

## Light Therapy Questions & Answers

Since 1982 specialized bright light therapy has been researched and implemented in the U.S. and abroad. Hundreds of thousands of individuals, medical centers and clinics have found success by utilizing this therapy for patients with SAD (seasonal depression), major and bipolar depressions, sleep disorders, PMS & PMDD, prenatal and postpartum depression, shift work and jet lag.

This "Questions & Answers" page is intended to provide readers with general information about the current uses of light therapies. No medical instructions or advice is intended. Anyone interested in light therapy should seek the advice of a skilled clinician.



### What is Seasonal Affective Disorder?

SAD is a depression that happens when dark winter days keep your body clock from resetting every day. When your internal 'body clock' shifts, the wrong hormones are produced at the wrong time of day, causing the symptoms of SAD. Darkness also causes the body clock to over produce the nighttime hormone, melatonin. Evidence suggests that too much melatonin can cause depression.

### Do Circadian Rhythm Disorders Cause Other Problems?

The daily changing signals your body clock produces are called 'circadian rhythms.' Since circadian rhythms control energy/mood and sleep/wake cycles, a malfunctioning circadian rhythm can contribute to depressive disorders, anxiety and sleep disorders.

### How do I know if I have a circadian rhythm disorder?

If your mood or energy changes seasonally, or you feel worse at a certain time of the day, or you have trouble sleeping, you may have a circadian rhythm disorder. An assessment test is available online, which will tell you whether you have a disorder, its severity and the best treatment regimen. For more information visit: [www.apollohealth.com](http://www.apollohealth.com)

### How does bright light therapy work?

Exposure to specialized bright light is the only effective means of shifting circadian rhythms back to their normal pattern. Bright light also suppresses the secretion of the night-time, withdrawal hormone melatonin, and produces serotonin and other neurotransmitters.

### How should I use light?

Because light affects your body clock's ability to regulate sleep/wake and energy cycles, knowing when to use light is critical. Using light at the right time of day will elicit a quick, effective response, while the wrong

time of day can make symptoms worse. The circadian rhythm assessment will let you know the best time to use the light. ([www.apollohealth.com](http://www.apollohealth.com))

### What type of light is most effective?

For over 20 years, 10,000 lux light has been shown to be effective in treating circadian rhythm disorders. However, recent research confirms that a **specific bandwidth** of that 10,000 lux light is responsible for preventing SAD and related circadian rhythm disorders. This bandwidth is 464 nm (nanometers) and is up to **ten times more effective** than other bandwidths. Since this bandwidth represents a narrow slice of the visible spectrum, it is much less intense than 10,000 lux, making therapy easier on the eyes and causing fewer side effects. The only method which produces this effective bandwidth is BLUEWAVE™ Technology.

### What factors are important in a lightbox?

- **Research Participation:** Light therapy technology is rapidly advancing, yet most light companies are using 20 year-old, full-spectrum technology. Companies that actively participate in research offer leading edge technology, allowing for a quicker and stronger response.
- **Verified Claims & Performance:** Manufacturers who are actively involved with medical societies and participate in published research are likely to make credible claims. For example, medical research shows that Kelvin temperature, full-spectrum, Color Rendering Index (CRI), etc. have nothing to do with effective response. Yet several companies exaggerate the importance of these features.
- **Effective Treatment Area:** A larger treatment area equals a stronger response. Treatment distances of 20" or better are recommended for moderate to stronger symptoms.
- **Convenience & Portability:** Light therapy doesn't work if you can't incorporate it into your routine. Bulky and heavy lightboxes are difficult to use,

*Continued from page 1*

which is why most people don't use stand lights, even though stand lights are slightly more effective. New technology is allowing light devices to be more effective while at the same time being more portable and convenient to use.

### **When should I notice a difference?**

Most people respond within the first week, with complete remission in about two weeks. The response should be very marked. People awaken earlier and easier, feeling more refreshed and energetic during the day. They sleep better throughout the night, and don't feel exhausted or fatigued. By the second week carbohydrate cravings should disappear.

### **What time of year should I start using my light?**

If you don't know the best time of year to start using your light, use Halloween or Daylight Saving Time as your starting point. This is when most people begin to notice problems. For some, the season starts early and ends late, but for most others, if it starts early, it will probably end early as well. For example, a large group of SAD patients notice the onset of symptoms in September and start feeling better by mid February. Conversely, February can be the worst month for some, and they might not better until May. The vast majority of people though, need to use their light from October through March or April.

### **How long should I use my light each day?**

Most people use specialized light therapy early in the morning for about one-half hour, but timing of light therapy varies for each individual. Most find they can reduce their treatment time to an average of 15 minutes per day once they notice a response.

### **Are there any negative side effects from light therapy?**

The American Psychiatric Association's [Task Force](#)

[Report on Mood Disorders](#) has determined that there are no negative long-term side effects associated with non-UV light therapy. However, less than two percent of users experience initial headaches due to eyestrain. Eyestrain can be minimized by increasing the surrounding level of light in the room where the lightbox is used. Studies using BLUEWAVE™ Technology reported no side effects.

### **Can I use light with medication?**

Light can be used in combination with medication, and several studies report that light therapy augments the antidepressant effects of medication. Medication works to keep serotonin from being absorbed too quickly, and light naturally produces serotonin, creating a synergistic effect. (If you use light while on antidepressant medication, the level of medication may need to be adjusted.)

### **Are there any cautions with light?**

Over-use of light may increase the risk of a hypomanic reaction in bipolar patients, or could cause feelings of jitteriness, euphoria or mild anxiety. Since these reactions usually happen from using the light for extended periods, light should not be used for more than an hour at a time. Negative reactions to light are not common and are easily controlled by discontinuing light for a day or two and then gradually becoming acclimated to the light.

### **Won't changing my household bulbs to full-spectrum help?**

Although full-spectrum bulbs may produce a more natural looking light, it can't produce the intensity necessary to elicit an antidepressant response. Home improvement centers now offer several full-spectrum lighting options. However, because full-spectrum lighting produces a broader spectrum of light, you may need to change ballasts or increase wattage to keep lighting levels adequate.

### **Will insurance cover the cost of a light box?**

65-70% of insurance companies have reimbursed the purchase price of light boxes. Your chances for reimbursement are greatly improved when you provide the following information to your provider:

1. Insurance Letter: Your physician should write a letter explaining the diagnosis of SAD (or related disorder), and that light therapy is the most effective and least expensive treatment.
2. Doctor's prescription specifying the disorder (SAD, sleep disorders, etc.), product, usage at a the recommended distance, duration and time of day to administer treatment
3. Receipt or invoice for purchase of lightbox.
4. Abstracts and professional articles on the treatment of SAD.

Apollo can provide you with a sample insurance letter (developed by the NIMH) as well as abstracts and professional articles.

### **Can my treatment be adjusted?**

A lightbox with a large treatment field will allow most people to reduce their treatment time to approximately 15 minutes after they respond to the light. Some need more time and others require less. Your response may vary. If you awaken earlier than desired, you are receiving too much light. If symptoms begin to reappear, increase treatment by 5 or 10 minute intervals. Light boxes with smaller treatment fields may require continued use at ½ hour or more.