

Light

Could life exist without it?

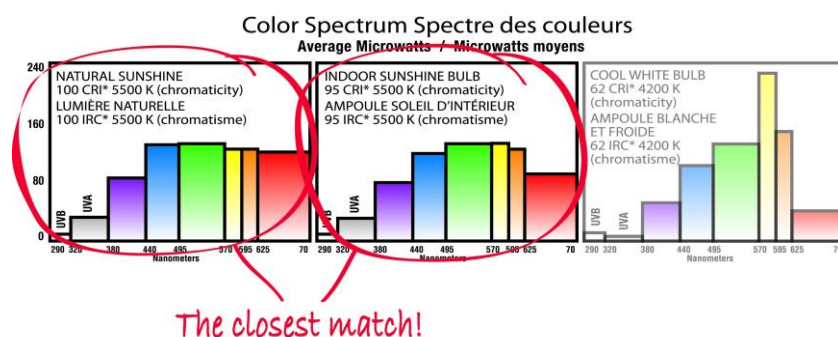
Indoor Sunshine® Lights May Increase Immune System Function & Vit D3.

A preliminary study with five 30 wt Indoor Sunshine® Full Spectrum Plus® CFLs suggests an **increase in immune system function in 30 days**. In 7 out of 9 subjects, blood tests showed a **22-79% increase** in the most common white blood cells as measured by the Absolute Neutrophil Count (ANC). One subject went down 1% and one went up 1%. Study participants were told to “live with the Indoor Sunshine lights as they would any lights.” They put the lights where they wanted and used them when they wanted.

A preliminary study with Indoor Sunshine fluorescent tubes showed an **increase in vitamin D3 in three hours** in one post-menopausal woman. Both studies need to be repeated and expanded.

What is Full Spectrum Plus® Light?

Full Spectrum Plus® light contains all the **colors of the rainbow plus UVA and UVB in the same balance as sunshine** at noon, just not as strong. Natural sunshine is the blueprint for Indoor Sunshine®. The light comes from the highest quality blend of rare earth minerals. Unfortunately, standard indoor light is predominantly yellow-orange and does not provide the same wavelengths of light that natural sunshine does.



Why are color balance and ultraviolet important?

Every wavelength of color brings a different biological response. For example, blue wavelengths suppress melatonin that helps us sleep and raise serotonin that helps us be alert, calm and happy, and improves visual acuity. Indoor Sunshine is often used to reduce symptoms of SAD, Seasonal Affective Disorder. In **1903 Niels Finsen** received the **Nobel Prize in Medicine for his work with ultraviolet light and phototherapy**. Until penicillin was discovered in 1938, the preferred method of treating infectious diseases was exposure to the sun and ultraviolet light because sunlight stimulated the patient's immune system.

Life Expectancy

One study placed 2000 mice under four different types of light. In an otherwise identical, controlled environment, the mice developed tumors and died at

- 7.5 months under pink fluorescent light
- 8.2 months under cool white (standard) fluorescents
- **15.6 months under full spectrum fluorescents**
- 16.1 months under natural sunlight

Autism

Temple Grandin, PhD, world spokesperson for autism, recommends Indoor Sunshine light.

Light and Schools

The *Daylighting in Schools* study by Pacific Gas & Electric showed that students under natural sunlight had a **20% increase in reading and 26% increase in math.**

The Department of Education in Alberta, Canada, conducted a two-year controlled study from June 1987-June 1989 with four kinds of light in five schools. Under full spectrum light with ultraviolet, students had the

- **Best attendance (1/3 fewer absences)**
- **Greatest gains in height and weight (upper elementary students)**
- **Best academic achievement**
- **2/3rds fewer cavities**

"... **lighting systems are not neutral** - they have **non-visual effects** on people who are exposed to them over long periods of time."

Light and Commerce

Research shows that **sunlight increases sales 31-49% per square foot,** according to a 1999 *Daylighting and Productivity* study by Pacific Gas and Electric. The study has a **99.9% statistical certainty.**

Additional research shows that full spectrum light

Decreases

- Depression
- Anxiety/Tension
- Sleep Disturbances
- Migraines
- High Blood Pressure
- Sugar & Starch Cravings
- Alcohol Cravings
- Errors and Fatigue
- Violence & Aggression
- PMS (Premenstrual Syndrome)
- Seasonal Affective Disorder (SAD)

Increases

- Alertness
- Energy
- Productivity
- Calcium Absorption
- Visual Acuity
- Immune System Function
- Academic Performance
- Concentration
- Cooperation
- Productivity

Extreme lack of exposure to sunlight may contribute to melanoma, a cancer often associated with fears of overexposure. A study of 4.6 million U.S. Navy personnel found that melanoma occurred most frequently in sailors who worked inside. *Subtle Energy 1998,* William Collinge, PhD.

The *International Journal of Epidemiology* compared the incidence of fatal ovarian cancer in northern and southern latitudes within the United States. Women living in more **southern latitudes** where they received **more sunlight** had a **much lower likelihood of dying from ovarian cancer.**

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