# **PEMF Therapy for Chronic Fatigue**

We all feel fatigue from time to time. But, if you've been fatigue constantly for more than 6 months and even a good night's sleep and rest don't seem to help, you might be suffering from chronic fatigue syndrome (CFS), also known as myalgic encephalomyelitis (ME).

Chronic fatigue is much more than just feeling tired. It is a <u>multi-system condition</u> that can make even a simple task, such as filling up a glass of water, feel like an uphill task for you. It's a new state of fatigue that can sap your creativity and inner drive and reduce your ability to do normal activities at home and work.

The causes of CFS can vary, and each person's journey is unique. If you've tried various solutions without success, perhaps, it's time to consider pulsed electromagnetic field (PEMF) therapy. This alternative noninvasive treatment modality has been a gamechanger for some people with CFS, offering a fresh perspective when the conventional ways seem stuck.

Are you curious to know if this is something you need?

Keep reading to learn all about chronic fatigue and how PEMF therapy can help.

# What is CFS?

ME/CFS is a complex and disabling condition that affects various parts of your body, including the brain, muscles, digestive system, immune system, and heart.

According to the Centers for Disease Control and Prevention, the condition affects around 836,000 to 2.5 million Americans of all ages. However, the majority of them have not been diagnosed. It is most common in people aged between 40 and 60 years, with adult women being more often affected than adult men.

ME refers to pain in the muscles and inflammation of the brain and spinal cord. Research shows that ME/CFS causes problems in:

- Producing energy at a cellular level in the body
- The immune, neurological, and hormonal systems
- Regulating blood pressure and heart rate
- Digestion
- Sleep
- Cognition, which involves how quickly information is processed

# **Symptoms of CFS**

The symptoms can differ from person to person and its intensity can change every day. Besides feeling tired, you might experience:

- Extreme exhaustion after physical or mental activity
- Issues with cognitive functions
- Dizziness that gets worse when you go from lying down or sitting to standing
- Muscle or joint pain
- Sleep that doesn't make you feel refreshed

Some individuals with this condition may also have headaches, sore throats, and tender lymph nodes in the neck or armpits. They might become more sensitive to light, sound, smells, and certain foods and medicines.

## **Causes of CFS**

Even though researchers have identified numerous biological abnormalities in individuals living with CFS, the exact cause is still not known. It is believed to occur because of various reasons, such as:

**Genetics:** CFS tends to run in certain families; therefore, individuals may be susceptible to the condition from birth.

**Infections:** For some, the disease may suddenly be triggered after an infection, exposure to toxins, anesthesia, or immunization.

**Physical or emotional trauma:** Instances of trauma like a car accident, surgery, or significant emotional stress have been reported by some individuals shortly before the onset of ME/CFS symptoms.

**Energy usage issues:** Some individuals with CFS may have difficulties converting the body's main energy sources, such as fats and sugars, into usable energy.

# **Treatment of CFS**

There is no approved treatment or cure for CFS, but your healthcare provider may help you manage some of your symptoms using conventional treatments, including a

combination of approaches like medications to reduce symptoms, cognitive behavioral therapy to address psychological aspects, and graded exercise therapy to gradually increase physical activity.

However, the response to these treatments can differ; for some, conventional treatments may have gradual improvements over time, while for others, efficacy may be elusive. This is why people are turning to alternative therapies like PEMF, a noninvasive cutting-edge technology that works on the cellular level of your body to address chronic conditions, including CFS, from its root cause.

To comprehend how PEMF increases cellular energy to reduce fatigue symptoms, it is important to understand the cellular processes that occur in chronic fatigue.

# How chronic fatigue affects cellular function?

In patients with chronic fatigue, the efficiency of cellular respiration, the process responsible for generating energy in cells, becomes compromised, primarily affecting energy production. The mitochondria, which are known as the powerhouses of cells, often operate below their optimal level in individuals experiencing chronic fatigue. This leads to a decrease in the production of adenosine triphosphate (ATP), the <u>primary energy</u> source for cells in the body.

ATP plays a crucial role in various biological processes, such as protein synthesis, neuron activity, and muscle contraction, making it vital for overall health and well-being.

Additionally, chronic fatigue is linked to an increased burden of <u>oxidative stress</u>. The imbalance between reactive oxygen species and antioxidants further complicates cellular challenges. The prolonged activation of the immune system in response to the condition can result in chronic inflammation, influencing cellular functions and contributing to the overall state of fatigue and other associated symptoms.

This is where PEMF therapy can help. PEMF aids in <u>enhancing ATP levels</u> and improves overall cellular function by increasing cellular activity and supporting healthy energy production. Cells may perform more effectively and improve general health and well-being when there is more energy available.

# How does PEMF therapy help with chronic fatigue?

PEMF therapy is a promising avenue for addressing the cellular dysfunction associated with CFS. It can help increase energy production in cells, reduce <u>pain</u> and inflammation, and improve circulation, thereby alleviating symptoms such as fatigue, muscle pain, and difficulty concentrating. Additionally, the therapy may contribute to improving sleep quality, further aiding in fatigue reduction. Here are some ways in which PEMF therapy helps:

## **Stimulates Mitochondrial Activity**

PEMF therapy stimulates mitochondrial activity, ensuring these vital organelles function optimally. This stimulation not only enhances ATP production but also supports overall cellular function. By addressing mitochondrial efficiency, PEMF therapy targets a core component of energy production, potentially alleviating chronic fatigue.

#### **Enhanced Cellular Communication**

PEMF therapy affects the <u>permeability of cell membranes</u>, which regulate the movement of ions in and out of cells. Improved communication leads to more efficient cellular activity, including ATP production. By optimizing this fundamental aspect, PEMF therapy lays the foundation for addressing the root causes of chronic fatigue.

### **Increased Oxygenation**

A key factor in energy production is the availability of oxygen to cells. PEMF therapy contributes to increased oxygenation, a vital aspect of ATP synthesis. By enhancing oxygen delivery to cells, the therapy promotes a more efficient energy production process.

# **Reduced Oxidative Stress**

Oxidative stress, a consequence of an imbalance between reactive oxygen species and antioxidants, is often elevated in chronic fatigue. PEMF therapy <u>reduces oxidative stress</u> and supports healthy cellular function, enhancing ATP production.

## **Improved Blood Flow**

PEMF therapy <u>improves blood flow</u> and oxygen supply to cells. This systemic enhancement of blood circulation provides relief from common symptoms of chronic fatigue, such as low energy levels, <u>sleep quality</u>, <u>pain</u>, mood enhancement, and cognitive function.

PEMF therapy also supports healthy immune function, critical for individuals with CFS, where autoimmune dysfunction is believed to play a role. By regulating the immune system, PEMF therapy helps reduce inflammation and promotes healing throughout the body.

# How to maximize the benefits of PEMF therapy when used for chronic fatigue?

PEMF therapy should be used as a cumulative treatment. To maximize its benefits, it's necessary that you:

- Include leafy green vegetables in your daily diet, as they are packed with nutrients that support cellular function and energy production.
- Take a supplement to increase magnesium intake because it helps in cellular energy production and muscle relaxation.
- Ensure you are drinking an adequate amount of water. Proper hydration supports blood flow, oxygenation, and nutrient transport to cells. It also aids in detoxification.

It is suggested to use PEMF therapy as a complementary treatment with other therapies. This approach helps to enhance the benefits of PEMF therapy.

# **Wrapping Up**

PEMF therapy offers a holistic approach to addressing the cellular dysfunction associated with CFS. By enhancing cellular communication, stimulating mitochondrial activity, increasing oxygenation, and reducing oxidative stress, it contributes to improved energy production and overall cellular function. This, in turn, leads to various benefits for both physical and mental well-being, making PEMF therapy a valuable consideration for those dealing with the challenges of CFS.

A 20-minute session with PEMF therapy can supercharge all 75 trillion cells in your body. If you want to experience a faster recovery, consider having a PEMF device in your house, as it can be used multiple times a day.

## References

1. Wang C, Liu Y, Wang Y, et al. Low-frequency pulsed electromagnetic field promotes functional recovery, reduces inflammation and oxidative stress, and enhances HSP70

expression following spinal cord injury. *Mol Med Rep.* 2019;19(3):1687-1693. doi:10.3892/mmr.2019.9820

2. Wang C, Liu Y, Wang Y, et al. Low-frequency pulsed electromagnetic field promotes functional recovery, reduces inflammation and oxidative stress, and enhances HSP70 expression following spinal cord injury. *Mol Med Rep.* 2019;19(3):1687-1693. doi:10.3892/mmr.2019.9820