110. The effects of RF and microwaves on health physics.

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Microwave and radiofrequency (RF) radiation constitute part of the whole electromagnetic spectrum. The health effects of electromagnetic field and radiowaves in the range of 100 khz - 300 GHz. The term radiofrequency refers to the range 100 kHz - 300 MHz (3 km to 1 m wavelength in air) and microwaves to the frequency range of 300 MHz - 300 GHz (1 m to 1 mm wavelenggh in air). It is known that electromagnetic energy in this frequency range produce effects in biological system - such as : eyes, tissue, nerve, cardiovascular, reproduction and genetic.

When electromagnetic radiation passes from one medium to another, it can be reflected, refracted, transmitted or absorbed, depending on the biomedical system and frequency of the radiation. Absorbed RF and-microwave energy can be converted to another forms of energy and cause interence with the functioning of the living system.

Most of this energy is converted into heat.