolytics, Sedatives, Hypnotics

The objective with these actions is to reduce depression and accompanying anxiety, stabilise the mood and restore nervous system function and integrity. Herbs also have a role in treating comorbid features such as insomnia and irritability. Herbs include bacopa, damiana, ginkgo, holy basil, lavender, lemon balm, magnolia, oats green, passion flower, rhodiola, rosemary, saffron, schizandra, St. John's wort, scullcap, valerian, withania, zizyphus.

Nervine Tonics, Relaxing Nervines, Nerve Stimulants, Bitter Nervines

Nervine tonics are the mainstay of treatment. Depressed clients may suffer from sexual dysfunction so stimulants are indicated. Bitter herbs stimulate digestive secretions (which increases breakdown and movement of food and waste through the digestive tract) and stimulate liver function, including bile production, which helps eliminate waste material from the body. These herbs may help reduce nausea, relieve dyspepsia and the side effects of antidepressants. Herbs include angelica, bacopa, chamomile, damiana, ginger, globe artichoke, holy basil, lavender, lemon balm, motherwort, mugwort, muira puama, oats green, passion flower, reishi, schizandra, scullcap, saffron, Siberian ginseng, St. John's wort, valerian, wormwood, withania, yarrow.



Herbal Support Could Include:

HERB NAME	DESCRIPTION	ACTIONS
Holy Basil (<i>Ocimum tenuiflorum</i>)	<p>In Ayurveda holy basil is referred to as “the elixir of life” and is believed to promote general wellbeing. A 2022 randomised, double-blind, placebo-controlled trial suggest that eight weeks of supplementation with 250mg of holy basil daily may reduce objective and subjective measures of stress, and improve subjective measures of sleep quality. In a two-month, hospital based, clinical study the researchers concluded holy basil positively affected general anxiety levels as well as the stress and depression that accompany anxiety.⁷⁴</p>	Adaptogen Relaxing Nervine Antidepressant Anxiolytic Neuroprotective Antioxidant Immune Modulator Anti-Inflammatory Cardioprotective Hepatoprotective Aromatic Digestive
Lavender (<i>Lavandula angustifolia</i>)	<p>A 2022 systematic review and meta-analysis concluded that lavender has significant antidepressant effects. Internationally renowned American herbalist David Winston uses lavender for people who feel they are “in a fog” and for those experiencing “stagnant depression”, which he defines as a fixation on a specific traumatic event. In support of this the main overall finding from a study on lavender tincture (1:5 in 50% alcohol 60 drops per day) was that it may be of therapeutic benefit in the management of mild to moderate depression as adjuvant therapy with tricyclic antidepressants.⁷⁶</p>	Sedative Anxiolytic Nerve Tonic Antidepressant Carminative Antispasmodic

Herbal Support Could Include: (Cont.)

HERB NAME	DESCRIPTION	ACTIONS
Lemon Balm (<i>Melissa officinalis</i>)	 <p>Current evidence suggests that lemon balm may be effective in improving anxiety and depressive symptoms, particularly in the acute setting. A recent randomised double-blind clinical trial showed that lemon balm and lavender have the same effect as the antidepressant fluoxetine (brand name Prozac). The patients were randomly assigned to receive two capsules (1g) of lemon balm (group 1) or lavender (group 2) every 12 hours (twice a day), or two capsules of fluoxetine (10 mg) (group 3) every 12 hours, for eight weeks.⁷⁷</p>	Relaxing Nervine Anxiolytic Antidepressant Sedative Nervine Tonic Nootropic Carminative Aromatic Digestant Anti-Inflammatory Spasmolytic Antispasmodic Antioxidant
Oats Green (<i>Avena sativa</i>)	 <p>Traditionally oats green is used for its nutritious and restorative powers, beneficial for relieving depression, stress, anxiety and insomnia. It is a wonderful tonic for the nervous system, supplying many of the nutrients that may be lacking. The results of a 2020 randomised, double-blind, placebo-controlled study in 126 people confirmed that chronic supplementation (four weeks) with oats green can benefit cognitive function and modulate the physiological response to a stressor.⁷⁸</p>	Nervine Nutritive Tonic Sedative Antidepressant Anxiolytic Antioxidant
Passion Flower (<i>Passiflora incarnata</i>)	 <p>A recent systematic review concluded that passion flower seems to be an effective and safe treatment to reduce stress sensitivity, insomnia, anxiety and depression-like behaviours. This review evaluated the effects of passion flower in neuropsychiatric disorders such as schizophrenia, bipolar affective disorder, major depressive disorder and attention-deficit hyperactivity disorder. Academic interest in these disorders has been growing due to the COVID-19 pandemic and the related upsurge in anxiety and depression.⁷⁹</p>	Anxiolytic Mild Sedative Hypnotic Anti-Inflammatory Antispasmodic Hypotensive Anodyne

Herbal Support Could Include: (Cont.)

HERB NAME	DESCRIPTION	ACTIONS
Reishi (<i>Ganoderma lucidum</i>)	<p>Reishi is used as a general tonic for deficiency syndromes associated with tiredness and fatigue. One study found that in a group of 48 breast cancer survivors fatigue was reduced and quality of life was improved after four weeks of taking reishi. The people in the study also experienced less anxiety and depression.⁸⁰</p> 	Adaptogen Antidepressant Tonic Nervine Relaxant Stimulant Immune Modulating Immune Enhancing Antioxidant Anti-Inflammatory Anti-Allergic
Rhodiola (<i>Rhodiola rosea</i>)	<p>Many herbalists use rhodiola to support people with depression and anxiety. It appears to be able to significantly reduce the fatigue and 'burnout' that come from chronic stress and anxiety. In a 2020 human clinical trial rhodiola improved the quality of life and clinical symptoms in patients with depression disorder (also taking sertraline, a selective serotonin re-uptake inhibitor (SSRI) known as Zoloft) over a 12 week period. The researchers said high doses of rhodiola were better than the lower doses.⁸¹</p> 	Adaptogen Antidepressant Anxiolytic Antioxidant Cardioprotective Anti-Inflammatory CNS Stimulant
Rosemary (<i>Rosmarinus officinalis</i>)	<p>A recent study found that rosemary could be used to boost prospective and retrospective memory, reduce anxiety and depression and improve sleep quality in university students. Depression scores (along with sleep, anxiety and memory scores) improved after 30 days of treatment with rosemary. In the recent double blind randomised controlled trial 68 participating students randomly received 500mg of rosemary and placebo twice daily.⁸²</p> 	Antidepressant Sedative Antioxidant Hepatoprotective Carminative Antispasmodic Cardioprotective Analgesic

Herbal Support Could Include: (Cont.)

HERB NAME	DESCRIPTION	ACTIONS
Saffron (<i>Crocus sativus</i>)	<p>There is an increasing body of evidence supporting saffron's antidepressant and anxiolytic efficacy in adults with depression and anxiety and the mood enhancing effects of saffron have been confirmed in several studies. These studies have been conducted on adults of varying ages. A 2022 Perth study, on the effects of saffron on menopausal symptoms in women during perimenopause, was associated with greater improvements in psychological symptoms. Saffron (administered for 12 weeks at a dose of 14mg twice daily (morning and evening, with or without food)) was associated with a 33 and 32 percent reduction in anxiety and depressive symptoms, respectively, suggesting it had a generalised mood enhancing effect. Research from 2019 showed saffron (14mg twice daily) was an effective add on to pharmaceutical antidepressants in patients experiencing mild to moderate depression. Many of the people in the study reported improvements in their sleep.^{84 85}</p>	<p>Nervine Tonic</p> <p>Antidepressant</p> <p>Anxiolytic</p> <p>Adaptogen</p> <p>Sedative</p> <p>Analgesic</p> <p>Antispasmodic</p> <p>Neuroprotective</p> <p>Cognitive Enhancer</p> <p>Antioxidant</p> <p>Anti-Inflammatory</p> <p>Aphrodisiac</p> <p>Cardiotonic</p> <p>Hypotensive</p> <p>Hypoglycaemic</p> <p>Hypolipidaemic</p>
Siberian Ginseng (<i>Eleutherococcus senticosus</i>)	<p>Siberian ginseng is often referred to as the 'king of adaptogens' and is traditionally used to help the body better adapt to stress. There is substantial evidence to suggest that stress may be a trigger of depression in some individuals.⁸⁶</p>	<p>Adaptogen</p> <p>Mild Stimulant</p> <p>Tonic</p> <p>Immunomodulator</p>

Herbal Support Could Include: (Cont.)

HERB NAME	DESCRIPTION	ACTIONS
St. John's Wort (<i>Hypericum perforatum</i>)	<p>Over the past 30 years St. John's wort has become a poster herb for depression and mood disorders, especially seasonal affective disorder. The existing evidence indicates that St. John's wort appears to be as effective as antidepressants in treating mild to moderate depression. It also appears to be better tolerated with fewer side effects. These results were confirmed in a recent systematic review of St. John's wort for major depressive disorder which was conducted with 35 studies examining 6993 patients. The incidence of side effects to St. John's wort is approximately 10-fold lower than for synthetic antidepressants. While antidepressant is one of St. John's wort's actions there are many more valuable and important uses of this sunny herb. Herbs are best chosen for the particular person and not the disease. As famous as St. John's wort is for depression it is probably equally infamous for its known effects on pharmaceutical drugs. It increases the metabolic pathways used by many prescribed drugs thus reducing blood levels of these drugs which may lead to loss of therapeutic effect and potentially render them ineffective. (Please see page 12 for more information). ^{87 88 89 90}</p>	<p>Antidepressant</p> <p>Relaxing Nervine</p> <p>Anxiolytic</p> <p>Nervine Tonic</p> <p>Trophorestorative</p> <p>Anti-Inflammatory</p> <p>Antispasmodic</p> <p>Anodyne</p>
Withania (<i>Withania somnifera</i>)	<p>Being a powerful adaptogen withania enhances the body's resilience to stress. A recent review found that withania improved symptoms of depression and insomnia and that it may alleviate these conditions predominantly through modulation of the hypothalamic-pituitary-adrenal and sympathetic-adrenal-medullary axes, as well as through GABAergic and serotonergic pathways. In recognition of the synergistic effect of all the constituents in withania, while some studies link specific withanolide components to its neuropsychiatric benefits there is evidence for the presence of additional, as yet unidentified, active compounds in withania.⁹¹</p>	<p>Adaptogen</p> <p>Anxiolytic</p> <p>Nervine Tonic</p> <p>Tonic</p> <p>Mild Sedative</p> <p>Aphrodisiac</p> <p>Anti-Inflammatory</p> <p>Antioxidant</p> <p>Immunomodulatory</p> <p>Cardioprotective</p>

Conclusion

While someone with depression can feel hopeless at times, it is important to remember that the disorder can be treated successfully and effectively. Despite the sometimes-crippling symptoms, depression is manageable and treatable. There is hope. People can recover and lead happy, fulfilling lives. The prognosis with treatment is excellent so sticking with a treatment plan is a critical part of improving the outlook. The intensity of symptoms and the frequency of episodes are often significantly reduced. Many people recover completely. When treatment is successful, it is important to stay in

close touch with the doctor and therapist, because maintenance treatment is often required to prevent depression from returning.^{92 93}



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