Bright Light Therapy (BLT) Information Session
What is Bright Light Therapy?

The use of timed, intense doses of white light to treat specific conditions using a clinically valid bright light therapy system that meets expert guidelines.
Common BLT Myths

Bright lights cause the production of Vitamin D

*Vitamin D is created by the body when exposed to UV. The UV produced by BLT lamps is blocked for eye and skin safety.*

If 10,000 LUX is good, 20,000 LUX must be better

*10,000 LUX reaching the eyes is the maximum light level clinically tested and recommended.*

I need to stare at the light during treatment

*No, you do not stare at the light. Optimally, lamps should be positioned just above the field of vision and centered in front of your eyes, which would be kept open.*

Light therapy works for everyone

*BLT has been shown effective, when used properly, 65-85% of the time and generally leads to results within 2 weeks. However, for some, compliance may be an issue.*
How BLT Works

The current theory on how BLT produces a therapeutic response:

• Bright light, passing through the eyes, acts as a signal for the pineal gland to stop the production of melatonin – the “sleepy” hormone. Light synchronizes the circadian rhythm or “body clock”.

• The cells that initiate the signal are located in the lower, back area of the eye. These cells are most efficiently stimulated by bright light from above.

• Effective BLT lamps mimic sunlight at a high level of brightness that is tolerable and works quickly.
What does BLT treat?

Seasonal Affective Disorder (SAD) and the winter blues are by far the most prevalent conditions that lead to the use of Bright Light Therapy.

BLT may also be used to treat:

- Circadian Sleep Disorders
- Jet lag or shift work adjustment
- Non-Seasonal mood disorders
- Ante-partum blues
Why use BLT?

• It is the first line of treatment recommended by healthcare professionals for treating SAD and the Winter Blues
• Non-invasive and safe when used correctly
• Research trials have been conducted since early 1980’s
• University research has resulted in several clinically proven products that meet expert guidelines
• Can be used with or without a mood stabilizer, as directed by a physician
• Research has shown high response (65-85%) and a short response period (5-10 days)
• Minimal to no tolerance development
Side effects have been minimal. While a small minority of patients experience headaches, eyestrain/irritation, fidgetiness or mild nausea at the beginning of treatment, these usually subside after a few days. If they are persistent, the dose of light can be tapered, most often taking care of the problem.

The most dramatic side effect, which occurs quite infrequently, is a switch to an overactive state, during which one may have difficulty sleeping, become restless or irritable, and feel speedy or “too high.” People who have experienced such states in late spring or summer – indicative of hypomania or mania in bipolar disorder – are particularly vulnerable, and guidance by a skilled clinician in the use of light therapy is especially important.

Use of a mood stabilizing drug may be needed. If eye irritation persists, it can be alleviated by sitting farther from the lights, using them for shorter periods, installing a humidifier or using artificial tears.

Source: The Center for Environmental Therapeutics
BLT Contraindications

There are no specific contraindications except in the case of degenerative retinal diseases. As a precaution, patients with ocular pathology should proceed only with concurrence of their ophthalmologist and a schedule of periodic eye exams.

Most drug phototoxicity stems from exposure to ultraviolet (UV) light, which is not a problem when using a UV-screened light box. Several drugs (for example, antiarrhythmic medications used to control irregular heartbeat), have been shown to photosensitize to intense visible light, mainly short-wavelength blue irradiation.

Caution is warranted in such cases.

Source: The Center for Environmental Therapeutics
Who is most affected?

- Women are up to 4X as likely to suffer from SAD or the winter blues than men
- Most prevalent in those age 20 – 50 years
- Primarily located in northern US & Canada
- SAD and the winter blues may affect over 50 million North Americans
SAD/Winter Blues Symptoms

- Tendency to oversleep
- Difficulty waking up in the morning
- Craving for carbohydrates
- Lack of energy
- Difficulty concentrating on completing tasks
- Frequently groggy and/or irritable
- Withdrawal from friends, family, & social activities

**Checked 3 or more?**
You may need a Day-Light Bright Light Therapy System!
SAD or Winter Blues?

Often these are used interchangeably. However, they may be viewed as terms that distinguish the severity of symptoms.

**Seasonal Affective Disorder** or SAD is a “Major Depressive Disorder”, as defined by the American Psychiatric Association. This group have very severe symptoms and are at a point where they likely need professional help.

SAD is a diagnosis that would be made by a psychiatrist based on several factors, including symptom severity and the potential for harm to the individual.

**Winter blues** is used to categorize those who feel “down” in the Fall/Winter and experience milder symptoms.

The winter blues are often self-diagnosed and the impact on daily living may be unpleasant, but is not debilitating, with a low potential for harm.
Using BLT for SAD/Winter Blues

Symptoms may appear in late August and can last through April. Therapeutic BLT use should follow the below steps:

1. Use daily, including weekends at the same time
2. BLT sessions should be conducted early in the morning, soon after waking
3. Begin with 30 minutes and adjust the session time, up or down, in 5 minute increments, based on response (this may take 2-3 days)
4. If a morning session is missed, do not conduct it later than 12 pm, as this may impact your sleep schedule – however, some people will also use lamps later in the day, but for very short periods or at greater distances (this lowers the lux)
5. If BLT sessions are skipped for 2-3 days the beneficial effects often dissipate

FREE ASSESSMENT TOOLS: http://www.cet.org/self-assessment/
Clinical Light Application

Clinical Lamp Set-up

1. Centred in front of the eyes
2. Lamp enclosure set at about a 30 degree angle from vertical
3. The middle of the lamp enclosure should be 12” – 14” away from the eyes
4. User may read, use a computer or eat breakfast during sessions
5. Eyes should remain open and corrective lenses (non-tinted) may be worn
6. Session time should be 20-30 minutes, adjusting as necessary
Who are the BLT experts?

The **Center for Environmental Therapeutics (www.cet.org)** is a not-for-profit professional organization made up of leading clinical researchers in the field of bright light therapy.

CET has established specific guidelines for the design of clinically effective bright light therapy devices.

**Clinical Day-Lights meet these design criteria!**
## Expert Guidelines

<table>
<thead>
<tr>
<th>Day-Lights</th>
<th>Recommended Requirement</th>
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<tbody>
<tr>
<td>✓</td>
<td>Design based on university clinical trials</td>
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<tr>
<td>✓</td>
<td>10,000 LUX at a comfortable distance</td>
</tr>
<tr>
<td>✓</td>
<td>White light (3000-4000 Kelvin)</td>
</tr>
<tr>
<td>✓</td>
<td>Broad field of illumination</td>
</tr>
<tr>
<td>✓</td>
<td>UV-filtered protection</td>
</tr>
<tr>
<td>✓</td>
<td>Glare-free diffuser</td>
</tr>
<tr>
<td>✓</td>
<td>Adjustable height for optimal positioning</td>
</tr>
<tr>
<td>✓</td>
<td>Projects light from above</td>
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</tbody>
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Day-Light University Studies

Winter Depression: Journal of Biological Rhythms. 2010; 25 (4): 297-301
Chronic Depression: Psychological Medicine. 2005; 35: 945-955
Light Therapy: Principles and Practice of Sleep Medicine. 2005; 4: 1424-1442
Ante partum Depression: Am. J. Psychiatry. 2002; 159: 666-669
Bipolar Depression: Am. J. Psychiatry Online. 2017; October

Current Studies

• Partners Healthcare, Boston, Underway
• University of British Columbia, Underway
• University of Missouri-Kansas City, Underway
• Northwestern University, Feinberg School of Medicine, Underway
Health Canada

Health Canada is the national regulatory body that oversees medical devices in Canada. Similar to the FDA, they follow a three-tiered classification system for medical devices and pharmaceuticals.

They currently class light therapy devices for the treatment of mood disorders as Class 1. They restrict some terminology that may be use in marketing of BLT products. Specifically, manufacturers may not refer to depression within product collateral or other marketing materials.
The Carex Story

• 20+ years of experience producing SAD lamps
• Recommended bright light treatment of leading clinicians
• Clinically tested, effective designs with proven therapeutic benefit
Day-Light Classic Plus (DL93011CA)

**Features**
- Primarily for therapeutic purposes
- Uses the same lens material, bulbs and flicker-free ballast as the Classic
- Two light settings
- Stylish and easy-to-use

**Benefits**
- Combines traditional light box design with a contemporary appeal
- The next generation of our proven product used by thousands of people

**CLINICAL – MILD TO SEVERE**