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EESystem Clinical Study Summary (Layman's Version)

Dr. Glen Rein, PhD

Quantum Biology Research Lab – 2025

Abstract

This summary outlines the findings of a 2025 study conducted by Dr. Glen Rein, PhD, at the Quantum Biology Research Lab. The investigation explored how the Energy Enhancement System (EESystem) influences the electrical properties of human cells. Using electrochemical impedance spectroscopy (EIS), researchers observed measurable changes in 92% of participants following exposure to a 48-unit EESystem. Results suggest that the system may promote energetic balance within the body by modulating cellular conductivity in alignment with each individual's physiological needs.

Purpose of the Study

The study explored whether sitting in an Energy Enhancement System (EESystem) — a technology that produces non-classical electromagnetic fields (“scalar waves”) — could measurably change the electrical energy inside human cells. Electrical energy is important because every cell in your body uses it to stay healthy, repair itself, and communicate with other cells.

How the Study Was Done

Participants: 25 volunteers

Exposure: 24 hours total inside a 48-unit EESystem, spread over three days

Cells Tested: Cheek cells (easy to collect and test fresh)

Measurement Tool: Electrochemical Impedance Spectroscopy (EIS) – a precise method that measures how well electricity flows through cells

Frequency Used: 13.9 kHz — a natural “resonance frequency” of cheek cells, which gives more accurate readings

Main Findings

23 of 25 participants (92%) showed measurable changes in cellular electrical energy. Five individuals (20%) showed increased electrical conductivity, while 18 participants (72%) showed decreased conductivity. Two participants (8%) demonstrated no significant change.



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What the Changes Mean

Decreased conductivity likely represents a restorative, healing phase where the body conserves energy. Increased conductivity may indicate revitalization or heightened energy flow. The direction of change appears individualized, with each body responding according to its current energetic needs.

Scientific Interpretation

The findings suggest that the EESystem can modulate bio-electrical energy within human cells. The body appears to self-regulate toward balance — some individuals experience activation, others relaxation — indicating homeostatic normalization of energy flow.

Why It Matters

Cell membranes act like biological batteries, storing voltage that drives healing and communication. When this voltage weakens, cellular repair and vitality diminish. The EESystem may help restore optimal cellular voltage, supporting recovery and rejuvenation.

In Simple Terms

After time in the EESystem, nearly everyone's cells changed how electricity flowed through them — either slowing (deep healing) or speeding up (energizing). The system seems to help the body find balance — whether calming down or powering up.

Quick Stats Recap

Participants: 25

Exposure: 48-unit EESystem (24 hours total)

Change detected: 92%

Range: -315% to +219%

Strong effects (>100%): 8 participants

Overall: Normalization of cellular energy flow

Takeaway

The Energy Enhancement System appears to help the body self-regulate its energy at the cellular level, potentially supporting healing, restoration, and vitality through modulation of the body's own electrical systems.

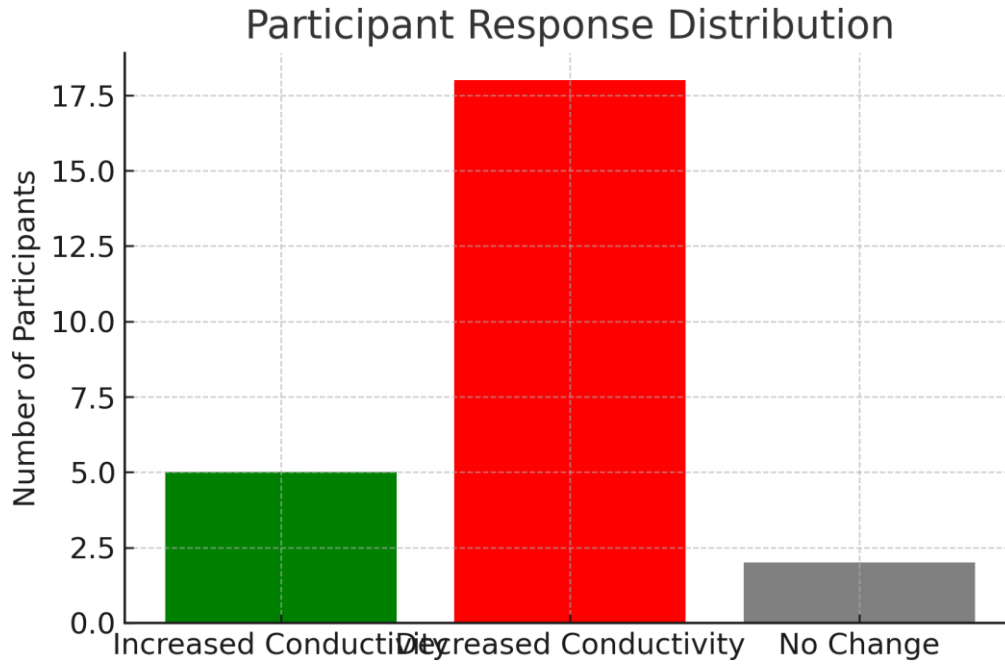


Figure 1. Participant response distribution showing increase, decrease, or no change in conductivity.

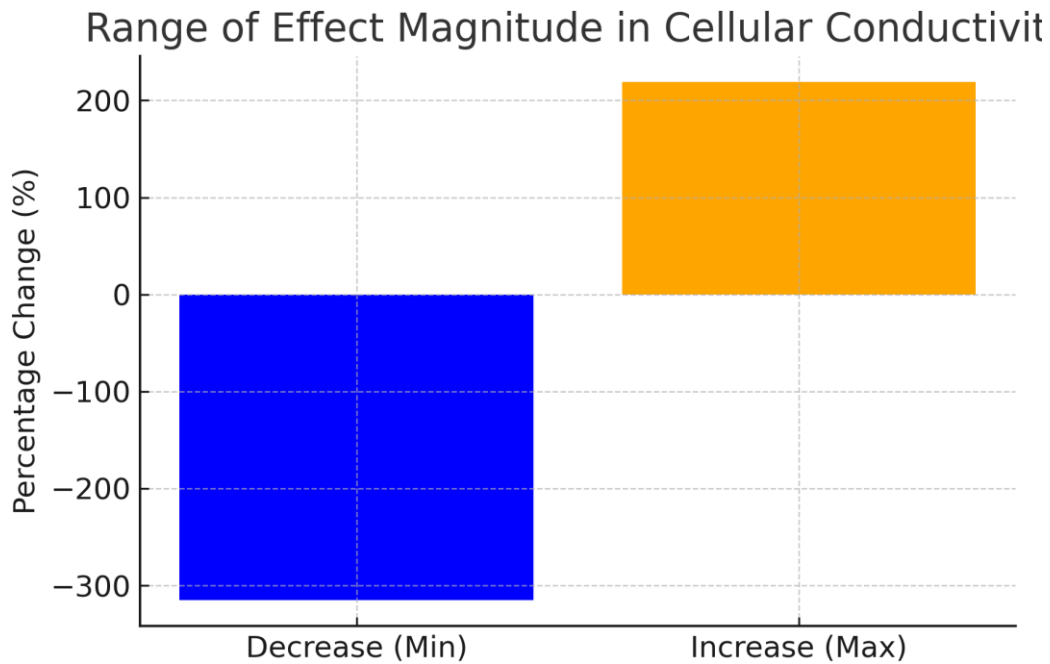


Figure 2. Range of observed effect magnitude in cellular conductivity (% change).



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Original Glenn Rein Document:

EFFECT OF EE SYSTEM ON CELLULAR ELECTRICAL ENERGY

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Executive Summary

The electrical properties of human cheek cells were measured before and after exposure of 25 subjects to the EE System. The results of the present study indicate that 92% (23 out of 25 subjects) showed changes in the (electrical) energy flowing through their cells and therefore the energy in their cells after 24 hours of exposure (over three days) to a large 48 units EE System. Only five subjects showed an increase in conductivity (ranging from 32-119%), whereas the majority of respondents showed a decrease in conductivity (ranging from 26-315%). Of these individuals eight subjects showed very large effects, greater than double (100%). Why so many individuals showed a decrease conductivity and why so many showed such a large effect is discussed. The results clearly show the validity of the new method and the efficacy of the EE System to affect bio-energy.

Introduction

Numerous PEMF devices are now commercially available offer a wide variety of different energies to facilitate healing. Classical electromagnetic (EM) EM fields are well known to promote bone healing and since this original discovery in the 1970s numerous scientific studies have demonstrated efficacy in a variety of pathological conditions, including cancer (Jimenez, 2018). The EE system is unusual in that it involves non-classical EM fields which is an umbrella term for those EM fields that are not described by the classical equations of Maxwell and Hertz. Such fields are now recognized by main stream physicists which are called longitudinal scalar waves (Monstein, 2002) and a new extended electrodynamic theory supporting such fields has now been developed and published in main stream physics journals (Reed, 2020). The issue is the biomedical community which still does not recognise the biological effects of these fields which have been shown in-vitro by some scientists (Rein, 2002). For example, it has previously been shown that human DNA is sensitive to the longitudinal scalar waves from the EE system which responds by increasing



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its electrical conductivity by 28% (Rein, 1998). Most recently a clinical trial was conducted in a 24-base unit which decreased biological ageing (Hsu, 2024.). The present study was designed to measure both electrical activity and HRV of subjects exposed to a 48 Unit EE system for 24 hours over the course of 3 days. Only the electrical measurements will be presented in this report.

Methods

Electrochemical Impedance Spectroscopy (EIS) was used to measure the electric properties of human cheek cells before and after treatment with the EE system. EIS is an established method in the scientific literature to measure the dielectric properties of living cells in the human body (Abasi, 2022). Cells are placed in between two electrodes, one of which generates a voltage in the form of an electric field and the second electrode measures the induced current. The induced current is measured in terms of electrical impedance (resistance to the flow of electricity) which is reciprocal to electrical conductivity. The advantage of measuring conductivity with EIS is that the device allows the user to measure the electrical properties at any specific desired frequency. It is well known that the dielectric properties of biological systems are frequency dependent (Gabriel, 1996). Ordinary electrical conductivity is measured at a fixed frequency of 2kHz, which is an arbitrary choice made by the electrical engineers without taking into account the biological implications. With EIS, the user can take measurements at any desired frequency. Impedance measurements in these experiments were taken at 13.9 kHz because previous experiments showed that frequency is a resonance frequency of cheek cells in suspension. The resonance frequency of cheek cells was also determined using EIS because this method measures impedance as a function of frequency. At specific frequencies there is a large increase in impedance indicating that these frequencies are resonant frequencies. Interestingly enough, at some frequencies the impedance is increased, whereas at other frequencies it is decreased. In these experiments, frequencies which produced a positive impedance and those producing a negative impedance were manually recorded giving a total set of frequencies associated with the cheek cells. 13.9kHz was chosen because it is a particularly strong resonant frequency. Taking electrical measurements at a resonant frequency of the biological system offers increased sensitivity and accuracy.

Impedance spectroscopy of biological systems is a measure of the flow of energy through the cells. Electrical energy is fundamental for all biological systems, not only excitable nervous tissue, but from all living cells because electrical energy flows across all cell membranes which are negatively charged on the outside and positively charged on the inside. Electrical energy is of interest to the alternative medical community, because it is a



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measure of the ability of cells to utilise electrical energy (and therefore most likely other types of energy). A recent book, Healing is Voltage is a detailed discussion about electrical energy in the body and its role in health and disease (Tennant, 2010). It is shown that the electrical energy across the cell membrane (membrane potential) is critical for health.

Buccal epithelial cheek cells were chosen for this study because of the ease in obtaining fresh living cells from humans exposed to various EM technologies. In contrast, fresh blood cells are difficult to obtain and require a nurse. Cheek cells are readily available by scraping the inside of the mouth with a dull knife, collecting the cells on the surface of the knife and transferring those cells directly into water. These solutions were collected for each subject before and after exposure to the EE System and measured for their electrical properties as described above.

Numerous studies have now been published in mainstream scientific journals measuring the biochemical, genetic and morphological properties of human cheek cells (OBwald, 2003), including the effects of electromagnetic fields (Mudrak, 2017). In addition, scientific publications have measured the dielectric and impedance properties of cheek cells, which have been shown to be frequency dependent (Lackovic, 2007). Therefore, this method, although new to the alternative energy community, is a valid scientific method for measuring the effects of the EE system on living human cells at the clinical level.

Results

The average impedance values for each subject, before and after being exposed to the EE system for 24 hours is presented in Table 1 below. In addition, the percentage change was calculated. A positive percentage means the after values were higher than the before values and the impedance was therefore increased. This corresponds to a decrease in conductivity which occurred for most subjects. Two subjects had values of plus and minus 8%, but previous control experiments indicate that day to day variations in the absence of any energetic interventions also produces an 8% (or lower) change. Therefore, these two subjects did not change after treatment with the EE System. Five subjects showed a decrease in impedance indicating an increase in conductivity, ranging from 32% to 119%. Changes above 100% indicate a doubling of the conductivity, which is a strong effect. It is not clear why these five subjects all showed an increase in conductivity, unlike most of the subjects.



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Discussion

The results of the present study indicate that 23 out of 26 subjects showed changes in the (electrical) energy flowing through their cells and therefore the energy in their cells after 24 hours of exposure to a large 48 units EE System. Most subjects showed a decrease in conductivity which is most likely explained by the HRV data obtained from the same individuals in the present study. Virtually all the subjects showed a weak regulatory control of their heart rate. This physiological state of most subjects (weak heart regulation and low conductivity) could both be caused by a slow metabolism. Most of these subjects need to slow their system down in order to deal with their unhealthy physiological state. In a separate study it was shown that most individuals directing their bio-energy inward could slow down the rewinding of the two strands of their DNA (Rein, 2024). Thus their internal energy and therefore their internal physiological state had a tendency to slow down. Another study showed that most subjects lower the amount of energy they release into the environment, when their body was being stimulated by acupuncture needling (Yang, 2019). The hysteresis phenomena has been described in the body, whereby enzymes slow down their metabolic responses to certain chemical stimuli (Frieden, 1970).

This slowing down phenomena even occurs in nature when ions of charged particles interact with electrons. The resonant interactions cause an exchange in energy, which results in a less energy transfer when the ions slow down. Since ions and electrons also occur in the body, this phenomena could explain how and why biological systems need to slow down (Stevens, 2016).

Furthermore, previous experiments by the author has shown that humans exposed to energy from healers and energy from light therapy devices decreases the conductivity of their cheek cells. Thus the intuitive notion that healing energy should increase electrical conductivity in the body is not always true. Previous studies by the author indicate that some energies increase the electrical properties of the body and other energies decrease it. In the present study it is shown that the same energy can increase or decrease electrical conductivity, depending on the individual and their basic state of health.

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Table 1: The Effect of the EE System on Electrical Properties of Cheek Cells

| | Average before | Average after | % Change |
|-----------|----------------|---------------|----------|
| Austin P | 46.7 | 90.8 | 94.4 |
| AngelaC | 36.65 | 516 | 40.8 |
| April J | 56.5 | 97.2 | 72.0 |
| Brandon C | 59.15 | 54.45 | - 7.9 |
| Carlo V | 36.25 | 57.35 | 58.2 |
| Collin H | 45.85 | 88.1 | 92.1 |
| Cheri F | 28.4 | 35.8 | 26.1 |
| Debby H | 33.9 | 50.65 | 49.4 |
| Eveylyn K | 26.5 | 23.45 | - 11.5 |
| Ivy A | 177 | 89.75 | - 119 |
| Jen D | 12.8 | 26.15 | 104.3 |
| Joshua B | 68.85 | 44.6 | - 35.2 |
| Lephoung | 14.05 | 44.95 | 219.9 |
| Martha N | 16.7 | 42.75 | 156.0 |
| Melissa P | 29.3 | 15.65 | - 46.6 |
| Pamela R | 98.95 | 266 | 168.8 |
| Saderia | 53.45 | 90.85 | 70.0 |
| Sandy P | 35.55 | 108.65 | 205.6 |
| Shana T | 63.6 | 119 | 87.1 |
| Shelby L | 50.05 | 711 | 42.1 |
| Shirley T | 48.45 | 100.8 | 108.0 |
| Sonia L | 64 | 142 | 121.9 |
| Stephen C | 80.75 | 87.25 | 8.0 |
| Theophila | 57.1 | 38.8 | - 32.0 |
| Wassa | 19.9 | 82.5 | 314.6 |