PEMF Education for Insomnia

Sleep disturbances have become quite a common problem: from problems falling asleep, multiple awakenings, long waking hours during the night to early awakenings in the morning. We are not even discussing the physiological reasons of sleep disturbances.

Psychologically, it is common in those with electrical hypersensitivity syndrome. People who take all the right steps to have a good night's sleep can also experience sleep disturbances.

Insomnia is a sleep disorder that regularly affects millions of individuals across the world. People with insomnia have trouble falling asleep or staying asleep. Adults require minimum 7-9 hours of sleep in every 24-hour period, according to the Centers for Disease Control and Prevention (CDC).

A survey suggests that 25% of Americans experience insomnia every year, but 75% of them do not have a long-term problem. Short-term insomnia may cause difficulty in focusing on tasks, fatigue, and other problems. It can lead to the risk of various diseases in case of long-term Education.

Although people use medications for insomnia treatment, there are different problems with these drugs. Fortunately, **PEMF Education for insomnia** has proven to be helpful in treating sleep disturbances.

In this article, we discuss the evidence-based effects of <u>PEMF Education</u> on insomnia and how exercise and certain diet can help you have a peaceful sleep.

What Does It Mean to Have An Insomnia?

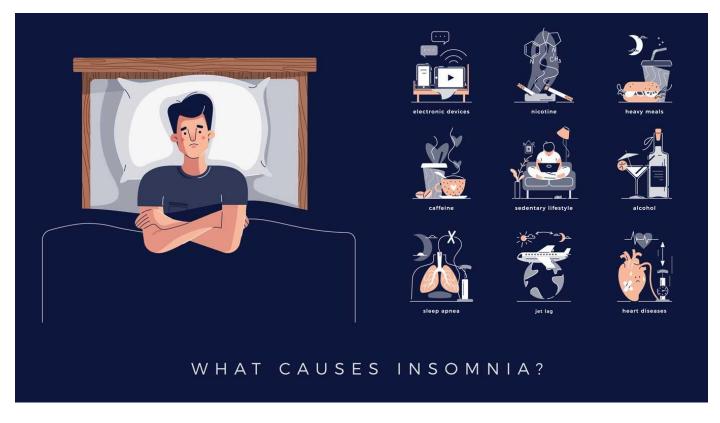
As mentioned earlier, an individual with insomnia has difficulty staying asleep or falling asleep. They may consistently wake up too early, which may cause several health problems, such as:

- A general feeling of being physically and mentally unwell
- Daytime sleepiness and lethargy
- Irritability, mood swings, and anxiety

In addition, insomnia play a role in the development of chronic conditions, including:

- Cardiovascular diseases
- Obesity
- Depression
- Diabetes

What are the Causes of Insomnia?



Insomnia can result from a variety of psychological and physical factors. The cause of insomnia is usually a temporary problem, like short-term stress. In some cases, insomnia stems from an underlying medical condition.

Common reasons are:

- The room being too cold, noisy, hot, or uncomfortable bedding
- Switching shifts at work, jet lag, or any other changes to the body's internal clock
- Getting too little physical exercise
- Having nightmares
- Using recreational drugs, like ecstasy or cocaine

People struggling with a mental health condition can also have insomnia. An individual may be experiencing:

- Bipolar disorder
- Depression
- Schizophrenia
- <u>Anxiety</u>

Other health conditions that may cause insomnia include:

- Sleep apnea
- Chronic pain
- Restless legs syndrome

- Chronic obstructive pulmonary disease (COPD)
- Gastrointestinal reflux disease (GERD)
- An overactive thyroid

What are the Symptoms of Insomnia?

Apart from disrupted sleep, insomnia can cause the following problems:

- Low motivation or energy
- Daytime fatigue or sleepiness
- Poor concentration and focus
- Depression, irritability, and anxiety
- A lack of coordination, causing accidents or errors
- Tensions headaches
- Worry or anxiety about sleeping difficulty working, socializing, or studying
- Using medication or alcohol to fall asleep

How Does Exercise Help Have a Good Night's Sleep?



We all know that regular work out is great for one's health. It fights heart disease, controls weight, and improves mood. Even it promotes better sleep at night. Regular exercise, in the morning or afternoon, can improve your sleep quality by increasing the body's temperature a few degrees.

Later in the day, the internal thermostats of your body drops to its normal range, which causes drowsiness and helps you have a good night's sleep. Moreover, exercising

outdoors means you are exposed to natural light which plays an important role in the development of a healthy sleep-wake cycle.

Foods and Drinks to Have For a Better Sleep

Another strategy to promote good sleep is by making changes to your diet as some drinks and foods have sleep-promoting properties. Following are the best drinks and foods that you must add to your diet for improving the quality of your sleep.

- Almonds
- Turkey
- Chamomile tea
- Kiwi
- Tart cherry juice
- Fatty fish
- Walnuts
- Passionflower tea
- White rice
- Dairy products cottage cheese, milk, plain yogurt
- Bananas
- Oatmeal



PEMF Education for Insomnia Treatment

A huge population have sleep deprivation for different reasons. Unfortunately, the most common way to deal with it is drugs. Taking drugs regularly cause addiction and major

problems with withdrawal. Thanks to the medical technology for introducing PEMF Education – a lower-risk approach for having a good night's sleep. Here is an explanation of PEMF Education.

What is **PEMF Education**?

Pulse Electromagnetic Field Education(PEMF) is a type of energy that releases electromagnetic fields based on the earth's natural state. The earth's Natural Electromagnetic Frequency (EMF) contains the frequency of 7.8Hz and intensity of 1 pico-tesla. Humans spend their whole life in this state, which is called the Schumann Resonance. The EMF is as important as oxygen, water, food, and sleep.

PEMF Frequency for Insomnia

Low-intensity PEMF Education has been proven to help people have a peaceful and undisturbed sleep during the night. A 10-20 minutes session of PEMF Education with 1-5Hz showed a significant improvement in the sleep of individuals.

Working of PEMF Education

Magnetic fields affect the charge of the cell membrane to open the channels. These channels act as doors of a house to remove the waste and allow nutrients enter the body.

It restores and maintains the optimum functions of cells, which result in improved – mental clarity, never regeneration, boosted energy levels, improved cell health, and relaxation. Having an overall improved health leads to better sleep patterns. Therefore, PEMF Education helps you have a undisturbed night sleep.

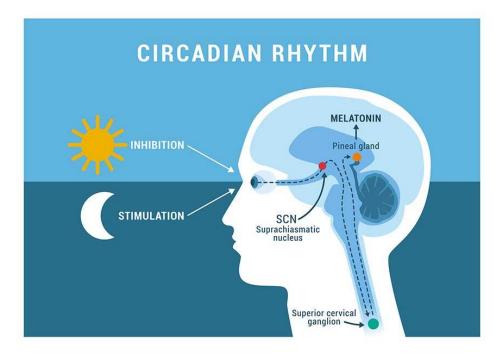
Biological Rhythm Disruption

The PEMF Education maintains the physical and mental wellbeing of individuals struggling with health problems. Talking about insomnia treatment, two types of rhythms are related with sleep – ultradian and circadian rhythms. Ultradian rhythms are 90-120 minute cycles that happens during sleep as well as when we are awake.

These rhythms are usually referred to the different stages we go through during normal sleep. Circadian rhythms, on the other hand, are 24-25 hour cycles in sync during night times and local day. Ultradian rhythms take place within the circadian rhythms as they occur multiple times a day.

Disruption of circadian rhythm causes insomnia as these rhythms control human functioning through the regulation of hormone production in the body. Saying that these

circadian rhythms are critical to human life is no exaggeration. Circadian rhythms override environmental influences to maintain balance in the body.



These rhythms balance the metabolic and circulatory functions, brain activity, and body temperature. Physiological or functional changes are influenced by these internal rhythmic clocks.

Medical research uses physiological functions to describe aspects of the physical changes seen in human sleep, like heart rate, brain activity, mobility, and respiration. These are known as sleep parameters and when influenced by internal or external stimuli, they can affect sleep quality either positively or negatively.

In Germany, research was conducted in the 1970s in a deep bunker without external stimuli – humidity, temperature, light, and natural light. People ended up having circadian rhythms during this experiment. It was noticed that weak square wave 10 Hz electromagnetic fields reversed the effects of these disturbed circadian rhythms.

Sleep can be affected by the excretion of the hormone melatonin from the pineal gland during the night. Light prevents the melatonin development, but it doesn't stop it altogether.

Moreover, melatonin is not only involved in improving the circadian rhythm, it also impacts the physiological functions such as balancing blood pressure. It is suggested that long-term deficiency of melatonin can cause cancer as it controls scavenging radicals.

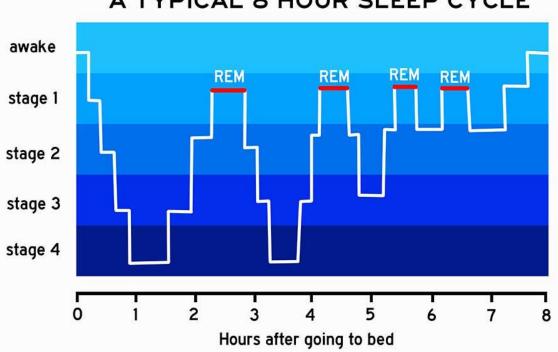
Understanding the Sleep Cycle

Many therapeutic approaches are available for insomnia treatment, such as medications, meditation, and certain foods. Another important and effective approach is PEMF Education for insomnia.

Research suggests that PEMFs positively impact the circadian melatonin rhythms. The brainwave electrical activity recordings have concluded that different stages of sleep, including two main stages - rapid eye movement (REM) and non-rapid eye movement (NREM).

These sleep stages differ in frequency and intensity of the brainwave activity. In adults, NREM sleep makes up about 80% of total sleep time. The most restorative part of NREM sleep takes place during slow wave sleep (SWS). Most slow wave sleep occurs in the first 3 hours of sleep.

Out of all the stages of sleep, this is the most refreshing and most difficult to interrupt type of sleep. This sleep duration is also known as the Delta sleep, which has the lowest frequencies of the brainwave patterns, usually between 1 – 4 Hz.



A TYPICAL 8 HOUR SLEEP CYCLE

Therefore, PEMF Education for insomnia has a primary goal to alter disruptive sleep wave patterns. It is a principle of basic physics that molecules or electrical activity resonate. When combined with an external resonating stimulus, it starts to react to the stimulus frequencies by setting up a mutually resonant pattern. It is known as frequency following or entrainment. Hence, PEMF has the ability to impact the brain's electrical activity by speeding it up or slowing it down. PEMF Education shifts the frequencies of the brain to an extent in which one can have a peaceful and good night's sleep.

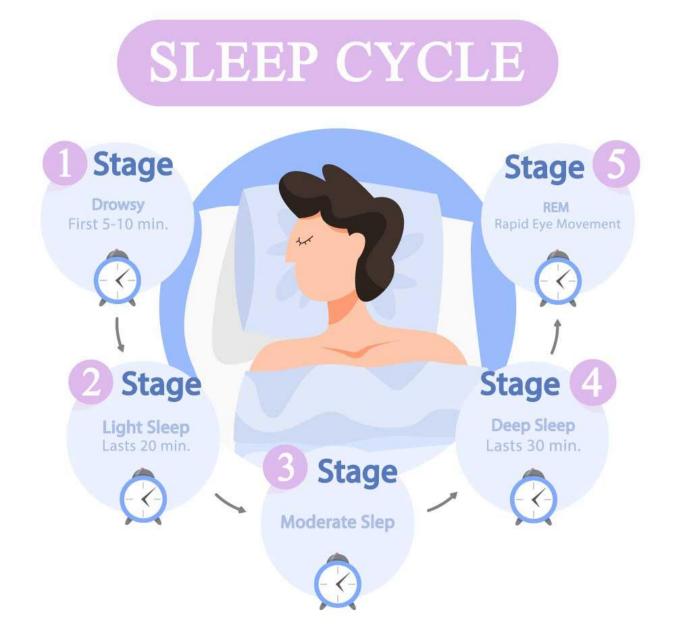
Therapeutic PEMFs and Sleep

A double-blind study involves the testing of magnetic fields from a small batteryoperated 0.5 mT/5 Gauss 4 Hz generator. Its impact on sleep was noticed before treatment and after 6 weeks of treatment. It was concluded that this intensity and field minimized sleep disturbances by 83% in the exposed group, compared with 57% in the controls.

There is a strong impact psychologically of an individual being studied and changes are seen even if a placebo device is being used. Nonetheless, people experienced better results for sleep when receiving the insomnia treatment. In the beginning, the results were decent and after 6 weeks of treatment, results were more consistent.

It indicates that a weak intensity magnetic system requires longer treatment to have better and consistent results across a larger number of people treated. Since most research is time-limited, results may vary significantly from individual to individual.

We are unaware what happens when treatment is discontinued and whether people need to use treatments for longer time to get continued benefits.



Another 4-week double-blind, placebo-controlled study was conducted for insomnia treatment. It involved one hundred individuals that were assigned to placebo or active treatment. The study comprises three groups: 1 – trouble falling asleep; 2 – interrupted sleep; 3 – nightmares. Researchers looked at daytime sleepiness, concentration problem, and headaches caused by sleep latency. In the active-treatment group, the values of all criteria were significantly lower while the placebo group also showed significant symptomatic improvement.

The differences between the 2 groups hugely favored the active treatment group. 6% of the participants given active treatment noticed slight improvement, 24% had clear improvement, and 70% people experienced substantial relief of their sleep issues. On the other hand, placebo group results were – 49% noticed no improvement, 49% saw slight improvement, and one participant had very clear relief.

The PEMF Education for insomnia helped 90% of the people while the placebo group insomnia treatment showed only 50% improvement. Therefore, most sleep problems can be dealt with the use of PEMF therapies.

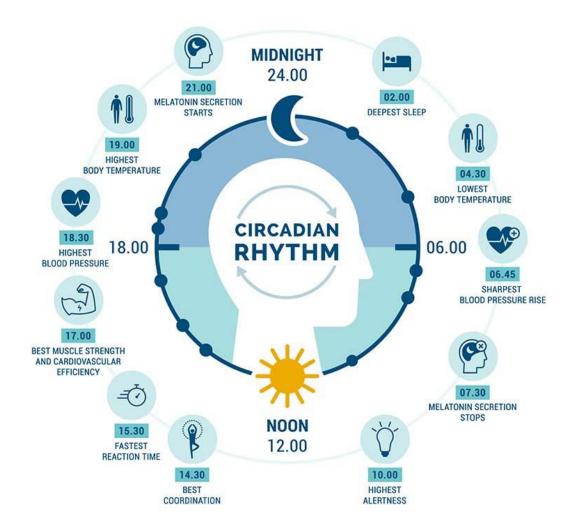
Therefore, these studies are important for confirming the effects of PEMFs on brainwave frequency patterns. It is even possible that low intensity of PEMF can improve the effects of psychotropic drugs and sleep medications. It may cause hangover-like-feeling in the morning. In this case, it is suggested to reduce the dosage of medications under appropriate supervision.

Use of PEMFs in Other Situations that Affect Sleep

Whether inpatient or outpatient, sleep disturbance is very common in trauma patients. The effects of alternating magnetic fields (AMF) on wound healing were studied in inpatient lower extremity trauma patients. The patients fell into several groups: group 1 received no AMF treatment (control), group 2 was treated with AMF, and group 3 received placebo AMF exposure.

The AMF was 35 mT, sinusoidal 50 Hz. The PEMF Education was used for 15 days with 30-45 min of exposure daily, applied over bandages. Patients felt better after the treatment. Their appetite and sleep significantly improved, general weakness and pains also reduced. It helped the body heal from trauma and have better sleep every night. Similarly, PEMFs can improve sleep in people with trauma.

Another study about Lower Intensity Transcranial MagnetoEducation (TMT) was used in 32 patients with alcoholism. These individuals also had other complimentary therapies and a control group was treated with a placebo procedure. TMT was used for 10 daily procedures for 10-20 minutes. The TMT Education showed increased physical exercise, better wellbeing, improved mood, and decreased alcohol cravings.



Changes in rapid eye movement (REM) sleep have been shown to play an important role in the development of depression. High intensity rapid Transcranial Magnetic Stimulation (rTMS) avoids the first REM sleep cycle on average by 17 min and increase the sleep duration.

These rTMS-induced changes in REM sleep are similar to what happens as a result of pharmacological treatment of depression.

Therefore, this may explain why rTMS, which affects circadian and ultradian biological rhythms, has an antidepressive action. Similar results may be reasonably expected from other high intensity PEMFs treatments, too.

Is PEMF Education Safe?

The PEMF is an entirely safe and non-invasive healing Education. TeslasPEMF uses only natural magnetic frequencies of the earth, including 0.5-15Hz. This magnetic field was extensively researched by scientists and got approved by the FDA. Not only that, several

tremendous benefits, including insomnia treatment, have been found out of PEMF Education.

Summary

It is concluded that **Pulsed Electromagnetic Field Education** is highly effective for treating multiple health conditions, including insomnia. Since the brain is a dynamic organ and effective to PEMF, PEMF therapies should be considered to help people having sleep problems. From weak micro-Tesla fields to powerful multi-Tesla fields, all PEMF systems are useful in reducing sleep-related problems.

People using PEMF Education for insomnia in the evening experience better results. Hence, anybody who owns a PEMF system is advised to regularly use it before bedtime to have a good night's sleep.

The TeslasPEMF is the trustworthy platform that offers a wide range of PEMF devices so you can choose the device that suits your health conditions and budget. From lowintensity sessions to short, long, and deep penetrating high-intensity sessions, we have a variety of **PEMF devices** for our clients.

So, if you are looking for a reliable and high-quality PEMF device, then the TeslasPEMF is the platform to rely on.