

## IS KITCHEN TECH THE KEY TO ENDING FOOD WASTE?

*As new companies set out to change the way we use the contents of our kitchens, Flashes investigates whether smart technology can help us beat our overflowing bins.*

If you've watched a news programme or documentary in the last five years, or even read a newspaper, there's little chance you are unaware of the threat food scarcity presents globally. From global warming and rising tides to drought, livestock disease and rapid population growth, the reasons for food insecurity are manifold, and the impact is already being keenly felt across much of the African continent and legions of developing countries.

As such, it will likely surprise many that a staggering one third of all food produced globally each year is lost or wasted, according to the United Nations Food and Agriculture Organisation (FAO).

Food insecurity is described as one of global development's most pressing concerns by the UN, and more than one billion people globally go hungry each year, yet in truth, the world is producing more than enough food to match current demand.

However, whether through production problems through to household consumption, 1.3 billion tonnes of food goes to waste annually, representing a waste of resources such as land, water, energy and human toil, as well as an unnecessary increase in greenhouse gas emissions.

While food waste is undoubtedly a global concern, as anyone who has eaten out in the UAE over the past decade knows, for many years the country's five-star hotels were engaged in a more-is-more battle to attract consumers, one lobster tower at a time.

That is, until last year, when work to turn the tide at a governmental level was stepped up significantly with the launch of the UAE Food Bank and a Dubai Government commitment to working towards zero food waste. Launched under the umbrella of Mohammed bin Rashid



## UAE FOOD BANK

An initiative of collaboration with local authorities as well as local and international charities to introduce a comprehensive ecosystem improving the efficiency of food storage, packaging and distribution, the UAE Food Bank was launched in 2017 under the Mohammad Bin Rashid Al Maktoum Global Initiatives Foundation.

### THE UAE FOOD BANK FOLLOWS THREE MAIN STEPS:

#### 1. COLLECTION OF FOOD

The Food Bank partners with food producers (such as hotels, restaurants, supermarkets, farms and philanthropists) to collect fresh and canned foods.



#### 2. SAFE STORAGE

Dubai Municipality provides operational support, following an internationally standardised process of food collection, packaging, storage and distribution.



Source: MBRGI

Al Maktoum Global Initiatives (MBRGI), the UAE Food Bank dedicated itself to turning the tide on waste by committing to distributing food to those in need, while at the same time collaborating with local authorities, as well as local and international charities, to help eliminate the issue.

The food bank's comprehensive system, aimed at efficiently storing, packaging and distributing excess fresh food from hotels, restaurants and supermarkets, quickly made headlines, with many of the country's residents looking afresh at their approach to living more sustainably. It was a timely intervention, for according to Abu Dhabi's Masdar Institute, almost half of food at UAE hotel buffets at the time was being wasted, with a staggering \$3.54 billion a year being spent on food waste across the country.

Whether eating out or at home, many of us are wasting sizable quantities of food. From busy working schedules to erratic travel commitments, the reason consumers end up binning so many groceries are many and complicated. But with a number of new technological innovations on the horizon, could now be the time for us all to adopt smart systems in our homes aimed at curbing our own personal food waste?

In recent years, many of the world's leading home appliance firms have been turning their expertise to the creation of smart fridges featuring family hubs, which can help consumers manage their grocery shopping by encouraging the use of produce before it passes its best. With an increasing number of devices now on the market, the technology they offer is becoming ever more ingenious, with some home appliances even enabling owners to integrate their families' schedules with their fridge's shelves, ensuring that dinner prep is limited to household members



*“Smart fridges are still not accessible to a lot of people, so we want to make regular fridges smarter”*

**STACIE THOMPSON**, co-founder Ovie



## GLOBAL STATS

## 3. DISTRIBUTION

The Food Bank work with volunteers and partners to distribute the well-packaged food within and outside of the UAE.



There are almost  
**ONE BILLION**  
hungry people in the  
world right now



If only one quarter of the  
food wasted was saved, it  
would feed about  
**870 MILLION**  
hungry people across  
the world

who will be home in time for supper. But while the limitations of these machines are seemingly endless, all this technology comes at a cost, and smart fridges have, until now, been a realistic possibility for only those of generous means.

All that looks set to change in the coming months, however, as a number of innovative new technologies designed to help consumers turn the fridges they already have into smart, integrated tech hubs hit the market.

Take Chicago-based startup Ovie, which recently crowdfunded \$64,000 to finalise development of a product that helps track food expiry via Bluetooth. For co-founder Ty Thompson, the lightbulb moment came when he found himself throwing a pasta dish prepared earlier in the week into the bin. Making a pledge to reduce his own food waste, he and his team took inspiration from a carpark system that used LED lights to indicate the proportion of empty spaces to create a food management system that reminds consumers when food in their fridge needs to be used up. The integrated system takes note of what is in a user's fridge, then suggests recipes that will make use of ingredients in a timely manner, even coming up with edited grocery lists to ensure shoppers buy only what they don't already have hiding at the back of their shelves at home.

"We're trying to solve a friction point in people's lives," explained company co-founder Stacie Thompson. "Nobody intends to throw out food, but life gets busy and chaotic."

The duo's ingenious system has evolved dramatically from an initial LED light programme to a series of smart-tagged containers that track food freshness. A light on the tags, which can be attached to fresh vegetables as well as sealed containers, changes

colour to indicate food freshness and kits, which will be priced from \$90, are set to ship early next year.

"It went from simply a light system in your fridge to help you waste less food to a fully integrated solution that reminds you when food needs to be used up, suggests recipes and lets you shop for ingredients," Thompson says.

"Smart fridges are still not accessible to a lot of people, so we want to make regular fridges smarter."

Meanwhile, in London, a company named Smarter is attempting to do a similar thing across Europe, while seeking crowdfunding to make its innovative new waste-saving app available in the US and further afield.

The firm will shortly begin shipping its 'Fridge-Cam', a wireless camera that fits inside a fridge and connects to an app, allowing users to view the contents of their fridge from any location. The device, which takes a picture each time the fridge door is closed, is already making waves, with the firm claiming to have received more than a million pre-orders from across Europe.

"If people are in a store, they can open the app and see what's in their fridge. Or they can use it for reminders," Smarter Chief Executive Christian Lane explained.

The app also tracks best before dates and can create shopping lists as items need replaced. The company has even formed a partnership with Tesco, the UK's largest supermarket chain, allowing users to connect the app to the store's online shopping platform.

"Longer term, I think we will move away from people checking the fridge or even checking the app to see what they need," Lane said. "Instead, everything will happen automatically in the background. We want to build a powerful replenishment platform." ♪

