

# The Effects of the EarthCalm Quantum Cell on Heart Rate Variability and the Biofield – Part 1

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EarthCalm Summary of Report:*

## **Abstract:**

Exposure to a cell phone for three minutes causes adverse health effects, as demonstrated by electrodermal screening technology (EDS). EDS assesses meridian flow and thus organ and system function. Participants were tested before and after cell phone exposure. After returning to baseline measurements the participant was retested with the EarthCalm Quantum Cell attached to the phone.

When tested with the Quantum Cell attached, half of the participants in the study experienced 100% elimination of all negative effects.

## **Introduction**

EarthCalm products are designed to protect the human nervous system from the hazards of manmade electromagnetic fields, which surround everyone. They do this by enhancing a person's connection to the earth's electromagnetic field, which allows the dissipation of stress producing currents.

This study shows the ability of the EarthCalm Quantum Cell to reverse the deleterious health effects of cell phone exposure, electromagnetic radiation (EMR). Exposure to a stressor can produce measurable changes in EAV (electro-acupuncture according to Voll). Dr Reinhold Voll is the inventor of this type of assessment. It is also called computerized electrodermal screening (EDS).

The Avatar instrument is based upon the principles of EDS, which takes advantage of the electrical conductivity of the acupuncture system. Using this technology, one can gauge the health of meridians and therefore the associated organs by the amount of electricity that passes through the meridian.

The readings are as follows-100 units of electricity are passed through the meridian through an acupoint on the hands or feet. If 50 units come out to the other hand, which is holding a copper "handmass" then that meridian is functioning well and healthy. If more is returned, the organ is inflamed and has a more acute condition and if it is lower than 50, the organ has a more chronic condition and is functioning below normal.

As demonstrated in this study, using the EarthCalm Quantum Cell reverses the negative health effects of cell phone use, as shown by the EAV test.

## Methods

In this study, 10 healthy participants were assessed before and after a three-minute exposure to a 3G Apple iPhone (SAR 1.39 watts/kilogram). For this test, acupoints were measured with the Avatar. The participant was lying down during the phone exposure and the phone was placed on a pillow next to the ear. The test was repeated with the EarthCalm Quantum Cell attached to the phone. The subject did not know when the phone had the Quantum Cell attached.

After demonstrating a return to baseline measurements after cell phone exposure using a heart monitor, the participant was retested with the EarthCalm Quantum Cell attached to the phone (three-minute duration of exposure).

## Results

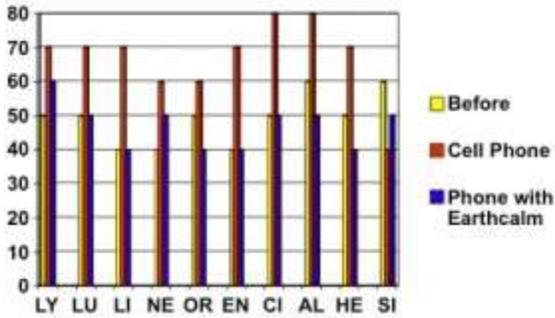
The results of electrodermal screening show that most or all of the negative changes in these measures are partially or fully reversed by the EarthCalm Quantum Cell. It should be noted that a reading of 50 is normal, a reading above 50 represents an acute response and a reading below 50 a chronic response that most likely indicates a deficiency in the functioning of that system.

Table 1 represents the summary of results of testing for each participant. As shown, five subjects had complete elimination of all negative effects from cell phone exposure (up to 9 meridians) when using the phone with the EarthCalm Quantum Cell. Most of the negative effects were reversed. Nine out of 10 subjects had a minimum of 2 reductions of negative effects and all but 1 of the subjects had at least 50% of the negative effects reversed. These reversals ranged from 30 to 100% and as shown in Table 1, 35 of the negative effects on meridians were 100% reversed, 6 were 70% reversed, 5 were 50% reversed, 4 were 30% reversed (45 total), compared to 17 that were not reversed. Only 2 subjects had less than half of the negative effects reversed.

**Table 1.** Overall results of EAV testing show a reversal of deleterious effects by the EarthCalm Quantum Cell (EQC).

Figures 1-10 show results of electrodermal screening for each participant.

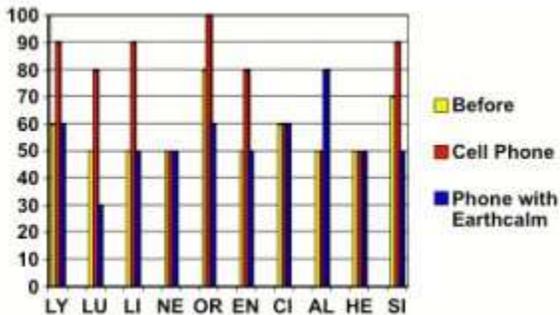
Figure 1 shows results for a participant that responded with 9 out of 10 meridians negatively affected by the cell phone. As seen, 9 out of 10 meridians showed an acute negative response to cell phone exposure and all of these were fully or partially eliminated by the EarthCalm Quantum Cell. Seven of the negative effects on the meridians and the corresponding systems were 100% reversed and the remaining 2 that were negatively affected were 50% reduced.



**Figure 1.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

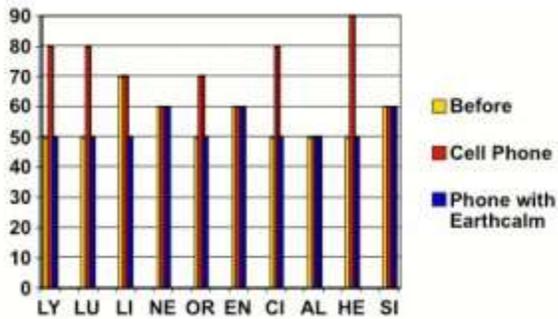
Figure 2 shows results for a participant that responded with 6 out of 10 meridians showing an acute negative response to cell phone exposure and all of these were 100% eliminated by the EarthCalm Quantum Cell.



**Figure 2.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

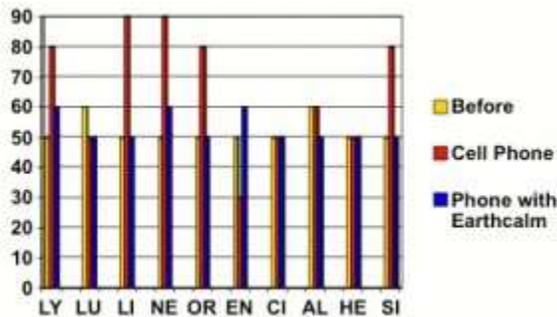
Figure 3 shows results for a participant that responded with 5 out of 10 meridians showing an acute negative response to cell phone exposure and all of these were 100% reversed by the EarthCalm Quantum Cell. Results for the large intestine meridian show that although the cell phone did not increase the reading above baseline, the EarthCalm Quantum Cell normalized the reading to an improvement over the baseline reading of 60.



**Figure 3.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

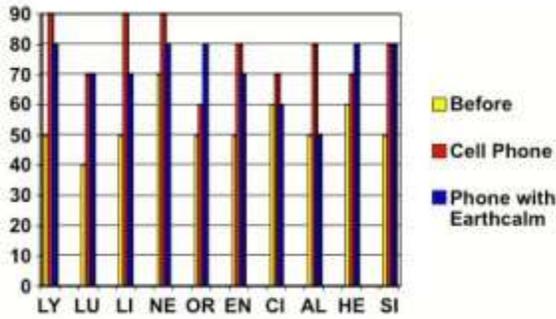
Figure 4 shows results for a participant that responded with 5 out of 10 meridians showing an acute negative response to cell phone exposure and all of these were fully or partially reversed by the EarthCalm Quantum Cell. Three of the negative affects were 100% eliminated and 2 were 70% reversed.



**Figure 4.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

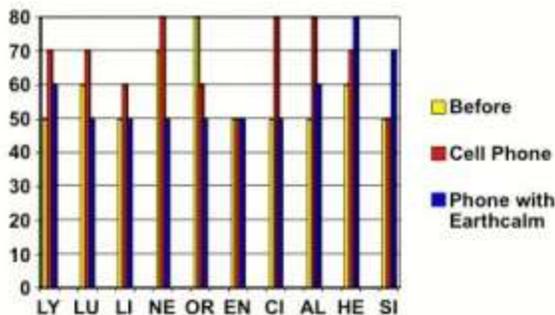
Figure 5 shows results for a participant that all 10 of the meridians and corresponding systems were negatively affected by cell phone exposure. As shown, 2 of the changes induced by the cell phone exposure were 100% eliminated by the EarthCalm Quantum Cell, 2 were 50% reversed and 2 were 30% reduced. Two of the changes were not reduced and 2 were further exacerbated.



**Figure 5.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

Figure 6 shows results for a participant that responded with 7 out of 10 meridians showing an acute negative response to cell phone exposure and all of these were fully or partially reversed by the EarthCalm Quantum Cell. Four of the negative affects were 100% eliminated and of the remaining 3 that were negatively affected, 1 was 70% reduced, 1 was 50% reversed and 1 was further exacerbated. For the lung and organ meridians (which had a baseline of 60 and 80, respectively) EarthCalm normalized the EAV readings to 50,

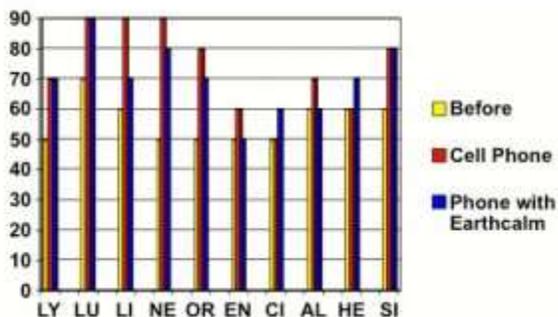


**Figure 6.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

Figure 7 shows results for a participant that responded with 8 out of 10 meridians showing an acute negative response to cell phone exposure and all of these were fully or partially reversed by the EarthCalm Quantum Cell. Two of the negative affects were

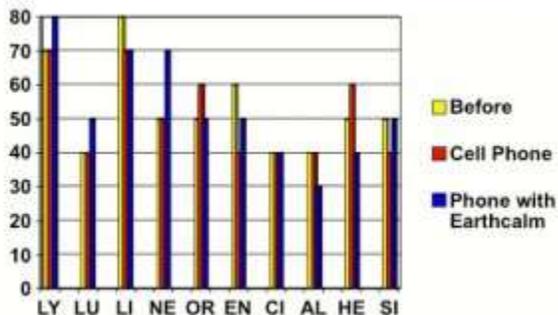
100% eliminated and of the remaining 6 that were negatively affected, 1 was 70% reversed, 2 was 30% reduced and 3 were not reversed.



**Figure 7.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

Figure 8 shows results for a participant that responded with 2 out of 10 meridians showing an acute negative response to cell phone exposure and both of the negative effects were 100 % eliminated. For the endocrine meridian, the EAV reading was normalized to 50 from a baseline of 60 and cell phone exposure reading of 40.

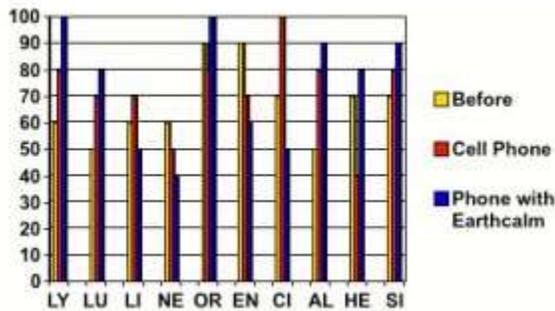


**Figure 8.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, AL-allergies, HE-heart, SI-small intestine.

Figure 9 shows results for a participant that responded with 6 out of 10 meridians showing an acute negative response to cell phone exposure and all of these were fully or partially reversed by the EarthCalm Quantum Cell. Two of the negative affects were

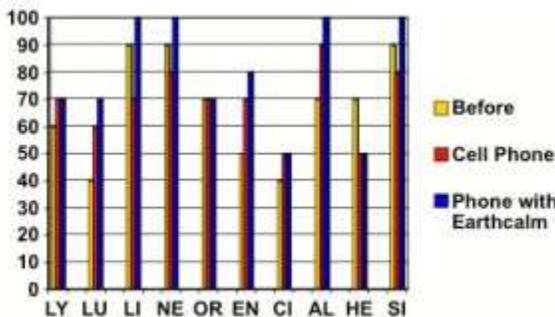
100% eliminated and 4 were further exacerbated. For the endocrine meridian, Earthcalm normalized the reading from a baseline of 80 and cell phone exposure reading of 70 to 60. For the large intestine meridian, the reading was normalized to 50 from a baseline of 60 and cell phone exposure reading of 50.



**Figure 9.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the Earthcalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

Figure 10 shows results for a participant that responded with 5 out of 10 meridians showing an acute negative response to cell phone exposure. Two of the negative affects were not reduced and 3 were further exacerbated.



**Figure 10.**

Electrodermal screening (EAV) shows reversal of deleterious cell phone EMR effects. The y-axis shows EAV readings and the x-axis shows measures for meridians before cell phone use (in yellow) after cell use (in red) and after cell phone use with the EarthCalm Quantum Cell (in blue). The meridians are defined as follows: LY-lymph, LU-lung, LI-large intestine, NE-neuroendocrine, OR-organs, EN-endocrine, CI-circulation, AL-allergies, HE-heart, SI-small intestine.

## Discussion

Results of this study indicate that exposure to a cell phone for three minutes causes deleterious health effects as demonstrated by Avatar electrodermal screening technology. These effects are eliminated fully or partially by the EarthCalm Quantum Cell.

In 5 out of 10 participants, all of the negative effects of cell phone exposure (up to 9 meridians) were completely eliminated by the EarthCalm Quantum Cell and in the remaining subjects, most of negative effects were reversed. A total of 34 of the negative effects on meridians were 100% reversed, 5 were 70% reduced, 5 were 50% reversed, 4 were 30% reduced (49 total), compared to 15 that were not reversed. For those who had negative effects, 9 out of 10 subjects had at least 50% of the negative effects reduced. In contrast, in 4 subjects a total of 8 of the negative effects of cell phone exposure were worsened when exposed to the phone with the EarthCalm Quantum Cell. In these subjects, reversals of negative effects were also observed, indicating a benefit of the Quantum Cell.

The observation that the EarthCalm Quantum Cell reverses most of the negative effects of cell phone exposure demonstrates the effectiveness of this product. In half of the participants there was a 100% elimination of all negative effects. The normalization of EAV readings (especially out of normal range baseline readings) by the Quantum Cell also indicates that there is a beneficial effect.

The lack of reduction of cell phone effects in one subject could be explained by the time course of the study. The time course of cell phone exposure with the EarthCalm Quantum Cell was only a few minutes in this study. Perhaps with a longer exposure time, reductions in the negative health effects of the cell phone would be seen. Also, with a longer exposure time with the phone and the Quantum Cell, the partial reversals could be increased to more complete elimination of negative effects, which would be a greater demonstration of the benefits of the Quantum Cell.

In conclusion, considering half of the participants experienced complete elimination of negative effects, that over three times as many negative health effects were reversed by the EarthCalm Quantum Cell than effects that were not reversed and that the Quantum Cell normalized EAV readings is strong evidence for the effectiveness of the EarthCalm Quantum Cell in remediating the harmful effects of exposure to EMR from cell phones.

## Conclusions

Results of this study indicate that the EarthCalm Quantum Cell fully or partially reverses the negative health effects of cell phone use as measured by electrodermal screening, which assesses meridian flow and thus organ and system function.

