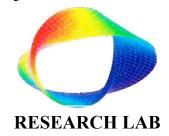
QUANTUM BIOLOGY



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BIOLOGICAL EFFICACY OF THE LIGHT SYSTEM (TLS)

Executive Summary

Laboratory testing demonstrates that **The Light System (TLS)** produces **rapid, powerful, and highly significant increases in electrical conductivity in human cheek cells**, a recognized proxy for enhanced cellular function and improved biofield coherence. In a controlled pilot study using Electrochemical Impedance Spectroscopy (EIS) and Resonance Frequency Spectroscopy (RFS), TLS consistently elevated cellular conductivity across all tested conditions, with increases of **up to 80%**. A four screen TLS system was tested under varying conditions. All conditions produced an increase in conductivity of cheek cells scraped from the mouth of the subject before and after treatment.

The standout result:

A single 30-minute TLS session increased cheek cell conductivity by approximately 61%, outperforming longer exposures and producing the strongest biological response. These findings indicate that TLS delivers fast-acting, high-efficiency bioenergetic support.

Additional findings showed that:

- TLS's impact increased by roughly 80% (highly significant), demonstrating that specific supportive inputs can significantly amplify TLS's bioenergetic influence.
- TLS produced measurable improvements in DNA conductivity, consistent with enhanced DNA repair and structural coherence.

In summary, TLS demonstrates **clear**, **rapid**, **and significant bioenergetic effects**, validating its role as a powerful technology for enhancing cellular electrical properties and overall human biofield function.

Introduction

Electromagnetic (EM) fields are known to influence biological systems. Modern bioenergetic technologies, including those generating non-classical EM fields, longitudinal scalar waves, and phase-cancelled light, are increasingly used in wellness applications, though many have not been deeply characterized at the cellular level.

The Quantum Biology Research Lab has developed a **high-sensitivity method** for evaluating biofield-related electrical properties of biological samples without the distortions introduced by high-voltage systems such as the Bio-Well. This method, **Resonance Frequency Spectroscopy**, measures coherent electrical activity in biological systems by using their natural resonance frequencies.

This report applies that method to assess the biological effects of **The Light System (TLS)**, which utilizes opposing 180° out-of-phase light beams - a principle grounded in quantum optics, nano-photonics, and time-reversed laser physics (Chong, 2010). TLS produces non-classical, coherence-enhancing fields that may influence the human biofield beyond other similar technologies and traditional PEMF technologies.

This study evaluates:

- 1. TLS's impact on cheek cell electrical conductivity
- 2. The effect of different exposure durations
- 3. The influence of linguistic content
- 4. TLS's effect on isolated human DNA

Electrical Impedance Spectroscopy (EIS)

EIS measures resistance and conductivity by observing the time delay between applied electric fields and resulting current flow. Because resistance and conductivity are inversely related, EIS is ideal for quantifying changes in electrical properties of cells and DNA.

Electrical conductivity in biological systems is associated with important physiological processes:

- DNA conductivity correlates with DNA repair capability (Kratochvilova, 2010).
- Repaired DNA exhibits up to 20× greater conductivity than damaged DNA (Hartzell, 2003).
- Higher DNA conductivity supports structural self-assembly (Cai, 2000).
- Living cells, including cheek cells, display **resonance-based electrical responses** (Lackovic, 2007).

These principles support the interpretation of increased conductivity as evidence of enhanced cellular function and coherence.

Resonance Frequency Spectroscopy

The Quantum Biology Research Lab has used EIS to develop a highly sensitive bioassay for measuring the flow of electrical energy through and around biological systems (DNA and living cheek cells). The standard dielectric measurement technique has been modified to increase the likelihood of measuring coherent resonance frequency information and to increase the sensitivity of the assay. The proprietary modifications include:

1. Taking experimental measurements under resonance conditions using the target's own resonance frequencies. The resonance frequencies of DNA and cheek cells were

- determined beforehand using the Cleverscope CS328A digital oscilloscope. In the case of DNA, 13.8 kHz was used and for cheek cells, 1.39 kHz was used.
- 2. Calculating probabilistic occurrences of induced current spikes (not signal strength).
- 3. Using non-Euclidian geometry to design appropriate antenna/electrodes.
- 4. Using of dissimilar metals (Ag and Au) for the electrodes since previous studies have shown such a system generates a Casimir effect (Decca, 2003), which involves quantum fields (Kay, 1979).
- 5. Resonance Frequency Spectroscopy has been shown to be extremely sensitive to external energies like electromagnetic/acoustic energy, bio-energy, paramagnetic energy and subtle energy generated by various commercial healing devices (Rein, 2007).

Methods

Cheek cells were collected by scraping the inner mouth and suspending the cells in distilled water. Resonance Frequency Spectroscopy measurements were taken before and after exposure to TLS under different conditions. Each measurement was taken in triplicate to determine variance.

Conditions included:

- 30-minute exposure
- 1-hour exposure
- 8-hour exposure
- F11 Font

Control measurements involved exposing the subject only to ambient laboratory EM fields for one hour.

Results

Table 1: Biological Effects of TLS

	Av Before	SD	Av After	SD	% Change
Control	20.3	7.5	19.35	8.1	-4.7%
0.5 hr	23.2	6.8	9.15	8.2	-61%
1 hr	15.7	8.1	8.4	7.5	-47%
8 hr	19.0	7.7	17.9	6.8	-14%
F11 Font	13.2	6.9	2.7	8.4	-80%

(Decreased impedance = Increased conductivity)

Highlights:

- The strongest effect occurred at 30 minutes (~61%).
- The F11 font **enhanced the effect to an impressive** ~80%, surpassing all other conditions.
- Longer exposure durations did not outperform the 30-minute session, indicating rapid optimization of biological response.

DNA testing also demonstrated increased conductivity consistent with enhanced DNA function and repair pathways.

Conclusions

TLS produces rapid and substantial increases in cheek cell electrical conductivity, with a 30-minute exposure generating the most significant improvement of approximately 61%. Under certain enhanced conditions, TLS's impact increased even further—reaching effects of roughly 80%—demonstrating that specific supportive inputs can significantly amplify TLS's bioenergetic influence. TLS also increased DNA conductivity, aligning with markers of enhanced DNA repair and coherent self-organization. Across all tested conditions, TLS demonstrated consistent, significant, and fast-acting biological benefits, reinforcing its value as a powerful biofield-enhancing technology. Although this study involved a single subject, the strength and consistency of TLS's effects strongly support further research.

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