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# NATURAL SCIENCE

RESTORING AND HEALING THE WORLD THROUGH RESPONSIBILITY AND COMMITMENT, IN ACCORD WITH NATURAL AND DIVINE LAW



**MICROWAVE COOKING?**

**IT'S THE KISS OF DEATH!!**

*.... and, what is more, it's A PROVEN RECIPE FOR CANCER!!*

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# Microwave Ovens: A Hazard to Health

ALARMING RESULTS OF A SCIENTIFIC STUDY

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**Electrosmog, nowadays globally widespread, is a deadly threat to life. The effects of electrosmog are still greatly underestimated, for they occur insidiously, and the consequences are not immediately recognizable. The connection between the electromagnetic stress on an organism and a health impairment arising from it remains a controversial issue in today's science. Moreover, strong economic interests are at stake which impede the discovery of the truth. For several years now also microwave ovens, as well as the food prepared in them, are suspected of being hazardous to health and even causing cancer in case of regular exposure.**

**M**ICROWAVE OVENS, like other electrical devices, operate on alternating current whereby the so-called "magnetron," the core of the oven, generates microwaves which penetrate into the food and cause water molecules within the food to vibrate at a frequency of approx. 2.45 GHz. This gives rise to friction, caused mainly by the high oscillation rate of the water molecules in the electromagnetic field. Materials containing moisture, such as foods, absorb microwave energy and the friction produces heat which then spreads towards the outer parts. By conventional heating methods, such as on a cooking plate, the thermal diffusion process is just the other way around. There the heat is dissipated from the outside inwards, corresponding to a natural conduction of heat.[1]

## —IS MICROWAVED FOOD A HAZARD TO HEALTH?—

**I**NTERESTINGLY ENOUGH, up to about 15 years ago there were very few scientific studies carried out in the U.S.A. and Europe on the safety of microwave ovens, although they have already been on the market for around 40 years. Meanwhile it is known that microwaved food undergoes certain changes, including physical and chemical modifications thus reducing their bioavailability. In order to find out if microwaved food could possibly be detrimental to health, the author approached the *University of Lausanne*, Switzerland, at the end of the 1980s proposing they should make a joint scientific investigation on this matter. However, the *Swiss National Fund* turned down the request for economic support stating there was no necessity for research in this field. Not wishing to abandon the project completely,

the decision was taken to carry it out on a much reduced scale and to finance it privately.

A summary of the original research findings [2] was published in 1992 in *raum&zeit* [3] and in the *Journal Franz Weber* [4]. Without any consideration for the overall statements the paper was dismissed as being unscientific and the results were questioned. The author, however, is still of the firm conviction that microwave radiation and microwaved food causes cancer—despite being subjected to pressure.

## —SCIENTIFIC RESEARCH ON THE SUBJECT—

**T**HE STUDY WAS CARRIED OUT under strict testing conditions with a small group of carefully chosen voluntary test persons (five women, three men, 20 to 35 years old; one member of the team in charge of the experiment, 61 years old). During the time the test was carried out the test persons lived for about two months in a Swiss health resort and kept to a strict macrobiotic diet. They avoided any kind of stress during this period in order not to distort the results of the experiment.

Every two to five days they were given raw or cooked food on an empty stomach—milk and various vegetables that had either been cooked conventionally or defrosted or cooked in a microwave oven. It was a blind test where the test persons did not know how the food had been prepared. The test was carried out with the following foodstuffs:

- ◆ fresh untreated milk from organic farmers
- ◆ fresh untreated milk from organic farmers, heated conventionally
- ◆ pasteurized milk from Intermilch Bern, heated in a microwave oven
- ◆ raw vegetables (carrots and fennel) from organic farmers
- ◆ vegetables from organic farmers, cooked conventionally
- ◆ frozen vegetables from organic farmers, defrosted in a microwave oven
- ◆ vegetables from organic farmers, cooked in a microwave oven

Directly preceding and then 15 minutes and 120 minutes after food intake, blood samples were taken from the test persons and different parameters were analyzed. The hematological analysis followed immediately after drawing the samples. After natural sedimentation the serum was subjected to several vital energy tests in the course of the same day.

The following parameters were analyzed (Table 1): the number of erythrocytes (red blood corpuscles), the hemoglobin level (red blood pigment), the hematocrit (the number of cellular particles in the total blood volume), the number of leukocytes (white corpuscles), the number of lymphocytes (minute white corpuscles), and the cholesterol level, specifically the HDL concentration (high density lipoproteins).

	MILK				VEGETABLES			
	raw	conventionally cooked	indir. past. not homogen.	microwave-cooked	raw	conventionally cooked	microwave defrosted	microwave-cooked
Red blood cells	-	0	0	0	0	0	+	0
Hemoglobin	-	0	0	---	0	0	0	---
Hematocrit	---	0	0	0	0	0	+++	+
Leukocytes	0	0	0	+	0	0	+	+
Lymphocytes	-	0	0	0	0	0	-	-
Cholesterol	---	0	0	0	0	0	+++	+++

### ALARMING FINDINGS

**I**N THE COURSE OF THE STUDY it became evident that microwaved food had a definite influence on the blood of the test persons: the hemoglobin level decreased significantly after an intake of microwaved food (Fig.1) and the hematocrit increased after consumption of vegetables defrosted or cooked in a microwave oven (Fig.2).

After each food intake the leukocyte values (Fig.3) and the HDL values were found to be increased. Contrary to expectations fresh untreated milk caused a significant decrease in the cholesterol level. After an intake of food out of the microwave oven the number of leukocytes showed a

more distinct temporary decrease than after eating all the other variations of food.

On the other hand, raw or conventionally cooked food, with the exception of fresh milk, caused no changes in the blood count. Stress is always accompanied by a greater or smaller increase in the number of leukocytes. Even consumption of healthy food can mean short term stress for the body. The tests carried out on the test persons who consumed microwaved food showed, however, distinctly higher values than for those who had eaten conventionally prepared food.

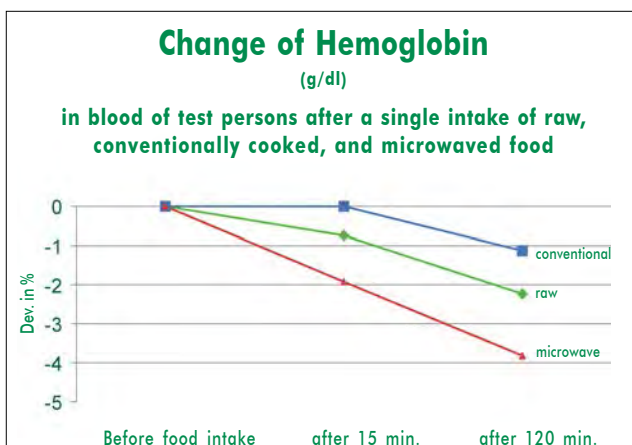


Fig. 1: Significant reduction of the hemoglobin level of blood after consumption of conventionally cooked, microwaved and food eaten raw, measured each time before food intake, and both 15 and 120 minutes later.

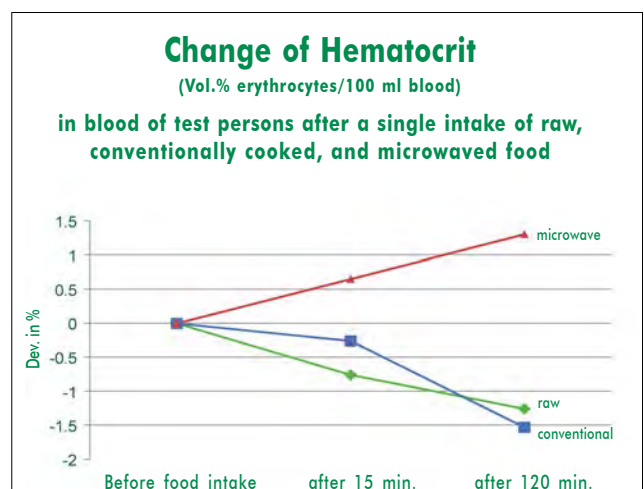


Fig. 2: Hematocrit value before and both 15 and 120 minutes after consumption of microwaved, raw or conventionally cooked food. Whilst raw and conventionally heated food reduced the hematocrit in a 120 minutes period, there was an increase after consumption of microwaved food.



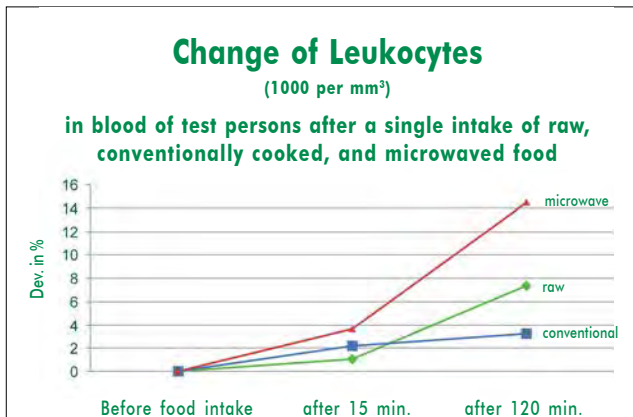


Fig.3: Increase in number of leukocytes both 15 and 120 minutes after intake of conventionally cooked, raw or microwaved food. Highest increase after consumption of food prepared in a microwave oven.

The number of red blood corpuscles remained unchanged except for a tendency to an increase after eating vegetables defrosted in a microwave oven. The stress situation did not apparently last long enough to bring about a mobilization of red corpuscles out of the reserve depots. The cholesterol level, especially the level of HDL lipoproteins, increased significantly after an intake of microwaved vegetables. (Fig.4)

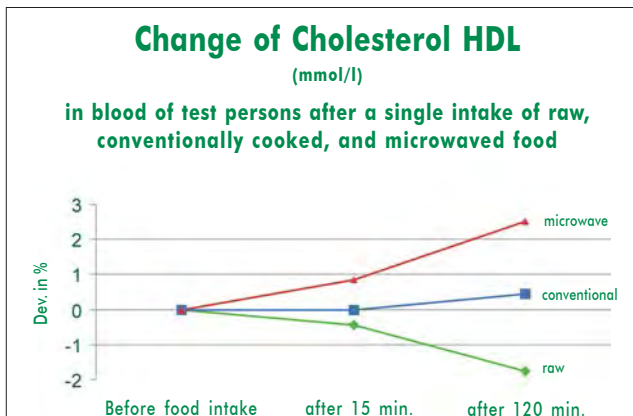


Fig.4: Change in HDL concentration measured both 15 and 120 minutes after intake of raw, conventionally cooked or microwaved food. Significant increase after consumption of microwaved vegetables.

This is especially interesting since vegetables, in contrast to fresh milk, contain as little as no cholesterol. The question poses itself why the cholesterol level of the blood is increased after an intake of microwaved vegetables, whilst it decreased—in fact significantly—after drinking fresh milk. The cholesterol level of the blood is indeed much less dependent on the consumption of fat in foodstuffs than has so far been supposed and has been maintained for decades by the margarine producers. In a healthy organism there is an interchange between the cholesterol taken in by foodstuffs, the decomposition of cholesterol and the cholesterol synthesis, so that the blood's cholesterol level is kept in balance. Stress, however, raises the cholesterol level temporarily. The tests revealed that raw and conventionally cooked vegetables caused no change

in the cholesterol level, while vegetables, defrosted or cooked in a microwave oven, led to a significant rise in lipoproteins (HDL). This is apparently a stress reaction of the organism responding to the radiation the food underwent.

THE EFFECTS OF MICROWAVE RADIATION ENERGY?

IT HAS BEEN PROVEN that microwaves damage the structure of the food while it is still in the microwave oven. But what effect does microwave energy itself actually have? Does the microwave energy accumulate in the food, and does it pass from the food into the blood? Vital energy tests on the blood serum were conducted to provide answers to these questions. The importance of this matter becomes especially clear when we consider that all functions of a living body are dependent on its energy balance. The energy which allows a body to maintain and control its functions is derived from sunlight, and is absorbed directly from the sun's rays as well as indirectly, i.e. by means of food. If this energy is changed, such as in the case of microwave radiation, then it retains its destructive quality in the food and consequently in the blood of the body that consumed it. The problem then lies not only in the fact that the destructive energy remains hazardous in the food, but also that it damages the body afterwards in the same way.

Using a bioluminescence method it was possible to detect and measure the transfer of microwave energy into the blood via food. In order to do so a standardized suspension of luminous bacteria was added to diluted milk, diluted vegetable juices and serum samples, and every stimulation or inhibition of the luminosity was measured. Figure 5 shows that a temporary increase in energy in the blood serum occurred with a food intake. The absorption rate resulting from microwaved food was, however, in every single test case higher and lasted longer than with food that had not been exposed to microwaves.

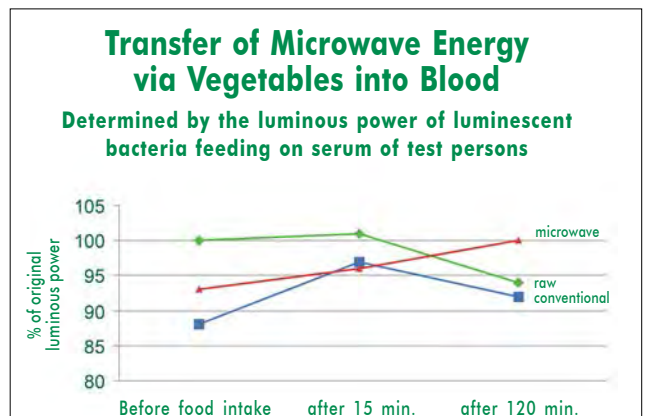


Fig.5: Absorption of energy from raw vegetables, conventionally cooked vegetables, and vegetables exposed to microwaves. Measurements of bioluminescence of luminous bacteria before and both 15 and 120 minutes after consumption. 15 minutes after food intake the luminous reaction increased in all samples. At testing time 120 minutes a further increase in luminosity was registered in the serum of test persons who had consumed microwaved food, whereas a decrease was evident after consumption of raw or conventionally cooked food.

WHAT DOES THE STUDY IMPLY?

AS PART OF THE IMMUNE SYSTEM, the blood reacts extremely fast and sensitively to stress in the organism, whether it is of a physical or psychological nature. It was realistic to presume that microwaved food could have an effect on blood. In the course of the study it became evident that food cooked or defrosted in a microwave oven leads to recognizable tendencies and even to significant reactions of the blood, although the stress was relatively slight and only effective for a short time, since the food was consumed only once per person in order not to endanger the health of the test persons. The results would certainly have been considerably more distinct if the test persons had been given microwaved food a few weeks longer. The objective of the study was to determine whether a change of quality would take place in the blood at all under the influence of microwaved food, and not primarily to what extent this would be the case. The measured effects of microwaved food on the human organism, compared with non-irradiated food, led to changes in the blood of test persons indicating an early pathological process, just as is the case in the beginning of a cancerous process.

In addition, direct changes were evaluated in microwaved milk. The protein stability got overstrained after irradiation. Milk becomes denatured when microwaved, and it coagulates to such an extent that it can no longer be properly digested. Yet microwaved milk does not only lose food value, but it also becomes toxic. A decrease in the folic acid of the milk was discovered. Folic acid is a vitamin of the B group and is essential for hematopoiesis. The analysis of the milk proved an increased acidity after exposure to microwaves. Acidity, nowadays a general problem also in nature, is a signal for a pathological process. It should be taken more seriously than is currently the case, for there will be no survival on this planet if the balance is not restored.

The results of the study suggest that technically generated energy, such as microwave energy, can be transferred inductively to the human body by means of microwaved food. It is easily imaginable what would happen in a human body if such energy were absorbed over a long time period. The immune system would sooner or later be weakened and even break down. If that happens it only takes an additional physical or psychological shock for a latent cancerous process to develop into an acute stage.

The results of this short term study carried out on a small scale are alarming enough to be a warning for consumers, scientists, and doctors. The author would be pleased if his work had laid a foundation for further investigations on this subject.

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# Are Microwave Ovens Exempt from Criticism?

ON 19 MARCH 1993 the *Canton Bern Commercial Court*—following a complaint filed by the *Swiss Association of Dealers for Electroapparatuses for Households and Industry* (FEA)—sentenced the scientist Dr. H. U. Hertel:

“1. The defendant is prohibited, under punishment of up to 5000 Swiss francs, or up to one year in prison (Art. 292 StGB and Art. 403 ZPO), to declare that food prepared in microwave ovens is dangerous to health and may lead to pathological changes in the blood as also indicative for the beginning of a cancerous process;

2. The defendant is also prohibited, under the same punishment, to use symbols of death or other symbols to this end in connection with microwave ovens.”

The Swiss Federal Court in Lausanne confirmed this verdict on 25 February 1994.

UNFAIR COMPETITION?

THE SWISS FEDERAL COURT bases its verdict on the law on Unfair Competition. This law concerning unfair competition can be breached when a person utters discriminating, untrue, misleading and unnecessarily harming statements against a supplier or his products (Art. 3 lit. a UWG). While, before the amendment of this law, a person could only be prosecuted for unfair competition when he was also a competitor, today's law applies to everybody. The Federal Court is not even interested in whether there is an intention behind it and whether it really conflicts with competition. It suffices if an utterance could possibly have an influence on competition.

THE SWORD OF DAMOCLES HANGING OVER THE PRESS

THIS KIND OF FEDERAL JUDGEMENT has led to an unbearable uncertainty in the Swiss press. Any criticism on anything like a product can immediately involve prosecution. The freedom of speech in Switzerland, which is talked of so highly everywhere, is being sacrificed on the altar of market economy and its managers. A number of journalists were condemned, because of criticizing the economy; recently the *Kassensturz* of the Swiss Television was also sentenced to pay a fine of more than half a million Swiss francs to a pharmaceutical company.