

Food Safety: Temperature control of potentially hazardous foods

Guidance on the temperature control requirements of
Standard 3.2.2 *Food Safety Practices and General Requirements*

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Comments on this guide are invited from individuals, organisations and government agencies. Feedback is welcome on difficulties in understanding the guide and whether more information should be provided. The feedback must be in writing and can be faxed, mailed or emailed to the Food Safety Program, Food Standards Australia New Zealand, at the contact details below. The information received will be taken into account when the guide is reviewed.

For further information on the Food Safety Standards and other regulatory matters, please refer to the Food Standards Australia New Zealand website at www.foodstandards.gov.au or, in New Zealand, www.foodstandards.govt.nz.

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This guide has been developed by Food Standards Australia New Zealand (FSANZ) to help food businesses and enforcement officers interpret the requirements to keep food under temperature control that are included in Food Safety Standard 3.2.2 *Food Safety Practices and General Requirements*. The guide, unlike the Food Safety Standards, is not legally binding. If there is any doubt about the interpretation of the Standards, independent legal advice should be sought.

The guide is intended primarily for food businesses that handle the types of foods which must be kept under temperature control to keep them safe to eat and that are either developing food safety programs to control temperature-related hazards in these foods or otherwise require detailed information on the temperature control requirements. It explains the types of foods that should be kept under temperature control and the legal requirements about keeping foods under temperature control. The guide offers some advice on how to comply with these legal requirements.

The legal requirements for temperature control are contained in Food Safety Standard 3.2.2 *Food Safety Practices and General Requirements*. There are two other Food Safety Standards: Standard 3.1.1 *Interpretation and Application* and Standard 3.2.3 *Food Premises and Equipment*. These Food Safety Standards apply, or will apply in the near future, to food businesses in all States and Territories in Australia.

The Food Safety Standards form Chapter 3 of the Australia New Zealand Food Standards Code. The Standards and the Code are available on the FSANZ website www.foodstandards.gov.au.

Fact sheets in English and other languages explaining the requirements of the Food Safety Standards are available from your local government council or from the FSANZ website.

The glossary at the beginning of this guide explains the meaning of some of the words used in this guide. If the word is in *this type style*, it means that the word is explained in the glossary.

If you need further advice on the requirements in the Food Safety Standards or information on food safety please contact an Environmental Health Officer at your local government council, Public Health Unit or your State or Territory Health or Human Services Department.

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Glossary

Contaminated describes food that contains foreign substances (for example stones or hair), chemicals that should not be present, or bacteria or viruses that could cause illness. In this guide it usually refers to food that contains food-poisoning bacteria.

Food safety program has a legal definition in Standard 3.2.2 *Food Safety Practices and General Requirements*. It is a written document that lists the food safety problems (or hazards) that could occur in your business and how you would control them, and what records you will need to keep to show that you have controlled these hazards. You will need to regularly review your system to ensure it is adequate and keep a copy at your business premises.

A business can demonstrate it has a safe alternative temperature control system in place by developing and implementing a *food safety program*.

If you need information or advice about *food safety programs*, contact your State or Territory Health or Human Services department or your local council.

Handle includes all aspects of preparing food for sale. *Handling of food* is legally defined in Standard 3.1.1 *Interpretation and Application* to mean making, manufacturing, producing, collecting, extracting, processing, storing, transporting, delivering, preparing, treating, preserving, packing, cooking, thawing, serving or displaying of food.

Hold hot or holding hot means to prepare hot food and keep it hot until it is sold to a customer. There is no legal definition of the terms in the Food Safety Standards. It would include, for example, placing hot food in a bain-marie for display at a take-away food premises but would not include plating up meals in a hospital kitchen for immediate delivery to patients in that hospital.

Potentially hazardous food has a legal definition in Standard 3.2.2 *Food Safety Practices and General Requirements*. It means food that has to be kept at certain temperatures to minimise multiplication of any food-poisoning bacteria that may be present in the food or to prevent the formation of toxins in the food.

Ready to eat food is food that is ordinarily consumed in the same state in which it is sold, for example sandwiches, cooked meat from a delicatessen, cheeses and salads from a self-serve salad bar. It does not include nuts in the shell, and whole raw fruits and vegetables that are intended for hulling, peeling or washing by the consumer. It is defined in Standard 3.2.2.

Room temperature means temperatures in the range above 5°C and below 60°C.

Toxins are poisons produced by some types of bacteria when they multiply in food.

Introduction

Keeping foods at the right temperatures is an essential food safety practice

This guide explains the temperature control requirements in Food Safety Standard 3.2.2 *Food Safety Practices and General Requirements* and provides some advice on how to comply with the requirements.

Food businesses are required by State and Territory food laws to ensure that the food they prepare and sell is safe to eat. 'Safe to eat' means that food will not cause illness when someone eats it.

The common symptoms of food borne illness, or food poisoning, are diarrhoea, vomiting and stomach pains. Symptoms may also include nausea, headaches, fever, muscle and joint pains.

Food may cause illness because there are high levels of food-poisoning bacteria in the food. The bacteria themselves may make your customers ill or the bacteria may have produced poisons in the food that cause illness. These poisons are called *toxins*.

A way of preventing or limiting bacteria from multiplying or producing *toxins* in food is to control the temperature of the food by either keeping it cold or very hot.

The foods that need to be kept cold or very hot are listed on page 4. Food businesses are legally obliged to control the temperature of these foods to prevent food poisoning. Some foods do not contain bacteria that cause illness or do not provide an environment that will allow bacteria to multiply. These foods do not need to be kept cold or hot.

Keeping food very cold or very hot will only prevent some types of food poisoning. It will **not** prevent illness caused by, for example, viruses and some types of bacteria such as pathogenic *E. coli*. Only very small numbers of these bacteria are needed to cause food poisoning. Therefore, any food *contaminated* by these types of bacteria or viruses may make the food unsafe.

In these cases, temperature control will not prevent food poisoning. The best way to stop these types of bacteria and viruses from causing food poisoning is to prevent the food from being *contaminated*. Once these bacteria and viruses are in the food, the food will be unsafe to eat unless the food is adequately cooked or reprocessed.

Preventing food-poisoning bacteria from contaminating food is just as important as keeping food cold or very hot.

Follow these practices to prepare food hygienically and prevent food contamination:

- Wash and thoroughly dry your hands before handling any food or equipment in contact with food.
- Avoid handling ready to eat foods with your hands. Use tongs or other implements instead.
- Do not allow ready to eat foods to come into contact with raw meat or the juice from raw meat.
- Do not handle food or equipment when you are ill.

You are legally obliged to prepare food in accordance with the Food Safety Standards.

1 Temperature control requirements

Food businesses are legally required to comply with the Food Safety Standards

Do the temperature control requirements apply to my business?

The temperature control requirements apply to all types of food businesses that *handle* or sell *potentially hazardous foods*. There is a list of *potentially hazardous foods* on page 4.

The types of businesses that *handle* or sell *potentially hazardous foods* include restaurants, take-aways, clubs, supermarkets and caterers, whether the food is sold to the public, privately, for profit or to raise funds for a charity or community group. They include businesses that use mobile premises such as vans and temporary structures such as market stalls, as well as businesses operating from home.

What is temperature control?

To ensure that food stays safe, you are legally required to ensure that *potentially hazardous foods* are kept either very cold (5°C or colder) or very hot (60°C or hotter) or at another temperature if that is safe.

Some foods must be kept below 5°C to prevent the growth of certain food-poisoning bacteria. It is advisable to store food at the storage temperature recommended by the manufacturer of the food.

By keeping food very cold (5°C or colder) or very hot (60°C or hotter) you can stop food-poisoning bacteria from multiplying in the food or producing poisons (known as *toxins*). To comply with the Standard you must keep *potentially hazardous foods* at these temperatures unless you can show that the time the food is at another temperature is safe. Safe alternative temperature control systems are explained later.

It is safe for food to be between 5°C and 60°C for a **limited time only**, for example, while it is being prepared, because food-poisoning bacteria need time to start multiplying and to multiply to unsafe numbers.

The legal definition of temperature control is:

temperature control means maintaining food at a temperature of:

- (a) 5°C, or below if this is necessary to minimise the growth of infectious or toxigenic micro-organisms in the food so that the microbiological safety of the food will not be adversely affected for the time the food is at that temperature; or
- (b) 60°C or above; or

- (c) another temperature—if the food business demonstrates that maintenance of the food at this temperature for the period of time for which it will be so maintained will not adversely affect the microbiological safety of the food.

Which foods do I have to keep under temperature control?

You are required to keep all *potentially hazardous foods* under temperature control.

What foods are ‘potentially hazardous foods’?

Potentially hazardous foods are foods that meet both the criteria below:

- they might contain the types of food-poisoning bacteria that need to multiply to large numbers to cause food poisoning; and
- the food will allow the food-poisoning bacteria to multiply.

The following foods are examples of potentially hazardous foods:

- raw and cooked meat (including poultry and game) or foods containing raw or cooked meat such as casseroles, curries and lasagne;
- smallgoods such as Strasbourg, ham and chicken loaf;
- dairy products, for example, milk, custard and dairy-based desserts such as cheesecakes and custard tarts;
- seafood (excluding live seafood) including seafood salad, patties, fish balls, stews containing seafood and fish stock;
- processed fruits and vegetables, for example salads and cut melons;
- cooked rice and pasta;
- foods containing eggs, beans, nuts or other protein-rich foods such as quiche, fresh pasta and soy bean products; and
- foods that contain these foods, for example sandwiches, rolls and cooked and uncooked pizza.

Which foods are not potentially hazardous foods?

Note that some of the above foods may have been processed by the manufacturer so that they are not potentially hazardous. This means that they do not need to be stored under temperature control for food safety reasons because they do not contain food-poisoning bacteria or they will not allow the bacteria to multiply. Examples include canned and bottled food, dried fruit, salted dried meats, fermented dried meats, yoghurts, hard cheeses, spreads, sauces, dried pasta, breads and dried foods.

Raw whole fruit and vegetables are not potentially hazardous because they do not allow any food-poisoning bacteria to multiply.

Some of these foods may need refrigeration to minimise or prevent spoilage and meet their shelf life indicated by the use-by or best-before date on the label. Remember, it is an offence to sell food that is mouldy or spoilt.

Some foods that are not potentially hazardous can become potentially hazardous if you alter the food in some way. For example, custard powder is not potentially hazardous because it is too dry for bacteria to multiply, but when milk is added the custard is potentially hazardous.

What if I do not know if a food is potentially hazardous?

You should check with the manufacturer or supplier of the food and ask if it is potentially hazardous.

Are there temperature requirements for frozen foods?

Yes—you are required to ensure that potentially hazardous frozen foods that you want to keep frozen are:

- frozen when they are delivered to you; and
- kept frozen when you store, display for sale or transport the food.

A specific temperature for frozen food has not been specified because as long as the food is kept frozen it will remain safe. However, the temperature may be important to maintain the quality of the product and storage directions on labels or provided by the manufacturer should be followed.

When must I keep food under temperature control?

The Standard requires you to ensure that the temperature of *potentially hazardous food* is **5°C or colder** or **60°C or hotter** (or at another temperature if that is safe) when you:

- **receive** the *potentially hazardous food* into your business; and
- **store, display and transport** *potentially hazardous food*.

'Store' means any time when you are not receiving, preparing, processing, displaying or transporting food. For example, a container of food on a bench top is being 'stored' on that bench top.

When you are preparing *potentially hazardous food* you do not have to keep it at any specified temperature because that would be impractical. However, you must ensure

that the **time** that food is at *room temperature* (that is, between 5°C and 60°C) is kept as short as possible to minimise the opportunity for bacteria to multiply.

Keep the preparation time as short as possible when you are preparing *ready-to-eat* foods such as sandwiches. These foods will not be further processed to reduce bacteria to safe levels or destroy any *toxins* that may form.

As you will see later, the time that food is at *room temperature* during preparation limits the time that it can later be stored, displayed or transported at *room temperature* and still be safe.

How can my business comply with the temperature control requirements?

The simplest way to meet the requirements is to ensure that *potentially hazardous food* is kept either very cold (5°C or colder) or very hot (60°C or hotter).

When preparing food, keep the food at *room temperature* for as short a time as possible by preparing the food in batches and placing it in the refrigerator as soon as it is ready.

If you do not wish to, or are unable to, store, display or transport food at 5°C or colder or at 60°C or hotter, you must be able to demonstrate to an enforcement officer that the alternative temperature control system you are using is safe. Alternative systems are discussed in 2 *Alternative temperature control systems* on page 10, and examples in 4 *Suggested methods of compliance* on page 15 explain how alternative systems can be used. In all States and Territories you can use a *food safety program*, or base your system on guidelines recognised by the relevant food industry or sound scientific evidence.

In New South Wales there is a legal definition of 'demonstrate'. This definition requires you to 'demonstrate' to the satisfaction of the Director-General, New South Wales Health Department. In practice this means that, although you may be required to show an enforcement officer at the time of an inspection of your business that you have an alternative temperature control system in place, it will be assessed against systems that satisfy criteria set down by the Director-General.

How do I measure the temperature of food?

You will need a thermometer that can measure the internal temperature of food because the surface temperature may be warmer or cooler than the temperature of the rest of the food. This means that you will need a thermometer with a probe that can be inserted into the food.

The thermometer must also be accurate to $\pm 1^{\circ}\text{C}$. This means that when the thermometer shows that the food is at a temperature of 5°C , the actual temperature of the food will be between 4°C and 6°C .

Check that your thermometer is accurate by placing the probe in a container of crushed ice that is just melting. The thermometer should read 0°C within 1°C , that is, between -1°C and $+1^{\circ}\text{C}$. If it does not, then it needs checking by the manufacturer.

Remember to clean and sanitise the thermometer before inserting it into food. Wash the probe in warm water and detergent, sanitise according to the sanitiser instructions or the instructions that accompany your thermometer, and allow the probe to air dry or thoroughly dry it with a disposable towel.

Advice on thermometers can be found in the fact sheet 'Thermometers and their use with potentially hazardous food'.

The Food Safety Standards require you to have a thermometer if you handle potentially hazardous foods. The thermometer must be kept at your food premises.

What are the temperature requirements for cooling and reheating potentially hazardous food?

Cooling potentially hazardous food

If you cook *potentially hazardous food*, that you intend to cool and use later, you need to cool the food to 5°C or below as quickly as possible. The less time that cooked *potentially hazardous food* is between 5°C and 60°C during cooling, the less opportunity there will be for food-poisoning bacteria to multiply.

There may be food-poisoning bacteria in the food even though it has been cooked. Some types of bacteria can protect themselves from heat and survive the cooking process. The food may also have been contaminated with food-poisoning bacteria after cooking. These bacteria can multiply if the food is left for long periods between 5°C and 60°C .

You are required to cool food from 60°C to 21°C in a maximum of two hours and from 21°C to 5°C within a further maximum period of four hours. Alternatively, you can cool food over a longer time period but you will need to be able to show that your process is safe.

Complying with the cooling requirement

The requirement does not mean that you have to put food in the coolroom or refrigerator as soon as it has finished cooking. The food can be left at *room temperature* until it reaches 60°C because food-poisoning bacteria will not multiply at

60°C or above. However, do not leave food cooling at *room temperature* unless you are sure that the temperature of the food is still at least above 60°C. Use your probe thermometer to check this. A guide to when to put hot food in the refrigerator is to allow it to stand for 20–30 minutes after coming out of the oven or from the stovetop and then place it in the refrigerator.

You may be surprised how long it takes for some foods to cool down, even in a coolroom or refrigerator. It may take many hours to cool to 5°C. If you don't know how fast your food is cooling, use your probe thermometer to measure the warmest part of the food, usually in the centre.

If you have food that is taking longer than six hours to cool, the following suggestions may assist you to cool food rapidly:

- Reduce the bulk of the food by dividing it into smaller and/or shallow containers.
- Cut large joints of meat and poultry into portions before cooling.
- Ensure there is space around food containers so that the cold air in the refrigerator or coolroom can circulate freely.

The times for cooling are maximum times. In some food processing systems, food is cooled quicker using blast chillers, for example, in cook–chill systems.

Extended cooling times may be necessary when cooling hams and other large cooked meats that cannot be portioned. For further information on cooling large joints of meat, see Appendix 3 in the guide to the Food Safety Standards, *Safe Food Australia*. This guide is on the FSANZ website.

If you do cool foods over a longer period than you are required to, you must have a *food safety program* or other scientifically based system in place to demonstrate that your cooling process is safe.

Reheating chilled potentially hazardous food

If you reheat *potentially hazardous food*, you are required to reheat it rapidly to 60°C or hotter. This requirement **only** applies to potentially hazardous food that you want to *hold hot*, for example, on your stove or in a display unit to serve to customers or for them to serve themselves.

'Rapidly' has not been defined but it is best practice to reheat the whole container of food to 60°C within a **maximum** of two hours. The reason for reheating the food 'rapidly' is to minimise the amount of time that food is between 5°C and 60°C while it is being heated because food-poisoning bacteria multiply between these temperatures.

The reason for reheating to 60°C or hotter is because food-poisoning bacteria cannot multiply in food that is 60°C or hotter, so the food can be held hot at this temperature until it is served to a customer without it becoming unsafe.

This requirement does **not** apply to food you reheat to serve to customers for immediate consumption, for example, reheating a portion of chilled lasagne for a customer in a restaurant. The reason for this is that the time between reheating and serving is not long enough for food-poisoning bacteria to multiply.

However, whether reheating food for *hot holding* or immediate service, it is good practice to reheat food to temperatures above 70°C (steaming hot). This temperature will destroy food-poisoning bacteria that may have contaminated the food, or multiply in the food, while it was prepared and stored. Reheating to this temperature is not a legal requirement because it is not always possible to heat food to this temperature without spoiling its quality, for example, an egg-based custard. Also, reheating may not destroy all the contaminating bacteria or any *toxins*. Therefore reheating cannot be guaranteed to make contaminated food safe.

Complying with the reheating requirement

You will comply with the requirement if you quickly bring liquid foods to a rolling boil or simmering point on the stovetop. This may take, for example, 15–20 minutes for a two-litre container. Food in the oven may take longer to reheat. This is particularly so for solid foods such as a large lasagne. Use your probe thermometer to check the temperature in the centre of the food. Once you have worked out that you are meeting the requirement and you use the same size containers at the same heating temperature, you do not have to check temperatures repeatedly.

Do not reheat food more than once. If food-poisoning bacteria are present in the food they could multiply to dangerous levels during the repeated heating times.

Alternative reheating systems

You may need to reheat food more slowly than the recommended two-hour reheating period. If this is the case, you can choose another way to reheat the food, for example by using a different time and temperature process, but you must be able to show that the system you are using is safe.

2 Alternative temperature control systems

Food businesses are responsible for ensuring that potentially hazardous foods stored, displayed or transported at temperatures between 5°C and 60°C are safe

Food businesses are encouraged to keep *potentially hazardous foods* either 5°C or colder or 60°C or hotter.

This may not be possible all the time for all your *potentially hazardous foods*. For example, you may be unable to display the foods at these temperatures. You are permitted to have foods at other temperatures only if you can demonstrate to the enforcement agency that the system you have for controlling the time your foods are at these temperatures is safe.

Three different ways that businesses can use to demonstrate that their alternative system is safe are:

- the business can use a *food safety program*;
- the business may implement a process for which there is documented sound scientific evidence that the process will not affect the safety of the food, for example, the 2 hour/4 hour guide described below; or
- industry guidelines may be available which provide advice on implementing safe alternative systems based on sound scientific evidence. For information on whether such advice is available for your industry sector, contact the relevant industry association.

You can use other methods, but the responsibility lies with you to ensure that you do not affect the safety of your food.

The 2 hour/4 hour guide

The 2 hour/4 hour guide tells you how long food can be at *room temperature* and remain safe.

If you decide to keep *potentially hazardous food* at *room temperature*, it must be for **very short time periods** and, as with any food preparation, it is important to follow these essential food safety practices:

- do not contaminate the food—you and your staff must prepare it hygienically and protect it from contamination;
- cool cooked foods quickly and within the legally required times and temperatures (see page 7); **and**
- ensure your coolrooms and refrigerators are working effectively.

Provided you have followed these food safety practices, the time that the food can be at *room temperature* should not be greater than described in the **2 hour/4 hour** guide below. Note that the times that food is at *room temperature* during preparation, storage, display and transport must be added together to give a total time.

- If you hold the food at temperatures between 5°C and 60°C for a total of less than **two hours**, you must then either return it to the refrigerator for final use later **or** ensure it is used before the 4-hour limit is up.
- If the food has been held for a total of longer than **two hours** but less than **four hours**, use it before the 4-hour limit is up but note that the food cannot be returned to the refrigerator or coolroom.
- If the food has been held for a total of **four hours** (or longer), discard it—it may not be safe to eat.

The four hours includes **any time that the food has been out of temperature control during preparation, storage, display and transport.**

Do not include the time taken to **cool** cooked food provided the food has been cooled within the 6-hour period explained on page 7.

The 2 hour/4 hour guide will work even on a very warm day because it is based on multiplication of bacteria at 40°C. However, it is best practice to avoid keeping potentially hazardous food at *room temperature* whenever possible. Instead keep it chilled or keep it hot.

It is unsafe for potentially hazardous food to be repeatedly held at *room temperature* (that is, between 5°C and 60°C) and then re-chilled. If you wish to return food to a refrigerator, it must only be at *room temperature* for a single period of no more than two hours. This food could be removed from refrigeration for a further period of two hours but leftovers should not be re-refrigerated.

Note that those food-poisoning bacteria that need large numbers to cause illness take a number of hours to multiply sufficiently to make the food unsafe. However, you cannot see the food-poisoning bacteria multiplying so the appearance of the food, its taste or its smell does not indicate whether the food is safe to eat.

An example of the 2 hour/4 hour guide in use

Sandwiches are made at a café each morning for display at lunchtime to supplement the sandwiches that are made to order. They are not refrigerated. The business develops work instructions for staff based on the 2 hour/4 hour guide.

These work instructions indicate that the sandwiches must be prepared between 7.00 a.m. and 8.00 a.m. and placed in the coolroom. They must not be put on display before 11.00 a.m. and any sandwiches remaining unsold at 2.00 p.m. must be

discarded. When the business is inspected, the enforcement officer is shown a copy of the work instructions and notes that at 10.30 a.m. the sandwiches are in the coolroom as set out in the instructions.

3 Enforcement

State and Territory governments are responsible for enforcing the Standard

How will the requirements be enforced?

Failure to comply with a requirement of the Food Safety Standards is an offence under the State or Territory food or health laws. Officers from your local government council or the Territory health authorities in the Northern Territory and the ACT will enforce the standards.

Enforcement of the temperature control requirements

When an enforcement officer is checking whether you comply with the temperature requirements for storing, displaying and transporting potentially hazardous food he or she will probably take the temperatures of these foods in your premises. If the foods are 5°C or colder or 60°C or hotter you have complied with the requirements. If the food is at another temperature, the officer will ask you to demonstrate the safe alternative system you are using. This is a legal obligation you have under the Standards (see *2 Alternative temperature control systems*). It is recommended that your alternative system be recorded in writing so that you can show the paperwork that indicates you are complying with the system. If you do not have such a system in place and you are storing, displaying or transporting potentially hazardous foods at *room temperature*, you are not complying with the requirements of the standards.

In New South Wales there is a legal definition of 'demonstrate', see page 6.

Enforcement of the cooling requirements

The enforcement officer will check the size of containers you are using to cool *potentially hazardous food*, the time the food was placed in the refrigerator for cooling and the temperature of the food. You may be asked about how you cool food, particularly if the officer thinks you may be doing it too slowly. If you are using an alternative cooling system, it is recommended you have your system set out in writing which includes paperwork that shows you are complying with it.

There is no need to keep any records if you are complying with the cooling times and temperatures on page 7.

Enforcement of the reheating requirements

The enforcement officer will ask you if you reheat any food for holding hot for example, in a bain-marie, on the stovetop or in the oven. You are likely to be asked about the times you start reheating food and the times that you display it, or have it ready to

serve, and the heating methods you use. If you are reheating food at the time of the officer's visit, the officer may take temperatures of food.

If the officer believes that you are taking longer than the recommended maximum time of two hours to reheat the food, or you are reheating to too low a temperature, you may be asked if you are using an alternative reheating system. If you have an alternative system, it is recommended you have your system set out in writing which includes paperwork that shows you are complying with it.

4 Suggested methods of compliance

You will need to control the temperature of your food or, if the food is not refrigerated or kept hot, you will need to limit the time

The examples on the following pages show two different ways in which a business can comply with the temperature control requirements. The two different ways are to use temperature (that is, holding food 5°C or colder or 60°C or hotter) or to use time (that is, limiting the time that food is at *room temperature*).

If you choose to use 'time' then you **must** be able to show that this alternative system is safe. This means that you would need to have your system in writing and keep paperwork to show that you are complying with it. The records of time and temperature used below are examples of paperwork that could be kept. Alternatives include work instructions that indicate the times that staff prepare food and the procedures for preparing that food, or labels on food that indicate the date and time that the food was prepared.

If you are unsure about temperature control practices at your business or the type of paperwork needed to show that your times and temperatures are safe, contact your State or Territory Health or Human Services Department or an Environmental Health Officer at your local council for guidance.

Food receipt

Situation

You run a café and want to serve quiches made by another food business. You want to ensure that the quiches are safe when they are received.

Using temperature

You ask the supplier of the quiches to deliver the quiches in a refrigerated truck at 5°C and you keep them chilled until you need to use them.

Using time

The quiche supplier delivers the quiches unrefrigerated. Because the quiches are not 5°C or colder you are obliged to ensure that the business delivering the quiches can demonstrate that he or she has a system for ensuring that the quiches are safe when they reach your business. It is recommended that this system be in writing. For example, you may have a written agreement with the supplier that the quiches will be made that morning and delivered within one hour of cooking. The supplier shows you

the paperwork indicating that the agreement has been complied with when the quiches arrive.

You then refrigerate the quiches when they arrive, noting that they have already been at *room temperature* for up to one hour, or you can place the quiches in an unrefrigerated display cabinet and use them for the lunchtime trade. They must be used within the next three hours. Any quiches remaining after this three hours must be thrown out.

When the enforcement officer asks why the quiche is delivered warm and is not refrigerated, you would show the officer the agreement with the business that makes the quiches, to demonstrate that the process is safe, and the paperwork that indicates that you confirmed this when the quiches were delivered. You would need to explain the process you follow to make sure they are thrown out after no more than four hours outside temperature control, and show the officer the paperwork that supports this.

Food storage

Situation

You are a caterer and make platters of sandwiches for functions in your building. You do not have enough chilled space to store all the sandwiches once they are made.

Using temperature

You buy additional refrigeration space. When each platter is finished being made up, it is placed in the coolroom, which chills and holds the food at 5°C until it is needed for the function.

Using time

You know that the sandwiches must be eaten or discarded within four hours of preparation. You start preparation at 10.00 a.m. and finish at 11.00 a.m. and display the food at a function from 12.00–2.00 p.m. The sandwiches will be safe because the total time is not more than four hours. Leftover sandwiches are thrown out. You have a system to note when you start and finish the preparation of the sandwiches and also note the function start and finish times. This will demonstrate that you have a system that ensures that the food is safe.

When the enforcement officer asks why the sandwiches are not held under refrigeration, it is recommended you show the officer your records of the sandwich preparation and function times to show that your process is safe.

Food display

Situation

Your restaurant has a hot food self-service display that you use for wet dishes (casseroles and similar foods), hot lunches and evening meals. When food is placed in the self-service display unit, it is hot (above 60°C). However, the unit is set to hold the food at a temperature of 45°C to prevent the food from drying out

Using temperature

You reset the display unit to make sure that it holds the food at a temperature of 60°C or above. Because this temperature may dry the food, the food is stirred frequently.

Using time

Every day at 11.30 a.m. you place the hot (above 60°C) freshly cooked foods in the display unit. The food remains in the unit until 3.30 p.m., when any leftovers are discarded. You have a system to note when the food was placed in the display unit and the time it was removed and thrown out.

In the evening, you use the same procedures to note the time you place food in the display unit and then the time you remove it and throw it out, making sure that this time does not exceed four hours. No leftover food from the lunch session is re-used for the dinner session because it has been thrown out.

When the enforcement officer asks why the food in the display unit is at a temperature of 45°C and not at a temperature of 60°C or above, it is recommended that you show him your written records of the time it is placed in the display unit and the time it is removed and discarded, to show that your process is safe.