



What's The Science?

Frequently Asked Questions

What is microcurrent?

Microcurrent is electrical current in millionths of an ampere (amp). Microamperage current is the same kind of current your body produces on its own within each cell. The current is very small. There is not enough current to stimulate sensory nerves so the current flow cannot be felt.

Why use micro for healing?

Microcurrent technology has been used for many decades and is used in some wound healing and bone healing devices. This is because microcurrent has been shown to increase cell energy (ATP) by up to 500% (Cheng, 1982). This study also found improvement in oxygenation and cell repair as well as boosting protein synthesis by 70%. See our list of publications below.

Is all micro the same?

No, early units and units used for wound healing typically use one or two frequencies as the current is delivered to the injured area or body. HoweRT® Micro devices use complex programming based on Resonance Theory. There are a number of technical parameters that are controlled for; including timing, waveform, polarization and "ramping". These parameters have been clinically developed to allow for advanced programming and much better clinical outcomes.

What is resonance theory?

First it is important to understand what frequency is. Frequency is the number of cycles per second of any wave; this is called Hertz. Resonance theory is about creating resonance, or coherence, between two energetic waves. It is based on the assumption that physical tissue has a "bioelectric/magnetic" signature. (A frequency that the tissue/organ is at when in a healthy state). ALL electrical current also has a frequency.

How is resonance used?

As an early instructor of Frequency Specific Microcurrent (FSM) Vanessa Howe was an early instructor in teaching practitioners how to use resonance to enhance clinical outcomes. The theory behind this is that if it is possible to heal tissues (with something like microcurrent), then the positive effects could be amplified by "matching" the frequency of the current to the frequency of the tissue injured. HoweRT® advanced programming takes it a step further in developing programs that not only attempt to match the injured tissue, but to match the typical cycle of healing in order to further enhance the outcomes. For this reason, her programs have been used to help heal top professional athletes.

Where do the frequencies come from?

Frequencies used by HoweRT® are published and accepted by the general community of established practitioners. The bulk of recent contributions to these lists have come from Dr. Charles McWilliams, who published a comprehensive list in Radiotherapy in Electroacupuncture in 1994. Other contributors to the field date back as far as the early 1900s with Dr. Albert Abrams, who published early frequencies in very early medical journals.



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Is resonance only used with microcurrent?

No, resonance is the concept of matching a bio-electric/bio-magnetic property of two entities. Resonance can be created with any modalities that can emit a frequency or waveform. Howe Resonance Technologies is dedicated to the development of resonance based technologies in viable, safe and effective devices.

What is Magnet/PEMF?

PEMF stands for Pulsed ElectroMagnetic Field. It is one of the newest areas of using resonance and energy to promote healing and wellness in the body. PEMF uses a magnetic field to induce energy flow to the cells and tissues of the body. It is very effective at improving circulation, but also for promoting healing. Long used in bone and skin/wound healing units, the key to optimizing the healing is the proper use of frequencies, which are embedded in the Magnet Field. Typically accepted uses of PEMF are: improving circulation, improving healing, reducing pain or inflammation and overall energy support.

How are HoweRT magnetic converters different from others?

Like all energy healing devices, the programming matters! HoweRT® Magnetic Converters utilize the clinically proven programs of the Micro Sport® devices! One of the most appealing aspects of the PEMF device is not needing to be 'hooked up'. Magnetic transducers only need to be in the general area of treatment to be effective. To learn more about PEMF and the Magnetic Converters, check out this video from our very own Vanessa Howe.

Does magnet/PEMF therapy work?

PEMF therapy has been used consistently since the 1970s in the US. There are hundreds of research papers studying PEMF over the decades. Results in these studies vary greatly, but overall the clinical and personal responses validate that it is a valuable and worthwhile tool.

Current Research

[Frequency-Specific Microcurrent as Adjunctive Therapy for Three Wounded Warriors](#)

[Frequency-Specific Microcurrent for Treatment of Longstanding Congenital Muscular Torticollis](#)

[Microcurrent Stimulation in the Treatment of Dry and Wet Macular Degeneration](#)

[The Efficacy of Frequency Specific Microcurrent Therapy on Delayed Onset Hamstring Muscle Soreness](#)