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Translated from Spanish

The brilliant invention to keep food fresh in the fridge for longer: it eliminates germs and bacteria

EcoLoc is compatible with IKEA's 365+ series of Tupperware and uses shortwave ultraviolet light to eliminate food waste.

More information: Say goodbye to throwing away food: Lidl's solution for preserving food longer and with better flavour is sweeping Spain



EcoLoc 'installs' on the lid of food containers

Every year, 7.7 million tons of food are thrown away in Spain—about 65.5 kilos per household—according to data from the Ministry for Ecological Transition. These are scandalous figures, even more so on a global scale: one-third of the food produced worldwide ends up in the trash. To prevent this, it is essential to improve food preservation, with inventions like Shelfy, the ingenious device that makes food last up to 12 days longer in the refrigerator.

Along the same lines, a team of researchers from Nanyang Technological University (NTU) in Singapore and the Swedish company PureFize Technologies have joined forces

to develop and launch EcoLoc, a device that harnesses the properties of ultraviolet light to kill the bacteria that tend to proliferate if food has been in the refrigerator for too long.

The real innovation is the chip that enables the device to function optimally. Unlike conventional UV lamps, it doesn't require mercury and is only a few centimeters in size. It's capable of producing short-wave ultraviolet (UVC) light, which is more effective at eradicating germs.

The chip is the heart of the device, which is actually made up of two distinct parts. On one side is the UVC lamp module powered by conventional batteries, and on the other, a transparent glass lid designed for food containers. The Swedish designation of origin is evident in another detail: this lid's compatibility with IKEA's 365+ series of Tupperware.

The best part is that EcoLoc doesn't need to be turned on all the time. It only needs to be turned on for a few minutes after placing food in the container, and it has a timer that automatically turns it off. If you want to extend the storage time even further, you only need to turn it on for a few minutes each day.

Their results have been confirmed through extensive laboratory testing, which highlighted the device's ability to kill bacteria as dangerous to health as *Legionella*. Researchers tested different types of food, such as tomatoes, which could be stored in the refrigerator for seven more days without spoiling, and blueberries, which lasted an extra 28 days.

The best part is that the research has been translated into a commercial product, which can now be purchased through the EcoLoc website for €79. This is the price of the starter kit, which includes the UV lamp module, three food containers, and three lids adapted to the system.

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