The Right Way to Treat Seasonal Depression

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Is the cold, dark winter making you SAD? Seasonal affective disorder (SAD) is a condition that can bring on a full-blown depression that reappears yearly, usually in winter, with major relief in the late spring and summer. It can destroy your ability to work, meet family obligations, and engage socially (or sexually). Feelings of anxiety and despair are also common.

SAD-related depression is usually accompanied by physical symptoms: difficulty waking up, sleeping longer hours, craving carbohydrate-rich foods, and gaining weight that is easily lost in late spring. Nearly 10 million people in the US have SAD, and three times as many have “winter doldrums,” similar, though not clinically severe, symptoms.

Since good mood, sunlight, and spring and summer tend to go together, many once believed that sprawling in the sun or a tanning bed was the answer to SAD — that the ultraviolet (UV) light they give off was a virtually magical cure. And, as it turns out, light does play a role in the treatment of SAD. But it’s visible light, not UV, that accounts for light’s antidepressant effect.

What’s the right way to treat SAD and the winter doldrums? Visible light therapy, which is generally provided by a light box. This light provides a spring-like sunrise signal that travels from the retina in the eye to the biological clock in the base of the brain, so that the internal clock and the clock on the wall stay coordinated. Ordinary indoor lighting is about 50–300 lux (the equivalent of twilight), while a light box with 10,000 lux of illumination provides a true, early, outdoor daylight level.

If you sit at a light box — usually for 30 minutes after rising — even your most disruptive clinical symptoms can clear up quite quickly, sometimes within days.

So, if you see a salon advertising UV tanning as a cure for SAD, don’t believe it. Early morning sunlight, which light therapy approximates, provides the lowest amount of UV radiation of the day, and the UVR therapy hypothesis was disproved when investigators found no reduction of antidepressant effect when UVR was eliminated from light boxes. However, in a recent study, college women who showed either mild or severe symptoms of SAD were far more likely to abuse indoor tanning (having 40 sessions or more per year). Since UVR stimulates the body to produce endorphins, chemicals that produce feelings of calm and well-being, this temporary “high” may influence tanning’s popularity among women with SAD. However, it is not the solution; bona fide light therapy works through the eyes, not through the skin.

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HOW SAD MAKES US SAD

SAD is linked to melatonin, a sleep-related hormone. Generally, melatonin levels in the body are higher at night and lower in the morning. For people with SAD, however, the cycle is often delayed, and melatonin levels remain elevated into the morning, causing them to oversleep or leaving them fatigued. Meanwhile, the brain’s internal clock relies on early morning light to keep our circadian rhythms in sync with local time, but the late sunrises of winter deny our bodies that essential signal. Depression can result when we have to keep waking up while it’s still dark. SAD is more frequent in the northern half of the US, where winter sunrise is significantly later than in the south. It is also more common toward the western edge of time zones — sunrise is about an hour earlier on the eastern edges.
Lig HT Box E ss En Tal S Ma ny light therapy products are commercially available. However, few have been clinically tested, and some may pose risks to the skin or eyes. Here are some guidelines, based on the recommendations of the Center for Environmental Therapeutics:

• The light box should have been tested successfully in peer-reviewed, placebo-controlled clinical trials.
• The box should be able to provide 10,000 lux illumination.
• The box should have a smooth diffusing screen that filters out the small amount of UVR emitted by the fluorescent bulbs in most light boxes. The safest light boxes use a polycarbonate diffuser.
• The light should project downward toward the eyes to minimize glare.
• Smaller is not better. Miniature devices cause glare, and even small head movements will take your eyes out of the therapeutic range. In general, light boxes should be no smaller than 15” wide and 12” high (180 sq. in.).

Finally, the lamp should give off white, not colored, light. Soft white light is highly recommended. Full spectrum and blue (or bluish) light provide no known therapeutic advantage — blue light causes glare, and over the long term may harm the retina. Boxes that give off inadequately filtered UV are particularly hazardous to the skin and eyes of people taking photosensitizing drugs (medications that sensitize the skin to the sun). Photodermatitis people may develop rashes, itchiness, bumps, or lesions on the skin as a result of exposure to UV light and have a higher risk of developing skin cancer. Typical UV photosensitizers include antibiotics and NSAIDs (non-steroidal anti-inflammatory drugs, like ibuprofen). Everyone who uses a light box should make sure it has a polycarbonate diffuser to screen out UV light adequately, but for people taking photosensitizing drugs, a filter is especially important.

Other drugs can photosensitize people to visible blue light, which exists in varying degrees as a component of white light. Anyone using tricyclic antidepressants or neuroleptics (common psychiatric drugs), antiarrhythmics, or antimalarial drugs should check with a dermatologist before starting bright light therapy.

Additionally, people with conditions including age-related macular degeneration, lupus erythematosus, chronic actinic dermatitis, and solar urticaria may react poorly (photo-sensitively) to the blue light produced by light boxes. For these SAD patients, a milder form of light therapy, dawn simulation, has seen initial clinical success. In dawn simulation, timed lights are activated automatically to gradually replicate a low-level springtime sunrise while you’re still in bed.

It can be difficult to tell whether your winter slump is clinically significant. You can get anonymous, confidential feedback online using the Personal Inventory for Depression and SAD in the Self-Assessment section at the nonprofit Center for Environmental Therapeutics (www.cet.org). If your depression is severe, consult a mental health specialist. Print out the report, and discuss it with your doctor if indicated.

LIGHT BOX ESSENTIALS

CONCLUSION

Light therapy for SAD can be a boon for quality of life for half the year. But users must keep an eye out for safety and efficacy: much commercial apparatus has received inadequate testing, or none at all. Many doctors are still unacquainted with this powerful non-drug technique. To learn more about light therapy, the newly published Chronotherapeutics for Affective Disorders is a comprehensive guide. And remember: Visible light, not harmful UV radiation, is the key to relieving symptoms of SAD. A light box, not a tanning machine, can help improve your mood and sleep without risking your health.

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References available on p.97.


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