

# PEMF therapy for chronic pain

No matter what age you are, you may experience pain at some point in your life. This can include toothaches, backaches, body aches, or other types of discomfort. Some people experience acute pain that goes away when the underlying cause is addressed. But some experience chronic pain that lasts longer than 3 months. The pain persists even after the original cause has been treated. Lingering pain can cause needless suffering and impact your quality of life.

While medications abound, relying on them for the long term may lead to many side effects. Plus, they only provide temporary relief and often mask the underlying problem, which makes you dependent on them.

If your pain has overstayed its welcome and you are looking for more natural or holistic methods, then this article is going to help you. Here, we will discuss a natural treatment called pulsed electromagnetic therapy (PEMF) to control and reduce your pain. This treatment modality does not require an invasive procedure or even taking a pill.

Before delving into the potential benefits of PEMF therapy for chronic pain, it's essential to understand the science behind chronic pain.

## When pain signals don't turn off- understanding chronic pain

When we experience acute pain, such as when touching a hot stove, our nervous system sends a signal to the brain, which triggers a response. This response is essential for our survival and is designed to protect us from further injury. But, in chronic pain, the signals persist even after the underlying injury has healed. Scientists believe that it occurs after nerves become damaged. This leads to long-lasting discomfort and functional impairment.

In certain circumstances, patients may have chronic pain without any prior injury. The exact cause of this isn't well understood. But it may sometimes result from an underlying health condition, such as:

- Fibromyalgia
- Osteoarthritis
- Rheumatoid arthritis
- Neuropathy

- Chronic fatigue syndrome
- Irritable bowel syndrome
- Endometriosis

Some people suffer from persistent aches that are not associated with an accident or medical condition. This response is referred to as psychogenic or psychosomatic pain. It is believed to be caused by psychological factors such as stress, [anxiety, and depression](#). The exact mechanisms underlying the connection between psychological factors and chronic pain are unknown. But many experts believe that it occurs due to low levels of endorphins. These are natural chemicals in the blood that trigger positive feelings.

## PEMF therapy: A possible solution for chronic pain sufferers

Having healthy cells is crucial for maintaining health and reducing the risk of cellular dysfunction or disease. PEMF therapy is a therapeutic procedure that can assist in fine-tuning your body's cells by correcting any imbalances in dysfunctional cells.

The therapy has been used for decades to treat a wide range of medical conditions. It has advanced implications in medicine, especially in the treatment of chronic pain and inflammation.

PEMF therapy can be used to:

- Improve circulation
- Enhance blood and tissue oxygenation
- Improve sleep quality
- Lower blood pressure and cholesterol levels
- Balance the immune system
- Accelerate bone and soft tissue repair
- Relax muscles

## How does PEMF therapy work to relieve pain?

Every cell in your body produces its own electromagnetic field. Disrupted energy in these fields may cause pain and inflammation. PEMF therapy works by delivering low-frequency electromagnetic energy to the cells of your body.

Remember that the electromagnetic fields delivered by a PEMF device are different from man-made electromagnetic fields such as power lines, microwave ovens, mobile phones, and other devices that may harm your body.

[PEMF devices](#) provide safe, natural EMFs of a lower frequency that are compatible with our body's chemistry and activities.

The therapy helps reduce aches by improving various physiological functions in your body. These include:

- Enhancing cell contraction and expansion
- Improving circulation of blood, oxygen, and nutrients to cells, thereby reducing edema
- Facilitating detoxification and regeneration of damaged cells
- Improving muscle function, bone healing, and repairing bones and tendons
- Reducing stress and inflammation
- Maintaining the body's natural magnetic field

## Types of chronic pain that PEMF therapy can treat

This treatment modality has been shown to be effective in treating a variety of chronic pain conditions. Here are a few examples:

**1. Arthritis:** This is a [chronic condition of joints](#) commonly seen in the elderly. This disorder is characterized by inflammation and tenderness in one or more joints.

PEMF therapy can help reduce inflammation in the affected joints. This reduces aches and improves mobility. A [study](#) found that electromagnetic field therapy was effective in reducing discomfort and improving function in people with knee osteoarthritis.

**2. Fibromyalgia:** It is a chronic condition characterized by widespread musculoskeletal aches along with other symptoms such as chronic fatigue and poor sleep.

The cause of fibromyalgia is unknown. However, many researchers believe that people with fibromyalgia may have impaired microcirculation<sup>[1]</sup>. It refers to the small blood vessels in our bodies, including capillaries and arterioles. They help transport oxygen and nutrients to our tissues. Impairments in microcirculation can lead to reduced blood flow and oxygen delivery to tissues. This may contribute to the discomfort and fatigue experienced by people with fibromyalgia.

According to a [study](#), PEMF therapy may improve microcirculation in patients with fibromyalgia. Thus, it can aid in pain reduction.

**3. Low back pain:** It is a common chronic condition that is caused by a variety of factors, including herniated discs, spinal stenosis, and muscle strain. Research [\[2\]](#) suggests that incorporating PEMF with conventional physical therapy protocols may lead to better clinical outcomes for patients with chronic low back pain. Combination therapy reduces discomfort and improves functional disability.

**4. Neuropathic pain:** It is a chronic condition that results from nerve damage or dysfunction. It may be caused by various factors such as injury, infections, chemotherapy, and diseases like [diabetes](#).

Electromagnetic field therapy can alleviate neuropathic discomfort by eliminating toxins from cells. This allows for more oxygen and nutrition delivery and lowers inflammation. PEMF enhances blood circulation in the arms and legs, which are the most affected by nerve injury.

**5. Migraines:** It is a type of chronic headache that can be severe and debilitating. Research indicates that migraines are most likely triggered by irregular brain activity. This includes hormonal, emotional, or physiological changes like a decrease in blood pressure.

PEMF therapy has shown strong evidence supporting its use in the treatment of migraines. A study found that subjects who received exposure to low-intensity electromagnetic waves reported decreased headaches. Moreover, additional exposure to PEMF therapy led to further improvement in headaches.

**6. Sports injuries:** Chronic aches are a common issue faced by athletes, particularly in the neck and back. But it may also occur in other areas of the body due to sports injuries such as sprains, strains, and muscle tears. To alleviate this discomfort and promote faster recovery, many athletes turn to PEMF therapy.

Research has shown promising results for the use of PEMF therapy in managing aches and inflammation due to sports injuries. They observed positive results in a double-blind clinical trial. Which was conducted on subjects with chronic musculoskeletal soreness.

PEMF therapy is commonly used by [athletes](#) as a part of their recovery regimen. By reducing inflammation and improving blood flow, the treatment helps to promote healing and reduce discomfort.

**7. Post-surgical pain:** Chronic post-surgical pain (CPSP) is a common and distressing complication that may arise after surgery. It often leads to a significant reduction in a patient's quality of life.

Studies have shown that PEMF therapy can be used to reduce discomfort and improve functional outcomes in patients with CPSP. The treatment works by increasing blood

flow to the affected area, promoting tissue repair and regeneration. Thus, it reduces inflammation and discomfort. It is a non-invasive and safe treatment option that may be used in conjunction with other therapies to manage CPSP.

## Takeaway

PEMF therapy not only helps with the above conditions, but it can also reduce pain from unknown causes. Using it regularly will show you a noticeable difference. It is considered a safe treatment option with minimal side effects when compared to invasive surgical procedures or medications that may have side effects.

Discuss with your doctor including it in your treatment regimen, and consider buying a PEMF therapy device to use in the comfort of your home.

## References

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