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MRET ACTIVATED WATER AS DIETARY COUNTERMEASURES TO MITIGATE CANCER RISK FROM SPACE RADIATION.

Abstract

Objectives: The major goal of space radiation research is to enable the human exploration of space without exceeding limiting risks from space radiation. The proposed study seeks to reduce the uncertainties in risk predictions for cancer and

acute radiation risks by utilizing MRET (Molecular Resonance Effect Technology) activated water as a dietary countermeasure to mitigate acute radiation risks. The goal of this investigation was to study the effect of MRET water for prevention and treatment of two kinds of oncology diseases on mice (laboratory models of Ehrlich's ascites tumor and Sarcoma ascites form). MRET Water is produced with the help of patented (US Patent No. 6,022,479) Molecular Resonance Effect Technology.

Methods: The ability of animals for tumor resistance was studied at Kiev Institute of Experimental Pathology, Oncology and Radiobiology, Ukraine Academy of Science on 500 mice with the help of the following methodology:

a) study of anti-tumor effectiveness of "preventive" administration of MRET water; mice received MRET water during 2 weeks before tumor cell transplantation and after transplantation;

b) study of anti-tumor effectiveness of "therapeutic" administration of different fractions of MRET water; mice received MRET water after tumor cell transplantation;

c) investigation of functional citotoxic activity of lymphocytes containing natural killer cells (NK-cells) isolated from spleens of mice (without tumors) which received MRET water; lymphocytes were incubated with tumor target cells.

Results: The experimental results confirm that consumption of all types of MRET water leads to the significant inhibition of tumor growth and suppression of mutated tumor cells. The resulting decrease of the Total Number of Viable Tumor Cells was 76

The survival of the investigated animals was daily monitored. The observed life span of mice which received optimal activated water in "preventive treatment" regime increased by 61.7

The increase of cytotoxic index in both regimes (21 days and 14 days of application of activated water for mice without tumors) by 26

Conclusions: The significant positive effect of MRET activated water on tumor resistance in animals was observed in all groups of mice on activated water. The application of activated water can be quite promising approach for non-drug stimulation of NK-cells immunization vaccines.