# Why Red Light Therapy May Help Fight Crohn's Disease

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Cramping. Fever. Loss of appetite. Fatigue. Unexpected weight loss. Diarrhea.

For many people, these unpleasant symptoms aren't just the signs of a stomach virus that will disappear in a day or two. For those with Crohn's disease, these symptoms can indicate a flare up. The symptoms may subside in a few days, or they could continue for months on end.

Many Crohn's patients will do anything to find relief from symptoms that interfere so much with their daily lives. Red light therapy for Crohn's disease may provide a ray of hope in the dark days of this disease.

## What Is Light Therapy?

Light therapy is a medical treatment that uses specific wavelengths of light on the body to produce various intended effects. Light therapy uses light emitting diodes (LEDs) to shine full-spectrum, red, green or blue wavelengths of light onto the body. Light therapy can be performed at home or in a medical setting such as a physician's office or medical spa.

Light therapy, also called phototherapy, has long been used for applications such as improving sleep quality, treating seasonal affective disorder (SAD) and reducing inflammation. In recent studies, light therapy with red or near-infrared light wavelengths delivered to the abdomen has been shown to alter the microbiome of the gut. Studies conducted on mice and humans have shown promising early results for light therapy and gut health.

What Is Crohn's Disease?

Readers who suffer from Crohn's disease are likely all too aware of its symptoms and effects. But for those who suspect they may have Crohn's disease or are simply curious about red light therapy for Crohn's disease, below is a brief description of Crohn's disease.

Crohn's disease, which affects more than half a million Americans, is sometimes referred to as granulomatous colitis, Crohn's enteritis, granulomatous enteritis or regional enteritis.

Crohn's disease is a specific type of inflammatory bowel disease (IBD) that causes inflammation in various areas of the digestive tract. It can be painful and sometimes debilitating. Symptoms can range from mild to severe. In some cases, Crohn's disease can lead to life-threatening complications.

### Symptoms of Crohn's Disease

The most common symptoms of Crohn's disease are fatigue, malnutrition and diarrhea. It's not uncommon for Crohn's to go into remission for periods of time before the disease flares up again. During a recurrence of Crohn's, symptoms can also include fever, severe cramping, blood in the stool, sores in the mouth, intestinal blockage and poor appetite.

Because gut inflammation can lead to malabsorption of nutrients that are necessary for daily bodily functions, Crohn's disease may ultimately lead to anemia, joint pain and swelling, kidney stones, inflammation of the liver, weight loss and other systemic effects.

There is currently no known cure for Crohn's disease, but many treatments can offer assistance in decreasing symptoms, increasing comfort level and soothing inflammation.

#### Causes of Crohn's Disease

Experts disagree about the cause of Crohn's disease.

In the past, Crohn's disease was thought to be an autoimmune condition in which the body's own immune system attacked healthy tissues. But some experts now believe that the immune system is actually attacking healthy bacteria in the gut for unknown reasons. That immune response then causes the inflammation responsible for Crohn's symptoms.

Lifestyle, environmental and genetic factors also likely contribute to the development of Crohn's disease.

Additionally, prolonged, severe stress may play a role, as well as sugar and fat intake. Most people who develop Crohn's disease are diagnosed between the ages of 15 and 35.

## How Can Light Therapy Help With Crohn's Disease?

Light therapy has the potential to help with Crohn's disease in several ways.

#### Increasing Vitamin D Levels

Rates of vitamin D deficiency are much higher in adults with active Crohn's disease. But this is a bit of a "chicken and egg" scenario: Are Crohn's patients deficient in vitamin D because the inflammation in their intestines doesn't allow proper absorption of this nutrient? Or are people with lower vitamin D levels at greater risk of developing Crohn's disease?

Researchers suspect that the latter may be true. The incidence of Crohn's disease is 80% higher in northern Europe when compared to sunny southern Europe. The relative availability of sunlight in these regions has led researchers to believe that citizens' lower exposure to sunlight and lower vitamin D levels led to the development of Crohn's disease.

Because light therapy — specifically, ultraviolet radiation (UVR) therapy — can increase vitamin D levels, this therapy could potentially lower the frequency of Crohn's disease flareups.

## Repairing Intestinal Tissue

Light therapy is also known for tissue repair. Cells absorb the light and use it to produce energy, which helps the cells to reproduce more quickly and achieve healing more rapidly.

Crohn's disease wreaks havoc on the intestines, and accelerated healing provided by light therapy would certainly be a welcome benefit.

## **Decreasing Inflammation**

Crohn's disease is an inflammatory disease, and red light therapy has been proven to decrease swelling and inflammation. This holds potential good news for Crohn's patients, since so many Crohn's symptoms are a result of the inflammation occurring in the gut during a Crohn's attack.