

Induction hobs

Induction hobs are very popular today. However, in comparison to electric or gas cookers, induction cookers have a serious disadvantage: **the strong magnetic fields generated during cooking are harmful to the health of the cook and adversely affect the quality of the food.**

How it works

Visually, the induction hob is hardly distinguishable from a conventional electric hob – both have a glass ceramic cover. With the induction hob, however, a strong, medium-frequency magnetic field in the range of 20 kHz to 100 kHz is generated under the cooking zone, which causes eddy currents in the pan base. Thus, the bottom of the pan is heated directly, whereas the cooking zone is only heated indirectly via the pan. As a result, the cooking zone reacts quickly and energy consumption is somewhat lower compared to an electric stove. Because only part of the magnetic field is absorbed by

the pans, stronger magnetic fields can be generated in the vicinity of an induction hob.

Health effects

All life and every communication process in nature works by means of fine electrical and magnetic impulses. The central nervous system, for example, controls the body's functions by transmitting extremely subtle electromagnetic signals. Technically generated electromagnetic fields, for instance with an induction hob, superimpose and interfere with these precise signals: information is distorted or does not reach its destination at all. Any change of this information can trigger malfunctions, stress and may even lead to illness. This is why the World Health Organization (WHO) has classified magnetic fields as potentially carcinogenic for humans.

Many studies prove the connection between magnetic fields and diseases:

- Children have an increased risk of developing leukemia. Women are more likely to get breast cancer.

- The brain's natural protective mechanisms (e.g. melatonin levels, blood-brain barrier) are weakened and diseases such as Alzheimer's or amyotrophic lateral sclerosis (ALS) are promoted.

- The radiation damages the genetic material of the DNA and can cause strand breaks.

- The result is oxidative cell stress, which generally weakens the immune system.

Limit values

The official limit values for technically generated electromagnetic fields in most countries are based on purely thermal and short-term irritant effects. Long-term effects, which already occur at very low radiation intensity and are proven by numerous studies are not considered to be reliable and are therefore **explicitly not taken into account when setting the limit values.** This approach is strongly criticized by many scientists. The limit values for these magnetic fields set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) are 27 μT (microtesla); however, biological effects have been detected from as little as 0.02 μT ! Interestingly enough, even official bodies such as the Swiss Federal Office of Public Health (BAG) provide the following advice on how to handle induction hobs:

- Pans should cover the entire hob and must not be defective (no crooked bottoms) so that no large stray fields can occur.
- Mainly the rear hobs should be used and the front ones only with low power.
- Metal cooking spoons should not be used, so that no leakage currents flow through the body.
- People with a pacemaker or implanted defibrillator should discuss the use of an induction hob with their doctor in advance.
- Finally, pregnant women should not stand too close to the stove, as the magnetic fields can damage the foetus.

Most induction hobs even exceed the maximum limits set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), for example when a person is standing close to the induction hob.

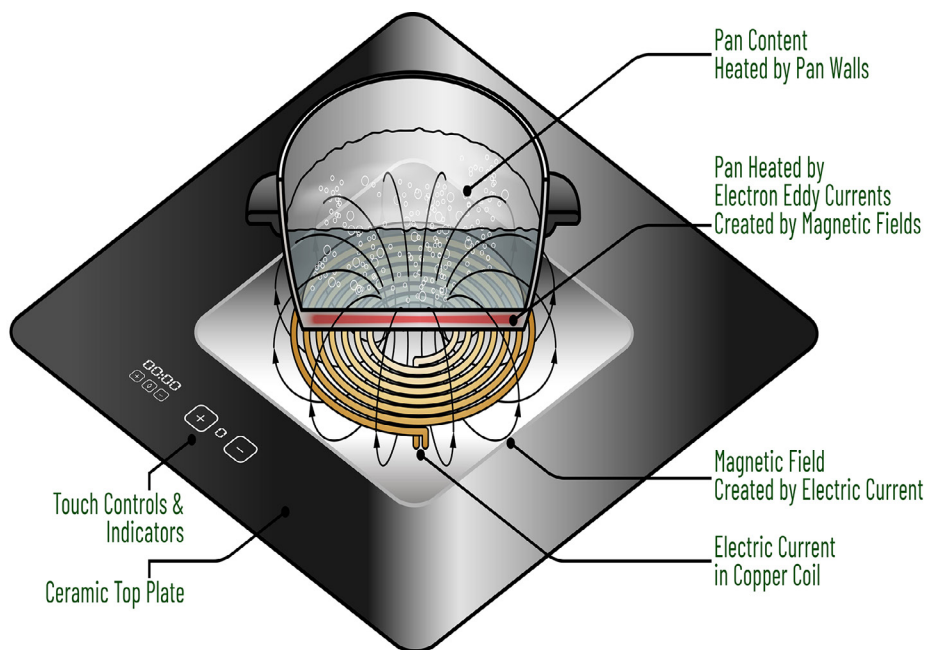


Fig. 1: An induction cooking stove essentially consists of a glass ceramic cover, under which a copper coil is located. Electric current flows through the coil and creates an alternating magnetic field, which generates eddy currents in the bottom of the pan. This heats up the pan and with it the food to be cooked.

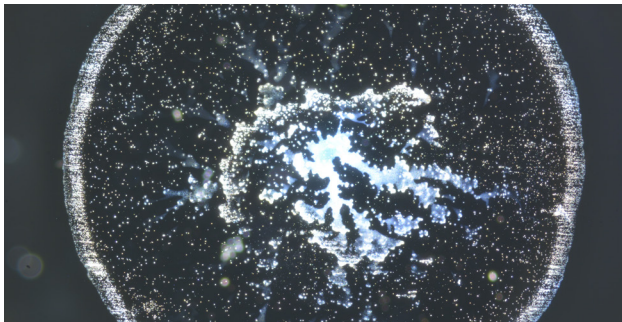


Fig. 2: Water drop image with gas stove

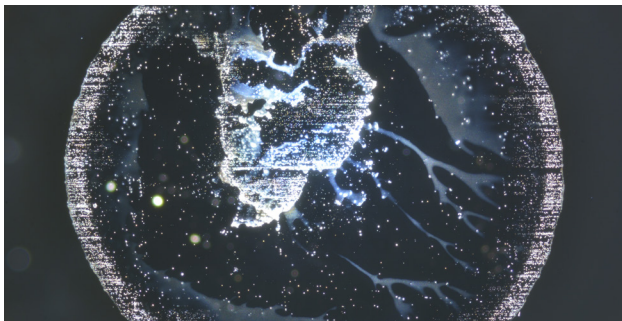


Fig. 3: Water drop image with electric cooker



Fig. 4: Water drop image with induction hob

The inner order is destroyed

In addition to the adverse health effects of magnetic fields, studies using a dark field microscope show that the induction stove also damages, if not destroys, the inner order of the food being cooked.

According to Erwin Schrödinger, winner of the Nobel Prize in Physics, the light stored in food is the decisive organizing factor. The order recognizable in the food corresponds to the quality of the food. In other words, we depend on food with a high degree of internal order for our health. The images (Fig. 2-4) were taken using the drop image method in the dark field at 25 x magnification. In the experiment, organic carrots were cooked on different stoves (gas, electric, induction), followed by the examination of the cooking water under the microscope. While the order of the dried water droplets was similar and clearly recognizable on the gas and electric stoves, it was destroyed on the induction hob (Fig. 4), a clear indication that the quality of the organic carrots had deteriorated.

The solution

Natural, wholesome food is an essential building block for life, well-being and performance. It therefore makes little sense to use a cooking appliance that impairs the quality of the food and harms the body, as is the case with induction stoves. The microwave is not an alternative either, because its effects on the food being cooked and the body are just as serious. (Information on this can be found on our Website.) For the above reasons, it is advisable to use an electric or gas stove. The electromagnetic load is much lower or even non-existent with gas stoves.

We are always happy to answer any further questions!

The World Foundation for Natural Science

World Headquarters

P.O. Drawer 16900, Washington, DC 20041, U.S.A.
 ☎-Tel. +1(703)631-1408 ✉-Fax +1(703)631-1919
 📧-E-Mail: WFNSHQ@NWC.global

European Headquarters

P.O. Box, CH-6000 Lucerne 7, Switzerland
 ☎-Tel. +41(41)798-0398 ✉-Fax +41(41)798-0399
 📧-E-Mail: EU-HQ@NATURALSCIENCE.org

07/24



The World Foundation for Natural Science
*The New World Franciscan Scientific Endeavour of The New World Church
 Restoring and Healing the World through Responsibility and
 Commitment in accord with Natural and Divine Law!*

