

EFFECT OF THE MEGACHI PENDANT TO REVERSE THE DETRIMENTAL EFFECTS OF CELL PHONE RADIATION ON HUMAN DNA

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Summary

A research study was conducted which demonstrated the effects of cell phone radiation on the electrical properties of DNA. Electromagnetic (EM) fields from cell phones were shown to inhibit the electrical properties of DNA. This effect was observed with cell phones (CP) on standby mode when they are emitting relatively weak EM fields and after only one EMF exposure lasting 3 hours. The MegaChi pendant was able to partially or totally reverse the inhibitory effect of cell phone radiation. The effect of the MegaChi pendant was further shown to be frequency and orientation dependent. When the perpendicular and parallel orientation data are taken together it can be concluded that the MegaChi pendant is highly effective at reversing cell phone induced effects on DNA.

Goals of this Research Project

- Demonstrate the short-term effects of CP radiation on the electrical properties of DNA in-vitro.
- Evaluate the efficacy of the Mega-Chi to immediately reverse these effects.

Introduction

Electro-pollution is now an established phenomenon which impacts public health. Originally believed to only effect electromagnetic (EM) sensitive people (Hillert, 1999), it is now believed to effect the population at large, particularly the young and elderly (Bailey, 2007). A wide variety of detrimental effects have been reported in cellular, animal and clinical studies. Of particular concern are the effects of cell phones because of their ubiquitous use. The association between cell phone use and cognitive brain function (Sandstrom, 2001) as well as an increased incidence of brain cancer (Kundi, 2004) are of particular interest. With respect to carcinogenic effects of cell phones, there is increasing evidence that these effects are mediated by DNA.

Previous studies demonstrated that DNA is highly sensitive to man-made EM fields which cause a variety of physical damage to its helical structure, as well as producing detrimental effects on its biological function within the cell nucleus. These effects have been observed for EM fields emanating from power lines, cell phones and computers (Omura, 1993). Regarding physical effects, these EM fields induce changes in the conformation of the secondary helical structure of DNA (Semin, 1995), as well as causing direct nicking of one or both of the two strands that make up the DNA helix

(Diem, 2005). Structural damages like these are known to be associated with cancer. EM fields from man-made electronic devices causes biological effects which trigger cancer via mechanisms independent of DNA. Taken together, these studies clearly demonstrate low-level EMF from cell phones and home appliances are detrimental to the health.

Manufacturers of such home appliances do not want the public to know there products are unhealthy. Therefore, the scientific research they sponsor is designed to show no harmful biological effects. Since all resonance effects between EM fields and biological systems occur only within specific frequency and amplitude “windows” (Blackman, 1989), it is relatively easy to conduct an experiment outside these windows to ensure a biological effect is not observed. It is therefore reasonable to assume that studies showing no harmful effects of EM fields were done under non-resonance conditions.

Experimental Approach

In these experiments the biological system being influenced by the EM fields from cell phones is purified human DNA suspended in an aqueous environment. Using this in-vitro model system, the electrical properties of DNA were measured. It is well known that DNA conducts electricity, either along its central axis or across the individual strands that make up its helical structure. The electrical properties of DNA and other large biomolecules can be measured used standardized methods involving application of a weak current at various frequencies and measuring the induced voltage (Nielsen, 1962).

Electrical conductivity of DNA has been studied in detail in DNA where it is shown to be frequency and temperature dependent (Kutnjak, 2005). These electrical properties are also dependent on the presence of structured water which immediately surrounds all charged biomolecules (Van Zandt, 1987). Using a different method, Smith confirmed the requirement for water because no electrical measurements could be obtained from dry (dead) biomolecules (Smith, 1999).

In the present study, the standard methods described above were used to measure the electrical properties of human DNA in water at different frequencies. The contributions from water were subtracted from all measurements so the electrical properties of DNA itself were measured and reported. Using this procedure measurements were taken on DNA exposed to ambient EM fields in the environment, DNA exposed to cell phone radiation and DNA exposed to the same cell phone with a MegaChi pendant placed on it either parallel or perpendicular to the axis of the cell phone.

Detailed Experimental Methods

The specific protocol that was followed involved making a stock solution (3mg/ml) of human placental DNA (Sigma Chemical Co., St. Louis) in deionized water. The stock solution was diluted to 1 mg/ml in deionized water for all experiments. In the first series of experiments, electrical properties were measured after the DNA solution had been sitting on the lab bench for three hours exposed only to ambient EM fields in the

environment. For EM field exposure a mobile Samsung flip cell phone (2006 model) was plugged in and kept on standby mode, not receiving mode, and a small glass vial containing the diluted DNA was placed directly on the opened cell phone for 3 hours.

In the next series of experiments the Mega-Chi pendant was placed on the touch pad of the same cell phone adjacent to the vial containing DNA in two positions- either parallel or perpendicular to the central axis of the cell phone. Separate vials containing the diluted DNA solution were used for these two experiments and the exact same procedure was followed as done previously for the control experiment. Control experiments were done first since it was unknown how long the protective effect of the MegaChi pendant might last.

For all measurement, weak (milliamp) current at specific frequencies (10-100kHz) was applied to purified human DNA in an aqueous solution to measure the corresponding voltage using a standard potentiostat. For each experiment ten sequential measurements were made on ten individual aliquots and averages calculated. In all cases electrical responses due to water were subtracted out from the signal (DNA + water) to ensure energetic treatments affected the DNA molecules and not the water molecules.

Results

Based on previous research at the Quantum Biology Research Lab with EM fields from various devices including cell phones, five representative frequencies were chosen for use in the present study. Measurements were taken at these frequencies to obtain strong and moderate inhibitory effects from cell phone radiation. The present study confirmed previous results that cell phone radiation inhibits the electrical activity of DNA. The data in Table 1 demonstrate a complete inhibition at 20 and 27 kHz, whereas a partial 40% inhibition was observed at 34 kHz and 87 kHz.

The present study also demonstrated for the first time that the MegaChi pendant placed on top of a cell phone was capable of completely or partially reversing the inhibitory effects of cell phone radiation. The data in Table 2 and 3 indicate that at 27 kHz, where a strong resonance occurs and the cell phone completely inhibited the electrical properties of DNA, the MegaChi pendant completely reversed the cell phone effect whether it was placed perpendicular or parallel to the axis of the cell phone. However, at other frequencies the efficacy the MegaChi pendant is orientation specific. For example, the results in Table 2 and 3 indicate that at 87 kHz the pendant is only effective in the perpendicular orientation where it completely reverses the cell phone effect on DNA. A similar orientation effect is seen at 11 kHz, which also only works (although only partially) in perpendicular orientation. In contrast, the pendant is ineffective when placed in the parallel orientation when measurements are taken at this particular frequency. When measurements are taken at 34 kHz the opposite results are obtained – the pendant is effective in the parallel orientation but not in the perpendicular orientation. The final observation from this study indicates that at 20 kHz, neither parallel nor perpendicular orientations reduced the cell phone effect. These data clearly show the efficacy of the MegaChi pendant to reverse cell phone induced effects on the electrical

properties of DNA and demonstrate that this reversal effect is frequency and orientation dependent.

Table 1
CELL PHONE RADIATION INHIBITS ELECTRICAL PROPERTIES OF DNA

Frequency (kHz)	DNA Ambient EMF	DNA Cell Phone Radiation	% Inhibition
11	18	0.7	96
20	20	0	100
27	35	1.0	97
34	34	21	38
87	30	18	40

Table 2
PROTECTIVE EFFECTS OF MEGACHI PENDANT IN PERPENDICULAR ORIENTATION

Frequency (kHz)	CP Effect % Inhibition	CP + MegaChi(perpendicular) % Change	MegaChi Effect
11	-96	-56	44% effective
20	100	100	Ineffective
27	-97	+23	Complete reversal
34	-38	-50	Ineffective
87	-40	0	Complete reversal

Table 3
PROTECTIVE EFFECTS OF MEGACHI PENDANT IN PARALLEL ORIENTATION

Frequency (kHz)	CP Effect % Inhibition	CP + MegaChi (parallel) % Change	MegaChi Effect
11	-96	100	Ineffective
20	100	100	Ineffective
27	-97	0	Complete reversal
34	-38	+23	Complete reversal
87	-40	-57	Ineffective

Discussion

Comparison of data obtained with control DNA in ambient EM fields to the data obtained after DNA was exposed to cell phone radiation for 3 hours, it is clear that cell phone radiation inhibits the electrical properties of DNA at certain frequencies where resonance conditions are met. In this case there is resonance between the DNA molecule, the cell phone radiation and the ambient geomagnetic field. Based on previous research at the QBRL frequencies were chosen where strong (11, 20 and 27 kHz) and moderate (34 and 87kHz) inhibitory effects were expected. Indeed the results presented here confirm

previous results, demonstrating that a harmful man-made energy source inhibits the electrical properties of DNA. The resonance frequencies where this cell phone effect is observed may originate from the cell phones themselves although cell phone radiation has apparently not been measured between 10 and 100 kHz (Straume, 2007).

Alternatively, the frequencies where this effect is observed may originate from intrinsic vibrations of the DNA molecule itself. Resonance frequencies of biomolecules like DNA are typically measured using optical spectrophotometers which have shown that DNA resonates in the RF and microwave portions of the EM spectrum. However DNA frequencies have not yet been measured in the 10 to 100 kHz region. Therefore at this time it is unclear why the observed effect on cell phones occurs at only these specific frequencies.

The second major goal of this research project was to demonstrate the efficacy of the MegaChi pendant to prevent cell phone-induced effects on the electrical properties of DNA. The first series of experiments was done with the MegaChi pendant placed perpendicular to the axis of the cell phone. The results from this experiment (Table 2) indicate a complete reversal of the cell phone effect at certain frequencies, i.e. 87 kHz. A partial 44% reversal of the cell phone effect was seen at 11 kHz indicating that the information stored in the pendant does indeed resonate with DNA at that frequency but does not completely negate the cell phone effect.

On the other hand, the information in the pendant has a strong resonance with DNA at 27 kHz and not only completely restores the cell phone effect, but overcompensates and increases the electrical properties of DNA by 23% when compared to untreated controls. This “better than normal” effect has been seen before at the Quantum Biology Research Lab when testing other anti-EMF subtle energy technologies. Similar overshooting has been observed by Dr Petkovic of the University of Nis in Yugoslavia, when studying a ferromagnetic cell phone blocker (Petkovic, 2007). Although the mechanism for the overcompensation effect is unknown, the phenomenon supports the concept that at certain frequencies, the information stored in a subtle energy technology must resonate with the DNA molecule and must be of the right type (out of phase, etc) to reverse the effects of the offending radiation.

Thus, the information stored in the MegaChi pendant is so effective at 27 kHz, it overcompensates. On the other hand, the information is not exactly the correct type to completely reverse the cell phone effect at 11 kHz. Apparently the MegaChi information when aligned perpendicular doesn't resonate with DNA or cell phone radiation at certain frequencies (20 and 34 kHz) since there is no reversal of the cell phone effects at these frequencies.

Since other investigators (Smith, 1999) have reported orientation dependent effects of subtle energy technology (with respect to alignment in the geomagnetic field), it was prudent to test the MegaChi pendant in a second position – parallel to the axis of the cell phone. The results from this experiment (Table 3) indicate different protective effects are seen in the two orientations. In the parallel orientation, the cell phone effect at 34 kHz is now completely reversed, whereas the pendant is ineffective in the perpendicular

orientation. In fact, at this frequency, the pendant is so effective, an over-compensation effect is observed. At 27 kHz the overcompensation effect seen with the perpendicular orientation is still completely effective in the parallel position but there is no overcompensation. This observation adds further support to the hypothesis that subtle changes in the quality of the MegaChi information effects its ability to protect DNA from cell phone radiation. The results in Table 3 also indicate at higher frequencies (87 kHz) the parallel orientation is less effective than the perpendicular orientation because the protective effect is lost in the parallel orientation.

When the MegaChi pendant is worn on the body, the orientation of its energy field will vary relative to the cell phone as the user moves in different positions. Therefore when evaluating the efficacy of the pendant to reverse the detrimental effects of cell phone radiation (on the electrical properties of DNA) one needs to examine both perpendicular and parallel effects. Thus, although the pendant is ineffective in the parallel orientation when measurements were taken at 87 kHz, the pendant is effective at this frequency in the perpendicular orientation. Therefore combining both sets of data we can conclude that the MegaChi pendant is highly effective at reversing cell phone induced effects on DNA.

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