

# Japanese company wants diners to eat everything, including the plate

KEITA NAKAMURA  
HEKINAN, AICHI PREF.  
KYODO

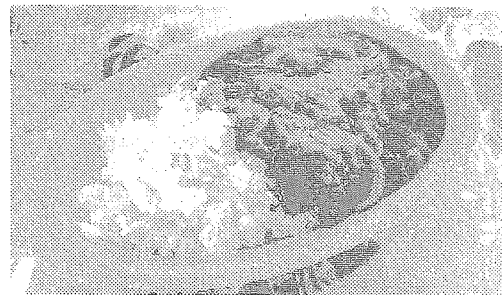
**I**n the future, when someone implores a dining companion to “finish off the meal,” it just might mean that they are expected to eat the plate and cutlery, too.

This is what Katsuhiko Sakakibara, the managing director of Marushige Seika, a confectionery company in Hekinan, Aichi Prefecture, has in mind. His goal is to help reduce the amount of plastic waste around the globe.

“If edible crockery became prevalent throughout society and replaced plastic, it would bring about a serious environmental benefit,” Sakakibara says.

As plastic and polystyrene waste become a more and more pressing global issue, manufacturers have begun developing edible tableware items as replacements for disposable plates, straws and cups.

Marushige Seika is a small business that has been making the wafer shells for ice cream-filled *monaka* desserts since 1983. More recently, it has been producing an edible-plate product, called the e-tray, which saw an unprecedented spike in its annual



Complete meal: A dish of rice and hashed meat served on Marushige Seika's edible e-tray plate KYODO

sales last year, tripling the figure of 2018.

Crispy like an ice cream cone, e-trays come in oval and rectangular shapes. They are also durable enough to hold food, with a thickness of about 5 millimeters.

Sakakibara originally came up with the idea of edible tableware as a way to combat the waste problem about 10 years ago when he visited a B-1 Grand Prix event, a famous nationwide food competition at which local specialties are promoted.

He saw mounds of single-use plates discarded haphazardly by the hundreds of thousands of visitors who had sampled a variety of dishes at various booths at the event. The sight made him wonder if there was anything he could do to reduce the amount of waste, which sparked the idea of edible plates made from *monaka* wafers.

To ensure the product was not going to fall apart when holding foods with a liquid element, he used a technique for making *ebi-senbei*, a hard shrimp cracker made of potato starch and one of Hekinan's specialties.

For ingredients, Sakakibara also picked potato starch instead of wheat flour and corn starch, which are typically used in ice cream wafers.

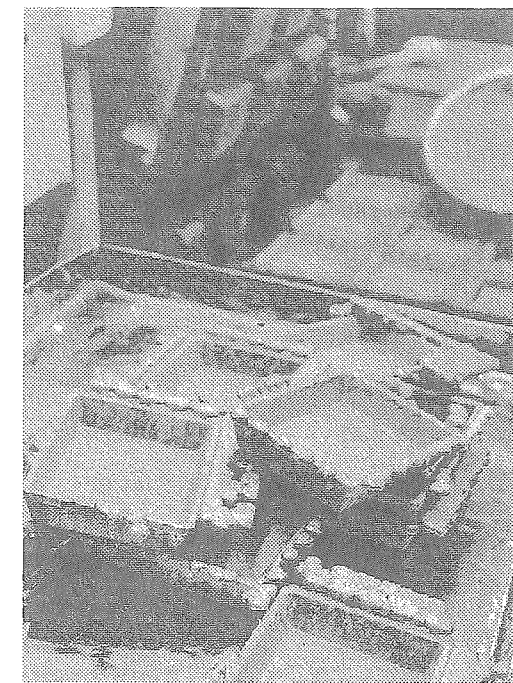
“Potato starch tends to swell when baked,” Sakakibara says. “I thought that, by baking it in metal molds, while applying high pressure, the plates would be hard and resistant to moisture.”

It took about one-and-a-half years for Sakakibara to make his e-tray design a reality and a salable product. But even after that, it took a process of trial and error before he perfected and refined the method of production, which he completed just a few years ago.

“Even if the plates are discarded and left uneaten, they will decompose faster than biodegradable plastics, or become food for animals,” Sakakibara says, adding that he is confident that the plates, which come in dif-



Above: Katsuhiko Sakakibara, managing director of confectionery firm Marushige Seika, holds up one of his company's edible plates and a pair of edible chopsticks. Above right: Freshly made square e-tray plates are ready to be trimmed at Marushige Seika. KYODO



ferent flavors — including *ebi-senbei*, onion, sweet potato and corn — taste good.

In the years since the product's launch, Sakakibara has tried to explore new sales channels by paying frequent visits to outdoor events at which street vendors sell food and where large amounts of plastic waste accumulate. There was a sudden and unexpected change last summer, when the orders of e-trays began to increase.

“I guess that reflected growing public concern with (the damage done by) plastic waste,” Sakakibara says.

Edible chopsticks, the company's second edible product, went on sale in 2017, and Sakakibara plans to further expand the company's lineup, turning to edible spoons next, which he plans to release by this summer.

Looking outside the country, edible tableware such as tumblers, food wrappings and even coffee cups, including those introduced by Air New Zealand on a trial basis for in-flight meals in December, have already been commercialized.

Among domestic businesses, confectionery maker Bourbon Corp., based in Niigata Prefecture, northwest of Tokyo, began to sell edible straws in January.

“When we were trying to develop ideas to combat the plastic waste issue, we hit on a good plan of revamping one of our existing products that is straw-like,” says a public relations official for the company, adding

that it has been approached by cafes in and near Tokyo about using them.

Compared to overseas markets of edible tableware, however, the size of the domestic Japanese market is still small, with a limited number of companies making such products, according to Sakakibara.

One of the biggest challenges to overcome before edible tableware becomes more popular is the cost. An e-tray costs at least ¥50, about 10 times more than disposal plastic plates. Sakakibara says that people are also reluctant to eat plates that may have been placed on the floor or a dirty surface, though he points out that leaving the plates to decompose, rather than consuming them, is still an environmentally friendly option.

But he appeared unfazed by the downside. “There must be certain people who will still choose edible items because of their eco-friendliness, even if they're more expensive,” he says. “In the short term, I understand that not all disposable tableware will be replaced.”

The next goal Marushige Seika has set is to make the business self-sustaining, though Sakakibara adds that is far from his main concern.

“Of course, earning money matters, but now heightening people's awareness of reduction of trash and plastic waste matters more,” Sakakibara says. “I hope edible tableware will contribute to this.”