

EVEN A TINY AMOUNT of bacteria can be a dangerous thing when it comes to food. While that packet of *nasi lemak* bought earlier in the morning might still seemingly smell and taste fine later in the day, it might have already harboured enough toxic pathogens to leave you feeling nauseated and ill.

“The immune system in healthy adults can deal with small amounts of bacteria and viruses. But larger numbers of such bugs can make us quite sick,” explains Ms Charmaine Toh, a dietitian with National Healthcare Group Polyclinics (NHGP).

Indeed, vulnerable people such as pregnant women, people with weakened immune systems or the elderly can die from food poisoning.

Common symptoms of food-borne illness — usually known as food poisoning — can be mild or severe. These can include nausea, vomiting, diarrhoea, stomach cramps, headaches and fever. While most episodes last only a day or two, some infections can be nasty. Hepatitis A or typhoid can cause severe illnesses lasting many weeks. Some food-borne illnesses can even result in long-term health issues involving the immune system, gut or kidneys.

Ms Toh says one of the most common causes of food-borne illness is the improper storage of cooked foods. While cooking destroys most pathogens, bacteria can be reintroduced to food later on, and leftovers can become a breeding ground for toxic strains such as *Staphylococcus aureus*, *Salmonella enteritidis*, *Escherichia coli* and *Campylobacter*. Here are the best ways to take care of leftovers.

Worthy of HEATING UP

SOMETHING AS INNOCUOUS AS STORING LEFTOVERS AND WARMING THEM UP PROPERLY CAN BE A VERY SERIOUS MATTER.

BY ELISABETH LEE IN CONSULTATION WITH
MS CHARMAINE TOH DIETITIAN // NATIONAL HEALTHCARE GROUP POLYCLINICS



Tip 1

Time is of the essence

Once food has been cooked, it should be refrigerated or frozen within **two hours**, says Ms Toh. Leftovers must be put in shallow containers or distributed into smaller portions for quick cooling, and refrigerated at or below 4°C within two hours.

In general, food can be stored for three to four days in a covered container in the refrigerator. Food destined for the freezer should be labelled with the freeze date and stored in freezer-quality resealable bags or sturdy glass/plastic containers.

BACTERIA TYPICALLY DO NOT CHANGE THE TASTE, SMELL OR LOOK OF FOOD. THEREFORE YOU CANNOT TELL WHETHER A FOOD IS DANGEROUS TO EAT. IF YOU ARE IN DOUBT ABOUT A FOOD'S SAFETY, IT IS BEST TO THROW IT OUT.

MS CHARMAINE TOH



Tip 5

Put the right food in the right place

Avoid **cross-contaminating** your food by storing cooked and ready-to-eat items separately from raw food, especially raw meats, advises Ms Toh. Use a separate, properly-covered container for each food item, and adopt a “first in, first out” principle when consuming leftovers.

Adds Ms Toh, “Do not store perishable food in the refrigerator door, especially milk. The temperature of food stored in the door can increase when the refrigerator is opened, so store foods that can go bad quickly on the main shelves of the refrigerator.” **LW**

Tip 2

Thaw food in the refrigerator

When food is left to thaw at room temperature, bacteria that may be present can multiply to unsafe levels. While freezing does inactivate bacteria, some may remain alive and can begin to multiply when the food returns to room temperature.

Thaw frozen food in the refrigerator in a container to catch the drips (thereby preventing cross-contamination), or use a microwave oven. If thawing small items quickly under running water, place them in a leak-proof bag. **Cook all thawed food immediately** and do not refreeze.



Tip 3

Use the right container

Take-out food containers are often made of foam, plastic or paper and may not be **microwave-safe**. Store and reheat take-out items in food-safe containers. Certain plastics are safe, while ceramics and glass are best. “Never reheat or store food in plastic containers that were not intended for food. Containers meant for one-time use, such as margarine tubs, tend to warp or melt in the microwave, and this may allow harmful substances in certain plastics to leach into the food,” says Ms Toh. Avoid plastics and containers that are visibly damaged, stained or have a bad smell.

Tip 4

Get hot, hot, hot!

It is important to use the right method of reheating to ensure all bacteria are destroyed. Whether oven-baking, sautéing or microwaving, Ms Toh recommends that leftovers be brought to a **minimum temperature of 74°C** — use a food thermometer to check — and soups, sauces and gravies should be brought to a rolling boil.

If using a microwave oven, give your leftovers a good stir in the middle of heating and allow the food to stand for a few minutes afterwards, as the heat will continue to radiate through the food. Do not forget to use a microwave-safe covered container — leftovers heat more evenly and retain their moisture better when covered.