



## Making Treatment Decisions

print   
close 

### Cold Laser Therapy

**Other common name(s):** Low Level Laser Therapy (LLLT), Low Power Laser Therapy (LPLT), Soft Laser, Biostimulation Laser, Therapeutic Laser, Laser Acupuncture

**Scientific/medical name(s):** None

#### Description/Overview

The term cold laser refers to the use of low-intensity or low levels of laser light. Proponents claim that cold laser therapy can reduce pain and inflammation. The US Food and Drug Administration (FDA) considers these laser devices investigational (experimental), and allows them to be used in studies based on some evidence that they may provide temporary pain relief. Cold laser treatment is thought to help some types of pain, inflammation, and wound healing, although stronger proof is needed. These lasers are used directly on or over the affected area.

Cold lasers are also sometimes used for acupuncture, with laser beams to stimulate the body's acupoints rather than needles (see Acupuncture). This treatment regimen appeals to those who want acupuncture but who fear the pain of needles.

Cold laser therapy providers advertise this method as a way to help people quit smoking, and some TV stations have reported this as news. The treatment is supposed to relax the smoker and release endorphins (naturally-occurring pain relief substances) in the body to simulate the effects of nicotine in the brain, or balance the body's energy to relieve the addiction. Despite claims of success by some cold laser therapy providers, there is no scientific evidence that shows this is an effective method of helping people stop smoking.

There is a great deal of variation in types of lasers that are used and how they are used. Some devices do not have the output that they promise, and others are little more than light-emitting diodes (LED lights). Some advertise that they can help herpes, high blood pressure, migraines, wrinkles, cerebral palsy, and other conditions for which there is little or no evidence. The FDA forbids statements that a treatment can help or cure diseases if scientific studies have not found it to be true. It has warned at least one seller of low level lasers to stop making such claims.

Well-controlled scientific studies are underway using reliable low level laser devices for pain, wounds, injuries, and other conditions. Certain types of cold laser treatment may eventually become part of conventional medical care.

This method should not be confused with conventional laser surgery, which is used as a valid treatment for some cancers. Hot lasers may be used to shrink or destroy tumors on the skin or on the surfaces of internal organs. They are sometimes used to remove colon polyps or tumors that are blocking the windpipe, colon, or stomach. They can help relieve symptoms of cancer, such as bleeding. Laser surgery for cancer is usually combined with other treatments such as surgery, chemotherapy, or radiation therapy.

## Additional Resources

### More Information from Your American Cancer Society

The following information on complementary and alternative therapies may also be helpful to you. These materials may be ordered from our toll-free number (1-800-ACS-2345).

- [Guidelines for Using Complementary and Alternative Methods](#)
- [How to Know What Is Safe: Choosing and Using Dietary Supplements](#)
- [American Cancer Society Operational Statement on Complementary and Alternative Methods of Cancer Management](#)

## References

National Cancer Institute. Lasers in Cancer Treatment: Questions and Answers. Available online at [http://cis.nci.nih.gov/fact/7\\_8.htm](http://cis.nci.nih.gov/fact/7_8.htm). Accessed 5/5/05.

National Center for Complementary and Alternative Medicine. Energy Medicine: An Overview. Available online at <http://nccam.nih.gov/health/backgrounds/energymed.htm>. Accessed 3/11/05.

Rindge D. Laser Acupuncture. *Acupuncture Today*. 2005 May; 06(5). Available online at <http://www.acupuncture today.com>. Accessed 5/4/05.

Swedish Laser Medical Society. Laser World Web Site. Available online at [http://www.laser.nu/lllt/LLLT\\_critic2\\_on\\_critics.htm](http://www.laser.nu/lllt/LLLT_critic2_on_critics.htm). Accessed 5/5/05.

Tuner J. Low level lasers in dentistry. Laser World Website. Available online at <http://www.laser.nu/index.htm>. Accessed 5/5/05.

US Food and Drug Administration. Laser Facts. Available online at: <http://www.fda.gov/cdrh/consumer/laserfacts.html>. Accessed 5/5/05.

White AR, Rampes H, Ernst E. Acupuncture for smoking cessation. *Cochrane Database Syst Rev* 2002;(2). CD000009.

White AR, Rampes H, Campbell JL. Acupuncture and related interventions for smoking cessation. *Cochrane Database Syst Rev* 2006 Jan 25;(1):CD000009.

Note: This information may not cover all possible claims, uses, actions,

precautions, side effects or interactions. It is not intended as medical advice, and should not be relied upon as a substitute for consultation with your doctor, who is familiar with your medical situation.

Revised: 03/23/2006