

Correct hand washing is important

Correctly washing your hands is an important step in minimising the risk of food-borne illness in your food business. Thorough hand washing physically removes dirt, food waste, grease and harmful bacteria and viruses from your hands. It is a legal requirement for food handlers to wash their hands.

Hand washing facilities

The Food Standards Code requires food premises to have hand washing facilities in food preparation areas, or where food handlers' hands are likely to be a source of contamination of food, such as the servery and cash register area.

Hand washing facilities must be:

- connected to or provided with a supply of warm running potable water
- of a size that allows easy and effective hand washing
- accessible
- provided with soap and single use towels (or air drier) and a container for used towels
- clearly designated for the sole purpose of washing hands, arms and face
- operated other than by hand (i.e. flick mixer).

Suitability and maintenance of premises

Commercial kitchens must be designed and organised to minimise food safety risks.

Consideration should be given to the workflow process. This refers to the way in which raw ingredients and the final products are stored, handled and served in the premises, and ensuring that food doesn't come into contact with possible sources of contamination, such as dirty dishes or leftover food, as it is being received, stored, prepared or served. It also considers how and where chemicals, cleaning equipment and rubbish are stored and ensuring sufficient and suitable food preparation surfaces and benches.

It is important to ensure that:

- 1. Non-food preparation areas are kept away from food preparation areas.
- 2. Separate work spaces are designated for preparing raw foods and cooked foods.
- 3. Cooking areas and equipment are put close to food preparation areas.
- 4. There are hand washing sinks in convenient locations for frontand back-of-house staff (servers, kitchen staff etc)
- 5. The premises complies with all relevant codes and legislation including food, building, plumbing, fire and water and wastewater services.

For advice on fit-out requirements for food businesses, please email health@bassendean.wa.gov.au or phone the Health Services team on 9377 8000.







Safe Food

Food businesses are responsible for safely storing food, including dry goods, refrigerated, frozen and hot foods. If food is not stored properly, food can spoil, become contaminated and cause food-borne illness in customers.

Perishable foods must be kept at the appropriate temperature to prevent the growth of harmful pathogens which cause food-borne illness. The growth of harmful pathogens occurs in the **Temperature Danger Zone (between 5°C and 60°C)**. This means that hot food must be kept hot and cold food must be kept cold in order to keep the foods out of the Temperature Danger Zone.

Bacteria are among the fastest reproducing organisms in the world, doubling every 4 to 20 minutes.

After four hours in the Temperature Danger Zone, the number of bacteria or bacterial toxins that could be present in contaminated food is far too high for someone to consume it safely. In some cases, even a small amount of bacteria can cause an infection, depending on the type of bacteria and the health of the person who ingests it.

Turn up the heat: Check bains-marie

It is important to check the performance of your bains-marie to ensure they are maintaining hot food items at 60°C or more. To do this, keep your probe thermometer handy.

The built-in thermometers on bains-marie, fridges, and refrigerated display units should not be relied upon as they do **not** accurately measure the core temperature of the food.

Place the clean thermometer probe into the food and wait until the temperature reading has stabilised. Adjust the bain-marie heat settings as required until you are sure that the core food temperature is maintained at or above 60°C.

Cook sprouts (or skip them altogether)

Sprouts are grown in warm and wet conditions, which are perfect for bacterial growth.

Contaminated bean sprouts, alfalfa sprouts and other varieties have been linked to dozens of food-borne illness outbreaks around the world, including one of the worst known outbreaks of *E. coli* infection. Sprouts are also difficult to clean and are usually served raw, which means dangerous bacteria remains intact. If you must serve sprouts, make sure you cook them first (or better yet, take them off the menu).

Know the tofu risks

Tofu is a popular meat substitute and a staple of the vegan diet. While tofu may last longer than real meat, it's important to remember that tofu is a perishable item and **can go bad**.

If it's slimy on the outside, has little bubbles in it, smells 'weird' or tastes fermented, throw it away.

It's also inadvisable to serve raw tofu dishes, even if the tofu is pre-cooked. Pre-cooked tofu can become contaminated after the cooking stage, so if you serve it raw, you risk serving contaminated food.





Freezer burned food

We've all seen it, wondered about it, and then either cooked it or threw it out. When food items are frozen in the freezer, the water molecules within the food item form ice crystals. The water crystals migrate from the food item to the coldest part of the freezer, which is often the side of the freezer. This loss of water molecules leaves the food item dehydrated and the end result is what is known as 'freezer burn'.

Freezer burn can occur for a variety of reasons, but the most common ones include:

- 1. Food not stored properly in the freezer. Food items need to be wrapped tightly and securely so that water molecules cannot escape.
- 2. Food items being stored too long in the freezer. There are appropriate storage times for frozen food. Eventually water molecules will escape frozen food, even when properly sealed and stored.
- 3. Freezers not maintaining an appropriate temperature of -15°C or below. Freezer burn can occur when a freezer is fluctuating in temperature.

Preventing freezer burn

To avoid freezer burn from occurring, you need to:

- Ensure that food is sealed appropriately and wrapped tightly.
- Let any excess air out of freezer bags before sealing.
- Let hot food cool down before freezing.
- Label all food items with a name and date before storing.
- Ensure that freezers are operating at the proper temperature of -15°C or below.
- Use frozen food items within the recommended storage time frame.

\square

Train your food handlers

THERE IS NO SUBSTITUTE for skilled and knowledgeable Food Handlers when it comes to protecting the public from food safety risks like food poisoning. To ensure food safety in your food business, you must train your staff in safe food handling practices. The easiest way to do so is through a food handlers course online, and through ongoing education and training resources (e.g. posters, guides, fact sheets, checklists).

High-risk foods

Examples of high-risk foods include:

- meat and poultry (cooked or raw)
- eggs (cooked or raw)
- dairy products
- seafood
- prepared fruits and vegetables
- unpasteurised juices
- cooked rice, fresh or cooked pasta
- foods that contain any of the above.

High-risk foods are foods that must be kept below 5°C when chilled. If these foods are frozen they should not be allowed to reach above -15°C. When cooking these foods, they should reach a temperature of at least 75°C for a minimum of two minutes and not be allowed to drop below 60°C until they're served.

Raw vegetables and fruit can also harbour disease-causing microorganisms, especially if they won't be cooked before eating (e.g. sprouts, rockmelon). Fruits and vegetables can become contaminated if they come into contact with contaminated water, surfaces or equipment; contaminated food; pests; or food handlers who are sick or have dirty hands.



Low-risk foods

Examples of foods that are considered to be low-risk include:

- biscuits and crackers
- plain breads and bread rolls
- bottled marinades/pasta sauces/salsa
- confectionary, dried fruit
- salted dried meats
- honey, jam, peanut butter
- pickles, salad dressings, sauces (e.g. soy sauce, ketchup)
- dry goods.

The TOP 10 food safety myths

Food safety misinformation can cause serious problems for a food business. Don't be fooled by these 10 common food safety myths!

Despite the increasing focus on healthy and safe food in Australia, there are still plenty of misconceptions about food safety and safe food handling practices out there. To help clear things up, we've compiled a list of the top 10 food safety myths—and the truths we should replace them with.

Myth 1 Cooked food can't cause food-borne illness

Food that is properly cooked is unlikely to cause food poisoning, however, there are plenty of ways that cooked food can become contaminated **after cooking**.

This can happen if:

- food isn't stored properly
- food is prepared on a contaminated surface or using contaminated equipment
- food handlers don't practise good personal hygiene.

Myth 2 If it looks and smells fine, it's probably fine

Spoilage microorganisms (bacteria, moulds, yeasts) can change the look, texture, flavour or smell of food, so it's easy to tell if the food has gone bad. Pathogens, on the other hand, generally do not cause food spoilage and they are odourless and tasteless, so you can't tell when food is contaminated with them.

Myth ³ If you cut off the mould, the rest of the food is safe to eat

Many people think that if you cut or scrape the mould out of food, the rest of the food is safe to eat; the colourful patches of mould you see on the surface are actually just the tip of the iceberg. Like plants, moulds produce thread-like roots that extend deep into the food. Most mould found on food products is harmless, but some moulds can produce mycotoxins, which are toxic to humans and can cause serious illness.



Myth 4 It's okay to thaw frozen food at room temperature

Frozen food should never be thawed at room temperature or in a warm water bath. High-risk foods must be kept out of the Temperature Danger Zone (5°C–60°C), as this is the temperature range in which dangerous bacteria **thrive**. Bacteria double every four to 20 minutes which makes them among the fastest reproducing organisms in the world.

Freezing doesn't actually kill bacteria, which means that as your food thaws, bacteria can wake up and multiply. The safest way to thaw frozen food is in the refrigerator.

Myth 5 De

Dehydrated foods aren't high-risk

When you add water to dried foods such as rice, pasta, lentils, beans and chickpeas during the cooking process, you give them the missing ingredient they need to grow. With time and at the right temperature, the number of bacteria can easily reach harmful levels. Adding water to dried foods means that these foods are now moist, low in acid and high in protein, which are the ideal conditions for bacteria to grow.

Uncooked rice may also contain *Bacillus cereus* spores, which are not destroyed by the cooking process. If rice is not refrigerated immediately after cooling, *B. cereus* spores can grow into bacteria and multiply.

Myth 6 You should wash raw chicken before cooking it

Washing raw chicken before cooking it does not remove the bacteria and can actually **increase** the risk of food poisoning. Splashing water from rinsing raw chicken under a tap can spread bacteria to hands, food preparation surfaces, cooking equipment and utensils. In fact, water droplets can travel more than 50cm in every direction.

replace the myths with the facts!

Myth 7 Food should be left to cool completely before going in the refrigerator

Waiting for hot food to completely cool at room temperature before putting it in the fridge means that you're giving bacteria in the hot food time to grow.

The safest way to cool your leftovers is to refrigerate them in shallow, uncovered containers once they've stopped steaming.

Be sure to avoid overstocking your refrigerator to allow cool air to circulate.

Myth 8 Vegans can't get food poisoning

Many of us associate food poisoning with foods like meat, eggs and seafood, but plants and plant-based foods can easily become contaminated with bacteria, viruses, parasites and naturally occurring toxins.

Many vegan-friendly foods are also served raw or lightly cooked, such as tofu, which means they aren't subjected to the high temperatures that kill bacteria.

As such, it is important for all food handlers to know the risks that are inherent in plant-based foods and vegan cuisine, to ensure that safe food is prepared and served.

Myth If you pick it up within five seconds, food dropped on the floor is safe to eat

Better known as the '5-second rule', this infamous rule states that if you drop a piece of food on the floor but pick it up within five seconds, it's still okay to eat. If food drops onto a surface with bacteria, then bacteria can be transferred onto the food.

Myth 10 Food poisoning is just an upset stomach

Symptoms of food poisoning usually include some combination of the following:

- diarrhoea
- nausea
- fever
- vomiting
- stomach cramps.

Although most cases of food poisoning are mild and last only a day or two, some can be far more serious or even deadly.

Vulnerable people—those in 'high-risk groups'—are far more likely to contract a food-borne illness and to suffer more severe symptoms.

Young children, the elderly and people with immune system disorders are among those most likely to die from food poisoning; pregnant women are 20 times more likely to contract listeriosis, an infection caused by the bacterium Listeria, which can cause miscarriages, stillbirths, preterm birth, infant mortality, blood poisoning or brain infections.



High-risk vegan foods

High-risk foods that require little or no preparation—and that do not go through a cooking 'kill step'—provide an ideal breeding ground for food-borne bacteria and other pathogens that can cause one or many people to get sick.

High-risk foods include a range of plant-based foods and ingredients. Some examples of these are:

- tofu
- rice
- raw sprouts
- vegan bread
- fresh fruits and vegetables (e.g. leafy greens, cantaloupes)
- cooked lentils, pasta, beans and chickpeas
- pre-cut or pre-washed fruits and vegetables
- unpasteurised fruit juices
- herbs and spices
- coconutnuts.

How plant-based food becomes contaminated

A PLANT-BASED DIET may be good for our health, but plant-based foods and ingredients can become contaminated as easily as any other food.

On a farm, crops and produce may become contaminated if they come into contact with:

- contaminated water
- animal faeces/manure
- faeces from birds and pests.

Wash fruits and vegetables in cold running water

FRESH FRUIT AND VEGETABLES are excellent sources of essential vitamins and nutrients, but they can also be a source of harmful bacteria like *Salmonella* and *E. coli*.

The most likely culprits? Leafy greens.

If it grows on or in the ground, it must be washed carefully and thoroughly in cold running water to remove bacteria and pesticides, so don't rush the rinse!

Re-wash pre-washed fruits and vegetables (or don't use them)

The more a food is handled and processed, the more likely it is to pick up harmful microorganisms that can cause food poisoning.

Pre-washed or pre-cut fruits and vegetables can harbour Listeria, a food-borne bacteria that can make some people **very** sick, and can have devastating consequences for expecting mothers—including miscarriage, stillbirth, uterine infection and preterm delivery.

> 48 Old Perth Road Bassendean WA 6054 PO Box 87, Bassendean WA 6934 9377 8000 mail@bassendean.wa.gov.au www.bassendean.wa.gov.au