

Yoga for Depression

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What is a depressive disorder from medical point of view?

Depressive disorders have been with mankind since the beginning of recorded history. In the Bible, King David, as well as Job, suffered from this affliction. Hippocrates referred to depression as melancholia, which literally means black bile. Black bile, along with blood, phlegm, and yellow bile were the four humors (fluids) that described the basic medical physiology theory of that time. Depression, also referred to as clinical depression, has been portrayed in literature and the arts for hundreds of years, but what do we mean today when we refer to a depressive disorder? In the 19th century, depression was seen as an inherited weakness of temperament. In the first half of the 20th century, Freud linked the development of depression to guilt and conflict. John Cheever, the author and a modern sufferer of depressive disorder, wrote of conflict and experiences with his parents as influencing his development of depression.

In the 1950s and '60s, depression was divided into two types, endogenous and neurotic. Endogenous means that the depression comes from within the body, perhaps of genetic origin, or comes out of nowhere. Neurotic or reactive depression has a clear environmental precipitating factor, such as the death of a spouse, or other significant loss, such as the loss of a job. In the 1970s and '80s, the focus of attention shifted from the cause of depression to its effects on the afflicted people. That is to say, whatever the cause in a particular case, what are the symptoms and impaired functions that experts can agree make up a depressive disorder? Although there is some argument even today (as in all branches of medicines), most experts agree on the following:

1. A depressive disorder is a syndrome (group of symptoms) that reflects a sad and/or irritable mood exceeding normal sadness or grief. More specifically, the sadness of depression is characterized by a greater intensity and duration and by more severe symptoms and functional disabilities than is normal.

2. Depression is usually first identified in a primary-care setting, not in a mental health practitioner's office. Moreover, it often assumes various disguises, which causes depression to be frequently under diagnosed.
3. Most of the health problems that people face today are stress related. In a major medical study, depression caused significant problems in the functioning of those affected more often than did arthritis, hypertension, chronic lung disease, and diabetes, and in some ways as often as coronary artery disease.
4. Depression can increase the risks for developing coronary artery disease, HIV, asthma, and many other medical illnesses. Furthermore, it can increase the morbidity (illness/negative health effects) and mortality (death) from these and many other medical conditions
5. Depression can coexist with virtually every other mental health illness, aggravating the status of those who suffer the combination of both depression and the other mental illness.
6. It is said to be a silent killer, because it moves swiftly and almost without any immediate symptoms. The person undergoes a lot of mental torture and due to this the friends and the family of the person also suffer.
7. The condition is heart threatening and may even cause a person affected to commit suicide. People with depression may have many ideas in their mind and you may not have a clue about any such condition.
8. The statistics on the costs due to depression in the United States include huge amounts of direct costs, which are for treatment, and indirect costs, such as lost productivity and absenteeism from work or school.

In general, the **definition of clinical depression** is used to describe a depression disorder that is *ongoing* rather than a temporary case of depression relating to life events or trauma. That particular depression definition also pertains to a condition that *requires medical treatment*. Certain factors, such as

genetics, can increase a person's chances of experiencing depression. Although genetics can play a role, many people with no previous family history of depression will experience a depression disorder.

Depressive disorders are common and approximately 6-10 percent of the population will experience a depressive episode in any given year. More women than men are affected (2:1) with some estimating that as many as one in five women (i.e. 20 percent) will experience an episode of depression during any given year. Depression in women is more widely recognized than in men because about twice as many women than men are likely to seek help. The problem is that many men are not aware of their condition.

The average age for a first diagnosed episode of major depression is about 40 years, while that for bipolar disorder is 30. Fifty percent of patients have onset between ages 20-50 years. Depression can begin in childhood or in later life, but this is less common and it tends to present differently in different age groups (e.g. childhood (2%) - apathy; adolescence (5%) – behavioral problems; elderly (25 to 50%) – physical complaints). (Health 24.com).

- Depressive disorders are more likely in those individuals who are socially isolated and have no close interpersonal relationships or who are divorced or separated.
- Depression tends to be chronic, has a low rate of recovery, and is often under treated. This is of particular concern given that elderly men, particularly elderly white men have the highest suicide rate.
- Adolescents who suffer from depression are at risk for developing and maintaining obesity.

Depression is also defined as an emotional state that lasts longer than 2 weeks and without treatment, symptoms can last for weeks, months, or years. Appropriate treatment, however, can help most people with depression.

Increasingly, there's evidence that depression involves various body systems. There seems to be a complex relationship between depression and the heart. Depression raises the risk of heart disease; it also magnifies the deadliness of existing cardiac problems. It's not clear why, although researchers have found

that depression alters blood platelets, circulating elements that are responsible for clotting.

What's more, depression leaves footprints on the body's structure as well. For example, it accelerates changes in bone mass leading to osteoporosis.

But of all the signs that depression has a neck-down presence, none is more insistent than physical pain. For a substantial number of people, possibly up to half of depression sufferers, bodily pain is the way depression presents itself.

The pain is often vague and unexplained by injury. It may show up as headache, abdominal pain, or musculoskeletal pains in the lower back, joints and neck—alone or in any combination. The painful physical symptoms of depression typically take the form of multiple somatic complaints.

The trouble is, too often neither sufferer nor doctor is aware of the true source of the problem and the depression goes untreated as well as unrecognized. It's not that the pain is "all in the head." No, the pain is indeed real, but it likely drives many people to primary care physicians or orthopedists in the mistaken belief that something has gone awry in their body. And there follows an unproductive search for an organic source.

Over 15 million adults in America can tell you this, and they should know: they are suffering from major depression.

What are the causes of depression

Exactly what causes depression is not known, but research has revealed several possible causes and contributory factors. These include both biological/physical and social/psychological factors. There is often a combination of factors at play in an individual's history and environment and different people become depressed for different reasons.

Sometimes a specific trigger may be identified but at other times people seem to become depressed for no reason at all. This is more likely when the person has experienced previous depressive episodes.

Biological factors

- **Neurotransmitters:** Studies have shown that brain chemicals (neurotransmitters) play a mediating role in the development of depression. When the functioning of brain chemicals is disturbed, depression can occur. Several different neurotransmitter systems may be involved but the two that have been more frequently implicated are serotonin (5-HT) and norepinephrine (NE). Studies have also shown a third brain chemical, dopamine, to play a role in both depressed and elevated mood.
- **Hormonal factors:** Increased secretion of cortisol from the adrenal gland during stress is associated with depression. Hypercortisolaemia has been shown to damage the hippocampus (an area of the brain associated with hormonal and behavioural regulation). Thyroid gland disorders are often associated with mood disorders. All patients suffering from a MDD (major depressive disorder) should be tested for hypothyroidism (i.e. under active thyroid). Studies have shown about 10 percent of patients, especially those with a Bipolar Disorder, have detectable concentrations of anti-thyroid antibodies (produced by the body in order to fight disease which in this instance turns upon the body itself). There is also an association between anti-thyroid antibodies and post-natal depression. Alterations in the pattern of growth hormone release has also been observed.
- **Neuroanatomical/Neurophysiological** considerations: CT Scans and MRI studies, although inconsistent, have shown differences in the size of some of the brain structures (e.g. caudate nucleus) in depressed patients as well as alterations in blood flow to certain areas. Mood disorders involve pathology of the limbic system (emotional centre, memory function). The basal ganglia (stooped posture, motor slowness) and the hypothalamus (changes in sleep, appetite and sexual behavior) have also been implicated.
- **Abnormalities in certain part of the brain** Individuals with anxiety disorders may have a anomalies in certain areas of brain functioning such as the amygdale (a part of the limbic system) and in portions of the cerebral cortex. The amygdale is a brain region of particular interest because of it's relationship to stress, emotions, pain and learning.

- **Recreational drugs/medication:** Some drugs (recreational and prescription) and alcohol can cause or exacerbate depression. This is possibly because they interfere with the regulation of brain chemicals or the physical structure of the brain (excessive alcohol and sleeping tablets cause shrinkage of the brain).
- **Medical illness:** Illness including strokes, Parkinson's disease, Cushing's disease and thyroid disease, among others, may be a contributory physiological factor.
- **Genetic factors:** Inherited factors are an important component in the development of mood disorders. Having a close relative who has suffered from a depressive disorder, especially Bipolar Disorder increases the likelihood of developing depression. People with a genetic susceptibility are more vulnerable to depression in the face of various stressors. Families in which members of each generation develop bipolar disorder have been studied. The investigators found that those with the illness have a somewhat different genetic makeup than those who do not become ill. However, the reverse is not true. That is, not everybody with the genetic makeup that causes vulnerability to bipolar disorder will develop the illness. Apparently, additional factors, possibly a stressful environment, are involved in its onset and protective factors are involved in its prevention.

Psychosocial factors

- An external event often seems to initiate an episode of depression. Thus, a serious loss, chronic illness, difficult relationship, financial problem, or any unwelcome change in life patterns can trigger a depressive episode. Stressful life events (e.g. loss of a loved one, illness, financial worries) more often precede the first episode of mood disorders than subsequent episodes. It is believed that the initial episode in a mood disorder results in long lasting changes in the biology of the brain (e.g. the functional state and interaction of neurotransmitters; also possibly a loss of neurons and a decrease in synaptic contacts). This increases the person's vulnerability to subsequent episodes.
- A family's style of interacting with different members, the family environment (e.g. a broken home) as well as its coping patterns may

increase a vulnerability to a depressive disorder. An individual's underlying personality type (e.g. dependent, obsessive compulsive) may also be a contributory factor.

Nothing in the universe is as complex and fascinating as the human brain. The 100-plus chemicals that circulate in the brain are known as neurochemicals or neurotransmitters. Much of our research and knowledge, however, has focused on four of these neurochemical systems: norepinephrine, serotonin, dopamine, and acetylcholine. In the new millennium, after new discoveries are made, it is possible that these four neurochemicals will be viewed as the "black bile, yellow bile, phlegm, and blood" of the 20th century. As lifestyles and communities become more "self-involved, and the emotional and physical needs of others neglected, depression can be the end result. This is because the need for acceptance and a sense of belonging are as basic a human need as food and water.

Signs & Symptoms of Depression

Depression, defined as a disorder of mood, must be distinguished from sadness or "the blues" and is a common and legitimate medical illness. While depression is not a disease it definitely makes you ill mentally. Everyone feels down or low at some stage, but when these lows last for long periods and affect general functioning and behavior the person may be suffering from a Depressive Disorder.

The functional changes of clinical depression are often called neurovegetative signs. This means that the nervous system changes in the brain cause many physical symptoms that result in diminished participation and a decreased or increased activity level.

Depressive signs and symptoms are characterized not only by negative thoughts, moods, and behaviors but also by specific changes in bodily functions. Not everyone who is depressed or manic experiences every symptom. Some people experience a few symptoms and some many symptoms. The severity of symptoms also varies with individuals. Less severe symptoms that precede the more debilitating symptoms are called warning signs.

The signs and symptoms of depression:

- include loss of interest in activities that were once interesting or enjoyable, including sex and low libido
- loss of appetite with weight loss or overeating with weight gain
- loss of emotional expression (flat affect)
- a persistently sad, anxious, irritable or empty mood
- feelings of hopelessness, pessimism, guilt, worthlessness, or helplessness
- crying spells; unusual fatigue, low energy level, a feeling of being slowed down;
- sleep disturbance with insomnia, early-morning awakening, or oversleeping
- trouble concentrating, remembering, or inability of making decisions; lack of focus,
- unusual restlessness or irritability
- persistent physical problems such as headaches, digestive disorders, or chronic pain that do not respond to treatment
- thoughts of death or suicide or suicide attempts
- Alcohol or drug abuse may be signs of depression
- Social isolation, meaning the sufferer avoids interactions with family or friends

Stressors that contribute to the development of depression sometimes affect some groups more than others. For example, minority groups who more often feel impacted by discrimination and are disproportionately represented. Socioeconomically disadvantaged groups have higher rates of depression compared to their advantaged counterparts. Immigrants may be more vulnerable to developing depression, particularly when isolated by language.

What is the general approach to treating depression from the medical point of view

For full recovery from a mood disorder, regardless of whether there is a precipitating factor or it seems to come out of the blue, treatment with medication

and/or electroconvulsive therapy (ECT) and psychotherapy are the three common medical use for treatment.

Although depression is defined as a disorder of mood, it affects more than just one's mood and includes symptoms affecting the body, thoughts and feelings. It is a medical illness like high blood pressure, diabetes and heart problems and is not a sign of personal weakness. Depression cannot be wished away and sufferers cannot simply pull themselves together. According to the National Institute of Mental Health, symptoms can be relieved in 80% of persons with serious depression, usually in only a matter of weeks and up to 60% may recover fully. (Health24, updated January 2010)

1. The first aim of treatment is to ensure the safety of the patient for which hospitalization may be required (i.e. suicidal/unable to care for self).
2. Secondly, a complete diagnostic evaluation must be carried out. This includes a full personal and family history as well as a history of illnesses, medication and recreational drugs/alcohol used; activities, personality type and support system. A physical examination may also be required to evaluate underlying physical illness, which may cause or worsen depression e.g. thyroid illness. It is important to detect medical problems, as these require separate, appropriate treatment.
3. Thirdly, a treatment plan has to be formulated which takes into account both immediate symptoms and the patient's future well being. This would include medication, psychotherapy, life-style changes and the addressing of stressors. Stressful life events are associated with an increased relapse rate in mood disorder sufferers.

Depression treatment is widely varied, and there is alternative medicine to consider. But research indicates that certain forms of treatment for depression are more effective than others.

Common medical treatments

In general, the severe depressive illnesses, particularly those that are recurrent, will require antidepressant medications (or ECT in severe cases) along with psychotherapy for the best outcome. If a person suffers one major depressive episode, he or she has a 50% chance of a second episode. If the individual

suffers two major depressive episodes, the chance of a third episode is 75%-80%. If the person suffers three episodes, the likelihood of a fourth episode is 90%-95%. Therefore, after a first depressive episode, it might make sense for the patient to gradually come off medication. However, after a second and certainly after a third episode, most clinicians will have a patient remain on a maintenance dosage of the medication for an extended period of years, if not permanently. Patience is required because the treatment of depression takes time. Sometimes, the doctor will need to try a variety of antidepressants before finding the medication or combination of medications that is most effective for the patient. Sometimes, the dosage must be increased to be effective. In choosing an antidepressant, the doctor will take into account the patient's age, his/her other medical conditions, and medication side effects

Antidepressants

Pharmacotherapy for depressive disorders has advanced considerably over the past twenty years and there are now a large number of drugs to choose from. All antidepressants are equally effective providing an adequate dosage is taken for a sufficiently long time. Different drugs may be prescribed for different individuals depending on the symptoms presented. Some antidepressants are more energizing, while others may cause weight loss or gain. A decision regarding which drug to use is often made on the basis of tolerability of potential side effects.

Antidepressants do not act rapidly. A certain dosage and concentration has to be reached before they become effective. This usually takes about a month but may take six to eight weeks in the elderly. It is important to persevere and to use the prescribed drug at the correct dosage for long enough. To find the most effective pharmaceutical treatment, the dosages of medications must often be adjusted, different combinations of antidepressants tried, or antidepressants changed. Response rates to the first agent administered may be as low as 50%. It may take anywhere from three to eight weeks after the start of medication before its therapeutic effects can be fully discovered.

Patients often feel significantly better after two to three months on antidepressants, but it is important that medication be continued for as long as your doctor advises. For a first episode of depression this usually means taking

medication six to nine months on optimal dosage after symptom relief has been achieved, two to five years for a subsequent episode and possibly life-long if episodes recur frequently and are severe. Stopping medication too soon increases the likelihood of relapse and the development of a chronic recurring illness. Patients are generally advised not to stop taking an antidepressant suddenly and to continue its use for at least four months to prevent the chance of recurrence. People with chronic depression need to take the medication for the rest of their lives.

Selective serotonin reuptake inhibitors (SSRIs) are medications that increase the amount of the neurochemical serotonin in the brain. As their name implies, the SSRIs work by selectively (blocking) serotonin reuptake in the brain. This block occurs at the synapse, the place where brain cells (neurons) are connected to each other. Serotonin is one of the chemicals in the brain that carries messages across these connections (synapses) from one neuron to another.

SSRIs are generally well tolerated, and side effects are usually mild. The most common side effects are nausea, diarrhea, agitation, insomnia, and headache. However, these side effects generally go away within the first month of SSRI use. Some patients experience sexual side effects, such as decreased sexual desire (decreased libido), delayed orgasm, or an inability to have an orgasm. Some patients experience tremors with SSRIs. The so-called serotonergic (meaning caused by serotonin) syndrome is a serious neurologic condition associated with the use of SSRIs. It is characterized by high fevers, seizures, and heart-rhythm disturbances. This condition is very rare and has been reported only in very ill psychiatric patients taking multiple psychiatric medications.

SSRIs have fewer side effects than the tricyclic antidepressants (TCAs) and monoamine oxidase inhibitors (MAOIs). SSRIs do not interact with the chemical tyramine in foods, as do the MAOIs, and therefore do not require the dietary restrictions of the MAOIs. Also, SSRIs do not cause orthostatic hypotension (sudden drop in blood pressure when sitting up or standing) and heart-rhythm disturbances, like the TCAs do. Therefore, SSRIs are often the first-line treatment for depression. Examples of SSRIs include fluoxetine (Prozac), paroxetine (Paxil), sertraline (Zoloft), citalopram (Celexa), fluvoxamine (Luvox), and escitalopram (Lexapro).

Electroconvulsive therapy

Electroconvulsive therapy (ECT) is a treatment where seizures are electrically induced in anesthetized patients for therapeutic effect. ECT is most often used as a "last resort" (from the perspective of hospital psychiatrists) for severe major depression which has not responded to trials of antidepressant or, less often, psychotherapy or supportive interventions. It has a quicker effect than antidepressant therapy, and thus may be the treatment of choice in emergencies such as catatonic depression where the patient has ceased oral intake of fluid or nutrients, or where there is severe suicidality. In recent years, the technique of ECT has been much improved. The treatment is given in the hospital under anesthesia so that people receiving ECT do not feel pain. Most patients undergo six to 10 treatments. An electrical current is passed through the brain to cause a controlled seizure, which typically lasts for 20 to 90 seconds. The patient is awake in five to 10 minutes. The most common side effect is short-term memory loss, which resolves quickly. Some evidence suggests it is the most effective treatment for depression in the short-term and one study, without a comparison group or assessment of additional treatments given, suggested that in the minority who remit it may be related to improved self-rated quality of life in both the short-term (which was correlated with the degree of amnesia) and after six months.^[52] However, the first systematic documentation of the effectiveness of ECT in community practice in the 65 years of its use found much lower remission rates than in prior research, and most of those relapsed.¹ ECT on its own does not usually have a sustained benefit, as virtually all those who remit end up relapsing within 6 months following a course, even when given a placebo. The relapse rate in the first six months may be reduced by the use of psychiatric medications or further ECT (though the latter is not recommended by some authorities, such as NICE), but remains high. Short-term memory loss, disorientation, headache and other adverse effects are common, as are long-term memory^[57] and other neurocognitive deficits, which may persist. The American Psychiatric Association and the National Institute for Health and Clinical Excellence have concluded that the evidence they had suggested that the procedure, when administered according to their standards and without

complications, does not cause brain damage in adults. ECT can usually be safely done as an outpatient procedure

Psychotherapy

Psychotherapy is a verbal interaction between a trained mental health professional and a patient who may be experiencing emotional or behavioral problems. There are several different types of psychotherapy, which may differ in the techniques used on the psychological principles emphasized, but the underlying aim is to enable the patient to gain insight into him or herself and thereby change maladaptive thoughts, feelings and behavior. Psychotherapy can be delivered by a variety of mental health professionals, including psychotherapists, psychiatrists, psychologists, clinical social workers, counselors, and psychiatric nurses.

Many forms of psychotherapy are effectively used to help depressed individuals, including some short-term (10 to 20 weeks) therapies.

- **Cognitive/behavioral therapy (CBT)**. The most studied form of psychotherapy for depression is *cognitive behavioral therapy (CBT)*, thought to work by teaching clients to learn a set of cognitive and behavioral skills that helps patients change the negative styles of thinking and behaving that are often associated with depression , which they can employ on their own.
- **Psychotherapies** (Talking therapies) help patients gain insight into their problems and resolve them through verbal give-and-take with the therapist.
- **Interpersonal therapy** focuses on focuses the social and interpersonal triggers that may cause depression and on the patient's disturbed personal relationships that both cause and exacerbate the depression.
- **Behavioral therapy** helps patients learn how to obtain more satisfaction and rewards through their own actions. These therapists also help patients to unlearn the behavioral patterns that may contribute to their depression.
- **A psychodynamic therapy** focuses on resolving the patient's internal psychological conflicts that are typically thought to be rooted in childhood.

Long-term psychodynamic therapies are particularly important if there seems to be a lifelong history and pattern of inadequate ways of coping (maladaptive coping mechanisms) in negative or self-injurious behavior.

- **Psychoanalysis**, a school of thought founded by Sigmund Freud that emphasizes the resolution of unconscious mental conflicts,^[11] is used by its practitioners to treat clients presenting with major depression.

Research has shown that some forms of psychotherapy are as effective as medication in treating mild to moderate depression. Medication tends to bring about results more rapidly, but the benefits of psychotherapy may be more enduring. It is generally agreed that the best form of treatment is a combination of both pharmacotherapy and psychotherapy. With more complex and chronic forms of depression the most effective treatment is often considered to be a combination of medication and psychotherapy. Psychotherapy is the treatment of choice in people under 18.

A study at Texas A&M University also found that removing sugar and caffeine from the diet can significantly reduce depression, even when symptoms are severe. Vit B-complex, overall healthy diet, and exercise (depressionhurts.com)

Experts at the Mayo Clinic say mental health can be improved by strengthening relationships. A health support system provided by family members and friends can go a long way in helping to alleviate stress and increase self-esteem. The key thing to remember is that to be more effective, treatment should address both the emotional and painful physical symptoms of depression (depressionhurts.com)

- A review of four studies on the effectiveness of mindfulness-based cognitive therapy (MBCT), a recently developed class-based program designed to prevent relapse, suggests that MBCT may have an additive effect when provided with the usual care in patients who have had three or more depressive episodes, although the usual care did not include antidepressant treatment or any psychotherapy, and the improvement observed may have reflected non-specific or placebo effects

Yoga Therapy view – Chakra focus point

Yoga is a way of life. It is predominantly concerned with maintaining a state of equanimity at all costs. All yoga schools of thought emphasize the importance of the mind remaining calm, because as the saying goes, only when the water is still can you see through it. Yoga Darshan or Yoga Philosophy also happens to be a valid discipline of Indian metaphysics (Brahma Vidya). It is the result of human wisdom and insight on physiology, psychology, ethics and spirituality collected together and practiced over thousands of years for the well being of humanity. The basic idea of yoga is to unite the atma or individual soul with the paramatma or the Universal Soul. According to Yoga philosophy, by cleansing one's mind and controlling one's thought processes one can return to that primeval state, when the individual self was nothing but a part of the Divine Self.

Regular practice of asanas, pranayama and meditation can help such diverse ailments such as diabetes, blood pressure, digestive disorders, arthritis, arteriosclerosis, chronic fatigue, asthma, varicose veins, heart conditions and depression. Laboratory tests have proved the yogi's increased abilities of consciously controlling autonomic or involuntary functions, such as temperature, heartbeat and blood pressure.

The Chakras that are more in line with depression are the Root Chakra (Muladhar) a feeling of not being grounded. Emotional consequences are anger, depression and a disorientation of life. The second chakra is the Crown Chakra (Sahasrara) a feeling of not being connected to spirit and some of the consequences are depression, muscular and skeletal system disorders, chronic fatigue.

How does Yoga work in depression

Movement will initially distract the mind from the loop of repeating anxiety producing thoughts. Also faster breathing practices, like Kapalabhati and then move on to slower breathing practices. After a period of time the mind is pulled out of its loop of worrying thoughts. Then it can be set in further slowing down and then to actual meditation. We hold the past in our bodies as well as in our

mind. Emotional and mental issues, be it stress, depression, or anxiety are often the result of long-term tension patterns, which create blockages in our energy flow. When energy doesn't flow freely, our light is dimmed, and we cannot stand in our fullness. Yoga therapy can help create greater emotional well-being by releasing tension and dissolving the emotional blocks that hold us back from living a happy, healthy life. Studies have illustrated yoga's ability to combat depression through balancing brain chemistry and stress hormone levels. Through a regular yoga routine, we can pull ourselves out of the pit of depression and rise once more to enjoy vitality and inspiration in our day-to-day lives.

Amy Weintraub, a former depression sufferer herself, offers a solution: yoga. "When the mind is absorbed in a negative spiral of thoughts," Weintraub, author of ***Yoga for Depression*** and founder of LifeForce Yoga explains, "whether it is anxiety based or depression, the mind needs something to focus on that takes it away from that negative spiral." Yoga for depression, she explains, does just that.

Studies have shown that the levels of cortisol (a major stress hormone) in the body are significantly lowered after the practice of yoga. In addition, studies have found that yoga raises levels of serotonin, the "feel good" hormone. Thousands of years before medical science Yogis were using postures, sounds, and visualization to stimulate the chakras. Now we know that they were increasing the secretion of hormones responsible for our general well-being. "The glands are the guardians of health," says Dr. Khalsa. Your frame of mind affects your neurological system, which in turn affects your glandular system and endocrine system, which then affects the immune system.

Psychological Benefits:

Regular yoga practice creates mental clarity and calmness, increases body awareness, relieves chronic stress patterns, relaxes the mind, centers attention and sharpens concentration.

Self-Awareness:

Yoga strives to increase self-awareness on both a physical and psychological level. Patients who study yoga learn to induce relaxation and then to use the

technique whenever pain appears. Practicing yoga can provide chronic pain sufferers with useful tools to actively cope with their pain and help counter feelings of helplessness and depression.

Spiritual Benefits

When you achieve the yogic spirit, you can begin knowing yourself at peace. The value of discovering one`s self and of enjoying one`s self as is, begins a journey into being rather than doing. Life can then be lived practicing "yoga off the mat".

Pain Management

Yoga is believed to reduce pain by helping the brain`s pain center regulate the gate-controlling mechanism located in the spinal cord and the secretion of natural painkillers in the body. Breathing exercises used in yoga can also reduce pain. Because muscles tend to relax when you exhale, lengthening the time of exhalation can help produce relaxation and reduce tension. Awareness of breathing helps to achieve calmer, slower respiration and aid in relaxation and pain management.

Yoga`s inclusion of relaxation techniques and meditation can also help reduce pain. Part of the effectiveness of yoga in reducing pain is due to its focus on self-awareness. This self-awareness can have a protective effect and allow for early preventive action

Has Yoga helped persons with anxiety and depression

Svyasa has systematically recorded case histories of large number of patients with various types of anxiety and depression, and also followed them from 2 weeks up to 10 years after being introduced to yoga practices. Dr. Horia Crisan, a medical graduate from Germany studied in 1980 the effect of 4 weeks of praiyama practice in 19 cases of carefully diagnosed cases of general anxiety and showed statistically significant reduction in their anxiety scores, pulse rate, blood pressure, and also a reduction in the urinary excretory product (urinary VMA) of adrenaline.

Dr. Jayakirameiah (2000) in 45 subjects with melancholia (form of depression), compared the efficiency of Electroconvulsive therapy, imipramine and Sudarshan

Kriya Yoga and concluded that Sudarshan Kriya Yoga is potential alternative to drugs as a form of treatment.

How Science Supports Yoga as a Cure for Depression

Studies conducted at Duke University in the late '90s and early 2000s revealed that after just four weeks, patients of major depression who exercised daily instead of taking medication experienced 95-100% of the improvement prescription drugs produced in their non-exercising counterparts. However, recent years have brought even more dramatic testimony to the foreground. For example, a 4-week study conducted in 1999 found that, among clinically depressed adults age 50+, exercise provided the exact same level of benefits that standard antidepressant treatment did. A 2007 follow-up study examined over 200 patients of major depression across all adult age groups and found similar results. Patients who participated in a supervised exercise program displayed a 45% improved by the end of the 4-week study, just two percentage points away from the antidepressant group's 47% improvement. That's where the benefit of regular exercise classes, such as a yoga class, comes into play. In other words, yoga class may be the new-and-improved Prozac.

So what is it about exercise that can so drastically improve our mood? Researchers suspect it comes down to the way our brains are wired. Like most species, we evolved as active organisms. Scientists suggest that our brains are simply not designed to handle life without physical activity. In support of this argument, research reveals that exercise not only helps with depression, but also anxiety and even substance-dependence. Scientists have noted that in addition to balancing serotonin and endorphin levels, exercise produces natural chemical compounds that support brain cell growth and maintenance. Neuroscience researchers have also found that exercise can switch on genes to increase galanin, a neurochemical that tones down the brain/body stress response. In other words, exercise can help the stressed as well as the depressed. According to medical scientists, yoga therapy is successful because of the balance created in the nervous and endocrine systems which directly influences all the other systems and organs of the body. Yoga acts both as a curative and preventive therapy. The very essence of yoga lies in attaining mental peace, improved concentration powers, a relaxed state of living and harmony in relationships.

What if there were a way to treat depression that was as effective as our current medication, but instead of producing side effects like weight gain, fatigue, and insomnia, resulted in weight loss, increased vitality, and better sleep at night? Amazingly enough, preliminary studies indicate that such a cure exists—and it doesn't even require a prescription.

Yogic remedies

How does Yoga define anxiety and depression

What the sage tells is that in all our emotions like extreme fear, anxiety, anger, frustration and even depression, the problem is that of uncontrolled surge of speed, first at the level of mind, which goes on to disturb the energy (prana) balance, percolates into extremely speeded up or blocked functions of the body resulting in physiological responses of anxiety or depression. When Srirama was in deep depression, sage Vasiuta gave him this truth and tells him “Manah prasamana upayah yogah” (mind slowing down trick is yoga) and goes on to give very simple hints of breathing to get master over the mind.

In the Yoga Sutras, Patanjali states that our inner obstacles create mental distraction, which in turn leads to Daurmanasya, depression. These inner obstacles can be removed by the practice of yogic techniques: asana, meditation and pranayama. Anxiety and depression are neuro-emotional patterns that hijack your mind, brain, and body, and prevent you from accessing your fullest potential. Through therapeutic vinyasa practice, meditation, breathing techniques, and restorative yoga, we can interrupt the cycles of anxiety and depression, and connect with your deepest self. (Bo Forbes).

A regular yoga therapy practice over the long term can be a powerful tool for emotional healing and integration. Through the practice of yoga, we become aware of the interconnectedness between our emotional, mental and physical levels. Gradually this awareness leads to an understanding of the more subtle areas of existence. The ultimate goal of yoga is to make it possible for you to be able to fuse together the gross material (annamaya), physical (pranamaya),

mental (manomaya), intellectual (vijnanamaya) and spiritual (anandamaya) levels within your being

At the healing Ashram of Dr. Swami Karmananda Saraswati, MB, BS (Syd), both asanas and pranayamas are taught, concentrating on those practices which build up levels of physical and vital energy. Anti-depressant drugs are discontinued and the sufferer is engaged in karma yoga. This is the second fundamental practice learned by sufferers from depression. According to yogic science, depression occurs when there is no objective in life and no engagement for the mind. If such a person comes to an ashram, practices some specific asanas and pranayamas in the morning, and karma yoga during the day, they invariably pick up and feel fine within a few days. Their symptoms go into a rapid remission. As therapy continues, the sufferer gradually learns to recognize and cope with depression, and counteracts its influence upon his daily behaviour. In the ashram, he is given a busy schedule and a lot of different tasks, according to his capacities and attributes. He is given a lot of worries and responsibilities but not of his own. It is disinterested service, performed without personal motive, without attachment. The tasks are performed with all sincerity, but they do not affect the deeper realms of the personal emotions and spirit. In this way depression is transcended in ashram life; and physical, mental and emotional energies are awakened and restored. Karma yoga is a major part of the therapy program for depression.

Yogic program for depressive illnesses

Yogic Meditation

By transcending the mind which is composed of constructed thoughts, peace will be attained. Hathayoga Prakipika 4:58

Meditation reduces stress, calms the mind, reduces negativity and creates a positive mental attitude. The long-term studies that follow practitioners for several years have been done in the area of mindfulness-based training using the Stress Reduction and Relaxation Program, developed by Jon Kabat-Zinn, Ph.D. at the University of Massachusetts, which includes Yoga postures, though the primary emphasis of the program is on mindfulness, a meditation technique where the practitioner observes his or her own mental process.

The practice is to encourage participants to “intentionally face and move into difficulties and discomfort, and to develop a decentered perspective on thought and feelings, in which these are viewed as events in the mind” (JD Teasdale, RV Seagal, JMG Williams, VA Ridgeway, Prevention of relapse/recurrence in Major depression by Mindfulness-Based Cognitive Therapy). The “decentered perspective” is what in Yoga we refer to as the development of Witness Consciousness. In the Yoga Sutras, Patanjali writes often of the “Seer.” The intention is witness the circumstances of our life and the thoughts and feelings those circumstances engender with calm and equanimity which Stephen Cope refers to in the book *Yoga and the Quest for the True Self*, and calls those the two pillars of Yogic practice. Instead of feeling the compulsion to react, the practice of Yoga enables us to slow down the impulsive reaction and more calmly respond. (*Yoga and the Quest for True Self*, Stephen Cope)

The Yogi who, seated in Padmasana, inhales through the entrances of the nadis and fills them with vital air gains liberation. Hathayoga Pradipika 1:49

Meta Meditation

This simple meditation often to create and nurture compassion in your life. This can be practiced in just a few minutes, so try to incorporate it as a part of your daily life.

Heart Chakra Meditation

The chakras can be used as a map to assess, discover where in life there was a blockage. In the case of depression one of the chakras that is often out of alignment is the heart chakra. When your meditation practice is with intention of healing depression it is wise to bring in particular attention to the Heart Chakra. This heart chakra meditation is a simple technique to release sadness and fear and to bring compassion and love into your life.

Yogic Breathing (Pranayama) for Relief of Stress, Depression, Anxiety

When the Breath wanders, the mind is unsteady, but when the Breath is still, so is the mind still." - Hatha Yoga Pradipika

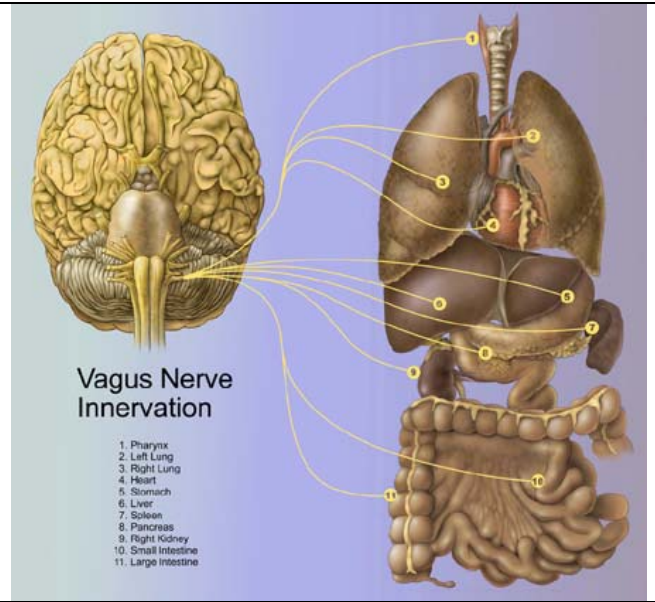
Breathing is life. It is one of our most vital functions. One of the Five Principles of Yoga is Pranayama or Breathing Exercise which promotes proper breathing. In a Yogic point of view, proper breathing is to bring more oxygen to the blood and to the brain, and to control Prana or the vital life energy. **Pranayama Yoga** also goes hand in hand with the Asanas. The union of these two Yogic Principles is considered as the highest form of purification and self-discipline, covering both mind and body. Yogic breathing exercises can calm the mind, reduce stress and alleviate anxiety.

Breathing is crucial to your well-being. Dr. Andrew Weil says: "If I had to limit my advice on healthier living to just one tip, it would be simply to learn how to breathe correctly." Learn yogic breathing exercises to help relieve depression, increase energy, lower blood pressure, and relieve anxiety. Many yogic breathing exercises stimulate the vagus nerve, which is a known treatment for depression. Breathing exercise has been shown to have as high as a 73% recovery rate for major depression. The vagus nerve carries information to many areas of the brain that control mood, sleep and other functions," The vagus nerves are neurons, the mechanism would be the sensory vagus picking up the changes in their local potentials and transmit the information to the brain and in terms of breathing effects from Pranayama would be to train the body to up the parasympathetic nervous system.

Vagus nerve innervation

This piece diagrams the pathway of the Vagus nerve as it innervates the abdominals and the thoracic cavity

Dbf click on pic to enlarge



Pranayama

- Dirga Pranayama:

The three part breath or the complete breath - , calming and relaxing. Calming the body, heart and mind

- Nadi Sodhana Pranayama

Alternate nostril breathing - balancing, calming, anti-anxiety, and very relaxing

- Ujjayi Pranayama

The victory or ocean sounding breath is focusing, grounding, and aids in concentration.

- Bhramari Pranayama

The bee breath - soothes the nerves and calms the mind

- Kapalabhati Pranayama – The breath of fire or the skull shining breath – invigorating, energizing, and purifying

Can be used when excess fatigue to energize the body

- Breath of Joy – energizing and lift the spirit

Asanas (Postures)

Yoga postures will activate and move prana in the body, open the heart center, stimulate and nervous system and balance the body-mind-spirit. Depending if one feels sluggish and weak, they would start with soothing restorative postures and if they are feeling too much energy they would start with a more active practice and move into a more soothing flow. From a yogic perspective, people with *tamasic* depression lack life force or *prana*. You'll want to concentrate on practices that bring breath to the body, particularly deep inhalations. If they are able to tolerate them, vigorous practices such as repeated **Sun Salutations** (Surya Namaskar), arm balances, and other challenging poses can be therapeutic. The body and mind are so occupied with the practice that it's hard to brood. Students with *rajasic* depression also tend to respond to Sun Salutations and backbends, though some of them will find strong backbends too agitating. Vigorous practices have the advantage of helping students burn off some nervous energy, and also of being demanding enough to keep their attention from drifting.

If they are experiencing more anxiety they would practice more forward bend and close posture such as child pose, Downward Dog. Inversion is very beneficial to relaxing the mind and calming the nervous system. Although there is a theme to their flow depending how they feel when they come to the mat, the practice should always include the forward and extensions to create the balance.

Completing your flow with a restorative is of outmost importance to reserve the energy and ensure a good prana flow and completing with Savasana for a complete practice.

Suggested by Amy Weintraub exert from Yoga for Depression p. 94

A **short and simple practice** that both soothes and energizes that is helpful when you are feeling anxious, and it lifts the depressed mood as well. The practice combines a special breath with a posture and an affirmation. I feel that this is a flow that should be done everyday to help ground and energize for that day and can be done anytime during the day to rebalance our mood. In addition I've included the moola bhandas to stimulate and helps us keep our ground on this new path that the students/client has chosen for themselves, Yoga for depression.

1. **Breath to Fortify the Nerves**

Arms forward and do some muscle contractions and release for all the body including the face down to the feet.

Follow by pulling Prana – arms forward hands open knees deep bend, then make a fist like you were grabbing a rope, breath in, and pull back like your pulling a pulley and breath out with nice strong sound.

2. **Mountain Pose (Tadasana)**

Full expression of the standing pose connecting earth energy and sky, spirit, universe. Moola Banbha deepening this connection and holding the energy in your creative and full expression 1st & 2nd chakra. Hold the posture for at least 10 deep breath

3. **Affirmation**

Continue to hold Mountain pose and breathing deeply through the nostrils. Relax into the sensations that are strong into your body.

Now affirm to yourself: “I am aligned with the energy fo the universe, and the energy of the universe supports and protects me.”

Suggested sequence from Yoga Journal www.yogajournal.com/lifestyle/864#5

Depression Sequence (minimum time 40 minutes, maximum time 70 minutes, at least three times a week)

1. **Supta Baddha Konasana (Reclining Bound Angle Pose)** with your back torso supported on a rolled blanket positioned below and parallel to your spine. (Total time 3 to 5 minutes.)

2. **Supta Padangusthasana (Reclining Big Toe Pose)**

Use a strap to hold the raised leg in place. *Hold each side for 1 to 2 minutes; total time 2 to 4 minutes.*

3. **Adho Mukha Svanasana (Downward Facing Dog)** Use a bolster or block to support the head. *(Total time 1 to 2 minutes.)*
4. **Uttanasana (Standing Forward Bend)**
Support your head and crossed forearms supported on a padded chair seat. *(Total time 1 to 3 minutes.)*
5. **Sirsasana (Headstand)**
Intermediate students should perform the full pose for a total time of 3 to 5 minutes. Bring your feet back to the floor slowly together if possible, either with straight knees or bent, with an exhalation, and stand in Standing Forward Bend for 30 seconds before coming up. *(Total time 3 minutes.)*
6. **Urdhva Dhanurasana (Upward Bow Pose)**
Supported on a chair. Pad the chair seat either with a sticky mat or folded blanket. Then slide your legs through the space between the chair back and seat, and sit on the back edge of the seat facing the chair back. Grip the chair legs just below the chair back and, with an exhalation, lean into a backbend. The front edge of the seat should cross your back torso just under your shoulder blades. Keep your knees bent and feet on the floor. Support the back of your head, either on a bolster or a block. You can continue to hold the chair legs, stretch your arms overhead, or slip your arms underneath the seat between the chair legs and grip the back rung. Be sure to breathe smoothly.

To come up, grip the chair legs just below the chair back, and pull yourself up with an exhalation. Try to lead to movement of your torso with your chest, not your head. *(Total time 3 to 5 minutes.)*
7. **Seated twist**
Continue to sit reversed through the chair, twist to the right with an exhalation, hold for 30 seconds, then twist to the left for 30 seconds. Repeat three times to each side, each time holding for 30 seconds. *(Total time 3 minutes.)*

8. **Setu Bandha Sarvangasana (Bridge Pose)** Place a blank under the shoulders for support. Repeat three times, each time for 30 seconds to 1 minute. *(Total time 2 to 3 minutes.)*
9. **Salamba Sarvangasana (Shoulderstand)**
(Total time 3 to 5 minutes.) Follow Shoulderstand with **Halasana (Plow Pose)**. Intermediate students should do full Plow with their feet on the floor, beginners can do Plow with their feet resting on a chair seat. *(Total time 1 to 2 minutes.)*
10. **Janu Sirsasana (Head-to-Knee Forward Bend)**
Support the head either on a bolster laid across your extended leg, or if you're less flexible, on the front edge of a padded chair seat. *Hold each side for 1 to 3 minutes; total time 2 to 6 minutes.*
11. **Setu Bandha Sarvangasana (Supported Bridge Pose)**
Allow the torso supported on a bolster, and shoulders and head resting lightly on the floor. Keep your knees bent and feet on the floor. *(Total time 3 to 5 minutes.)*
12. **Viparita Karani (Legs-Up-the-Wall Pose)**
Pelvis is supported on a bolster or rolled blanket. *(Total time 3 to 5 minutes.)* Be sure to slide off the support before your turn to your side.
13. **Reclining Conqueror Ujjayi**
Lie on a blanket support to open your chest, with long, smooth, full inhalations and exhalations. *(Total time 3 to 5 minutes.)*
14. **Savasana (Corpse Pose)**
Come off your blanket support and lay your back torso flat on the floor. Support your bent knees on a bolster. *(Total time 8 to 10 minutes.)*

References:

Health24.com

yoga therapyweb.com

Life positive.com

<http://www.svyasa.org/arogyadhama/yogatherapy/anxietyanddepression.asp>

<http://www.yogamag.net/archives/1981/11/nov81/depres.shtml>

<http://www.yogabasics.com/yogatherapy/depression.html>

Yoga for Depression – Amy Weintraub

Relax and Renew – Judith Lasater