What is PEMF?

PEMF (pulsed electromagnetic field) uses electromagnetic fields to stimulate and exercise the body's cells to help resolve cellular dysfunction and support overall wellness. As a natural force, PEMF is all around us in the earth's geomagnetic fields and Suchumann's resonances.

PEMF utilizes magnetic fields that are vibrating and change with time to create a pulsing, moving energy wave. This wave helps to rebalance and regenerate our cells. Everything is energy and all atoms, chemicals and cells produce electromagnetic fields. Every organ in the body also produces its own unique electromagnetic field. The body contains over 70 trillion cells that communicate through electromagnetic frequencies. This electromagnetic exchange controls tissue function. Disruption in this exchange causes impaired cell metabolism or disease.

The goal of PEMF is to increase cell energy and improve cell function by delivering a low frequency pulsed electromagnetic field through a device that mirrors the earth's magnetic field in frequencies and intensities. This non-invasive application helps to promote cells in the body to reach an electric charge at an optimal level, allowing cells to potentially maximize oxygen, water, and nutrients.

PEMF is a full body wellness therapy designed to assist our cells to reach or maintain homeostasis and good health.

How Does PEMF Therapy Work?

One of PEMF's greatest benefits is in the reduction of inflammation and pain in the body stimulated by changes in and around the cells. By sending weak electrical signals, the Calcium ion movement is effected. Calcium becomes bound to create an increased rate of chain of reactions, eventually producing Nitric Oxide, a natural ant-inflammatory. Nitric Oxide then continues the natural healing by reducing pain, improving blood flow, reducing swelling and helps in the production of cGMP, a growth factor producer that helps in the regeneration of blood vessels, tissue growth and remodelling.

Health Benefits of PEMF?

PEMF is a suitable alternative to drugs for the treatment of pain and inflammation in animals due to conditions such as arthritis, wounds or surgery. Pain perception is affected in many ways. It affects calcium ion movement, endorphin levels, acupuncture point stimulation, nerve regeneration, circulation, tissue oxygen and cellular metabolism.

PEMF can be helpful to:

- -reduce muscle tension
- -improve circulation
- -stimulate immune system
- -detoxify the body
- -improve uptake of nutrients
- -balance the endocrine system
- -reduce inflammation

- -regenerate cells and tissues
- -improve cell function
- -reduce edema and swelling
- -sedates bruises and contusions
- -improves sleep
- -reduce stress
- -reduce pain and stiffness
- -improve neuromuscular response

How Can PEMF Benefit My Dog?

PEMF treatments can be used strictly as maintenance or as a preventative to injury, especially for canine athletes or working dogs. Specific conditions can also be treated such as:

- -decreased mobility
- -hip dysplasia
- -muscle atrophy and stiffness
- -ligament injuries
- -sprains, strains or tendonitis
- -fresh or delayed union bone fractures
- -degenerative joint disease
- -tendon issues
- -arthritic conditions
- -abscesses or wounds

- -immune system disorders
- -behaviour and emotion disorders

What is Involved in a Treatment?

The PEMF system used is the iMRS 2000 Professional by Swiss Bionic Solutions. The unit consists of a massage table sized mat, a pillow and a probe.

The whole body mat is used to enhance circulation and oxygen delivery for improved energy, stamina, sleep and overall wellbeing. The smaller pillow applicator can be used on more specific areas of any part of the body. It can be used to release muscle tension, decrease muscle soreness, especially after strenuous exercise or an injury. The pillow is also beneficial in supporting the liver, lungs, kidneys, pancreas, digestive tract and lower abdominal organs. It can also be used for pain relief and discomfort. The probe is used to deliver a more intense wave to a smaller, more specific area of the body such as a joint, sinuses, or point tender spot in a muscle.

Depending on your dog's presentation, one or all 3 applicators may be used in a treatment. Your dog may only need as little 8 minutes or up to 60 minutes. After 60 minutes the maximum therapeutic value has been reach in a 24 hour time period. It is most beneficial when used immediately after an injury (acute) for a period of up to one week and more regularly for older (chronic) injuries. PEMF is an excellent choice for prevention of illness or injury. It can be used in combination with other therapies such as red light therapy and massage to improve results.