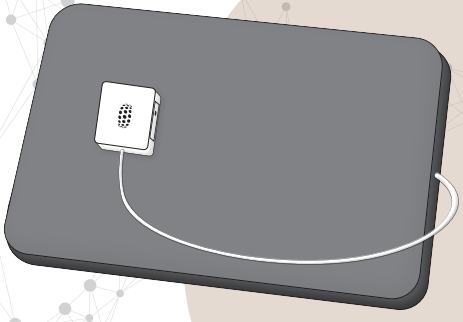
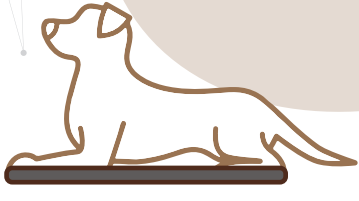
petspemf PAD

by Omnipemf





SCIENTIFICALLY TESTED & PROVEN EFFECTIVE

TREATMENT GUIDE FOR PROFESSIONALS

Petspemf Pad Treatment Guide for Professionals

We are delighted to have you join us at Petspemf as part of your non-invasive, drug-free treatment for your pet. PEMF is an entirely painless treatment with zero to minimal side effects, and can be used as a treatment alternative or in conjunction with other treatments, making it fully compatible for every pet's needs.

All of Petspemf products, frequencies, intensities and use are supported by medical and scientific studies*, with focus on efficiency, measurable results, usability and durability. All of Petspemf products meet the highest production standards.

This guide should provide you with all the information on PEMF technology, its brief history and advantages, user guide for each treatment, and applications for a variety of conditions.

Prof. Igor Jerman, PhD in Biology

"Dr. Igor Jerman, born in Ljubljana in 1957, is a Professor of Theoretical Biology. He has given lectures on Evolution and Theoretical Biology, Scientific Methodology, and Bioelectromagnetics at the Biotechnical Faculty, the University of Ljubljana, and elsewhere. He is the professional director of the Institute for Bioelectromagnetics and New Biology – the BION Institute which is mainly oriented to basic and applied research in the field of bioelectromagnetics, including the studying of interactions between endogenous bioelectromagnetic field of organisms and environmental and molecular electromagnetic fields".

Marko Kadunc, CEO

"I've dedicated the last few years to PEMF therapy because it is an entirely safe, non-drug option to accelerate our pets healing. In older pets, or in those who have been ill for long periods of time, supplements alone can take longer to work as the body has to digest and process them to achieve the optimum effect, with some drugs allowing for lots of side effects. Our pets can't tell us when they are in pain, and PEMF can act not only as a gentle treatment aid, but also a preventative tool to help your pet maintain the healthiest lifestyle possible".

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How PEMF works?

Pulsed electromagnetic field therapy (PEMF therapy) is a form of electromagnetic therapy that uses pulsed magnetic fields at differing frequencies to achieve certain physiological changes in a harmless way. The cells in our body may have different electrical charges when they are damaged. PEMF therapy induces secondary electrical fields within the bodily cells so as to return the damaged cells to their 'healthy' electrical charge. This ends up in a cascade of normal cellular reactions inside the cells leading to an improved rate of healing of bone, nerves, and soft tissues (tendons, ligaments, muscles, skin), additionally as providing physical relief.

Configured with the support of hundreds of studies on Pulsed Electromagnetic Field Therapy (PEMF), Petspemf Pad delivers a weak micro-current of a sine wave pulse to the damaged tissue, triggering the body's natural anti-inflammatory response, accelerating healing, reduces swelling, pain and inflammation.

When the electromagnetic wave is sensed by local tissue, cellular changes take place that lead to an increase in energy production and increased blood flow to the targeted area. Increased circulation delivers anti-inflammatory cells to the area, which aids in decreasing pain, and helps with regeneration and swelling. Therapy also helps to decompress the joints on which the affected muscles act, freeing them from excessive pressure.

Accumulating clinical evidence supports the use of PEMF therapy in both animals and humans for specific clinical indications including bone healing, wound healing, osteoarthritis and inflammation, and treatment of post-operative pain and edema.

It is important to consider the following parameters when using PEMF devices:

1. The frequency (whether constant or a pulse, low or high), intensity (mT) and pulse forms are the most important parameters.
2. The frequency of electromagnetic waves used in clinical therapies is usually lower than 100 Hz, with a magnetic flux density of 0.1 mT to 30 mT. Petspemf uses the frequencies within the 1 - 303 Hz and intensity of 0.5 to 2.5 mT.
3. In order for the electromagnetic energy to be successfully transmitted into the body, all PEMF therapy machines use one or more waveforms or a combination of them (such as sine waves, square waves, triangle waves, rectangle waves, sawtooth waves, etc.)

Working Mechanisms

- Increased calcium ion (Ca2+) signaling
- Production of nitric oxide (NO)

EMF exposure increased expression of bone morphogenetic proteins 2 and 4, induced osteogenesis, and promoted differentiation of osteoblast cells, all of which are consistent with bone repair, reduce inflammatory gene expression in immune cells, reduce programmed cell death, and promote dilation of blood vessels and enhanced circulation

These results are consistent with re-ductions in pain, swelling, and inflammation that have been observed clinically.

A number of studies have also found that PEMF treatment can increase the expression of heat shock proteins (HSP), a class of inducible proteins that are expressed under conditions of stress and have been associated with a number of cytoprotective and anti- apoptotic effects.

PEMF (low frequency) has also been linked to cell membrane adenosine receptor expression. Activation of these receptors by endogenous adenosine is associated with reductions in prostaglandins and inflammatory cytokines, again consistent with the published clinical findings of reduced pain and inflammation.

History of PEMF technology

PEMF technology has a long and fascinating history, and is one of the most recognized technologies for treating a wide variety of diseases and conditions.

PEMF devices have been used for therapy since the early 1900s, implemented as non-thermal diathermy machines in the 1930s and 50s. The FDA approved Bone growth stimulators (BGS) to increase bone healing in nonunion fractures in 1979, and cleared PEMF for urinary incontinence and muscle stimulation in 1998. Interestingly enough, in the 70s, PEMF was mostly used in treating fractures and injuries in race horses and performance horss.

In the 1990s, PEMF began developing as a treatment for soft tissue as well as the bone.

In 2004, the FDA approved pulsed electromagnetic field therapy for cervical fusion surgery patients at high risk for non-fusion, in 2006 for the treatment of depression and anxiety, in addition to approving PEMF therapy for the treatment of brain cancer in 2006 and 2011. In 2015, the FDA reclassified PEMF machines from Class 3 to Class 2 medical devices.

Since the 90s and especially in 2000s, veterinary care has expanded its research and use of PEMF, conducting vital studies which showed positive response in animals and no adverse effects. The results have pushed the use of PEMF outside the veterinary clinics and made it accessible for home use as well.

About Petspemf Pad

Petspemf Pad is a targeted and general Pulsed Electromagnetic Field Therapy device intended for treating pets. It is portable and easy to use, and can be used at the clinic or in the home/stable to supplement in-office treatments. Use of the Petspemf Pad will not interfere with existing standard treatment procedures or pain management programs. It is effective in combination with laser therapy, acupuncture, chiropractic treatments, and pain and inflammation medications.

Benefits

PEMF technology may provide the animal with a safe non-invasive therapy that can enhance wound repair without the necessity of direct skin contact. PEMF has been shown to have positive effects on both acute and chronic inflammation in pets assisting post-surgical and tissue healing, lowers inflammation and provides physical relief.

After a certain tissue injury, an acute inflammatory cascade is a natural response to the recovery process in fighting infections and initiating the healing process. However, high levels of inflammation contribute to pain and edema. PEMF targets the inflammation and lowers the pain and swelling.

Magnetic therapies heal the pet's body by restoring effective circulation and eliminating inflammation. Increased blood flow to a diseased part of the dog's body encourages a rise in nutrients to that location, speeding up the healing process. While magnetic therapies cannot cure all medical problems, they're an affordable, non-invasive, and safe choice to use in healing.

Treatment by using an electromagnet field works well with all types of orthopedic injuries. These include strains, sprains, torn cruciate, blown discs, fractures, broken bones, and muscle strains.

What are the benefits of Petspemf Pad?

- Improves circulation
- Reduces swelling
- Reduces pain
- Increases mobility
- Accelerates healing
- Compatible with other treatments for pain and inflammation
- Can reduce amount of pain medication
- No dangerous side effects
- Portable, for use at or away from home

How to use Petspemf Pad

Frequencies and intensities used by Petspemf Pad

Pets who have ligament injuries, sprains, strains or arthritis are great candidates from PEMF therapy. PEMF is also recommended for pets with conditions such as wounds, spinal cord injuries, disc disease, liver problems, digestive issues, asthma, allergy symptoms or behavior related problems.

All the frequencies, intensities, and uses are based on clinically and scientifically validated studies that are listed below each program. To have a broader range of possible positive effects, two frequencies at two different intensities of the applied magnetic field are used. There are also other possibilities for stimulation regimes: shorter (basic) and prolonged stimulation.

The pet can react positively to the basic regime, however, if the pet requires a more extended treatment, we recommend switching to the prolonged regime. The pet's instinctual recognition will most likely recognize the right timing and either give you the signal on when to stop, or they will just move away from the pad.

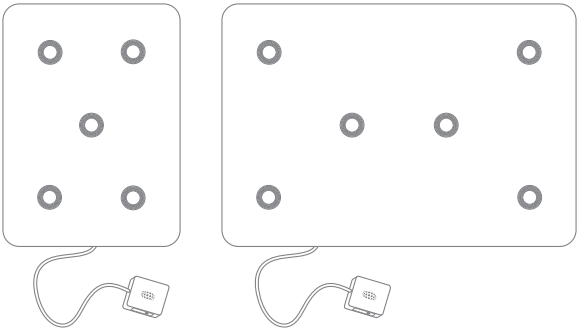
1. **Pain relief** (osteoarthritis, joint disease),
1. **Accelerated healing** (wound healing, regeneration of tissue),
2. **Stress relief** (reducing emotional stress, calming),

Indication	Frequencies	Intensity	Position	Daily regime	Therapy
1. Pain relief	50.6 Hz main 15.2 Hz at lower intensity	2.5 mT 1mT	over the affected site	Basic: 30 min Prolonged: 1h, 4h, 8h	until needed
2. Accelerated healing	15.2 Hz main 40.5 Hz at lower intensity	2.5 mT 1mT	over the affected site	Basic: 20 min, 40min Prolonged: 1h, 4h, 8h	until needed
3. Stress relief	4 Hz main 6 Hz at lower intensity	2.5 mT 1mT	plexus, whole body, head	Basic: 3 x 20 min 1-2 x 20 min Prolonged: 1h, 4h, 8h	1 week 2 weeks

How To Use

Petspemf Pad has five specially designed coils that generate electromagnetic fields and are powered by a pulse generator inside the device. Because of the wide active area, the pad is easy to use as owners just put the pad under or over the animal and select a program. The most suitable time for this is when they are resting or sleeping. All our pets need to do is to lay down and relax. The pad is thin so it can be placed on an existing pet bed, in a crate or a transport box.

It is recommended to keep your pet hydrated while using Petspemf Pad to help facilitate the natural release of toxins. It is also important to feed your pet a healthy diet, combine both dry and wet pet food.



Step By Step Instructions

1. **CHARGE**
   Charge your Petspemf Pad for a minimum of 2.5 hours when using it for the first time. Petspemf Pad is unlocked when plugged into the charger.
2. **DOWNLOAD THE APP**
   Download the Petspemf App to your mobile device or tablet from the iOS App Store or Google Play store.
3. **START THE APP**
   Press START and accept the Terms and Conditions. Make sure to have Bluetooth on your device turned ON and follow the step-by-step User Guide. If you are using an Android device, you will be asked to enable location services using the app.
4. **WAKE UP THE DEVICE**
   Double tap the control box to wake up the device (confirmed by a double vibration) - at this point the device is ready to use.

5. **CONNECT**
   Click the CONNECT button in the app and wait until Petspemf Pad pairs with your device.
6. **START SESSION:**
   Once you select a program, set your duration and the session will begin (followed by single vibration). To stop a session, either press the STOP button in the app or double tap the control box.
7. **PLACE THE PAD**
   Place the Pad on the pet's resting place or selected area for treatment. Let the pet rest on the Pad for the entire duration of the treatment selected from the table above.
8. **END SESSION:**
   After the program is completed, the Pad will turn itself off.

How to check if stimulation is in progress?

Check if the green light is blinking (1 blink per second). Each stimulation program also starts with 1 short vibration. You can also use the test tube with a magnet to confirm the presence of a magnetic field.

How to check if Petspemf Pad is charging?

Orange light means it's charging. No light while charging means it's fully charged. Blinking red light (1 blink per second) means the battery is low.

How do I know Petspemf Pad is connected to my phone?

Blinking orange light (1 blink per second) means it's connected to your mobile device (and no program is running).

Material and Care

- Water-based, toxic-free adhesive
- 100% Polyester cover
- Waterproof
- Antimicrobial and Anti-Odor
- Sown-in inner pocket to put away the control box and wires in case the pet bites
- 2 Covers available in order to avoid damage from liquids and physical damage. Both covers are replaceable in order to guarantee proper functioning of the device.

The pad's cover is anti-scratch, extremely durable, removable and washable in a washing machine up to 30 °C. Do not use Petspemf Pad near water or when the pet is wet. Avoid direct ironing on the area with the printed text. Petspemf Pad should be used on flat surfaces.

Treatment Protocols

Duration of Programs

Regardless of the area of treatment, we recommend that you begin treatment with **2 to 4 30-minute treatments** (basic regime) per day. For acute conditions, continue treatment until the it is no longer needed.

For **chronic or degenerative conditions**, we recommend you to **continue with 2 to 4 treatments per day for 2 to 4 weeks** and monitor the animal until you see improved mobility and less pain response. In any case, begin with the basic program and observe the animal's reaction. Your pet should get accustomed to gentle PEMF vibrations. Under chronic conditions or more serious acute ones, switch to the suggested prolonged regimes after a few days.

If the animal is hypersensitive or suffering from a long-term degenerative illness, resulting in reduced blood supply to the tissue, tingling or twitching may occur due to the increased blood flow. In such instances, we recommend limiting the duration of the treatment so that the damaged area may have time to adapt to a new physiological situation. We suggest lengthening the duration once the animal is accustomed to the sensation.

There is no risk of overdosing or causing the animal physical harm by using PEMF. In fact, as in the case of treatments for all indications, it is possible to carry out night therapy for several consecutive hours.

Recommended Positions for Using Petspemf Pad

Animals have a free spirit, but the consistency of use is crucial for optimal effect. Therefore, we need to choose the moments when to apply PEMF therapy wisely. The most suitable time for this is when they are resting or sleeping. All that the pets need to do is to lay down and relax. The pad is thin and usually placed on their mats or beds.

Treatment with PEMF is completely painless and is very well tolerated by both cats and dogs. The most challenging part is keeping pets in the same position for the duration of treatment. Treatment begins by simply placing the pad under or over the treatment site and pressing the start button or double TAP the control box.

When To Use

1. How to recognize signs of pain in your pet?

Pets can't tell us when they are in pain, so we must observe the signs they display. The obvious signs like wounds, swelling, redness, or infections are easier to spot. But pain can often be internal.

In dogs, general behavioural changes can be observed like shaking, panting, weeping, aggression, licking or scratching an area, inactivity, stiffness, loss of appetite, reluctance to play or be active, avoiding touch, etc.

In cats, the signs of experiencing pain are agitation, growling, hissing, reluctance to play, avoiding touch, licking or scratching an area, lack of grooming, change in toilet habits, reduced appetite, rapid and shallow breathing, trembling, sleeping more than usual, avoiding bright areas, less affectionate, etc.

The strategically placed coils inside of the products offer a targeted electromagnetic simulation of any part of the body of the pet. This results in physical relief and enhancement of the body's natural recovery processes.

A study that investigated the effects of PEMF on dogs with osteoarthritis concluded that the effectiveness of PEMF treatment was not lesser compared with an anti-inflammatory drug (firocoxib). The effects of only PEMF therapy were sustained over time.

2. How to recognize signs of stress in your pet?

Our pets are prone to stress too. However, the signs can often be subtle, so we must be vigilant.

In dogs, typical signs of stress are pacing, shaking, barking, whining, drooling, licking, yawning, panting, changes in body posture and ear posture, excessive shedding, avoidance, hiding or escaping, obsessive behaviour, etc.

In cats, signs of stress can be diarrhea, vomiting, over-grooming, lethargy, weight loss or weight gain, change in toilet habits, spraying urine outside of their toilet, aggressive behaviour, excessive meowing, unresponsiveness, reluctance to play, pacing, etc.

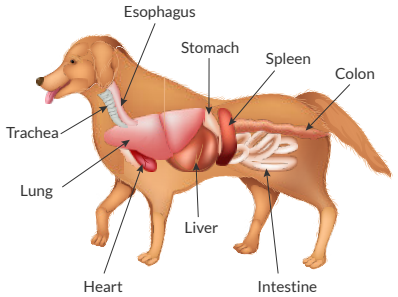
Evidence suggests that PEMF technology can improve anxiety in both humans and animals. PEMF products lead to physiological changes in the central nervous system responsible for mood disorders. Pets suffering from stranger anxiety, separation anxiety, thunder phobia, noise sensitivity, travel anxiety, or general anxiety can vastly benefit from PEMF therapy.

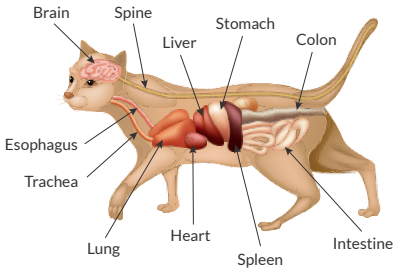
PEMF technology additionally energises cells on a molecular level which results in an oxygenized brain and increased blood flow.

3. How to recognize if your pet is injured?

If you spot obvious signs like wounds, swelling, redness, or infections it can signify that your pet is injured and needs veterinarian assistance.

In dogs, signs for internal injuries that are not visible can be a rapid heartbeat, shallow breathing, depression, black diarrhea, color change in the gums, whimpering or crying, coughing, or vomiting blood, weakness, lethargy, etc.





Will my pet feel anything?

Some humans report mild tingling or possibly a mild feeling of warmth or tingling due to the increased blood flow and blood oxygenation. Most humans report feeling relaxed, peaceful and energised. Most dogs have been observed to be drawn to the energetic field and often seem to relax and go into a "state of zen".

Treatment with PEMF is not painful and is very well tolerated by both cats and dogs. The most challenging part is keeping pets in the same position for the duration of treatment, therefore is recommended to use during the rest or sleep time.

How soon will I see results?

For acute inflammation, you should see noticeable relief after the first or second treatment. With chronic or degenerative issues, you may not see notable results for 1 to 2 weeks. You'll want to continue the treatments as recommended above for continued healing.

Typically, you will see results within two weeks and in many instances, observe immediate difference in the way your pet rises, walks and runs.

FAQ

Contraindications

PEMF devices are recognized to deliver treatments without reports of side effects or significant adverse events. Petspemf Pad has been developed for both home and clinical use. The device emits an electromagnetic field for which there is no valid scientific reason to believe that the electromagnetic emissions are harmful.

Petspemf Pad should not be used near people or animals with implants such as pacemakers, non-MRI-safe IUDs, cochlear implants, or mechanical heart valves.

Pet owners with such devices should keep at least 30 cm (12 inches) away from the active device. However, there are no magnetic induction effects from the Petspemf Pad's signal on veterinary surgical implants because these are made of non-magnetic materials. If you are hesitant about using Petspemf Pad on your pet, please contact your veterinarian for further consultation.

Aren't EMF's damaging?

PEMF therapy shouldn't be confused with electromagnetic fields (EMF's) from cell phones and WiFi which work at much higher frequencies and are highly chaotic, thereby disturbing normal electromagnetic processes of the organism's cells. On the contrary, PEMF is based on rhythmic pulsation and very low harmonic frequencies, thus helping cells sustain a normal biological vigor.

Can the Petspemf Pad be used on a pet with a pacemaker or other implanted electronic medical devices?

The FDA recommends against using Petspemf Pad over tissue known to contain implanted electrical leads, such as pacemakers. As such, we recommend against applying the Petspemf Pad to animals who have pacemakers.

Test tube – How to use it and what does it tell you?

In most cases, the non-invasive pulses are not tangible. To assure the signal's validity, we added a magnetic tester tube in the Petspemf Pad package which allows to hear the impulses emitted by the device, to confirm that a stimulation program is running. Petspemf Pad emits an electromagnetic field when active resulting in the reaction of the tube test magnet, which becomes a faint audible rattle when listening to the test tube. You can test the frequency of pulsed electromagnetic fields during different stimulation programs, as well as observe the change in the strength of the electromagnetic field as the test tube moves away from or closer to Petspemf Pad.

Safety

The Institute for Electrical and Electronics Engineers Standards for Radio Frequency Electromagnetic Field Exposure concluded that "A review of the extensive literature on radiofrequency biological effects, consisting of well over 1300 primary peer reviewed publications published as early as 1950, reveals no adverse health effects that are not thermally related". Non-invasive, non-thermal PEMF technologies have a long history of clinical use. Since the late 1990s, PEMF devices are estimated to have delivered over 3,000,000 treatments without reports of side effects or significant adverse events. Underscoring this

point, two general reviews of clinical PEMF use found no evidence of significant adverse events nor side-effects in the literature reviewed.

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Abstract Inquiry

Abstracts of the selected article for indication: pain, healing per request. Please contact petspemf.com/support

How FDA Regulates Animal Devices

The Federal Food, Drug, and Cosmetic Act (the Act) defines medical device as "an instrument, apparatus, implement, machine, contrivance, implant, in-vitro reagent, or other similar or related article, including any component, part, or accessory, which is ... intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease in man or other animals, or [which is] intended to affect the structure or any function of the body of man or other animals ... ." Further, a device "does not achieve its primary intended purposes through chemical action within or on the body of man or other animals, and ... is not dependent upon being metabolized for the achievement of its primary intended purposes." Examples of devices include such things as needles, syringes, surgical instruments, prosthetic devices, X-ray equipment, certain diagnostic test kits, and dental appliances.

FDA does have regulatory oversight over devices intended for animal use and can take appropriate regulatory action if an animal device is misbranded or adulterated.

Pre-market Approval is Not Required: The FDA does not require submission of a 510(k), PMA, or any pre-market approval for devices intended for animal use.

Device manufacturers who exclusively manufacture or distribute animal devices are not required to register their establishments or list animal devices with FDA and are exempt from post-marketing

reporting. It is the responsibility of the manufacturer and/or distributor of these articles to assure that these animal devices are safe, effective, and properly labeled.

The FDA encourages veterinarians and animal owners to report adverse drug experiences and product defects associated with animal devices to FDA using Form FDA 1932a.

An animal device that is also a radiation emitting electronic product, such as an MRI device intended for animal use, must comply with all requirements for animal devices in addition to applicable requirements for radiation-emitting electronic products in 21 CFR 1000 - 1050. FDA's Center for Devices and Radiological Health (CDRH) is responsible for regulating radiation-emitting electronic products. For further information on CDRH regulations that apply to manufacturers of electronic products, visit FDA's website on Radiation Emitting Products.

Manufacturers and/or distributors of animal medical devices may request a review of their product labeling and promotional literature to ensure that it complies with the Act by emailing AskCVM@fda.hhs.gov. This includes devices marketed in another country and offered for importation into the U.S.

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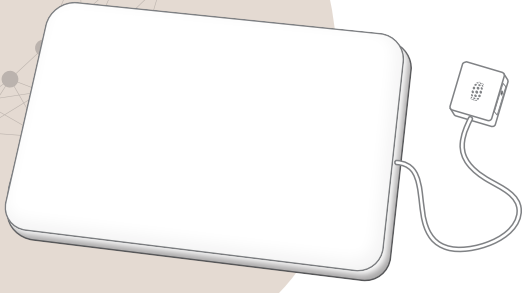

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