\ How many do you know? /

Take the "good actions for zero food loss and waste"

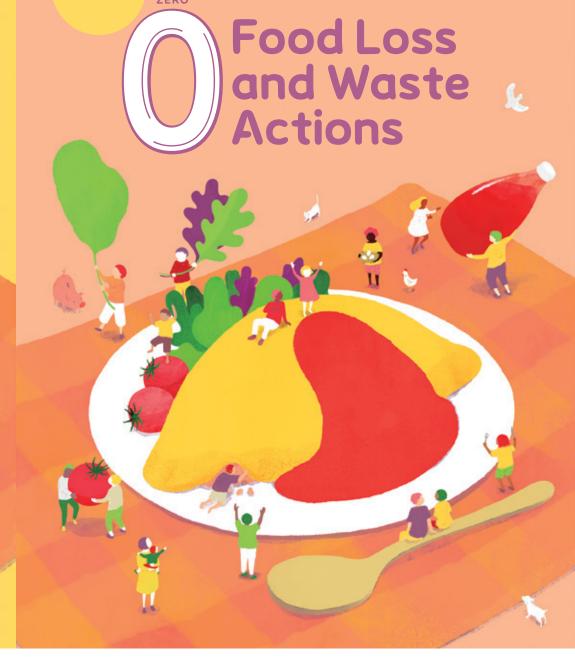
QUIZ!

- What kind of action is

  "taking the one in front of you"? A. Check P4 →
- Name three key points to keeping your fridge organized. A. Check P5 →
- When do you use a "doggy bag"?

A. Check P8 →





**TOKYO** 

Issued in September 2023 Issued by: Tokyo Metropolitan Government Bureau of the Environment, Resource Recycling Promotion Division, Planning Section Printing: IMOS





Use the QR code on the right to access the brochure and the Good Actions video.





Let's first look at what generates food loss and waste and the amount that is thrown away every day.

### Where does food loss and waste come from in the first place?

In addition to food loss and waste that happens at home or in restaurants, it can also occur in the process of getting food from the producers to us, the consumers.

### At producers



Food gets thrown out at places like farms and fisheries for reasons such as over-harvesting, or the food being misshapen (substandard).

### At manufacturers



Food gets thrown out due to overproduction at the factory, misprinted labels or damaged packaging, returns from retailers, and so on.

### In delivery



Food is thrown out if the package gets damaged in transit from the factory to the wholesaler, retail shop, or restaurant.

### At shops



Food that is not sold at shops is sent back or thrown out. Food thrown out by restaurants includes leftovers not eaten by customers.

### By consumers

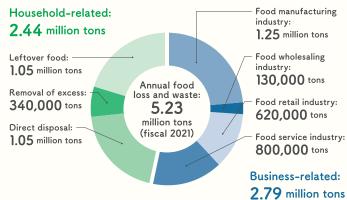


Food is thrown out by families when we buy too much food or forget to use it, when we cook too much, there are leftovers that go uneaten, and so on.

### Food loss and waste in numbers

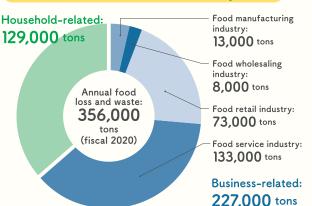
The total amount of annual food loss and waste in Japan is approximately 5.23 million tons! Of this amount, around 2.44 million tons is food loss and waste generated by households, while around 2.79 million tons is business-related, coming from food manufacturing, supermarkets, restaurants, and other businesses.

### Food loss and waste in Japan



\*The breakdown for business-related food loss and waste does not match the total amount.

### Food loss and waste in Tokyo



Household food loss and waste accounts for around half of the total amount nationwide, and about 40% of food loss and waste in Tokyo. This is mainly due to leftover food that is uneaten and throwing food away before it is eaten. Meanwhile, in the business-related category, the food service industry in Tokyo generates a higher percentage of food loss and waste than it does nationwide, accounting for more than half of all business-related food and waste.

#### Did you know?



Per capita, **114 grams**, equivalent to one rice ball, is thrown away every day.

 $\setminus$  Let's put them into practice starting today! /

### Good actions to take for zero food loss and waste

We can greatly reduce the food loss and waste that happens both at home or in businesses through our own actions. Why don't we all start taking "good actions for zero food loss and waste" today?









### Understand the difference between an expiration date and a best-by date

There are two kinds of expiration dates on processed foods: a consumption expiration date and a best-by date. If you know the difference between the two, you can shop smarter and reduce food loss and waste.



Foods that are easily damaged such as packed lunches, sandwiches, and deli-type side dishes

### "Best-by" date

Date up to which the food will maintain its best flavor

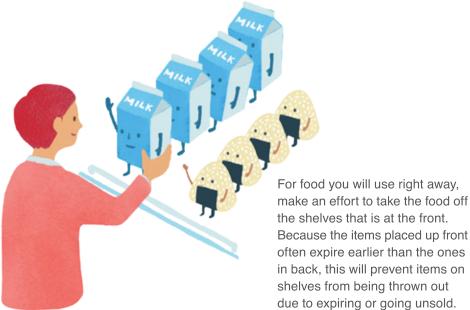


Longer-lasting foods like snacks, cup noodles, and canned foods.

Remember that the best-by date is a guideline for when the food is most delicious. Instead of just throwing it out as soon as it's past the date, check first to see if you can still eat it.



### For food items you will use right away, be sure to "take the one in front of you."





### Use a food sharing service

Try using a food sharing service, which rescues those items in danger of food loss and waste at restaurants and the like. The services allows you to purchase products at a discount before shops dispose of them.



Matches surplus food from stores with consumers through apps, etc. Contributes to the reduction of food loss and waste.



## \ Let's put them into practice starting today! / Good actions to take for zero food loss and waste







# GOOD ACTION

### Keeping the refrigerator tidy

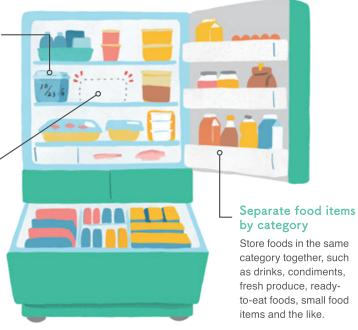
When your fridge is well-organized, it is easier to find the food you have in it, preventing food loss and waste due to forgetting to use groceries. Most of all, it feels good to be able to locate food items at a glance! Try to make it a habit.

### Place items that will expire soon up front

Place foods that need to be eaten right away, such as food that is about to expire or is ready-made, in a conspicuous place at the front of your fridge.

### Make space "just in case" you need it

The key to keeping your fridge tidy is to not to cram too much food in it, but to make sure there is always some open space.





### Store food the best way

Store the food you buy with care while it is still fresh so you can savor every bite of it. Vegetables, meat, and fish can be frozen as is. You can also freeze bread to preserve its flavor without any deterioration.

### Key points for smart freezer storage

#### Komatsuna and spinach

It is convenient to freeze them after cutting them into conveniently sized pieces. Use in dishes that you heat up, such as miso soup, as the texture changes.



### Shiitake and other types of mushrooms

You do not need to wash them; just remove any pebbles or sawdust, cut them up and then freeze for convenient use. This also brings out the umami flavor.



### Green onions, ginger, and garlic

Chop or mince them and then freeze for quick use when you need a condiment or a secret ingredient.



#### Sandwich bread and French bread

To preserve the flavor, wrap in plastic wrap or aluminum foil and then freeze. When you are ready to eat it, just toast or grill it as is.





## Take steps to prevent preparing too much food

Before you start cooking, avoid making too much by checking your family members' plans and how everyone is feeling. Not wasting food and only making what everyone will finish will also help save you money.



## \ Let's put them into practice starting today! / Good actions to take for zero food loss and waste









At restaurants, only order the amount of food you can eat



Order just the right amount of food for how you are feeling and how hungry you are at that moment. We also recommend looking for a restaurant that helps ensure people eat everything on their plate through efforts to eliminate leftovers such as offering a selection of smaller portion sizes or small side dishes.



finishing your meal.



### When having a dinner party, try doing "3010."

For the first 30 minutes after the meal starts, just enjoy eating your food without getting up. Then, 10 minutes before things come to a close, return to your seat and enjoy eating the rest of your meal. This is called the "3010" movement. Make it an environmentally-friendly party by encouraging everyone to try it out and not leaving any leftovers.



Source: Ministry of the Environment



## Ask if you can bring any leftovers home



If you couldn't finish everything on your plate, ask someone at the restaurant if you can get it wrapped up to go so you can bring it home and eat it later. We also recommend using a doggie bag.



### What is a doggy bag?

A doggy bag is any kind of container you can use to bring leftover food home with you. If you get in the habit of using a doggy bag, it will cut down on food loss and waste. Also, some restaurants that let you take home leftovers will have a "mottECO" logo.

Source for logo: Ministry of the Environment

## A world that has realized zero food loss and waste

Today, about one-third of the food produced in the world each year, or about 1.3 billion tons, is thrown away. What kind of future would await us if we could reduce food loss and waste to zero? Let's imagine it together.

## Cuts down on greenhouse gas emissions!

Food that does not get consumed by humans is responsible for generating approximately 3.6 billion tons of greenhouse gases like carbon dioxide a year. If we can reduce food loss and waste, we can also reduce greenhouse gases.

Amount of greenhouse gases that can be reduced

approx. 3.6 billion tons\*

### Let's dig deeper

3.6 billion tons is about the same as the amount of carbon dioxide that would be absorbed by all the forests in Japan (about 27 million ha) over a 15-year period.

## Reduces wasting of water resources!

A lot of water is used in the production and manufacturing that produces food. About 250 K m³ of water used for food is disposed of per year, which is about 9 times the amount of water in Lake Biwa.

Amount of water that can be reduced

pprox. **250** Km<sup>3</sup>

### Food will reach the people who are in need

It is estimated that one in ten people in the world, or about 770 million people, suffer from hunger. If the food that is being thrown away could get to those who need it, we could reduce the number of people suffering from hunger and malnutrition.

Number living in hunger who would be impacted

approx. 770 million people

### Let's dig deeper

By donating food we won't be able to use up at home to food drives in the community or at stores, it can get sent on to those in need.

## Less unnecessary spending, saving families money!

In Japan, food accounts for more than 1/4 of all household expenditures, and a family of four throws away approximately 60,000 yen worth of food per year. If we can reduce the amount of food we throw out, we can save that much in food costs.

Spending on food that can be reduced

approx. **60,000** yen







## The Tokyo Metropolitan Government is also taking action!

## Efforts to achieve zero food loss and waste

The Tokyo Metropolitan Government has formulated the "Tokyo Metropolitan Food Loss and Waste Reduction Promotion Plan" and aims to halve food loss by 2030 from the 2000 level, and to achieve net-zero food loss and waste\* by 2050. We are working with businesses, consumers, and all other stakeholders to achieve these goals.

\*We will minimize the generation of food loss and waste to the extent possible, while repurposing any inevitably occurring food loss and waste to make animal feed or fertilizer in order to reduce disposal to zero.

## The Tokyo Metropolitan Government's food loss and waste reduction targets

2000



\Cut in half! /

2030



760,000 tons

510,000 tons

380,000 tons Net zero! / 2050

Formulation of the 2021

"Food Loss and Waste Reduction Promotion Plan"

Formulated based on the "Act on Promotion of Food Loss and Waste Reduction," which took effect in 2019.



### 2030

### Reduce food loss and waste by half

Specific initiatives to achieve the target

#### Priority

### Prevent food loss and waste before it happens

### Raise awareness among consumers and businesses

Understanding the correct knowledge, encouraging behavioral changes, and sharing of good practices of businesses regarding the reduction of food loss and waste.

### Utilize new technologies for food loss and waste reduction

Utilization of demand forecasting technology using AI, etc. and packaging and freezing technologies that can preserve freshness.

### Promote initiatives for the food supply chain

Provide a forum that brings together all of the stakeholders to share the status of their efforts to review business practices, including the relaxation of delivery deadlines.

### Make effective use of food

### Promote utilization of unused food products

Facilitate the effective use of food stockpiles for disaster preparedness by matching stockpiles of municipalities and the Tokyo Metropolitan Government with food banks.

### Recycle and repurpose food

#### Promote food recycling

Recycle food from the loss and waste that inevitably occurs in the end to use it for animal feed, fertilizer, or energy.

### $\setminus$ Something many people don't know /

## Business practices that strongly contribute to food loss and waste

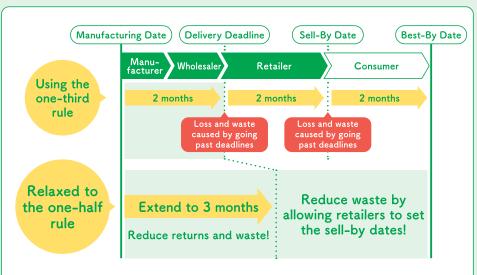
The food industry has its own way of doing things (commercial practices), some of which are responsible for food loss and waste.

The Tokyo Metropolitan Government is working with the food industry to review these customs.

### From the "one-third rule" to the "one-half rule"!

#### What is the "one-third rule"?

This rule refers to a business practice in which the period from product manufacture to best-by date is divided into three parts of roughly equal length: the deadline for delivery, the sell-by date, and the best-by date. Products are subject to return or disposal after each of these dates. If the product has a 6-month shelf life, 2 months from the date of manufacture is the delivery deadline from the wholesaler to the retailer, followed by the next 2 months until the sell-by date for the retailer.



### Food industry initiatives

Rules are being reviewed throughout the industry, such as relaxing delivery deadlines from one-third to one-half of the time period. Also, supermarkets and other retailers are eliminating sell-by dates and coming up with innovative ways to sell products without having to return or dispose of them.

#### What we can do

These business practices are driven by our need for new products with longer shelf lives. It is important for us to think about how we should shop to reduce food loss and waste.

## Global initiatives to achieve zero food loss and waste

The SDGs\* (Sustainable Development Goals) also call for a significant reduction of food loss and waste. Here we will introduce some of the efforts being made around the world to achieve zero food loss and waste.

\*International targets set in 17 areas, including the elimination of poverty and hunger.

## "Public refrigerators" that anyone can use

In Germany, the UK, Spain, and the U.S., open refrigerators have been installed in towns where anyone can donate excess food and take home any food they like. Itabashi Ward in Tokyo has a similar initiative called "Community Fridges."



Image: 5D Media/Shutterstock.com



### "OzHarvest Market," a free food supermarket

In Sydney, Australia, there is a supermarket where people can take home good quality surplus food free of charge. It is operated by OzHarvest, a national food rescue organization. The store serves over 400 customers daily.

### Enforcement of laws aimed at zero food loss and waste

In January 2022, the state of California in the U.S. enacted a law requiring businesses to take steps to reduce food loss and waste. Households are also required to compost food scraps by placing them in dedicated collection boxes.



### Message to Tokyo residents

A plentiful world with zero food loss and waste is not something anyone can create for us, but rather something that each of us can create for ourselves.

Let's take action together, starting by doing what we can!