

Functional Changes of Cells and DNA by Electromagnetic Waves in the Case of Cancer

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The co-authors of the research are Reneta Toshkova, Elisaveta Zvetkova, Georgi Gluhchev. Studies were conducted with model systems of influence of Drossinakis with electromagnetic (EM) fields and infrared thermal field (ITF). The purpose of research is to analyze effects over DNA. In the report is carried out analysis of effects over water and physiological saline. Results are achieved with blood serum of hamsters and physiological processes in hamsters with tumors. The analyses with water are conducted using the methods Non- equilibrium Energy Spectrum (NES) and Differential Non- equilibrium Energy Spectrum (DNES). Experiments are carried out with the influence of tumor cells of a mouse in water. It is observed reduction of DNES spectrum according to the control sample of cells in healthy animals. Reduction is also observed in DNES spectrum in blood serum of people having oncology diseases compared to the one of healthy people. Such a reduction is most prevalent in (- 0.1387 eV; 8.95 μm ; 1117 cm^{-1}). In research of the effects of e.m. fields in water and blood serum from hamsters the range is (-0.08 to -0.14 eV) (8.9 - 15.5 μm) (645- 1129 cm^{-1}). Research is conducted for the effects over Graffi tumor that was implanted in hamsters. Studies are conducted with pH and oxidation redox potential (ORP) effects of e.m. fields over physiological saline. During research with physiological saline is studied the change of pH and ORP.

During the influence with e.m. waves is researched the survival rate of hamsters with tumors, as well as the change in size of tumor. The DNA damage contributes to ageing and cancer, as the result depends on the type and number of lesions (injury) in DNA. The cancer related diseases are one of the main reasons for changes in DNA. During the influence with e.m. fields is observed change of erythrocytes and the animal hair of hamsters. It

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can be considered as established the effect of bioinfluence of Christos Drossinakis over the values of pH of physiological saline. Due to the 65% of water content in the human body, it can be considered that its parameters irrespective of its consistency in the blood and internal organs, will be influenced from an external bioinfluence, which will affect their functioning, and hence the health condition of the body. The potential of hydrogen ions in a healthy cell is -140mV, and in a cancer cell -70 mV. The increase of the number of hydrogen ions reveals a process of recovery in the potential of a cancer cell to a healthy condition.