Editorials

Why You Should Avoid Microwave Cooking

Is it possible that millions of people are ignorantly sacrificing their health in exchange for the convenience of microwave ovens? Over 90% of American homes have microwave ovens used for meal preparation. Because microwave ovens are so convenient and energy efficient, as compared to conventional ovens, very few homes or restaurants are without them. In general, people believe that whatever a microwave oven does to foods cooked in it doesn't have any negative effect on either the food or their bodies.

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. Microwaves are very short waves of electromagnetic energy that travel at the speed of light.

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.”

By comparison, microwaves from the sun are based on principles of pulsed direct current (DC) that don't create frictional heat; microwave ovens use alternating current (AC) creating frictional heat. A microwave oven produces a spiked wavelength of energy, with all the power going into only one narrow frequency of the energy spectrum. Energy from the sun operates in a wide frequency spectrum.

We've all been told that microwaving food is not the same as irradiating it (radiation “treatment”). The two processes are supposed to use completely different waves of energy and at different intensities. No FDA or government studies have proven current microwaving usage to be harmful, but we all know that the validity of studies can be - and are sometimes deliberately - limiting. Many of these studies are later proven to be inaccurate.

Mothers' Instincts Are Right

Many of us come from a generation where mothers and grandmothers have distrusted the modern “inside out” cooking they claimed was “not suitable” for most foods. My mother refused to even try baking anything in a microwave. She also didn't like the way a cup of coffee tasted when heated in a microwave oven. I have to fully agree and can't argue either fact. Her own common senses and instincts told her that there was no way microwave cooking could be natural nor make foods “taste the way they're supposed to.” Reluctantly, even my mother succumbed to re-heating leftovers in a microwave due to her work schedule before she retired.

Many others feel the same way, but they're considered an “old-fashioned” minority dating back to before the 1970's when microwaves first overwhelmed the market. Like most young adults at the time, as microwave ovens became commonplace, I chose to ignore my mother's intuitive wisdom and joined the majority who believed microwave cooking was far too convenient to ever believe anything could be wrong with it. Chalk one up for mom's perception, because even though she didn't know the scientific, technical, or health reasons why, she just knew that microwave ovens were not good based on how foods tasted when they were cooked in them. She didn't like the way the texture of the microwaved food changed either.

Microwaves Unsafe for Baby's Milk

Dr. Lita Lee of Hawaii reported in the December 9, 1989 Lancet: “Microwaving baby formulas converted certain trans-amino acids into their synthetic cis-isomers. Synthetic isomers, whether cis-amino acids or trans-fatty acids, are not biologically active. Further, one of the amino acids, L-proline, was converted to its 4-isomer, which is known to be neurotoxic (poisonous to the nervous system) and nephrotoxic (poisonous to the kidneys). It's bad enough that many babies are not nursed, but now they are given fake milk (baby formula) made even more toxic via microwaving.”

Microwaved Blood Kills Patient

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 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 above case, the microwaving altered the blood and it killed the patient.

It's very obvious that this form of microwave radiation “heating” does something to the substances it heats. It's also becoming quite apparent that people who process food in a microwave oven are also ingesting these “unknowns.” Because the body is electrochemical in nature, any force that disrupts or changes human electrochemical events will affect the physiology of the body.

Scientific Evidence and Facts

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. Microwaved energy from the sun and other stars is direct current based. Artificially produced microwaves, including those in ovens, are produced from alternating current and force a billion or more polarity reversals.
per second in every food molecule they hit. Production of unnatural molecules is inevitable. Naturally occurring amino acids have been observed to undergo isomeric changes (changes in shape or branching) as well as transformation into toxic forms, under the impact of microwaves produced in ovens.

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. Hemoglobin levels decreased and overall white cell levels and cholesterol levels increased. Lymphocytes decreased.

There is extensive scientific literature concerning the hazardous effects of direct microwave radiation on living systems. It is astonishing, therefore, to realize how little effort has been made to replace this detrimental technique of microwaves with technology more in accordance with nature. 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 such a violent, destructive power for any extended period of time, not even in the low energy range of milliwatts.

Of all the natural substances – which are polar – the oxygen of water molecules reacts most sensitively. This is how microwave cooking heat is generated – friction from this violence in water molecules. Structures of molecules are torn apart, molecules are forcefully deformed, called structural isomerism, and thus become impaired in quality. This is contrary to conventional heating of food where heat transfers conventionally from without to within. Cooking by microwaves begins within the cells and molecules where water is present and where the energy is transformed into frictional heat.

In addition to the violent frictional heat effects, called thermic effects, there are also other effects which have barely ever been taken into account. These thermic effects are not presently measurable, but they can also deform the structures of molecules and have qualitative consequences. For example, the weakening of cell membranes by microwaves is used in the field of gene altering technology. Because of the force involved, the cells are actually broken, thereby neutralizing the electrical potentials, the very life of the cells, between the outer and inner side of the cell membranes. Impaired cells become easy prey for viruses, fungi and other microorganisms. The normal repair mechanisms are suppressed and cells are forced to adapt to a state of energy emergency – they switch from aerobic to anaerobic respiration. Instead of water and carbon dioxide, the cell poisons, hydrogen peroxide and carbon monoxide are produced.

The same violent deformations that occur in our bodies, when we are directly exposed to radar or microwaves, also occur in the molecules of foods cooked in a microwave oven. This radiation results in the destruction and deformation of food molecules. Microwaving also creates new compounds, called radiolytic compounds, which are unknown fusions not found in nature. Radiolytic compounds are created by molecular decomposition – decay – as a direct result of radiation.

Microwave oven manufacturers insist that microwaved and irradiated foods do not have any significantly higher radiolytic compounds than do broiled, baked or other conventionally cooked foods. The scientific clinical evidence has shown that this is simply not true. In America, neither universities nor the federal government have conducted any tests concerning the effects on our bodies from eating microwaved foods. They're more concerned with studies on what happens if the door on a microwave oven doesn't close properly. Once again, common sense tells us that their attention should be centered on what happens to the food cooked inside a microwave oven. Since people ingest this altered food, shouldn't there be concern for how the same decayed molecules will affect our own human biological cell structure?

Microwave Sickness is Discovered
The Russians did research on thousands of workers who had been exposed to microwaves during the development of radar in the 1960's. Their research showed health problems so serious that the Russians set strict limits of 10 microwats exposure for workers and one microwats for civilians.

Microwaving prepared meats sufficiently to insure sanitary ingestion caused formation of d-Nitrosodiethanolamines, a well-known carcinogen. Microwaving milk and cereal grains converted some of their amino acids into carcinogens. Thawing frozen fruits converted their sucrose and galactose containing fractions into carcinogenic substances. Extremely short exposure of raw, cooked or frozen vegetables converted their plant alkaloids into carcinogens. Carcinogenic free radicals were formed in microwaved plants, especially root vegetables.

Decrease in Nutritional Value
Russian researchers also reported a marked acceleration of structural degradation leading to a decreased food value of 60 to 90% in all foods tested. Among the changes observed were: Decreased bio-availability of vitamin B complex, vitamin C, vitamin E, essential minerals and lipotropic factors in all food tested. Various kinds of damage to many plant substances, such as alkaloids, glucosides, galactosides and nitrilosides. The degradation of nucleo-proteins in meats.

Ten Reasons to Throw Out Your Microwave Oven
1. Continually eating food processed from a microwave oven causes long term – permanent – brain damage by "shorting out" electrical impulses in the brain (de-polarizing or de-magnetizing the brain tissue).
2. The human body cannot metabolize, break down, the unknown by-products created in microwaved food.
3. Male and female hormones production is shut down and/or altered by continually eating microwaved foods.
4. The effects of microwaved food by-products are residual (long term, permanent) within the human body.
5. Minerals, vitamins, and nutrients of all microwaved food are reduced or altered so that the human body gets little or no benefit, or the body absorbs altered compounds that cannot be broken down.
6. The minerals in vegetables are altered into cancerous free radicals when cooked in microwave ovens.
7. Microwaved foods cause stomach and intestinal cancerous growths (tumors). This may explain the rapidly increasing rate of colon cancer in America.
8. The prolonged eating of microwaved foods causes cancerous cells to increase in human blood.
9. Continual ingestion of microwaved food causes immune system deficiencies through lymph gland and blood serum alterations.
10. Eating microwaved food causes loss of memory, concentration, emotional instability, and a decrease of intelligence.

Joseph Marcola, DO