

Light Therapy



A natural treatment for seasonal (and non-seasonal) depression

Depression has a lot in common with jet lag. Both make people feel tired, unmotivated, and foggy headed. Like jet lag, depression is caused in part by disruptions to the biological clock that regulates our circadian rhythm. That clock is set by light and darkness, which is why an extra dose of morning light can lift depression.

Light therapy was developed in the 1980's for winter depression, and it is one of the few natural therapies that is as potent as a medication. It also works in the summertime, perhaps because we spend so much of our lives indoors.

Light therapy is not just for depression. It can also improve PTSD, ADHD, binge eating, sexual dysfunction, insomnia, and Parkinson's disease. However, we have only a few studies supporting its use in each of those conditions. For depression, we have nearly 100 studies.

To make this treatment work, you need to get the right box and use it at the right time.

Choosing a Lightbox

Most light boxes do not work. The top selling products are small and attractive, but they aren't big enough to bring relief.

Fortunately, a researchers have stepped in to guide the public: The Center for Environmental Therapeutics. Their top product is the Northern Lights LED Desk Lamp II, which stands out for its long-lasting LED bulbs (available at cet.org or Amazon). Other effective options include BOXelite OS, LiteUp, and Carex's Day-Light Classic or Classic-Plus, but use fluorescent bulbs that are more breakable and need to be replaced every 2-3 years. Find links at:

moodtreatmentcenter.com/products

Purchasing a different brand? Look for the following features:

Intensity: at least 2,000 lux; 10,000 lux is optimal

Screen Size: at least 12 x 17 inches

Wavelength: around 509 nM (White Light)

How to Use a Light Box

Sit directly under the box for 1-2 hours a day to get the full effect. The box should hover over your head at a 45 degree angle, just like the sun. Keep within the distance your box recommends (usually 12-17 inches) and don't stare directly into the light. You can read, eat, or use a laptop while under it.

Light is good for mood, but only in the morning. After 2:30 pm, light therapy can worsen mood by flipping the biological clock.

To find out the optimal time to turn on the light, go to www.cet.org; links may change but currently click on *Therapeutic Resources and Tools* button, then *Self assessment tools* then *Your circadian rhythm type (AutoMEQ)*. Answer the questions based on how you've felt recently and at the end it will tell you the best time to turn on the box (usually between 5:00 am and 8:15 am; closer to 5 if you're a morning person and closer to 8 if you're a night owl). If you cannot start it then that's ok. Get as close as you can.

Trouble waking up? Try a dawn simulator. These boost morning energy by creating a virtual sunrise at your bedside:

moodtreatmentcenter.com/dawnsimulator

Light therapy takes 2-4 weeks to work, but you may feel better as early as 2-4 days after starting it.

Light Therapy in Bipolar Depression

Light therapy works in bipolar depression, but can rarely cause manic or agitated symptoms. To minimize that risk, use the light between 12:00 pm and 2:30 pm. Start with 15 minutes under the box and gradually increase the time by 15 minutes each week until you are sitting under it for one hour a day. If manic symptoms occur (e.g. agitation, insomnia, restlessness, racing thoughts, irritability), contact your treatment team and lower the time under the box.

When to Start and End Treatment

For winter depression, start light therapy at least 2 weeks before you anticipate a seasonal dip in your mood. As the light increases in the spring, you can taper it down over 2-4 weeks by decreasing

the time under the box (e.g. lowering by 15 minutes per week).

The sudden increase in light in March can trigger mania and agitation in people with bipolar disorder, so they may need to stop the lightbox in February. To reduce this risk of springtime mood problems, wear blue-light filtering glasses in the evening, starting in late February:

moodtreatmentcenter.com/darktherapy

Side Effects and Precautions

The most common side effect is headache and eye strain. Insomnia is possible, but sleep usually improves with early morning light. To protect your eyes, make sure your box has a UV filter and do not stare into the light. Let your doctor know if you have any eye diseases.

More on Seasonal Affective Disorder

Seasonal Affective Disorder (SAD) tends to start between ages 15 and 30. About 5% of people in the U.S. have SAD and up to 20% have milder forms of the condition. Northern climates have higher rates, but the rates don't start to drop until you get below Columbia, SC. Winter depression is rare in the tropics (at or below Florida).

Learn more in *Reset Your Inner Clock* by Michael Terman, PhD.

—Chris Aiken, MD, adapted from *Bipolar, Not So Much* (Aiken & Phelps, WW Norton, 2017)