ELECTROMAGNETICALLY INDUCED ALTERATIONS IN THE EEG: DETECTING THE DETECTION PROCESS

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Reports have described a correlation between exposure to environmental EMFs and disease—principally cancer. We hypothesized the EMFs are detected by the nervous system, and that disease arises as a consequence of the body's continuous attempt to adapt to the EMF. If the body detects EMFs, the process may be reflected in changes in the electrical activity of the brain. We therefore compared the electroencephalogram (EEG) in the presence and absence of EMFs.

Initial studies were performed on New Zealand white rabbits exposed to 1 Gauss, 25 Hz; the magnetic field was applied for 2 seconds, followed by an 8-second (average) interval during which the field was switched off. Human subjects were exposed to 250-500 milliGauss, 35-40 Hz for 2-sec epochs. Computer comparisons of the EEG recorded before and during exposure indicated that some brain frequencies in the range 1-20 Hz were affected by the EMF in some rabbits and human subjects. These preliminary studies suggest that the presence of weak fields can be detected by human subjects, and that the detection process itself can be measured and analyzed via the EEG.