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Chapter 19: The Science of Bioenergetic and Bioelectric Technologies: Cellular Mechanisms

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Abstract:

Cells and cell components are designed to both transmit and receive electromagnetic energies through both biological electronic circuits and wireless communication mechanisms. This paper addresses the concept of resonant frequencies, resonant energy transfer, the electronic properties of cells and tissues and signal induction through resonant energy transfer. Frequency modulation of the body's oscillating electromagnetic field provides the capability of using the body's own energy field as a carrier wave for information; much like a radio station frequency modulates a radio signal with voice information. Selection of the proper frequency code can be utilized to activate cellular processes such as providing pain control, improving wound healing, increasing antioxidant production, increasing energy production through acceleration of fat metabolism or stimulating the production of hormones.

Key words: bioelectric, resonance, frequency-modulation, molecular antennas, electromagnetic, biomagnetic