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Translated from Czech

EcoLoc protects food from bacteria and mold. Goulash in the fridge shines through with a strong UV beam



- EcoLoc destroys bacteria, viruses and fungi using a UV chip with a broad spectrum of radiation
- It's easy to use: just turn on the UV lamp a few minutes before placing it in the refrigerator
- The technology helps reduce food waste and is compatible with IKEA boxes

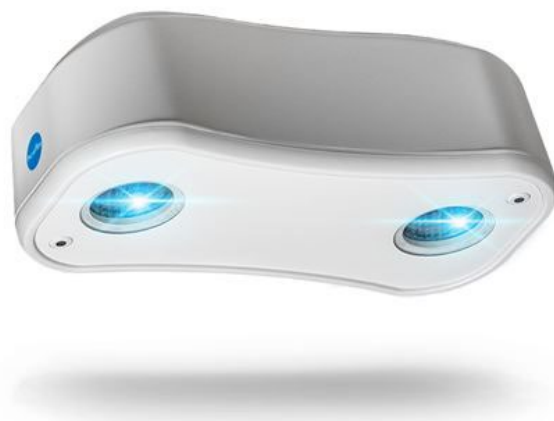
EcoLoc is a device consisting of a UV lamp and a special lid for food containers. It uses UV radiation technology to extend the freshness of food and ensure safe storage . It works without chemicals and, thanks to a special quartz glass lid designed for maximum UV radiation transmission, effectively destroys harmful microorganisms on the surface of food. This significantly slows down their spoilage and extends their shelf life.

EcoLoc is based on a small UV chip developed by experts from the Swedish company PureFize and scientists from Nanyang Technological University in Singapore. The chip generates short-wave UVC radiation that destroys the DNA of bacteria, viruses and fungi, and thanks to the broader spectrum of UVB and UVA, it can also disrupt biofilms, i.e. resistant layers of harmful organisms.

Unlike traditional discharge lamps, it does not contain toxic mercury and is small in size. UV light is produced by a phenomenon called cathodoluminescence (see Wikipedia), a process in which accelerated electrons strike a special surface and produce radiation.

Better than vacuum packaging

Unlike vacuum packaging, which seals the food, restricting air access but leaving bacteria inside, EcoLoc actively reduces them. It can therefore replace or supplement traditional preservation methods. Just press a button and it's done in about three minutes. The battery lasts for about 20 cycles on a single charge. The device operates in a range from -20 to 100 °C.



EcoLoc is a device consisting of a UV lamp and a special cap

Using EcoLoc is simple and convenient – just turn on the UV lamp for a few minutes before placing food in the refrigerator, or turn it on regularly during storage. Laboratory tests have shown that the device effectively destroys dangerous bacteria such as E. coli, Listeria or Staphylococcus aureus, and even the SARS-CoV-2 coronavirus . This increases food safety and helps reduce health risks associated with consuming contaminated food.

The test results also show a significant extension of the shelf life of various foods – for example, blueberries last up to 28 days longer, bread rolls by 22 days and tomatoes by a week. Treated raspberries remained in good condition even after seven days in the

refrigerator. The actual extension of shelf life, of course, depends on the type of food, storage conditions and other factors.

Works with IKEA boxes

This is of great importance not only for households, but also for the global fight against food waste, which represents a huge environmental and economic problem. According to the UN, more than half of the food purchased at home is thrown away . Often not because it is spoiled, but because it has lost its color, smell or taste. And this is precisely the fault of the microorganisms that EcoLoc effectively eliminates.



Food protection

EcoLoc technology is compatible with regular IKEA 365+ food boxes, making it easy to integrate into your everyday life. The device is designed to be safe, environmentally friendly and easy to use – it requires no refrigeration systems and can be switched on and off instantly as needed.

The future of this technology is promising - scientists plan to expand it into other areas, such as sterilizing medical devices, home hygiene and food packaging. If you're looking for a way to protect your food, save money and contribute to the planet , EcoLoc is proof that a small device with UV light can do big things.

<https://vtm.zive.cz/clanky/ecoloc-chrani-jidlo-pred-bakteriemi-a-plisnemi-gulas-v-lednici-prozari-silnym-uv-paprskem/sc-870-a-234593/default.aspx>