

PEMF re-energizes damaged cells by inducing a tiny electromagnetic signal within each cell, which in turn increases the spin of electrons and charges the cell membrane. As a result, membrane ion channels open. These channels are like the doors and windows of a house. By opening cell channels, nutrients and oxygen are better able to enter the cell, and carbon dioxide is more easily eliminated from the cell. It is this amplified electron spinning that restores the cell's transmembrane potential and brings the cell to homeostasis, restoring optimum cell function. Regular use of PEMF leads to every cell in the body improving how it absorbs nutrients, gets rid of waste, and repairs itself.

## PEMF affects the intracellular signaling system in multiple ways. Some of the key mechanisms are:

**CALCIUM SIGNALING:** PEMF has been found to elevate intracellular calcium levels. This increase in calcium concentration can activate various signaling pathways, resulting in accelerated healing, improved cellular functions, and reduced inflammation.

**ACTIVATION OF ION CHANNELS:** Studies have demonstrated that PEMF can activate various ion channels, particularly those responsible for the transportation of sodium, potassium, and calcium ions. The movement of these ions in and out of cells can modify or modulate cellular activity, affecting processes such as cell growth, differentiation, and communication between cells.

**ENHANCED PRODUCTION OF CELLULAR ENERGY (ATP):** PEMF has been shown to stimulate the production of ATP (adenosine triphosphate), which is a primary energy source for cells. Higher ATP levels can boost cellular metabolism, fueling cell repair and improving overall cell function.

**ANTI-INFLAMMATORY EFFECTS:** PEMF therapy can activate anti-inflammatory signaling pathways, reducing inflammation and promoting cellular regeneration. The activation of these pathways may also contribute to pain relief, tissue repair, and improved wound healing.

**MODULATION OF NEUROTRANSMITTERS:** Recent studies indicate that PEMF can affect neurotransmitter release within the nervous system, with potential implications for mood, pain sensitivity, and cognitive function. PEMF has been shown to modulate the release of neurotransmitters such as serotonin, dopamine, and endorphins, which can further influence intracellular signaling.

Safe - Non-invasive - Portable and Compact - Easy to use - Low operating cost - Immediate results