



Dr. A. Kumar
Consultant Herbalist @ Dietician
D.Sc. (HS), U.S.A.

Your Health and Microwave Cooking

Are microwave ovens killing us? The technology has always been a forte of the mankind. Technology makes our lives comfortable; but never forget, everything has a price. But beware, this price of use of technology should not be our health. According to one article by Anthony Wayne and Lawrence Newell, the use of microwave oven is playing with the human lives.

Is it possible that millions of people are ignorantly sacrificing their health in exchange for the convenience of microwave ovens? Why did the Soviet Union ban the use of microwave ovens in 1976? Who invented microwave ovens, and why? The answers to these questions may shock you into throwing your microwave oven in the trash. The purpose of this article is to open the eyes of the people that microwave cooking is not natural, nor healthy, and is far more dangerous to the human body than anyone could imagine. Because the governments and the concerned departments are hand in glove with the manufacturing companies, the truth is hidden in the carpet and the people are continuing to microwave their food - in blissful ignorance - without knowing the effects and danger of doing so.

How do microwave ovens work? Microwaves are a form of electromagnetic energy, like light waves or radio waves, and occupy a part of the electromagnetic spectrum of power, or energy. Cooking by microwaves begins within the cells and molecules where water is present and where the energy is transformed into frictional heat. Microwaves are very short waves of electromagnetic energy that travel at the speed of light (about 300,000 kilometers per second). In our modern technological age, microwaves are used to relay long distance telephone signals, television programs, and computer information across the earth or to a satellite in space. Technically produced microwaves are based on the principle of alternating current. Atoms, molecules, and cells hit by this hard electromagnetic radiation are forced to reverse polarity 1-100 billion times a second. There are no atoms, molecules or cells of any organic system able to withstand or bear such a violent, destructive power for any extended period of time, not even in the low energy range of milliwatts. But the microwave is most familiar to us as an energy source for cooking food.

Every microwave oven contains a magnetron, a tube in which electrons are affected by magnetic and electric fields in such a way as to produce micro wavelength radiation at about 2450 Mega Hertz (MHz) or 2.45 Giga Hertz (GHz). This microwave radiation interacts with the molecules in food. All wave energy changes polarity from positive to negative with each cycle of the wave. In microwaves, these polarity changes happen millions of times every second. Food molecules - especially the molecules of water - have a positive and negative end in the same way a magnet has a north and a south polarity. In commercial models, the oven has a power input of about 1000 watts of alternating current. As these microwaves generated from the magnetron bombard the food, they cause the polar molecules to rotate at the same

frequency millions of times a second. All this agitation creates molecular friction, which heats up the food. The friction also causes substantial damage to the surrounding molecules, often tearing them apart or forcefully deforming them. The scientific name for this deformation is "structural isomerism".

In 1991, there was a lawsuit in Oklahoma concerning the hospital use of a microwave oven to warm blood needed in a transfusion. The case involved a hip surgery patient, Norma Levitt, who died from a simple blood transfusion. It seems the nurse had warmed the blood in a microwave oven. This tragedy makes it very apparent that there's much more to "heating" with microwaves than we've been led to believe. Blood for transfusions is routinely warmed, but not in microwave ovens. In the case of Mrs. Levitt, the microwaving altered the blood and it killed her.

Scientific evidence and facts : In Comparative Study of Food Prepared Conventionally and in the Microwave Oven, published by Raum & Zelt in 1992, at 3(2): 43, it states : "A basic hypothesis of natural medicine states that the introduction into the human body of molecules and energies, to which it is not accustomed, is much more likely to cause harm than good. Microwaved food contains both molecules and energies not present in food cooked in the way humans have been cooking food since the discovery of fire."

One short-term study found significant and disturbing changes in the blood of individuals consuming microwaved milk and vegetables. Eight volunteers ate various combinations of the same foods cooked different ways. All foods that were processed through the microwave ovens caused changes in the blood of the volunteers. Haemoglobin levels decreased and over all white cell levels and cholesterol levels increased. Lymphocytes decreased.

The Swiss clinical study : Dr. Hans Ulrich Hertel, who is now retired, worked as a food scientist for many years with one of the major Swiss food companies that do business on a global scale. Dr. Hertel was the first scientist to conceive and carry out a quality clinical study on the effects microwaved nutrients have on the blood and physiology of the human body. His small but well controlled study showed the degenerative force produced in microwave ovens and the food processed in them. The scientific conclusion showed that microwave cooking changed the nutrients in the food; and, changes took place in the participants' blood that could cause deterioration in the human system. Hertel's scientific study was done along with Dr. Bernard H. Blanc of the Swiss Federal Institute of Technology and the University Institute for Biochemistry.

In intervals of two to five days, the volunteers in the study received one of the following food variants on an empty stomach: (1) raw milk; (2) the same milk conventionally cooked; (3) pasteurised milk; (4) the same raw milks cooked in a microwave oven; (5) raw vegetables from an organic farm; (6) the same vegetables cooked conventionally; (7) the same vegetables frozen and defrosted in a microwave oven; and (8) the same vegetables cooked in the microwave oven. Once the volunteers were isolated, blood samples were taken from every volunteer immediately before eating. Then, blood samples were taken at defined intervals after eating from the above milk or vegetable preparations.

Significant changes were discovered in the blood samples from the intervals following the foods cooked in the microwave oven. These changes included a decrease in all haemoglobin and cholesterol values, especially the ratio of HDL (good cholesterol) and LDL (bad cholesterol) values. Lymphocytes (white blood cells) showed a more distinct short-term decrease following the intake of microwaved food than after the intake of all the other variants. Each of these indicators pointed to degeneration. Additionally, there was a highly significant association between the amount of microwave energy in the test foods and the luminous power of luminescent bacteria exposed to serum from test persons who ate that

food. This led Dr. Hertel to the conclusion that such technically derived energies may, indeed, be passed along to man inductively via eating microwaved food.

Who invented microwave ovens? The Nazis, for use in their mobile support operations, originally developed microwave "radiomissor" cooking ovens to be used for the invasion of Russia during the second world war. This helped the Nazi forces to cook food for such a large army within a very short period, saved time and the army marched steadily ahead. Once the war was over, the Allies discovered medical research done by the Germans on microwave ovens. These documents, along with some working microwave ovens, were transferred to the United States War Department and classified for reference and "further scientific investigation." The Russians had also retrieved some microwave ovens and now have thorough research on their biological effects. As a result, their use was outlawed in the Soviet Union. The Soviets also issued an international warning on the health hazards, both biological and environmental, of microwave ovens and similar frequency electronic devices. But it is a sad thing that the big corporate and manufacturers with the connivance of the governments, is silent over this health issue of great concern and the use of microwave ovens has been increasing steadily world over.

It is better to get up a few minutes early in the morning, but cook your food in the conventional way and stop or minimize the use of microwave ovens.

For free guidance on any of the health problems, diseases and medical conditions, please contact Dr. Kumar dr.kumar@yorkscollge.com

**Dr. A. Kumar
Consultant Herbalist & Dietician
D.Sc., (HS) USA**