

SEASONAL AFFECTED DISORDER AND SYMPTOMS OF DEPRESSION

Light Boxes for the Winter Blues by Tom MacKay

"Why do I feel so down and depressed this time of the year?"

These dark, rainy days make me feel so blue. I have no energy. I hate to get up in the morning and I am always craving sweets or carbohydrates. Is this why I put on weight every winter? Do I have the winter blues? Cabin fever? "The blahs?" "Why does my monthly period seem worse in the winter? I wish I could feel good again, like I felt in July."

Typical questions. In fact, 25% of the population in Canada have these symptoms. Nearly 350,000 people in the British Columbia lower mainland suffer from a newly named syndrome: Seasonal Affective Disorder (S.A.D.).

Recent studies at UBC in Vancouver and the Presbyterian Medical Centre in New York indicate that people living in the northern part of the hemisphere (i.e. Canada) suffer from seasonal mood disorders more than others who live in southern areas where sunlight is more prevalent in winter. Particularly in British Columbia, where they experience long periods of dark, dismal, rainy days, there is a higher incidence of S.A.D. than in other parts of Canada. (Could this be one reason why the highest suicide rate is in Canada?)

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Why is this happening? Is this new?

Seventy years ago, a sufferer of S.A.D. would simply be resigned to the fact that s/he had a case of "cabin fever." One would simply hibernate for most of the winter and spend the time indoors feeling lethargic, gaining weight and longing for spring to reappear. Trips to Hawaii or the Bahamas were unheard of, and one had to make do with only a kerosene lantern atop the kitchen table.

It has been only in recent years that the medical profession has diagnosed this winter depression as a treatable disorder. The treatment is simple --- light therapy.

No wonder we feel like a new person when we lie back on a sunny beach in Cancun! Sure, the relaxation is wonderful and the scenery is great, but hey ! What is that big ball of fire in the sky? One can't see the sun in Vancouver through the black rain clouds. That's it ! We miss the sunlight !

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So how do we bring the sunshine back to us?

The answer is simple, affordable and available. Portable light boxes consisting of clinically approved fluorescent lamps in a safety-tested box with an electronic ballast can have a major impact on your well-being.

To answer your question on the technical side, blood levels of the light sensitive hormone, melatonin, may be abnormally high at certain times of the day and are rapidly reduced by light exposure. When bright light is presented, the body's internal clock (which controls daily rhythms of body temperature, hormone secretion, and sleep patterns), adjusts accordingly.

Light therapy involves exposure to intense levels of light under controlled conditions. The recommended light therapy system consists of a set of fluorescent bulbs installed in a box with a diffusing screen and set up on a table or desk top at which one can sit comfortably for the treatment session. Treatment consists of sitting close to the light box, with lights on and eyes open. Looking at the lights is not necessary nor recommended; rather, people are free to engage in such activities as reading, writing, or eating meals. It is as simple as reading the morning paper and getting a good dose of sunlight at your kitchen table.

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What is important is to orient the head and body toward the lights, concentrating on activities on the surfaces illuminated by the lights, and not on the lights themselves. Treatment sessions can last from 15 minutes to three hours once or twice a day depending on the equipment used and individual needs. The average length of a session for a system delivering 10,000 lux illumination is, for example, much shorter than for 2,500 lux (30 minutes versus two hours.) In a clinical test at the Presbyterian Medical Centre, all S.A.D. patients showed remissions using the daylight 10,000 lux system; 10% responded fully to 15 minute sessions upon awakening; 85% to 30-minute sessions, and 5% to one-hour sessions. (Full Spectrum lamps simulate natural sunlight, and mimics lighting that exists shortly after sunrise or before sunset.)

Light intensity is a critical "dosing" dimension of the therapy. All systems deliver varying amounts of light, and people vary in their responses to those levels. The time of day for light therapy is another important factor. Many people with winter depression respond best to treatment first thing upon awakening. Some, however, do better with evening light. It is necessary to determine the optimal time of day for each individual.

Is increased exposure to normal room light therapeutic without the use of special apparatus?

Some very light-sensitive people living and working in dim environments may feel improvement simply through increased exposure to normal room light. Research studies show, however, that most sufferers of S.A.D. and the winter doldrums require exposure to light levels much higher than provided by ordinary indoor lamps and ceiling fixtures. Such therapeutic levels are five to twenty times higher (as measured in lux or foot-candles by a light meter) than typical indoor illumination in the home or office. Changing the harmful cool white fluorescent lights in one's office to full spectrum lighting is a very quick and cost-effective way to simulate natural sunlight during working hours, where we spend one third of our working day.

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Do the lights really work?

Researchers at more than 15 medical centers and clinics in both the U.S. and abroad have for several years had much success with light therapy in patients with clear histories of S.A.D. Marked improvement is usually observed within four or five days and symptoms usually return in about that same time frame when the lights are withdrawn. Most users, therefore, maintain a consistent daily schedule, beginning as needed in fall or winter and continuing until the end of April, by which time outdoor light is sufficient to maintain good mood and high energy. Some people can skip treatments for one to three days (occasionally longer) without ill effects, but most start to slump quickly when treatment is interrupted.

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Is there a comparable amount of light in my office where we have a lot of fluorescent lights?

A typical office setting has approximately a 400-700 lux light level. A typical drafting room, where lighting is critical, has 500-1,000 lux.

How much do the lights cost? Can individuals build them for personal use?

Light boxes range in price from approximately \$400 to \$500 locally; however, with recent design breakthroughs, reduced prices are now available. Home construction of the apparatus is not recommended. Output must be specifically calibrated for the proper therapeutic effect. A danger of creating electrical or heat hazard exists. Apparatus on the market should be evaluated for output intensity, visual comfort, maximum transmittance with minimal heat build-up and clinical efficacy in documented research trials (very important.) These factors should be carefully checked before purchasing any light system.

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Are the lights medically approved? Is a prescription needed?

In the sense that your doctor suggests and supervises the treatment, the method is approved. People don't need a prescription for light, but anyone suffering serious depression should certainly seek a doctor's recommendation before obtaining a unit, and use it under the doctor's supervision. Choose your doctor wisely, and question one who simply prescribes drugs such as melatonin or anti-depressants. Some doctors do not have knowledge of Full Spectrum nor Light Therapy.