

10 May 2025

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UV-powered food cover can extend the life of the food in your ref



I cannot count the number of food that I had to throw away from my refrigerator because I forgot it was there or it spoiled already because of bacteria and microorganisms. Food waste is definitely a problem for people like me and it has significant environmental and economic repercussions. What if you had a gadget that can help extend the life of the food in your ref? Ecoloc is an innovative food container lid that utilizes ultraviolet (UV-C) light to combat food spoilage. It isn't an entirely new container, but rather a clever lid designed to fit IKEA's popular 365+ series of food storage containers. This compatibility makes it an accessible solution for many households already invested in this practical storage system.

The magic behind Ecoloc lies in its integrated, battery-powered UV lamp module. Developed by scientists from Nanyang Technological University in Singapore and PureFize Technologies in Sweden, the core of this module is a special chip that emits short-wave UV light, specifically UV-C. This type of UV light is renowned for its germicidal properties, effectively killing or inactivating bacteria, viruses, and other microorganisms that cause food to decay. Crucially, the UV-C light in Ecoloc is produced without the use of toxic mercury, a common component in traditional UV-C

lamps. This makes the Ecoloc a more environmentally friendly option. When the module is placed in the designated cradle on the clear glass lid and activated with a simple click, it bathes the food inside the IKEA container with this bacteria-killing light.



The primary benefit of the Ecoloc is its ability to extend the freshness and shelf life of food. By significantly reducing the microbial load on the food's surface, the Ecoloc slows down the spoilage process. PureFize claims that this technology can extend the shelf life of certain foods by up to 300%, although the exact duration will depend on factors like the initial condition of the food and how it has been handled. Research has indicated that bread can last up to 200% longer and tomatoes up to 300% longer with the use of Ecoloc. Beyond just keeping food fresher for longer, the Ecoloc also enhances food safety by reducing the presence of harmful pathogens that can cause illness. This

added layer of protection provides peace of mind for those concerned about foodborne diseases.





While UV light is powerful, Ecoloc has been designed with user safety as a top priority. The product features mechanisms to prevent UV exposure outside of the container, ensuring that it is safe for household use. It has also received CE marking for consumer safety, further validating its secure design. The UV light is primarily effective on surfaces directly exposed to it, while food beneath layers or not directly illuminated will maintain a healthy level of microorganisms. The goal is to eliminate enough harmful microbes to improve food quality and reduce the risk of high concentrations of “bad” microorganisms.





This device offers a promising and convenient solution to the pervasive problem of food waste. By leveraging the power of UV-C light in a safe and user-friendly design, it has the potential to revolutionize how we store food in our homes, leading to less waste, increased food safety, and ultimately, a more sustainable approach to our consumption habits.



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