

## **Bright Light Therapy: Not Just for SAD Anymore**

**Good news:** Bright Light Therapy has benefits for non-seasonal depression, insomnia and oversleeping, bulimia nervosa, antepartum and premenstrual depression, adult attention deficit disorder, and shift work adjustment.

For more than twenty years, many people suffering from seasonal affective disorder (SAD) or winter blues have used Bright Light Therapy to maintain physical and mental health. Michael Terman, Ph.D., Director of the Center for Light Treatment and Biological Rhythms at New York-Presbyterian Hospital, Columbia University Medical Center says, “Light therapy provides a potent alternative or adjunct to antidepressant drugs. . . . Physicians increasingly recognize that Bright Light Therapy is a potent, specifically active, non-pharmaceutical treatment modality. Indeed, the domain of light treatment has moved beyond SAD to non-seasonal depression (unipolar and bipolar), seasonal flare-ups of bulimia nervosa, circadian sleep phase disorders, and more.”

By directing diffuse white light to people’s eyes, Bright Light Therapy signals a springtime sunrise to the nervous system. This signal impacts the rate at which the pineal gland secretes melatonin, the hormone that affects our sleeping and waking routines. But Bright Light Therapy can alleviate mental and physical symptoms of depression beyond the timing and duration of sleep. “Light therapy provides a compatible adjunct to antidepressant medication, which can result in accelerated improvement with fewer residual symptoms,” explains Terman. “Fewer residual symptoms means less chance of relapse. It’s a no-brainer.”



The latest clinical trials also show that Bright Light Therapy can relieve the symptoms of non-seasonal depression—moodiness, lack of motivation, increased or decreased sleep, and withdrawal from social activities—and enable people to taper and sometimes even stop taking antidepressant drugs. “You might ask why light would be helpful in summer when sunlight is so plentiful,” Terman says. “Just think how a depressed person behaves regardless of the season: indoors, in bed, shades drawn, trying to escape into sleep. Such light deprivation is depressogenic at any time of year.”

Circadian sleep phase disorders throw people’s daily rhythms out of sync. Altered circadian rhythms of body temperature and melatonin secretion cause difficulty initiating sleep before 1 a.m. or later, difficulty awakening in time for a normal workday, and low morning alertness (“mental fog”). Other people, often the elderly, wake up prematurely, well before dawn. Bright Light Therapy can help people reach a desired sleep phase with enhanced daytime energy and reduced nighttime wakefulness. The nonprofit Center for Environmental Therapeutics (CET) states that “selective application of Bright Light Therapy in the morning (to correct phase delayed patients) or in the evening (to correct phase advanced patients) has been very effective in ‘resetting’ patients’ internal clocks to coincide with normal living schedules.”

Many people struggling with bulimia nervosa experience a winter worsening of binge eating and purging. Bright Light Therapy can help improve mood and dramatically alleviate urges to binge and purge.

Bright Light therapy offers a safe alternative to antidepressant drugs for women suffering from antepartum and premenstrual depression. During pregnancy, this benefits both mother and fetus. Terman says, “Every pregnant woman should learn about this, since 10 percent will develop clinical depression before giving birth.”

Light therapy can also reduce attention deficit disorder (ADD) symptoms in adults, a surprising new result from researchers in Toronto. Other research suggests benefits for coping with shift work by increasing alertness, enhancing night-shift performance, and enhancing sleep efficiency, although optimum light treatment schedules are still being evaluated by researchers.

Properly designed light boxes are easy to use and have minimal side effects. People usually self-administer light therapy at home on a schedule recommended by their clinician. Although the optimum light dosage, duration, and time of day requires individual adjustment, researchers generally recommend that patients with depression start with a 10,000 lux Bright Light Therapy lamp for thirty minutes each morning. Antidepressants may be prescribed as a last resort or in combination with Bright Light Therapy. Patients with bipolar disorder use Bright Light Therapy in conjunction with mood-stabilizing medications.

“The light treatment protocol for non-seasonal depression depends on the individual’s episode course, which may not be known,” says Terman. “Often, the treatment is begun adjunctively only after an adequate medication trial has shown only poor or partial improvement. In adding light, the clinician needs to consider two potentially interactive factors: drug dose adjustment and photosensitization. If there is an improvement with light, it may be possible to decrease drug dose, even to discontinuation. If the patient must continue with one or more drugs that photosensitize in the visible range, the light, or drug dose, or both may need to be reduced and routine ophthalmologic check-ups instituted.”

Terman says patients have only rarely discontinued light therapy treatment due to side effects. Clinicians watch out for autonomic hyperactivation (agitation, dyspepsia). Headaches and eyestrain can also occur, but these usually subside after the first few treatment sessions. Almost always, side effects can be controlled with light dose adjustments.

Many manufacturers sell clinically untested light boxes with arbitrary designs aimed at naive consumer appeal, and there is no federal or professional regulation of standards. CET strongly recommends choosing a light box that has been carefully evaluated in peer-reviewed clinical trials. The box should provide 10,000 lux of illumination at a comfortable sitting distance; fluorescent lamps should have a smooth diffusing screen that filters out ultraviolet (UV) rays that are harmful to the eyes and skin; the lamps should emit white light (full-spectrum lamps and blue lamps provide no known therapeutic advantage); the light should be projected downward toward the eyes to minimize visual glare. Larger light boxes are



preferred because even small head movements will take the eyes out of the therapeutic range of miniature lights.<sup>1</sup>

More and more, people are benefiting from Bright Light Therapy. Fewer suffer alone and in silence or need to resign themselves to prolonged use of antidepressant drugs and their problematic side effects. The recent extension of Bright Light Therapy to syndromes beyond SAD provides exciting opportunities to help more people live full, healthy lives.

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<sup>1</sup> CET recommends Uplift Technology's Day-Light Bright Light Therapy Box because it has been carefully evaluated in clinical trials with marked success rates. Visit [www.cet.org](http://www.cet.org) or [www.day-lights.com](http://www.day-lights.com) for more information.

