

ACTIVO-MED



How does Pulsed Electromagnetic Field Therapy Work?

The Activo-Med products all contain Pulsed Electromagnetic Field (PEMF - magnetic pulses created using electrical energy. PEMF therapy is created by passing an electric current (from the battery) through a number of copper coils. The frequency at which the current is sent is controlled by the control box. This is set up to frequencies suitable for therapeutic use to suit pre and post exercise plus specific conditions and rehabilitation.

PEMF can pass through all muscle tissue, tendons, ligaments and bone to help with wellbeing and regeneration. It can also pass through rugs so it is ok to put on top of a rug on a cold day. (The massage element if used, would need to be close to the body).

How does PEMF work?

The body is made up of numerous cells, all of which need energy to function. Energy is dynamic and has a frequency, which changes all the time. All energy is electromagnetic by nature and all cells produce their own electromagnetic fields. This means that nothing in the body happens without an electromagnetic exchange (trillions of cells are communicating via electromagnetic frequencies). Damaged cells will not have their correct electromagnetic field and their metabolic processes will be impaired.

PEMF helps restore the cells electromagnetic fields and their metabolic processes. The PEMF uses the magnetic pulses it creates to induce tiny electrical signals that stimulate the cell to repair, up-regulating the cells naturally generated energy and allowing them to heal themselves.

The PEMF also has an effect on the cells membrane channels (these control what enters and leaves the cell). It opens up these channels allowing more nutrients into the cell and waste products out, helping to restore the cells optimum balance. If enough cells are restored then they will work more efficiently.

Cells of the same types come together to make tissues and these tissues come together to make organs. So by restoring or maintaining cell function, organ function will also be restored or maintained allowing the body to function better.

PEMF works to:

- Reduce pain, inflammation and the stress on the body
- Improve energy, circulation, blood and tissue oxygenation, sleep quality, stress, blood pressure, nutrient uptake, cellular detoxification and regeneration
- Balance the immune system
- Accelerate repair of bone and soft tissue damage
- Relax muscles.
- Improves Lymphatic system

PEMFs and Magnets: What's the difference?

PEMFs are frequency-based, applied to either the whole body or parts of the body. PEMFs may only be needed for short periods of time, while the effects last for many hours, setting in motion cellular and whole-body changes to restore and maintain balance in metabolism and health. The body does not 'get used to' the healthy energy signals of therapeutic PEMFs, even if used over a long time, compared to magnets.

Stationary (or "static") magnetic fields from magnets have fixed strengths. They are used in mattresses, bracelets, knee wraps etc. Most have a shallow penetration into the body, resulting in a very limited ability to affect deeper tissues, and they rarely treat all the cells of the body simultaneously.

Massage Therapy

Massage causes a physiological response in the body. The main physiological changes are a relaxation response, which is involuntary, and a mechanical response. The mechanical response is the physical effects that occur when pressure is applied. The Activo-Med Combi Pro rug will create these responses in conjunction with the Pulsed Electromagnetic therapy that the horse is also receiving.

Relaxation response:

This is where the heart rate and breathing slow, blood pressure reduces, as does the production of stress hormones, and the muscles relax.

Mechanical response:

Is an increase in blood and lymph circulation plus relaxation.

Less is more: if massage is applied too intensely it could:

- Aggravate existing problems
- Mildly stress the body.

The Activo-Med products have the option of being set up to level 10 intensity. The pre-set programs are set to a maximum of level 6 as a more gentle and sequenced (1-2-3-5-4) massage gives a better result.