



## Whole Body Cryotherapy Overview

The therapeutic value of cold temperature has been recognized for centuries and dates back to the early Egyptians. Whole Body Cryotherapy (WBC) involves briefly exposing the entire body to very cold air temperatures. Initially developed by a Japanese physician to treat rheumatoid arthritis, WBC has been used for over two decades by European hospitals and clinics to treat a wide variety of inflammation-based injury and disease. US Cryotherapy introduced WBC to the U.S. in 2011. We offer two modes of treatment: Whole Body and Localized cryotherapy.

**Whole Body Treatment:** The user walks into a two-person chamber for about three minutes during which skin temperature drops 25°– 40° F from an average of 90° F. Core body temperature remains essentially unchanged. Treatment is followed by 5 - 8 minutes on a piece of aerobic equipment, or a vibration platform, to restore circulation and warm up.

**Localized Treatment:** Very cold air is applied to a localized part of the body for 3 minutes via a device that resembles a large vacuum cleaner. These treatments are more effective than a normal 20-minute icing (ice packs, immersion, gels, and sprays).

**Premise of WBC:** We believe the human body is the best mechanism for diagnosing its own disorders. WBC simply stimulates the body to regain its own natural ability to recover. It activates the body's self-regulating abilities to start the rehabilitation process. WBC is not a substitute for medical treatment, but instead a valuable addition to traditional medicine, and in some cases, a viable alternative.

**How WBC Works:** The rapid drop in skin temperature causes blood to flow away from the surface (muscles, tissue and tendons), and into the core (vital organs) which causes toxins to be released and carried away by the blood. While pooling in the core, blood is re-vitalized with nutrients and oxygenated. Once outside the chamber the skin rapidly re-warms, sending rejuvenated blood back to the surface and triggering an endorphin release. WBC induces analgesia (immediate pain relief), dramatically reduces inflammation, stimulates a hyper-circulatory response which delivers nutrient-rich blood to enhance the regeneration of damaged muscle tissue, and returns the body to a hyper-metabolic state for two hours after therapy.

**Benefits of Cryotherapy:** WBC offers a safe, natural, non-invasive way to reduce inflammation, relieve pain, boost energy, enhance wellness, and experience the invigorating effects of endorphin release.

**Speed Recovery Time & Enhance Performance:** WBC is an effective technique to alleviate inflammation after strenuous exercise and training for athletes of all fitness levels. It enables athletes to recover much faster and train harder. The therapeutic benefits of WBC also enhance performance and may be a valuable pre-workout addition. Note: US Cryotherapy has provided cryotherapy equipment/treatments to over 40 professional and collegiate sports teams (including the Sacramento Kings and Oakland Raiders).

**Post-Operative Recovery Time:** WBC may reduce post-surgical recovery time especially following orthopedic or plastic surgery. The anti-inflammatory effect of WBC reduces pain and swelling, thus speeding up recovery. Its analgesic effects may reduce the need for pain medication and enable more intense physical therapy, which can potentially reduce treatments by 40%. WBC reduces the discomfort of recovery and allows patients to return to a normal lifestyle faster.

**Pain Management:** WBC has shown promising results in relieving chronic pain due to inflammation-based conditions. It was originally designed in Japan to treat patients with rheumatoid arthritis. The analgesic properties of WBC may enable patients to reduce or eliminate pain medication. Increased blood circulation following repeated WBC treatments helps promote general wellness and provide relief to chronic pain.

**Sports Injuries:** Following sports injury, WBC can help heal muscles, tendons and joints. Regular WBC procedures help restore motor functions and reduce soreness and swelling, thereby reducing recovery time.

**Health & Wellness:** Studies note that cryotherapy may improve overall health, wellness, and physical appearance. Some users report WBC is invigorating and claim improvements in various conditions, such as psychological stress, insomnia, increased energy, and relief from muscle and joint pain. WBC causes an increase in metabolism, burns fat, and may provide relief from itching and psoriasis and improve skin condition through increased collagen stimulation.



## Frequently Asked Questions

### Is Whole Body Cryotherapy Safe?

Yes. US Cryotherapy has safely conducted over 500,000 sessions without incident and our staff is well trained. Europe has been doing cryotherapy safely for more than two decades.

### Is It Comfortable? Will I Be Able To Stand The Cold?

Whole body cryotherapy is simply very cold air flowing over the surface of the skin. There is no freezing. The air is completely dry and safe. We provide protective gloves, head covering, socks, and slippers. It is cold, but not painful, and it only lasts for three minutes. If you feel it is too uncomfortable you can exit the chamber at any time. Regular users say they completely accommodate to the cold after about three sessions.

### How Should I Dress for Whole Body Cryotherapy?

Typically, men wear gym shorts with no top or a gym shirt. Women normally wear gym shorts with either a gym top or sports bra. Others wear swimsuits or bikinis. The idea is to expose as much skin as comfort and individual modesty allows. We provide protective clothing and loaner shorts and tops in case you don't have your own with you.

### Has Whole Body Cryotherapy Been Researched?

Yes. Researchers in Europe have conducted over 200 clinical studies on the effects of WBC. They have developed and refined WBC for over two decades. Over 50 European hospitals and medical clinics have used WBC to treat some four million patients. In the U.S., WBC is currently viewed as a wellness treatment. It is not reimbursed by insurance and is not yet approved by the U.S. Food and Drug Administration.

### How Many Treatments Before I See Results?

Results vary greatly from person to person. It also depends on the kind of issues you are trying to address. Here are some general guidelines:

- 1) For long-term chronic issues, we recommend at least 5-10 treatments to start. If you don't get any results in that time, WBC probably will not help your medical condition.
- 2) For short-term acute issues (like recent injuries), people normally see benefits within 2-4 sessions, with some people getting immediate results.
- 3) If you are utilizing cryotherapy simply to rejuvenate your body, increase your general energy, and improve your mental clarity, completing 5 sessions is typically enough to achieve noticeable results.

Most people report a sense of euphoria and boost in energy after their first session similar to a "runner's high" experienced after strenuous exercise. However, one session just exposes you to the experience of cryotherapy and lets you know what to expect. To make a fair evaluation, you need at least five sessions before making an informed decision.

### How Often Should I Do Cryotherapy Sessions?

Initially, we recommend doing your sessions as often as possible (ideally every day or every other day). That will enable you to maximize the positive effects of WBC, which are cumulative over short time periods. Once you have achieved positive results, you can regulate the frequency of sessions to match your goals and schedule.

For general maintenance, people typically do 2-6 treatments per month. For people undergoing physical therapy, we recommend 3-5 sessions initially with follow-up sessions done prior to, and as close as possible to, scheduled physical therapy treatments.

### Who Should Not Use Whole Body Cryotherapy?

As part of your check-in process, you will complete a medical questionnaire. Only a few conditions preclude cryotherapy. They include: recent heart attack, wearing a pacemaker, COPD, congestive heart failure, pregnancy and a few more. Additional conditions, like a history of seizures, blood disorders, and circulatory dysfunction, require a doctor's approval. Otherwise, nearly everyone can safely undergo cryotherapy. Children under age 18 require parental consent and children 11-13 must be accompanied by a parent in the chamber.

### How Does WBC Compare to an Ice Bath?

WBC is safer, more tolerable, quicker, and far more effective than a 20-minute ice bath. Ice can freeze tissue and muscle, damage the skin, and require a longer recovery period before exercising. WBC achieves nearly the same drop in skin temperature as an ice bath in only 3 minutes. Unlike an ice bath, WBC does not freeze tissue or muscle, allows an immediate return to exercise, increases circulation, and causes the body to release anti-inflammatory proteins and endorphins.

### What is Facial Rejuvenation?

It is the application of cold air to the face for 6-10 minutes. It helps close pores, tighten skin, reduce wrinkles, and aid the production of healthy collagen.