

# Understanding PEMF:

## A Guide to Pulsed Electro-Magnetic Therapy

### What is Pulsed Electro-Magnetic Therapy?

Pulsed Electro-Magnetic Therapy, better known as PEMF, is a way of healing illness and disease by increasing your body's natural vitality.

Countless scientific studies have proven how it can provide astonishing health results. It heals numerous disorders, diseases and injuries... without any of the harmful side effects commonly associated with prescription drugs and medical procedures.

It's a safe and natural way to literally recharge your body. It does this by targeting your body at a cellular level to stimulate cell metabolism and improve your health.

### Nature's Healing Force

You already naturally have an electric-magnetic pulse running through your body, as each of your cells have an electric charge. This is normally influenced by the Earth's own electro-magnetic field which radiates upwards from the Earth's core.

PEMF enhances nature's ability to promote healing and wellness in your body. It does this by strengthening the natural electrical charges in your body's cells to improve circulation and cell metabolism.

This greatly improves the functioning of your body's systems like your cardiovascular, digestive and lymphatic systems. By doing so, your

body's systems function better, promoting healing of illness and disease in your body.

To date, it's been shown to provide a wide range of health benefits for illnesses and diseases.

Including:

Arthritis

Asthma

Alzheimer's

Symptoms of depression

Migraines

Pain relief

Parkinson's

IBS

And many more.

## A History of PEMF Therapy

Electromagnetic field therapy has been used to heal people from illness and disease since electricity was first invented. However, people have been aware of the powers of magnetic therapy for thousands of years.

It was practiced in China as early as 2,000 B.C. as is recorded in the ancient Chinese medical text "The Yellow Emperor's Book of Internal Medicine". In the book it talks about magnetic stones being used to correct health imbalances and heal people from illness.

Later in around 200 B.C. ancient Greece, the famous Greek physician Galen spoke of the cleansing powers of magnetism in his medical text

“De Simplicum Medicamentorum Temperamentis Ac Facultatibus”. Indeed, the word magnet comes from the ancient Greek word “magnes lithos”, which literally means “stone from Magnesia”... Magnesia being a part of Greece commonly known for having magnetic rocks.

The healing powers of magnetism were later used to treat illness and disease in the Middle Ages as magnetic stones called “guiding stones”, were placed on people’s bodies.

In modern times, the invention of electricity meant practitioners were able to improve upon magnets and harness electricity to heal people from illness and disease. And so, Pulsed Electro-Magnetic Therapy was born.

At first it was widely adopted in East and Western Europe, however in North America it was only used by veterinarians usually to heal broken legs in racehorses.

The medical community is becoming increasingly aware of the healing powers of PEMF Therapy. In 2015, the FDA acknowledged the safety and effectiveness by reclassifying PEMF devices from Class 3 category to Class 2 which means they are safe for private individual use.

Its health benefits are hard to ignore. This is shown by the fact over 2,000 studies have been carried out which have investigated its healing capabilities. This includes NASA scientists, who use it to treat its astronauts upon returning from their missions in space.

## How It Works

To understand how PEMF works, you first need to understand the role electromagnetic pulse plays in nature and how it interacts with your body.

At the Earth's core is a powerful magnetic field. It's what creates the North and South Poles which we use for navigation. This is an incredibly strong force which greatly impacts all living things on earth.

Your body has a magnetic field which interacts with the Earth's magnetic field. Your body is designed to use the Earth's geomagnetic force at a cellular level. It's made up of around 100 trillion cells, all of which are powered by electrical energy and influenced by the Earth's magnetic field.

The effect of this natural force on our physiology has been highlighted when astronauts return to Earth after completing their space missions. When the astronauts return to land they need assistance in leaving their space craft as they're unable to walk or even stand up. This is due to the atrophy and loss of bone density they suffer from. The reason they have these problems is because during their time in space they were away from the earth's electromagnetic field.

## **Your Body's Electricity**

To understand how PEMF works, you also need to understand how your body works at a cellular level.

Your cells are like mini engines. They're powered by the nutrients your body gets from the food you eat, and the oxygen you get when you breathe, which are then ignited by electrons which are stored in the "cell batteries".

These cell batteries are called mitochondria, they supply the electrons to ignite the metabolic processes. Without them, your cells wouldn't function. The mitochondria or cell batteries produce adenosine triphosphate (ATP) which is what powers your cells.

When ATP has used up all the power within its cells, it becomes ADP, or adenosine diphosphate. It can be recharged and converted into ATP again by the mitochondria by using the nutrients you get from food and the oxygen you breathe.

In an aerobic state, with oxygen, the mitochondria can make up to 38 ATPs from every sugar molecule it metabolizes. In an anaerobic state, one which lacks sufficient oxygen, it can make only 2 ATPs per sugar molecule.

Another important electrical feature is what's called the transmembrane potential or TMP. This enables your cells to maintain a voltage across their membranes. Each of your cells has a positive charge on the outside and a negative charge on the inside. This allows electromagnetic exchanges between your cells which make life possible.

A person in good health has a charge of 70 to 100 millivolts. Aging, stress, poor diet or the environment can reduce this voltage. It has been found that a person with a cell voltage of 30 to 50 millivolts is likely to suffer from a chronic illness, and cancer is seen in people with less than 15 to 20 millivolts. It's no coincidence the human heart, which is the most positively charged organ in the human body, never becomes cancerous.

Your body's electrical charge has important consequences for your health. Because if your cells don't have enough electrical charge, then your body will perform its functions inefficiently... your vital organs like

your heart, nervous system, and digestive system will work below par. And illness and disease are likely to result.

## **An Example**

Let's take the case of red blood cells. Their positivity on the outside means they repel each other which allows them to float freely as they travel around your body.

When red blood cells travel freely, it also means they have a larger surface area to perform their work. This enhances their ability to carry out important physiological processes like circulation, oxygenation and hydration... activities which are vital for maintaining healthy and fully functioning organs in your body.

For example, your blood cells collect oxygen and get rid of CO<sub>2</sub> in your lungs, and absorb nutrients from the food you eat in your intestines. Toxins are also collected and filtered out through your liver and kidneys.

The better your cells are charged, the greater their ability to absorb nutrients and remove toxins which enhances your overall health, and promotes healing, giving you greater wellness and vitality.

If you're away from this electromagnetic force, as in the case of the astronauts, or if the connection becomes weak, due to factors like your diet, lifestyle or the environment you live in, then your body's electric charge will be reduced.

## **How a Low Electrical Charge Affects Your Body**

As each blood cell travels through your capillaries they pass on nutrients and oxygen, while absorbing toxins or enzymes from all your major organs.

However, when your blood cells start losing their positive charge, then instead of repelling each other and traveling freely, they start sticking to each other. This is called the Rouleaux effect.

The more your cells power down, the more the Rouleaux effect increases and the less efficiently your body's systems can function. For example, if more than 8 cells clump together, they're combined surface area is reduced by 50%.

This has serious consequences for your health for two reasons. The first is there's less surface area for your blood to absorb nutrients and oxygen, and waste. And, because only one blood cell can pass through your capillaries at a time, less blood can travel to your body's vital organs.

This affects all the major systems in your body, as the blood absorbs and diffuses oxygen and nutrients as well as collecting and getting rid of toxins and carbon dioxide all via your capillaries.

On top of this, your blood needs oxygens and nutrients to fuel the mitochondria and generate ATP energy to power all your body's cells. So, when your blood is powered down and your cells are stacked together they aren't working to their full potential. This means every component of your body will struggle to do what it was designed for.

When your blood is suffering from the Rouleaux effect, it recirculates around your body without doing its work properly. And because the flow of blood throughout your body is restricted and carrying less

oxygen, bacteria, parasites and viruses, which thrive in environments with little oxygen can thrive.

## **How PEMF Therapy Enhances Your Health**

PEMF Therapy promotes natural healing in your body as it's modeled after the earth's own electromagnetic pulse. It works by running a low frequency electrical current through a copper coil. This then creates a magnetic field which targets your body at a cellular level to stimulate cell metabolism.

It recharges the cells of your body, to combat the Rouleaux effect and make your blood cells flow freely. This maximizes the ability of your blood cells to perform their tasks when they travel in your capillaries to your body's organs.

It also increases their surface area to enhance circulation, oxygenation and hydration. At the same time cellular ability to absorb nutrients and remove toxins from your body is greatly increased.

This causes a chain of responses in the body, leading to improved health without the harmful side effects commonly associated with prescription drugs.

Your vital organs like your lungs, liver, intestines and kidneys are able to work at optimal levels as they get enough oxygen and nutrients, and toxic waste is removed.

In addition to this, your mitochondria can work at an optimum level, as they'll be in an aerobic environment with enough oxygen to create 38 ATP for each molecule of sugar you consume.

**The Health Benefits PEMF Therapy Gives YOU**

As PEMF therapy frees up your blood cells, your body's cells activity is run at optimum efficiency. This means your brain and other vital organs can carry out their activities better and healing is promoted in your body.

Your body will be able to heal from injuries more effectively, pain can be alleviated, the aging process will slow down, you'll have more energy, be less prone to disease, and can heal from chronic illnesses.

Here are some of the health benefits PEMF Therapy can give you:

- **Provides relief from arthritis, fibromyalgia, back and joint pain, and ankylosing spondylitis by stimulating your body's natural endorphins.**
- Effective treatment for Parkinson's, Alzheimer's and recovery from stroke.
- **Treats migraine, insomnia, stress, anxiety and phobias.**
- Increases bone density regeneration which helps with osteoporosis, arthritis, osteoarthritis, fracture healing, and cartilage regrowth in worn joints.
- **Treatment of the liver, the kidneys, pancreatitis, and the heart.**
- Heals irritable bowel syndrome, Ulcerative Colitis and Crohn's.
- **Alleviates allergies, sinuses, bronchitis.**
- Heals skin problems like burns, scars, dermatitis, and acne, as well as soft tissue like muscle and ligaments
- **Treats nerve pain issues like brachial neuralgia, facial neuralgia, and intercostal neuralgia.**

In short, PEMF Therapy empowers your cells to do their jobs more effectively. It improves blood circulation and increases oxygen

distribution around your body, and allows waste and nutrients to pass through easier.

This means you can have a healthier body working at its full potential, and with a greater ability to heal itself.

## Enjoy Deep Healing with New Cutting-Edge PEMF Devices from MiraMate

Unlike most other PEMF devices which can be difficult to understand and use, ours were created with your convenience and comfort in mind.

They've been designed and built using cutting edge research which has been carried out across the globe, most notably in Russian where PEMF therapy is commonly practiced.

Our attention to detail is what sets us apart from the other PEMF devices on the market. For example, most PEMF devices use a rounded number as the base for their programs. Whereas, all our programs are based on a frequency of 9.6 Hz, as scientific studies show this is the frequency which heals your body the most.

Added to this, the pulses in our devices vary in pattern, intensity, and timing which maximizes their effect on your body's cells.

Think of a top athlete, before they run their event they warm up, so that the body is prepared for the event. Then they do the event, and there's a cooling down afterwards. This is important so that they can maintain top performance whilst performing their event. They are preparing their body.

Mini Magic does the same thing. The very first programs gently warm up the body with gentle massaging frequencies. Then there is a stronger main program. And then there's a cooling down afterwards. So your body is never subjected to sudden harsh signals. It's primed.

This is a great improvement from other PEMF devices as your body doesn't become accustomed to the pulses and so stop benefiting from it (a phenomenon known as entrainment). Think about a clock, it may be ticking in the background tick, tick, tick. After a while, you won't hear the ticking. Your hearing will not be tuned to the clock. You'll ignore it.

It's the same of pulsed electromagnetic units. If you always apply the same signal, your body will start ignoring it. So the programs in Mini Magic are constantly changing. So your body is always surprised by a change in the signal in some subtle way, but still maintaining the patterns to be of maximum effectiveness.

What's more, all the pulses our devices send are bidirectional. Most pulsed electromagnetic units apply the signal just in one direction, like kicking a football. But this applies the signals like waves on the beach. The waves go in, and the waves go out. And so after a treatment, your body doesn't become charged in one direction, because the charge gets flowing in and then it flows out again. So after the treatment your body charge is still neutral, however the cells in your body will still have the energy from the signals passed through them. This prevents your body from becoming overly charged during treatment. It also means you can use them safely for longer to get even more healing.

Our devices work in harmony with nature as they're modelled on Fibonacci harmonics. These harmonics occur naturally in nature as all living things are based on Fibonacci.

To find out more about our PEMF Therapy devices and what they can do for you. Please click on the following link:

<https://www.miramate.com/what-makes-mini-magic-special/>

## Reviews

### **Marcello Allegretti – January 9, 2018**

My first experiences with the Mini Magic. Working for many hours in front of a computer, as I do every day, can be very stressful. Without your noticing, stay still while you write and draw, regardless of your posture.

But over time the consequences become evident. Thus begins a pain in the neck that becomes unbearable and that takes you throughout the day, without respite.

But since I have my Mini Magic, these problems have disappeared! I apply the two coils on the shoulder, I electrically power the Mini Magic from the USB port of my computer, and finally I can work without interruption and without pain!

I'm sure it will help me 100 other times, above all because I will be able to use it also in the car, thanks to the USB power supply that now have all the cars.

The Mini Magic, thanks to the technology with which it was designed and the fact that you can take it anywhere, is a great invention!

Marcello Allegretti

### **Debra O'Connell (verified owner) – January 23, 2018**

I thought I would share my very first experience with MiraMate's Mini Magic. I have chronic late stage lyme and now have arthritis in my thumbs and wrists which is debilitating it comes and goes but mostly always really painful can hardly text, open jars etc, since I've had the Mini Magic my pain has reduced by 50% and still getting better, I use it for half an hour daily on my thumbs and wrists and it makes a huge difference just wanted to share. Thanks for this great portable pain relief.

**lothlorien9183 (verified owner) – February 27, 2018**

I have had rheumatism/arthritis in my knees since I was 12 years old. I felt a lot of pressure and pain from Inflammation around the joints. I bought the Mini-Magic when it was first released. After 3 treatments the pressure disappeared. I have more flexibility and a lot less pain. I highly recommend it.

Sharon Jacobson

**Chaffee Cline – January 13, 2018**

I have a testimony.... few weeks ago was traveling... and I stepped out of vehicle wrong... I suddenly had a massive leg cramp charlie horse... like all the muscles were about to snap in my leg. I grabbed the Mini Magic, turned it on...and scanned my leg up and down with pemf coils (they were taped together) Usually when this happens to me my leg constricts and spasms for usually 20-30 minutes of intense pain, like screaming 10/10 pain. Well I grabbed the pemf coils and ran it up and down my leg, and setting it on pain points. I think my leg turned to normal in about sixty seconds. I could not believe it, in total shock. I now carry Mini Magic with me 24/7 just in case this happens to me again. I have CRPS (complex regional pain syndrome) neuropathy, my

body is always doing pain things. I think at moment Mini Magic is one of my top strategies for releasing pain, yes quite amazing.

To see more user's testimonials, please check here:

<https://www.miramate.com/reviews/>