

# Boost Your Healing and Longevity with Hyperbaric Oxygen Therapy: What You Need to Know.

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Hyperbaric oxygen therapy (HBOT) might sound like a modern medical breakthrough, but would you believe it's actually been around for centuries? It was originally developed in 1662 by a British clergyman who believed pressurized air could heal the body—more than 200 years before the invention of the light bulb.

Despite its long history, HBOT has mostly stayed under the radar. But recently, it's getting more attention thanks to new research, wider access, and some good publicity (Lebron James says he uses it to speed recovery).

Today, it's FDA-approved for treating conditions like carbon monoxide poisoning and diabetic wounds, and experts are discovering even more potential uses.

By delivering oxygen at higher pressures, HBOT helps repair tissue, reduces inflammation, and may even support brain health. With its potential still being uncovered, it's becoming a promising option for recovery and overall well-being.

Curious what this cutting-edge therapy might do for you? Let's dive into the science and find out.

## What Is Hyperbaric Oxygen Therapy?

HBOT involves breathing pure oxygen in a pressurized chamber, where the increased pressure allows your lungs to take in more oxygen than what's possible under normal conditions.

This treatment mimics “diving” to a pressure level equivalent to being 33 to 66 feet underwater, but instead of being submerged, you're in a 100% oxygen environment. While room air only contains about 21% oxygen, this highly pressurized, oxygen-rich setting puts a good kind of stress on your body.

Although pure oxygen can be toxic if administered in excess or for too long, when given in the right dose and under controlled pressure, it activates your body's healing mechanisms and promotes longevity.

This oxygen-rich environment accelerates healing by driving oxygen deep into your tissues, helping reduce inflammation, promote tissue regeneration, and optimize cellular function.

## How HBOT Strengthens Your Body

I think of Hyperbaric Oxygen Therapy as a form of “hormesis”—the concept that small doses of stress can be beneficial by activating your body's repair and regenerative mechanisms. Much like how exercise creates microtears in muscle that then heal and grow stronger, HBOT delivers a controlled stressor to your body. This mild stress enhances your body's natural ability to repair itself, making it stronger over time.

HBOT works by saturating your cells and tissues with oxygen, which promotes the release of growth factors and stem cells, both crucial for the repair of damaged tissue. It's not just a temporary boost but an enhancement of your body's ability to regenerate.

## A Lifeline for Healing

For those suffering from chronic conditions, HBOT offers new hope.

It's shown promise in treating a variety of conditions like stroke, traumatic brain injury (TBI), dementia, and even the lingering symptoms of Long COVID. HBOT is being explored as an adjunct therapy in cancer care, particularly for its ability to reduce tissue damage caused by radiation therapy.

One of the key ways HBOT promotes recovery is through angiogenesis—the formation of new blood vessels—which ensures that damaged tissues receive the oxygen and nutrients they need to heal.

Now, let's dive deeper into how HBOT supports healing for each of these conditions and why it's becoming a powerful tool in chronic illness recovery.

### ► HBOT for Traumatic Brain Injury

In cases of stroke or traumatic brain injury, the brain can suffer damage during brief moments of oxygen deprivation.

While the oxygen supply typically returns, the injury may still affect the brain's ability to recover. So HBOT can help by delivering extra oxygen to the damaged areas, potentially improving cognitive function and supporting neural recovery, even long after the initial trauma.

There's so much research that supports the use of HBOT to promote noticeable improvements in both cognitive function and symptom relief associated with mild TBI.<sup>1</sup> These improvements seem to be even more pronounced in patients who also have Post-Traumatic Stress Disorder (PTSD).

A recent study showed that veterans with mild TBI and PTSD who underwent HBOT showed significantly improved cognitive function, reduced symptoms like anxiety and depression, and had a reduced need for psychoactive medications.<sup>2</sup>

After 40 HBOT sessions, brain imaging showed that damaged areas began to function more like healthy brain tissue. And at the end of the study, 52% of veterans no longer met the criteria for PTSD, while many reported further improvements six months later.

This opens the door to the possibility that HBOT could be a safe and highly effective treatment for individuals managing these challenging conditions.

### ► HBOT for Long-COVID

If you're suffering from Long COVID, you may experience improved energy levels, cognitive function, and overall wellness through HBOT. While COVID-19 can lead to damage in various organs, especially

your lungs, HBOT enhances your body's ability to regenerate and repair damaged tissues, giving you a chance at faster recovery.

A recent study followed Long COVID patients who underwent hyperbaric oxygen therapy (HBOT) for one year to assess its lasting effects.<sup>3</sup> The study found that improvements in cognitive function, sleep quality, psychiatric symptoms, and pain levels observed shortly after HBOT persisted a full year later. Quality of life also remained consistently better, showing that HBOT offers long-term relief for Long COVID symptoms, with benefits continuing well after the therapy sessions ended.

### ► HBOT for Radiation Recovery in Cancer Care

HBOT has been shown to help mitigate damage caused by radiation, promoting tissue regeneration and reducing the risk of long-term injury.

About 80% of people experience improvement in their symptoms related to soft tissue damage, though the affected tissue doesn't fully return to its original, healthy state.<sup>4</sup>

## HBOT for Optimizing Health and Longevity: Beyond Healing

I see HBOT as more than just a tool for treating illness—it's a powerful addition to any wellness plan, helping to boost overall health and support a longer, more vibrant life.

HBOT shows great potential in supporting healthy aging by addressing several key biological processes linked to aging. For example, HBOT can:

1. **Promote angiogenesis:** As mentioned above, HBOT can drive the formation of new blood vessels, which ensures that tissues receive the oxygen and nutrients they need to function properly. This process is crucial in combating the decline in microcirculation seen with aging.

2. **Reduce inflammation:** By regulating the immune system and decreasing the production of pro-inflammatory cytokines, while enhancing antioxidant defenses. This helps to counteract oxidative stress, a major contributor to aging, and improves mitochondrial function.

3. **Enhance cellular health.** HBOT has been shown to suppress cellular senescence—the process where cells stop dividing and contribute to tissue aging. It can also stimulate stem cell activity, which aids in tissue repair and regeneration. Because of this, clinical studies have shown improvements in age-related changes in cognitive function, skin elasticity, and glucose metabolism.<sup>5</sup>

## Personalizing HBOT: One Size Doesn't Fit All

While the benefits of HBOT are compelling, I stress that it's not a one-size-fits-all solution. Treatment protocols should be personalized to each individual, with factors like age, underlying health conditions, and specific health goals taken into consideration. Overuse of HBOT can lead to adverse effects, including oxygen toxicity, so it's crucial that this therapy is used under the guidance of a trained healthcare professional.

Moderation is key. For some, shorter, more frequent sessions may be ideal, while others may benefit from longer, less frequent treatments. Personalized protocols ensure that the therapy provides maximum benefit with minimal risk, making it an effective tool for long-term health management.

## Is Hyperbaric Oxygen Therapy Right for You?

Whether you're managing a chronic condition, recovering from an injury, or simply aiming to optimize your health and extend your longevity, HBOT could be worth exploring. Its ability to support your body's natural healing processes—without the side effects of conventional drugs—makes it a versatile and powerful tool for both health and wellness.

However, like any medical treatment, it's essential to approach HBOT with caution and personalization. Consulting with a healthcare provider will help you determine the right protocol for your specific needs, ensuring that you maximize the benefits while minimizing any potential risks.

When considering the cost of HBOT, keep in mind that while insurance may cover certain FDA-approved conditions, coverage for off-label uses, such as wellness or anti-aging, is less common. A single session can range from \$100 to \$300, and because multiple sessions—typically 20 to 40 or more—are often needed, the total cost can add up quickly. Each session generally lasts 60 to 90 minutes, and most treatment plans span several weeks, so planning ahead both financially and in terms of your schedule is important. Always check with your insurance provider to confirm what's covered.

## What to Expect During HBOT

HBOT is a treatment that must be prescribed by a healthcare provider, and many hospitals now offer this service. During a session, you'll relax in a comfortable chamber where you can sit or lie down while breathing deeply. Sessions can last anywhere from 45 minutes to several hours, depending on the condition being treated.

As the pressure increases in the chamber, you might notice your ears feeling plugged—much like the sensation you get when flying or driving through the mountains. Swallowing or chewing gum can help “pop” your ears back to normal.

The oxygen-rich blood then circulates throughout your body, delivering extra oxygen to injured tissues to promote healing. It's common to feel a bit lightheaded after a session, and mild side effects like fatigue, headaches, or claustrophobia can occur. Because of this, it's a good idea to have someone drive you home afterward.

### Interested in That Next Step?

Explore your [options for hyperbaric chambers](#) and find the right fit for your wellness journey. (Plus, referrals from me can help you save 5 to 10% on your chamber purchase, depending on the model.)

If purchasing your own chamber isn't the right fit for you, there are also plenty of top-rated clinics that offer HBOT services. Here are a few locations to consider:

- [Hyperbaric Medical Solutions](#) is the premier HBOT provider in the Northeast and South Florida
- [Hyperbaric Physicians of Georgia](#) is the premier in the Southeast (Georgia and North Carolina territories)
- [Holistic Hyperbarics](#) is in Oakland, CA
- [Bay Area Hyperbarics](#) is in San Jose, CA
- [O2 Health Labs](#) is in Newport Beach, CA
- [San Diego Hyperbarics](#) in San Diego, CA
- [ATX Hyperbarics](#) is in Austin, TX
- [Alive+Well](#) is in Dallas, TX

Don't see a location near you? Reach out to any of these clinics, and they can help redirect you to a trusted provider in your area. Or email the [OneBase Health](#) team for a recommendation.

You can search online using terms like "hyperbaric oxygen therapy near me" or "hyperbaric oxygen treatments in [your town]" to locate a provider offering HBOT. Alternatively, you can:

- Contact local hospitals or medical centers—many offer HBOT services.
- Consult your primary care physician or specialist for referrals to HBOT providers in your area.

### Reference

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