



Treatment Menu

A guide to therapies, medicines, and natural treatments for the brain

DEPRESSION



There are many ways to recover from depression, and options on the list below are known to work better than a sugar pill and bring about positive changes in the brain.

The first step in choosing a treatment is to identify the cause of the depression. While the treatments here work well for major depression, they may not work well for depressions caused by something else (such as bipolar, OCD, trauma, addiction or medical illness).

LIFESTYLE

WALKING

Walking briskly 30-45 minutes every other day treats depression as well as an antidepressant and has even better preventative properties. Swimming, dancing and other aerobic activity will have the same effect, and three 10-minute chunks works equally well.

ACTIVITY

Regular activity daily activity is essential to overcoming depression. A mix of social, enjoyable, and goal-directed activity is important. Start light so it's not overwhelming; more ideas at moodtreatmentcenter.com/activation.htm

MINDFULNESS

This form of mental training can treat depression and change the brain when practiced daily. A free audio guide is on our website, and we also offer group and individual education in mindfulness: moodtreatmentcenter.com/mindfulness.htm

DIET

The Mediterranean diet, which is rich in fruits, vegetables, nuts, fish, and healthy oils, treats depression. In one study it worked as well as medication:

moodtreatmentcenter.com/minddiet.pdf

MEDICINES

BUPROPRION (wellbutrin)

Benefits: treat depression, improves concentration, reduces nicotine cravings; also treats anxiety when it is due to depression.

Risks: side effects are rare (e.g. tremor, headache). Does not impact weight or sex drive.

SEROTONIN AND DUAL AGENTS

Benefits: treat depression and anxiety. Dual agents, which impact serotonin and norepinephrine, have additional benefits in chronic pain.

Risks: lower sex-drive, disrupted sleep, nausea.

Examples: fluoxetine (prozac), sertraline (zoloft), citalopram (celexa), escitalopram (lexapro), paroxetine (paxil), fluvoxamine (luvox), vortioxetine (brintellix), vilazodone (viibryd).

Dual agents (SNRIs): venlafaxine (effexor), desvenlafaxine (pristiq), duloxetine (cymbalta), levomilnacipran (fetzima), milnacipran (savella).

MAOIs

Benefits: can work when other medicines haven't; especially good for atypical depression (with fatigue, high appetite, and a reactive mood).

Risks: older versions have many side effects and require a special diet to avoid dangerous elevations of blood pressure. The newer version (selegiline) is well-tolerated and only has dietary restrictions in higher-doses.

Examples: selegiline (emsam), tranylcypromine (parnate), isocarboxazid (marplan), phenelzine (nardil).

MIRTAZAPINE (remeron)

Benefits: treats depression, anxiety, insomnia and can work when other medicines haven't. It can also reverse the side effects of serotonin medicines.

Risks: weight gain, grogginess. No sexual side effects.

TRICYCLICS

Benefits: treat depression, anxiety, chronic pain and insomnia. Can work when other medicines haven't.

Risks: numerous side effects including low blood pressure, heart arrhythmias, constipation, drowsiness, concentration problems, sexual difficulties.

Examples: amitriptyline (elavil), clomipramine (anafranil), doxepin (sinequan), imipramine (tofranil), nortriptyline (pamelor), protriptyline (vivactil), trimipramine (sumontil), desipramine (norpramin). Tetracyclic versions: maprotiline, amoxapine.

DOPAMINE AGENTS

Examples: pramipexole (possibly ropinorole, rotigotine)

Benefits: treat depression, restless legs. No sexual side effects or weight gain.

Risks: nausea, drowsiness, compulsive behavior.

NOVEL STIMULANTS

Examples: modafinil, armodafinil

Benefits: work quickly for depression, fatigue, concentration.

Risks: anxiety, headache, insomnia.

ATYPICALS

Examples: Aripiprazole (abilify), quetiapine (seroquel), olanzapine (zyprexa), brexpiprazole (rexulti), risperidone (risperdal), cariprazine (vryalar)

Benefits: help antidepressants work better.

Risks: weight gain, drowsiness, restlessness, diabetes, high cholesterol, tardive dyskinesia (chronic muscle twitching).

LITHIUM

Benefits: helps antidepressants work better; prevents suicide; strengthens brain cells. Well tolerated in lower doses (for depression).

Risks: nausea, tremor, thirst, low thyroid, kidney problems.

OTHER

Meds which may work (limited evidence):

Memantine, riluzole, thyroid supplementation, pindolol, cyproheptadine (similar to mirtazapine), amantadine, buspirone with melatonin, statins (lovastatin, atorvastatin), topiramate (topamax).

Meds which work but cause significant drowsiness:

Nefazodone, trazodone.

NATURAL

VERY EFFECTIVE

These work about as well as antidepressants:

SAME: the main methyl donor in the body

Omega-3 (fish oil): 30% of the brain is made from

lipid. Omega-3 supplements in the morning, works for winter and possibly non-winter depression, costs around \$150.

L-methylfolate: a prescription-grade folic acid, can work when combined with antidepressants, available as brands (deplin, cerefolin, enlyte).

Saffron: an extract of the plant which improves brain health

Acetyl-L-carnitine: an ingredient in brain cell membranes.

Curcumin (turmeric): a spice that helps depression, arthritis, and memory.

MILDLY EFFECTIVE

These work better than placebo but mild benefits:

Chromium, B-vitamins, folate, St John's Wort, rhodiola rosea, chamomile, creatine.

DEVICES & PROCEDURES

MEDICAL

Transcranial magnetic stimulation (TMS), electroconvulsive therapy (ECT), ketamine infusion (experimental), vagal nerve stimulation (a surgical device).

NON-MEDICAL

Wake therapy (a behavior therapy involving sleep schedule shifts), lightbox (moodtreatmentcenter.com/lightbox.pdf), dawn simulator (moodtreatmentcenter.com/dawnsimulator.pdf) and air ionizer (moodtreatmentcenter.com/airionizer.pdf).

THERAPY

COGNITIVE BEHAVIORAL THERAPY

Depression can influence your thoughts and actions, and this therapy helps people break free from those patterns. Clients use journaling to identify and question their depressive thoughts.
www.beckinstitute.org/cognitive-behavioral-therapy

INTERPERSONAL THERAPY

This therapy helps people resolve life changes that contribute to depression, such as grief, conflicts, new roles/transitions, and social isolation.
www.interpersonalpsychotherapy.org

ACCEPTANCE-COMMITMENT (ACT)

Depression can make people lose sight of the values that matter most to them. This therapy helps people get back in touch with those goals and move beyond the inner struggles of depression and anxiety.
www.contextualscience.org/free_videos

CBASP THERAPY

Cognitive Behavioral Analysis System of Psychotherapy (or CBASP) was developed for depressions that have been long-standing. It helps people navigate the complex ways that depression impacts relationships.
www.cbasp.org

SUPPORT GROUPS

Several local groups meet regularly to share information and support on living with depression. The Mental Health Association keeps a listing of meeting times:
www.triadmentalhealth.org

BIPOLAR DEPRESSION



Antidepressant medication usually does not impact the brain during bipolar depression, but fortunately there are many approaches which can treat and prevent this condition.

LIFESTYLE

WALKING

Walking briskly 30-45 minutes every other day treats depression as well as an antidepressant and has even better preventative properties. Swimming, dancing and other aerobic activity will have the same effect, and three 10-minute chunks works equally well.

WAKING

Waking at the same time each day (within 30 minutes) helps medication work better by setting your brain's circadian clock.

ACTIVITY

A mix of social, enjoyable, and goal-directed activity is important. Start light so it's not overwhelming; more ideas at moodtreatmentcenter.com/activation.htm

MEDICINE

LAMOTRIGINE

Benefits: prevents depression and mood swings, almost no side effects.

Risks: severe allergic rash (Stevens-Johnson)

LITHIUM

Benefits: very effective for depression and mania; prevents suicide; strengthens brain cells. Well tolerated in lower doses (for depression).

Risks: nausea, tremor, thirst, low thyroid, kidney problems.

ATYPICALS

Examples: Cariprazine, quetiapine, lurasidone, olanzapine-fluoxetine combination.

Benefits: very effective for depression, anxiety, sleep and mania.

Risks: weight gain, drowsiness, restlessness, diabetes, high cholesterol, tardive dyskinesia (chronic muscle twitching).

DOPAMINE AGENTS

Examples: Pramipexole, ropinorole, rotigotine

Benefits: very effective for depression, motivation, restless legs.

Risks: nausea, drowsiness, compulsive behavior.

NOVEL STIMULANTS

Examples: modafinil, armodafinil

Benefits: work quickly for depression, fatigue, concentration.

Risks: anxiety, headache, insomnia.

ANTIDEPRESSANTS

Examples: bupropion, SSRIs, MAOIs

Benefits: help about 15% of people with bipolar depression

Risks: worsening of mood, mania, suicidality, sexual dysfunction, anxiety.

MOOD STABILIZERS

Examples: valproate, carbamazepine, oxcarbazepine, aripiprazole, risperidone.

Benefits: these agents treat mania and help prevent depression (valproate may also treat depression).

Risks: depending on agent, may have weight gain, drowsiness, and medical risks.

NATURAL

N-ACETYLCYSTEINE (NAC)

Mechanism: antioxidant, brain protection.

Benefits: depression, concentration, addictions.

Dose: 1,000-2,000mg daily.

OMEGA-3 FATTY ACIDS

Mechanism: coats and protects brain cells; found in fish (salmon) and green leafy vegetables.

Benefits: prevents depression, mania, irritability.

Dose: 1,000-2,500mg daily of DHA + EPA, with high EPA (moodtreatmentcenter.com/omega3.pdf)

INOSITOL (VITAMIN B8)

Mechanism: improves brain-cell signaling.

Benefits: depression, anxiety.

Dose: 5-25 grams/day

LIGHTBOX

Mechanism: enhances serotonin, sets body's clock.

Benefits: winter depression, possibly non-winter too.

Dose: 10,000 lux lightbox used for 15-30 minutes in the morning (e.g. DayLight XL).

THERAPY

SOCIAL RHYTHM THERAPY

Through mood charting, clients learn which daily routines help stabilize their mood. The therapist also helps client build new skills to overcome the effects of bipolar on relationships and identity.

COGNITIVE BEHAVIORAL THERAPY

Depression can influence your thoughts and actions, and this therapy helps people break free from those patterns. Clients use journaling to identify and question their depressive thoughts.

FAMILY THERAPY

The therapist helps families live more effectively with mood problems in the home. Conflict resolution and specific communication skills are taught.

EDUCATIONAL GROUP

In this weekly seminar a therapist teaches skills to live more effectively with bipolar. Much of the learning comes from other patients who have struggled with bipolar

SUPPORT GROUPS

Several local groups meet regularly to share information and support on living with bipolar: Depression and Bipolar Support Alliance (DBSA), First Presbyterian Church (for families and patients). The Mental Health Association keeps a listing of meeting times: www.triadmentalhealth.org.

ANXIETY



Our body has a natural alarm system to warn us that something is wrong. Instead of sirens and lights, our alarm sends out anxiety and physical symptoms, including:

- Chest pain, racing heart
- Difficulty breathing
- Dizziness
- Nausea, stomach ache, diarrhea
- Numbness, tingling sensations
- Sweating, chills
- Trembling or shaking

NORMAL ANXIETY

Here the alarm system is useful and steers us away from danger. People can also seek out anxiety on purpose, as when they line up for a roller coaster or action film. False alarms are also normal: random panic attacks are normal and do not require treatment unless they lead to a continuous state of fear and avoidance.

SECONDARY ANXIETY

Medical and psychiatric problems can set off our alarms. In these cases, the alarm is normal because there really is something wrong, and the answer is to treat the underlying problem.

ANXIETY DISORDERS

Anxiety disorders are a vicious cycle where our alarm leads to fear and avoidance, which then causes more alarm. The medical term for this cycle is phobia; common phobias include:

- Speaking in public
- Meeting people

- Agoraphobia (fear of being in crowded or open places that are hard to get out of, or of leaving the home alone)
- Heights
- Planes

People can also have phobias of things inside themselves, such as:

- Panic disorder: a phobia of panic attacks.
- Generalized anxiety disorder: a phobia of worried or anxious thoughts.
- Post-traumatic stress disorder: a phobia of memories or reminders of past trauma.

Surprisingly, anxiety disorders are not treated by reducing the anxiety but by reducing the phobia. This makes sense when you consider that anxiety is a normal symptom, even when it goes off for the wrong reason. If the anxiety was reduced without changing the phobia, it would only return again. Below are options for anxiety disorders:

LIFESTYLE

AEROBIC EXERCISE

Aerobic activity, which raises your pulse by 10 beats per minute, can reduce anxiety after 3-4 weeks. It should be done 30 minutes a day (or as 3 10-minute chunks).

MUSCLE RELAXATION

This involves slowly tensing and releasing each of the core muscle groups in your body.
www.cmhc.utexas.edu/stressrecess/explore.html

DEEP BREATHING

Regular diaphragmatic breathing can reduce physical symptoms of anxiety.
www.cmhc.utexas.edu/stressrecess/explore.html

MINDFULNESS

This form of mental training can treat anxiety and change the brain when practiced daily. A free audio guide is on our website, and we also offer group and individual education in mindfulness: moodtreatmentcenter.com/mindfulness.htm

THERAPY

COGNITIVE BEHAVIORAL THERAPY

This therapy causes changes in the brain which can lead to a long-lasting recovery from anxiety disorders. The therapist helps you find ways to overcome the avoidance and worry that anxiety brings.

www.anxieties.com, ecouch.anu.edu.au

Book: The Anxiety and Phobia Workbook, E Bourne

ACCEPTANCE & COMMITMENT

This therapy helps people move beyond the inner struggle of anxiety so they can live more in line with their goals and values:

www.contextualscience.org/free_videos

Book: Get out of your mind & into your life, S Hayes

THERAPIES FOR PTSD

Specialized therapies for PTSD help people restore the sense of safety and trust that trauma disrupted.

People learn how to experience traumatic memories with less anxiety and more control.

Examples include Cognitive Behavior Therapy (www.anxieties.com) and Eye Movement

Desensitization Reprocessing (EMDR, www.emdria.org).

SUPPORT GROUPS

Several local groups meet regularly to share information and support on living with depression.

The Mental Health Association keeps a listing of meeting times:

www.triadmentalhealth.org

MEDICINE + THERAPY

Therapy for anxiety brings about changes in the brain through regular exercises that you take on outside of session. Cycloserine is a medicine which enhances learning and can help the brain overcome anxiety when taken before such exercises. In contrast, some medications impair the ability to learn from these exercises, particularly benzodiazepines and alcohol.

MEDICINES

ANTIDEPRESSANTS

Certain antidepressants can gradually reduce anxiety over 3-4 weeks without causing addiction.

Serotonin agents: fluoxetine (prozac), sertraline (zoloft), citalopram (celexa), escitalopram (lexapro), paroxetine (paxil), fluvoxamine (luvox), vortioxetine (brintellix), vilazodone (viibryd).

Dual agents (SNRIs): venlafaxine (effexor), desvenlafaxine (pristiq), duloxetine (cymbalta), milnacipran (savella).

Tricyclics: amitriptyline (elavil), clomipramine (anafranil), doxepin (sinequan), imipramine (tofranil), nortriptyline (pamelor), protriptyline (vivactil), trimipramine (sumontil), desipramine (norpramin). Tetracyclic versions: maprotiline, amoxapine.

Other: mirtazapine (remeron)

BUSPIRONE (BUSPAR)

Treats multiple types of anxiety, non-addictive, well tolerated without weight gain or sexual side effects.

PROPRANOLOL (INDERAL)

This blood pressure medicine reduces physical symptoms of anxiety such as tremor and racing heart. It can be taken as needed and is non-addictive.

ANTICONVULSANTS

Benefits: reduce anxiety (particularly generalized and social anxiety); improve sleep and chronic pain; non-addictive.

Risks: fatigue, dizziness. Pregabalin has weight gain.

Examples: gabapentin (neurontin), pregabalin (lyrica).

MEDICATIONS FOR PTSD

Antidepressants: Serotonin agents and mirtazapine can reduce many symptoms of PTSD.

Blood pressure medicines: Prazosin is very effective for nightmares. Propranolol can help prevent PTSD if taken soon after a traumatic event.

BENZODIAZEPINES

Benefits: reduce anxiety quickly but daily use can lead to addiction and worsened anxiety in the long-term.

Risks: these medicines are safer than alcohol but have similar properties to alcohol in the brain. They can impair memory, cause dependence and falls.

Examples: clonazepam (klonopin and wafers), diazepam (valium), lorazepam (ativan), oxazepam (serax), alprazolam (xanax, xanax-XR), temazepam (restoril), chlordiazepoxide (librium), clorazepate (tranxene), estazolam (prosom), flurazepam (dalmane), quazepam (dural), triazolam (halcion).

NATURAL

SILEXAN (LAVENDER)

This extract of lavender is a prescription medicine in Germany and available in the U.S. through NatureWay. In clinical studies, it out-performed one of the most effective medications for anxiety (paroxetine or paxil).

PROBIOTICS

These healthy bacteria are known to help digestion and in one study also reduced anxiety. They are available in capsules

(moodtreatmentcenter.com/probiotics.pdf), or in yogurts, fermented products, and other foods.

AROMATHERAPY

Many scents (mainly lavender; also orange scents, saffron, rose, ylangylang, rosemary, bergamot, chamomile, lemon, sandalwood, almond, vetivert, bergamot, and geranium) have a mild benefit for anxiety.

CHAMOMILE

Available as a tea or in tablet form, daily chamomile can reduce anxiety.

RHODIOLA ROSEA

This herb acts similarly to antidepressants in the brain, enhancing serotonin and dopamine and protecting brain cells.

SLEEP



Insomnia is usually caused by another mental health problem, stress or lifestyle factors. It's always best to address the underlying cause of the sleep problem and use sleep medication as a last resort.

NORMAL SLEEP CHANGES

As people age, they tend to fall asleep earlier, need less sleep, and awake more often throughout the night. In later life (>65) it may be normal to take brief (1-2hr) regular afternoon naps. For others, napping disrupts the sleep cycle and leads to more insomnia.

The brain's internal clock often runs slow in the late teens and early 20's, leading to oversleeping and late bedtimes. This is a common cause of insomnia and is best addressed by waking at regular times.

LIFESTYLE

REGULAR WAKING, A.M. LIGHT

Regularity is just as important as quantity of sleep. If you start to have insomnia, focus on getting out of bed at regular times and avoid naps. Use bright light to wake up or a dawn-stimulator (which turns the lights on gradually, available at www.cet.org)

BLUE LIGHT

Electronic light in the evening disrupts sleep, particularly blue-wave lengths which come from TV, computers and portable eReaders. Several options can help you filter the blue light (moodtreatmentcenter.com/bluelight.pdf).

FOOD & DRINK

Avoid caffeine after 2pm (chocolate has lots of caffeine). Avoid alcohol (which fragments sleep).

EXERCISE

Aerobic exercise (which raises your heart rate by 10 beats/minute) for 20-30min in the afternoon can deepen sleep quality when done regularly.

TEMPERATURE

To deepen sleep quality, try a very hot bath 1-2 hours before bed and sleep in a cold (60-65°) room.

SETTLE BRAIN WAVES

Develop an evening routine in the 30-60 minutes before sleep. Relaxation in this time will slow your brain waves and deepen sleep, while stimulating activity or problem-solving will lighten it (e.g. try moodtreatmentcenter.com/mindfulness.htm)

MEDICINES

Z-HYPNOTICS

Benefits: help initiate sleep, non-addictive. Longer-acting versions help maintain sleep.

Risks: it is best to use sparingly as continued use may be harmful to long-term health, although so is continuous insomnia. Other risks: falls, sleep-walking, memory problems.

Examples: Short acting: zaleplon (sonata), SL-zolpidem (intermezzo, edluar). Medium to long-acting: eszopiclone (lunesta), zolpidem (ambien, ambien-CR).

MELATONIN-AGONISTS

Benefits: improve insomnia by stabilizing sleep cycle rather than causing sedation. They need to be taken regularly as the work gradually.

Risks: headache, nightmares, stomach distress.

Examples: ramelton (rozerem).

OREXIN ANTAGONISTS

Suvorexant (belsomra) is the first sleep medicine of this type, due to be released in early 2015.

ANTIDEPRESSANTS

Benefits: low doses of sedating antidepressants can improve insomnia without addiction.

Risks: may worsen mood in bipolar disorder; each has different physical side effects.

Examples: doxepin (silenor), trazodone (desyrl), mirtazapine (remeron), amitriptyline (elavil).

ANTICONVULSANTS

Benefits: help initiate sleep and deepen sleep quality without addiction. Safe in bipolar and may help anxiety.

Risks: fatigue, dizziness. Weight gain for pregabalin.

Examples: gabapentin (neurontin), pregabalin (lyrica).

FOR NIGHTMARES

Prasozin, tiagabine (gabitril), cyproheptadine.

FOR ADHD WITH INSOMNIA

These blood pressure medications treat ADHD and cause fatigue at night: guanfacine (intuniv), clonidine (kapvay).

BENZODIAZEPINES

Benefits: help initiate sleep

Risks: regular use for >1-3 months can cause addiction. These medicines are safer than alcohol but have similar properties to alcohol in the brain. They can impair long-term health and memory and cause falls.

Examples: *FDA-approved for short-term use for insomnia:* temazepam (restoril), estazolam (prosom), quazepam (dural), flurazepam (dalmane).

Non-FDA approved: clonazepam (klonopin and wafers), diazepam (valium), lorazepam (ativan), oxazepam (serax), alprazolam (xanax),

chlordiazepoxide (librium), clorazepate (tranxene), triazolam (halcion).

NATURAL

MELATONIN

Darkness triggers the brain to release melatonin, a hormone which induces sleep. It is safer to use total darkness at night than to take extra melatonin, and ambient night can disrupt melatonin if you do take extra.

Risks: unsafe in pregnancy, breastfeeding and in children. May interfere with diabetes, high blood pressure, and epilepsy. May interfere with ovulation when taken.

Dosage: 0.3-5mg at bedtime as needed. Doses above 2mg cause drowsiness; lower doses help set the sleep cycle.

ALPHA-STIMULATOR

This device attaches to the ear-lobe and calms brain waves in a way similar to biofeedback. It has been found to relieve insomnia, anxiety, depression and chronic pain. Cost: \$500-800.

THERAPY

CBT FOR INSOMNIA

This therapy is more effective than sleep medicine and its benefits last longer. It involves specialized sleep-logs and gradual lifestyle changes.

Workbook: The Insomnia Workbook, S Silberman

NIGHTMARES REHEARSAL THERAPY

A brief therapy which helps people reshape their nightmares through regular mental exercises before sleep:

www.nightmare-treatment.com