New Way to Freeze Food Could Dramatically Cut Carbon Emissions

Detail Introduction :

Freezing is a relatively cost-effective way to preserve nutrition and flavor, but unfortunately, it comes huge energy and carbon emissions. Researchers have now devised an entirely new method of freezir that could reduce global energy consumption by as much as 6.5 billion kilowatt-hours a year. These 4 billion kilograms of carbon emissions are equivalent to about 1 million cars.



In addition, the technology considerably improves the quality of food and can be preserved for longe traditional freezing methods.

The technique, called isovolumetric freezing, relies on storing food in rigid, airtight containers made or plastic or metal filled with liquids such as water, which are then placed in the refrigerator. While tradi freezing involves exposing food to air and freezing it into a solid at sub-zero temperatures, the new n doesn't turn food into a solid.

Instead, only about 10 percent of the water in the container is frozen, and the pressure of space previce from expanding. "The energy savings come from not having to freeze food completely, which is er intensive," Bilbao-Sainz told anthropocenemagazine.org.