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ELECTROMAGNETIC RADIATION: IMPACT ON PEOPLE, METHODS OF PROTECTION

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ANNOTATION

Each substance has a certain radiation. It appears due to the formation of an electromagnetic field around the material and its propagation in a certain direction. The further charged particles move from their source, the stronger the electromagnetic field of the substance, and therefore the stronger the electromagnetic radiation. The radiation described here has damping properties, that is, the further an electron is from its source, the less charge it has. Electromagnetic radiation has certain effects on people. Both of them can cure certain diseases and cause harm.

Key words: *electricity, magnet, light, charge, particle, matter, field, electromagnetic.*

What is electromagnetic radiation? Electromagnetic radiation refers to waves of the same name that are generated under the influence of electric and magnetic fields. From a scientist's point of view, the unit of radiation is a quantum, but it also has wave properties (for example, it decays when an falling object moves away).

Currently, the following types of electromagnetic radiation are distinguished:

- Radio frequency (propagates in the form of radio waves);
- Heat or infrared rays;
- Optical waves that can be detected by the naked human eye (without special equipment);
- Hard and ultraviolet radiation, mainly in the ultraviolet spectrum (they are also called ionized).

The nature of radiation sources. Sources of electromagnetic radiation are classified as follows:

- An artificial electromagnetic field (EMF) disrupted by special devices or equipment, usually artificial;
- Naturally, when electromagnetic radiation comes from the elements of nature. Therefore, all electromagnetic fields and radiation created by planet Earth, electrical processes occurring in the layers of the atmosphere, and nuclear reactions in the Sun are natural.



Radiation is also divided into low and high depending on its level. The strength of this source of electromagnetic waves determines the parameters of the field strength and its radiation.

The largest issuers include:

- power transmission lines (mainly high-voltage, transporting the bulk of electricity and at the same time creating a large EMF);
- electric transport (trolleybuses, trams, high-current subways);
- towers necessary for the transmission of television and radio signals, as well as mobile communications signals;
- transformer substations and single current converters;

- lifting equipment operating using an electromechanical power unit.

Low-level sources of electromagnetic radiation include almost all household appliances, in particular:

- laptops, TVs and other devices equipped with an electronic tube display;
- irons, refrigerators, air conditioners, etc.;
- low-current networks (cables themselves, sockets, meters and other types of related devices), ensuring the transfer of energy from a source to various devices and devices.

In some cases, high levels of electromagnetic radiation are required. For example, in medicine, X-ray machines, MRI machines and other diagnostic devices generate a large single dose of radiation in the human body, but this is necessary for diagnosing or treating certain diseases.

Human electromagnetic field. The human body is not only a good conductor of electromagnetic waves, but also produces EMF - a natural source of electromagnetic radiation (EMR). Bioelectric field vibrations are actively used to diagnose various diseases. For example, an electrocardiogram, an electroencephalogram make it possible to identify problems related to the circulatory system, cardiovascular diseases, brain diseases, etc. at an early stage.

Attempts to measure the human electromagnetic field were made by scientists back in the 18th century, but this was impossible to do without the appropriate equipment with the required level of sensitivity. All studies are limited to analyzing the effects of EMR on humans.

In humans, the presence of their own electromagnetic field harmonizes the functioning of all cells of the body. Some scientists call human EMF a biofield or aura. This field is studied by psychics. From their point of view, it is the biofield that protects the body from negative environmental influences, including emotional ones. As soon as problems arise in the biofield, a person begins to get sick, he has various problems, so it must be immediately restored, for this unconventional methods are used.

Blood quality plays a key role in human health. What is the effect of electromagnetic radiation on blood? All elements of this life-giving liquid have certain electrical potentials and charges. Electrical and magnetic components that generate electromagnetic waves can destroy red blood cells, platelets, or vice versa, cause adhesion and blockage of cell membranes. And their effect on the hematopoietic organs causes disruptions in the functioning of the entire hematopoietic system. The body's reaction to such a pathology is to release an overdose of adrenaline. All these processes have an extremely negative effect on the functioning of the heart muscle, blood pressure, myocardial conductivity and can lead to arrhythmia.

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