

## **New therapy is a bright light in treatment of depression**

*Avoid self-treatment when using light boxes*

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**LANCASTER  
COUNTY, PA -**  
Light therapy isn't  
just for winter  
depression anymore.  
Research shows that

light therapy -- exposure to a therapeutic light source for a certain length of time -- can lift the mood of people who are depressed year-round. It can be the treatment that replaces antidepressants or, when used with medication, can push major depression into remission.

The evidence is convincing enough that a committee of the International Society for Affective Disorders recommended light therapy as a viable treatment for major depression.

"It is time for . . . light therapy to be incorporated in mainstream psychiatry," wrote committee members in *Psychological Medicine*, a journal printed by Cambridge University Press. To consider it a mere curiosity "wastes resources and prolongs suffering."

The growing interest in light therapy brings new hope to the 18.8 million Americans who suffer from depression, according to statistics from the National Institutes of Health.

Andrea Gregg, 25, of Lancaster, is one of them. Since her sudden onset of major depression seven years ago, she has worked her way through a litany of

psychiatric medications. Her psychiatrist prescribed old and new medications, combinations and high doses, but none of them were effective long term.

Her years were measured out between days spent in bed, unable to find the will or energy to get up, and the days she forced herself to work or volunteer -- carrying on as normally as she could.

In November 2004, Gregg admitted herself to New York State Psychiatric Institute, desperate for something to keep her depression from deepening into another suicide attempt.

Doctors stabilized her on Parnate, an older psychiatric medicine, and then added light therapy to her daily regimen. At 7:15 a.m., Gregg was required to get out of bed and sit in front of the light box for at least a half-hour. That time was specific to when Gregg's body naturally produces melatonin, the hormone that makes a person feel sleepy.

Gregg was excited about how much better she felt after using it, but the effect seemed to wear off by mid-day. Eventually, though, as she stuck with it, she saw prolonged benefit.

Now, she is able to go to sleep at night without large doses of Xanax, a central nervous system depressant. Before the light box, she took 4 milligrams of Xanax a day, 2 of them before bed. Now she only uses .5 mg of Xanax at night, primarily because it helps control her anxiety the next day.

It's been nearly a year and Gregg believes her light box is as essential to lifting her depression as the medication.

"Whenever I miss my light box, it throws me off a little bit. I get pretty down if I miss it for two days in a row," she said.

She compares her light box to other people's morning cup of coffee. She needs her light box to wake her up and to get her out of her "depression funk."

"Until the light starts kicking in, I don't want to do anything," Gregg said. "I don't have the concentration. I can set tons of things in front of me, but I just don't want to do them until about 45 minutes into it."

Dr. Michael Terman, one of the pioneering researchers in the field of light

therapy for Seasonal Affective Disorder and a professor of clinical psychology at New York-Presbyterian Hospital, was a consultant for Gregg's light therapy.

The treatment's effectiveness is related to the body's circadian rhythms (internal biological clock) and sleep, he said. Just like lack of light throws off the body's natural sleep and waking patterns for people with Seasonal Affective Disorder, it also affects people with year-round depression, Terman said.

"There's a tendency when people get depressed to change their sleep patterns," Terman said. They limit their exposure to daylight year-round by spending their days indoors, sleep at odd times and often sleep more than they need to -- creating a "man-made problem of light deprivation."

Light therapy brings a person's biological timing back into alignment, Terman said. He continues to research and experiment with the most effective ways to deliver light therapy.

For example, earlier this year Terman advised Gregg to add a dawn simulator to her treatment regimen.

The simulator, which extends over her bed, comes on with a pin prick of orange light two hours before she wakes up and gradually increases in intensity.

The dawn simulator matches the light patterns a person would experience when sleeping in a tent on the beach, said Terman, who helped to design it. The theory is that people are most responsive to light in the last few hours of sleep, even though their eyes are closed.

Some people get an antidepressant effect with just the simulator, Terman said. Other people need more.

Gregg needed the dawn simulator so she could get herself out of bed and to the light box. It also helped her stay awake in front of the box. For the light box to be effective, a person's eyes must be open, she said. Brighter light is needed then to achieve the equivalent "clock-resetting" effect of the dawn simulator, Terman explained.

"Andrea is paving the way for other people," Terman said. Far fewer clinical

trials on the effectiveness of the simulator on year-round depression have been done than on light therapy. Her responsiveness, and that of other patients with chronic depression, help motivate further research, he said.

Terman said his experience with Gregg and other chronically depressed patients who responded to light therapy helped motivate the creation of the Center for Light Treatment and Biological Rhythms at New York Presbyterian in November. The outpatient center is the first in the nation to use light therapy to treat people who have year-round depression. (See [www.nyppsy psychiatry.org/lighttherapy/](http://www.nyppsy psychiatry.org/lighttherapy/) or call 212-305-6001.)

In July, Psychology Medicine published Terman's research, done in collaboration with three peers, indicating that bright light treatment is effective for treatment of chronic depression.

"We've been truly amazed that people who show absolutely no seasonality (that are chronically depressed) are responsive to light at all times of the year and they respond just as strongly as people with winter depression," Terman said. His findings are supported by an increasing collection of worldwide results.

In spite of the positive data, though, not everyone with chronic depression responds to light therapy, Terman said. Nor does it completely alleviate depression in all cases. Gregg, for example, is still depressed, but not nearly as debilitated.

She goes to the gym with her sister, volunteers, coaches cheerleading and takes care of her dogs. And she no longer feels suicidal, she said.

Yet Gregg said she usually goes back to bed after her light treatment. "I don't really think that's normal, except just for me; It's (the depression is) so bad, it can only help me so much."

### **Avoid self-treatment when using light boxes**

Even though light therapy products are easily available, people must be very cautious about treating themselves.

"Anybody with a major depressive disorder must not self-treat," said Dr. Michael Terman, a professor of clinical psychology who has been studying the effect of light therapy on patients since the 1980s.

Light therapy can make dramatic changes in a person's emotional state and require adjustments in medication, Terman said. People with mild depression probably can experiment safely, Terman said, but he advises them to get as much information as they can before they start.

For example, he said, too many products on the market claim to be useful for light therapy, but aren't, or include incorrect medical advice.

The timing for using the light is also important, Terman said. Using it too early can be harmful and using it too late can be ineffective.

Terman recommends consulting The Center for Environmental Therapeutics at [www.cet.org](http://www.cet.org). The site has an online test which evaluates your natural sleep patterns, and uses the results to tell you what time to start light therapy.

It also lists the characteristics that quality light therapy products should have so you don't waste money on useless products.

The site also contains a wealth of background information, summaries of the latest research and links to other reputable sites.

People with major depressive disorders can get physician assistance by contacting the Center for Light Treatment and Biological Rhythms at 212-305-6001.

## **Recent studies on light therapy**

By Linda Espenshade  
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**LANCASTER COUNTY, PA** - Two recent studies on light therapy for people who are chronically depressed include:

- In April 2005, The American Journal of Psychiatry published a review of 23 controlled trials related to light therapy and depression, done between 1975 and 2003, to determine the efficacy of light therapy on chronic depression. The reviewers concluded that "the effects of light therapy was comparable to those found in many antidepressant pharmacotherapy trials." They also found that the light simulator was effective at reducing depression.
- A randomized double-blind trial of 102 people in Denmark (Evidence Based Mental Health, Aug. 8, 2005) showed that light therapy is effective at reducing depression when used with medication. "Analyses showed that the reduction in depression scores in the bright light group was statistically significantly larger than in the dim light group on all scales."