Retail Services

Food Safety Supervisor
Retail Services

SIRRFSA001
Handle Food safely in a retail environment
LEARNERS RESOURCE

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LEARNER GUIDE INTRODUCTION

ABOUT THIS GUIDE

This learner guide covers one unit of competency:

SIRRFSA001 – Handle food safely in a retail environment
from the Retail Services Training Package

This learners guide contains **generic information** covering the content of the above unit. The trainer and assessor will tailor the learning to make it applicable to your workplace where possible.

Please ensure you apply this knowledge to your workplace's specific food safety program and workplace procedures.

This unit applies to frontline service personnel involved in preparing, displaying and selling retail food. It requires the frontline service personnel to have knowledge and application of a retail store food safety program or procedures that complies with food safety regulations.

This unit describes the performance outcomes, skills and knowledge required to implement safe food storage handling processes in a retail food environment according to a food safety program.

ABOUT ASSESSMENT

This guide contains information which supports you in developing your competence. To apply this knowledge to your assessment, you will be required to complete the assessment tools that are included in your training course.
The assessment is a competency based assessment, which has no pass or fail; you are either competent or not yet competent. Not Yet Competent basically means that you still are in the process of understanding and acquiring the skills and knowledge required to be marked competent.

For valid and reliable assessment of this unit, a range of assessment methods will be used to assess practical skills and knowledge.

Your assessment may be conducted through a combination of the following methods:

- Question and Answers
- In class activities and completion of food safety tasks
- Case study application
- Completion of work based records
- Third-party reports from a supervisor
- A combination of these methods

The assessment tool for this unit should be completed within the specified time period following the delivery of the unit. If you feel you are not yet ready for assessment, discuss this with your trainer assessor. To be successful in this unit you will need to be able to link and apply your learning to your workplace application.

UNIT ELEMENTS & PERFORMANCE CRITERIA

1. Follow food safety program	1.1. Access information from food safety program to ensure food handling is completed safely.
	1.2. Monitor food safety according to organisational processes and document as required.
	1.3. Control identified food safety hazards relevant to operations.
	1.4. Take corrective action within scope of job responsibility when non-compliance and food safety hazards are identified and report to relevant personnel as required.
	1.5. Record food safety information, including equipment breakdowns, according to food safety program.
2. Store and handle food safely	2.1. Receive and transport food supplies to appropriate storage areas promptly, safely and without damage.
	2.2. Store and display food in environmental conditions that protect again contamination and maximise freshness, quality and appearance.
	2.3. Store food at controlled temperature and ensure that food items remain at correct temperature during storage and display.
	2.4. Use cooling and heating processes that support microbiological safety of food.
	2.5. Identify and take action to remove potentially unsafe food safety processes or situations.
	2.6. Change or sanitise food-handling implements between handling different food products to avoid cross-contamination.
	2.7. Mark and keep separate from other foodstuffs any food identified for disposal until disposal is complete.
	2.8. Dispose of food promptly to avoid cross-contamination.

3. Maintain personal hygiene standards	3.1. Follow hand washing procedures to minimise risk of contamination.
	3.2. Wear appropriate clothing and footwear and maintain uniform cleanliness standards.
	3.3. Secure hair and cover all open wounds to minimise risk to food safety.
	3.4. Report any health issues or illness to appropriate personnel.
4. Maintain equipment and work area	4.1. Clean and sanitise equipment, surfaces and utensils following organisational procedures.
	4.2. Identify and report cleaning, sanitising and maintenance requirements.
	4.3. Dispose of or report chipped, broken or cracked food handling utensils.
	4.4. Take measures within scope or responsibility to ensure food-handling areas are free from insects, pests and vermin and report incidents of animal or pest infestation.

PERFORMANCE EVIDENCE AND KNOWLEDGE EVIDENCE

This describes the essential knowledge and skills and their level required for this unit.

PERFORMANCE EVIDENCE

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role and:

- Demonstrate safe handling of food, following organisational policies and procedures and food safety program during three work shifts by:
  - using appropriate control measures to control food hazards at each of the following points:
    - receiving
    - storing
    - preparing
    - displaying
    - disposing
  - completing food safety documentation, recording and reporting
  - maintaining personal hygiene standards
  - maintaining food work area and equipment

KNOWLEDGE EVIDENCE

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- Key aspects of Commonwealth, state or territory and local food safety compliance requirements as relevant to job role:
  - personal hygiene
  - contents of national codes and standards that underpin regulatory requirements
  - reasons for food safety programs and what they must contain
  - local government food safety regulations and inspection regimes
  - consequences of failure to observe food safety policies and procedures
  - meaning of contaminant, contamination and potentially hazardous foods as defined by the Australia New Zealand Food Standards (ANZFS) Code (the code)
- Food handling and hygiene principles:
  - organisational food safety program, its purpose and implications for own work
  - own roles and responsibilities, and those of food safety personnel for food handling requirements from raw material to finished product
  - techniques for minimising contamination and spoilage
  - common sources and types of contamination and food safety hazards, including: conditions conducive to microbial growth and known allergens associated with food handling and processing
  - common types of physical, chemical and microbiological agents that can contaminate food
  - conditions that can cause physical, chemical and microbiological contamination
  - correct storage of food, including hot, cold, raw and cooked, and appropriate control measures
  - causes of deterioration of food, contamination, cross-contamination
  - procedures for identifying and reporting potential or actual source of contamination
  - food handling implements
  - need for change of implements between products
  - correct storage of medium for serving implements
  - shelf life of food products
  - control measures for food hazards

- procedures for recording failures in the food safety program, including equipment breakdowns
- temperature control and the temperature danger zone

- Correct temperature of storage and display units and how to maintain:
- load limits and effects of overloading
- effects of breaking temperature chain
- effects of blocking coils and air vents

- Food Storage requirements for:
- refrigeration
- freezers
- dry stores

- Cleaning work areas:
- cleaning procedures and schedules for work areas and equipment (internal and external)
- purpose and importance of cleaning and sanitation procedures
- safe use and storage of cleaning tools, equipment and chemicals, and insecticides and pesticides
- routine maintenance for work areas and equipment
- waste collection & disposal, recycling and handling procedures
- pest control procedures

- Food handling practices for:
- food segregation
- food packaging for storage
- labelling of food
- stock rotation

- Optimal maintenance of storage areas:
- cleanliness and sanitation
- ventilation
- lighting
- required temperature
- free from vermin or infestation
- free from defects

- Correct disposal of damaged or spoiled supplies
- Known allergens associated with food ingredients, food processing and handling

- Application of workplace documentation for food handling:
  - organisational food safety program
  - organisational policies and procedurews on hygiene and sanitation practices
  - food safety incident reports
  - safety data sheets for cleaning and sterilising products

ASSESSMENT CONDITIONS

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities.

Skills must be demonstrated in a retail environment, in your workplace.

The workplace and the simulated work environment for training where you will complete the assessment must have access to:

- Relevant food safety documentation
- Personal Protective clothing & equipment
- Cleaning & sanitation materials and chemicals
- A range of food products
- Food handling implements
- Food storage & display equipment

Pre-Requisites

There are no pre-requisites for this unit.

OVERVIEW

FOOD SAFETY RESPONSIBILITIES

All food handlers are responsible for, and may be prosecuted for selling unsafe food, or preparing food in such a way as to render it unsafe.

All food handlers are responsible for, and may be prosecuted for selling unsuitable food, or preparing food in such a way as to render it unsuitable.

All food handlers must not falsely describe food and must not falsely describe food where there is risk of physical harm to the customer.

All food for sale must comply with the requirements set out in the Australia New Zealand Food Standards Code.

A business will not avoid a fine for not knowing the food was unsafe or unsuitable.

Legal offences can apply to both the individual food handler and the business, so it is important for all staff in the business to be aware not to sell unsafe food.

The food safety supervisor should put in place procedures to ensure all staff know what to do if they suspect a food product is unsafe.

FOOD SAFETY REQUIREMENTS- GENERAL

Food businesses are expected to ensure that food handlers and anyone else on the premises do not contaminate food.

Under Food Safety Standard 3.2.2 Food Safety Practices and General Requirements, food handlers have an overall responsibility for doing whatever is reason able to make sure that they do not make food unsafe or unsuitable for people to eat.

Food handlers also have specific responsibilities related to their health and hygiene. Food handlers who are ill, particularly with symptoms such as vomiting, diarrhea or fever, should not handle food until after the after the symptom cease.
They should inform their supervisor and not undertake duties that risk contaminating food.

Some businesses are required to appoint a qualified Food Safety Supervisor .

All cafés, restaurants and retail food outlets must practice safe food handling and preparation to meet food safety requirements. Fixtures, fittings and equipment must be maintained in a clean condition and all food contact surfaces be sanitised.

Food retail businesses should
notify the local council of their business and food activity details
meet the requirements of the Food Standards Code

meet other legal requirements.

- Standard 3.2.2 - Food Safety Practices and General Requirements
- Standard 3.2.3 - Food Premises and Equipment
- Part 1.2 - Labelling and other information requirements.
- Australian Standard AS 4674:2004 – Design, construction and fitout of food premises

Other laws which relate to food and promotion and packaging are enforced by other agencies including:

- Australian Consumer Law enforced by the ACCC
- weights and measures - enforced by the National Measurement Institute

All food businesses must be designed and constructed to satisfy the requirements of Food Standards Code 3.2.3 – Food Premises and Equipment.
The Australian Standard AS 4674:2004 – Design, construction and fitout of food premises is a method of compliance with the Food Standards Code and is usually a requirement as a condition of local council Development consent.

Some factors to consider when complying with the Australian Standard for food premises are:

- providing adequate space for food storage and food preparation
- hand washing facilities must be hands free (ie not capable of being used by hand operation)
- hand washing facilities must be located within five metres of where food is handled
- walls must be of solid construction (ie stud walls are not permitted)
- service pipes and conduits must be concealed within floors, plinths, walls or ceilings or 25 mm from walls and 100 mm from floors and ceilings.

Food businesses are expected to take all practicable measures to ensure they do not receive unsafe or unsuitable food.
Retail food businesses need to have measures in place related to receiving, storing, processing, displaying, packaging, transporting and disposing of food.

Certain industry sectors of the NSW food industry are regulated under Food Regulation 2010 and are required to hold a NSW Food Authority licence. They include:

- high-priority plant product businesses
- businesses that handle or process meat
- businesses that further process seafood
- businesses that handle shellfish
- dairy producers, factories and vendors
- businesses that produce or process eggs & egg related products
- businesses that conduct food service to vulnerable populations

NSW food service and retail food businesses that are only required to notify their food handling activities to the local council, do not require a full documented Food Safety Program, but must demonstrate compliance to the relevant state food Act and the national Food Standards Code, including 3.2.2, 3.2.2A and 3.2.3.

KEY TIPS FOR FOOD SAFETY:

The following key tips are the golden rules for keeping food safe.

Healthy Hygienic food handlers:

- Food businesses are expected to ensure that food handlers and anyone else on the premises do not contaminate food.
- Separate utensils should be used for raw and ready-to-eat products, otherwise all equipment used for raw foods should be cleaned and sanitised before they are used for ready-to-eat and pre-cooked prepared foods.
- Food businesses also have specific responsibilities relating to the health of people who handle food, provision of separate hand washing facilities, telling food handlers of their health and hygiene obligations, and the privacy of food handlers.
- Food handlers who are ill, particularly with symptoms such as vomitting, diarrhoea or fever, should not handle food till after the symptom cease. They should inform their supervisor and not undertake duties that risk contaminating food.
- wash and dry hands thoroughly before starting to prepare or eat any food, even a snack

Keep clean

- keep benches, kitchen equipment and tableware clean and dry
- don't let raw meat juices drip onto other foods
- separate raw and cooked food and use different cutting boards and knives for both
- food premises, including fixtures, fittings and equipment must be maintained in a clean condition and all food contact surfaces be sanitized.
- A food business must also ensure that eating and drinking utensils, and food contact surfaces of equipment, are clean and sanitised
- garbage and recycled matter needs to be stored in appropriate containers.

Food handling Controls:

Food businesses are expected to take all practicable measures to ensure they do not receive unsafe or unsuitable food. This means they must make sure the food they receive:

- is protected from contamination
- can be identified while it is on the premises
- is at the correct temperature when it arrives, if it is potentially hazardous (below 5ºC for cold food or above 60ºC for hot food)

For the storage and display of food, businesses must ensure it's protected from contamination and kept under temperature control.

Potentially hazardous foods must be stored and displayed at below 5ºC or above 60ºC and thrown out if stored or displayed at temperatures between 5ºC or 60ºC for more than 4 hours.

Potentially hazardous foods must be used immediately if stored or displayed between 5ºC or 60ºC for between 2 and 4 hours. If stored or displayed at between 5ºC or 60ºC for less than 2 hours, the food can be either refrigerated or used immediately.

Food businesses should only use 'food grade' packaging and containers to store food.

Keep food cold:

- keep the fridge and refrigerated cabinets below 5°C
- put any food that needs to be kept cold in the fridge straight away
- don't eat food that's meant to be in the fridge if it's been left out for 2 hours or more
- defrost and marinate foods in the fridge, especially meats

Keep food hot:

- cook foods to at least 60°C,hotter for specific foods
- Potentially hazardous food s should be coked to 75°C or equivalent temperature
- reheat foods to at least 60°C, until they're steaming hot
- make sure there's no pink left in cooked meats such as mince or sausages

Follow labels and instructions

- don't serve food past a 'use-by' date
- note a 'best before' date and use as quickly as possible
- practice stock rotation
- follow storage and cooking instructions
- be allergy aware

(taken from NSW Food Authority Information)

Under Standard 3.2.2A - 11, category one and two businesses must appoint a certified "food safety supervisor" (FSS).

3.2.2A Clause 2 defines a food safety supervisor as a person who:
(a) holds a food safety supervisor certificate that has been issued within the immediately preceding period of 5 years; and
(b) has the authority and ability to manage and give direction on the safe handling of food

A FSS must be a person who has obtained formal certification as a FSS within the past 5 years. The FSS should be able to produced evidence of the formal FSS certificate upon request. The certificate will show the participant has successfully completed the required national units of competency for the FSS course

FSS certificates must be obtained from either a registered training organisation (e.g. accredited through the Australian Skills Quality Authority), or an organisation recognised by the relevant food regulator.
The food safety supervisor is nominated by the business and takes a lead role in supervising food safety and oversees the food handling in a food business. They must be 'reasonably available' as a point of contact for food handlers and authorized officers.
'Reasonably available' means the FSS works onsite and oversees food handling of high-risk unpackaged foods, or can be easily contacted (e.g. by phone)

The Food Safety Supervisor should

- know how to recognise, prevent and alleviate food safety hazards of the food business;
- have skills and knowledge in matters relating to food safety relevant to the food business; and share their food safety knowledge with food handlers.
- foster a positive food safety culture, so food safety is a top priority in 'the way we do things here
- have the authority to supervise, instruct and give directions about matters relating to food safety to food handlers in the food business.
- review, inspect and update food handling procedures and records for the business

Food Handler Responsibilities

A food handler is anyone who works in a food business and who either handles food or surfaces that are likely to be in contact with food such as cutlery, plates and bowls.
A food handler may do many different things for a food business.
Examples include making, cooking, preparing, serving, packing, displaying and storing food. Food handlers can also be involved in manufacturing, producing, collecting, extracting, processing, transporting, delivering, thawing or preserving food.

Food handlers' personal hygiene practices and cleanliness must minimise the risk of food contamination. The most important things they need to know are that they must:

- *Do whatever is reasonable to prevent their body; anything from their body or anything they are wearing, coming into contact with food or food contact surfaces.*
- *Do whatever is reasonable to stop unnecessary contact with ready-to-eat food.*
- *Wear clean outer clothing, depending on the type of work they do.*
- *Make sure bandages or dressings on any exposed parts of the body are covered with a waterproof covering. All Band aids should be blue in colour.*
- *Not eat over unprotected food or surfaces likely to come in contact with food.*
- *Not sneeze, blow or cough over unprotected food or surfaces likely to come into contact with food.*
- *Not spit, smoke or use tobacco or similar preparations where food is handled.*
- *Not urinate or defecate except in a toilet. Some special hand washing rules for food handlers*
- *Food handlers are expected to wash their hands when ever their hands are likely to contaminate food. This includes washing their hands.*
- *Immediately before working with ready-to-eat food after handling raw food.*
- *Immediately after using the toilet.*
- *Before they start handling food or go back to hand ling food after other work.*
- *Immediately after smoking, coughing, sneezing, using a handkerchief or disposable tissue, eating, drinking or using tobacco or similar substances.*
- *After touching their hair, scalp or a body opening.*

-"Health and Hygiene responsibilities of food handlers." Web. 12 Nov. 2015 <http://www.foodstandards.gov.au/consumer/safety/faqsafety/pages/foodsafetyfactsh>.

From: Food handler health and hygiene Fact Sheet Queensland Health

Who is a food handler?

A food handler is anyone who works for a food business and handles food or surfaces that are likely to come into contact with food, such as cutlery, plates, bowls, or chopping boards.

Food handler responsibilities

- Health of food handlers
- A food handler who has a symptom of a foodborne disease, knows he or she is suffering from a foodborne disease, or is a carrier of a foodborne disease, must, if at work:
- report that he or she is or may be suffering from the disease, or knows that he or she is carrying the disease, to his or her supervisor, as the case may be;
- not engage in any handling of food where there is a reasonable likelihood of food contamination as a result of the disease; and
- if continuing to engage in other work on the food premises - take all practicable measures to prevent food from being contaminated as a result of the disease.
- A food handler who suffers from a condition (an infected skin lesion or ear, nose or eye discharge) must, if at work:
- if there is a reasonable likelihood of food contamination as a result of suffering the condition – report that he or she is suffering from the condition to his or her supervisor; and
- if continuing to engage in the handling of food or other work – take all practicable measures to prevent food being contaminated as a result of the condition.
- A food handler must notify his or her supervisor if the food handler knows or suspects that they may have contaminated food whilst handling food.

Personal hygiene

A food handler must:

- do whatever is reasonable to avoid unnecessary contact with ready-to-eat foods, such as salads or cooked meat.
- take all practical measures to prevent contamination of food or surfaces that are likely to come into contact with food, by anything:
- from their body e.g. hair, bodily secretions and fingernails; or
- they are wearing e.g. clothes, jewellery, hair accessories, bandages.
- wear clean outer clothing, appropriate for the type of work they do
- make sure bandages or dressings on any exposed parts of the body are covered with a waterproof covering
- not eat over unprotected food or surfaces likely to come in contact with food
- not sneeze, blow or cough over unprotected food or surfaces likely to come into contact with food
- not spit, smoke or use tobacco or similar preparations where food is handled.

All Food business must:

inform all food handlers working for the food business of their health and hygiene obligations under as specified above.

1. ensure that any information provided by a food handler in relation to their health, as per the requirements specified above, **is not disclosed** to any person without the consent of the food handler, except the proprietor or an authorised officer, and that the information is not used for any purpose other than addressing the risk of food contamination.
2. take all practicable measures to **ensure all people** on the food premises of the food business–
    1. do not contaminate food
    2. do not have unnecessary contact with ready-to-eat food
    3. do not spit, smoke, or use tobacco or similar preparations in areas where there is unprotected food or surfaces likely to come into contact with food.

Health of food handlers

A food business must ensure the following persons **do not engage in the handling of food** for the food business where there is a reasonable likelihood of food contamination–

(a) a person known to be suffering from a foodborne disease, or who is a carrier of a foodborne disease

(b) a person known or reasonably suspected to have a symptom that may indicate he or she is suffering from a foodborne disease.

A food business must ensure that a person who is known or reasonably suspected to be suffering from a condition (an infected skin lesion or ear, nose or eye discharge) and who continues to engage in the handling of food for the food business, takes all practicable measures to prevent food contamination.

A food business may permit a person excluded from handling food in accordance with (1)(a), above, to resume handling food **only after receiving advice from a medical practitioner** that the person no longer is suffering from, or is a carrier of, a foodborne disease.

Personal hygiene

A food business must:

3. Maintain easily accessible hand washing facilities.
4. Maintain, at or near each hand washing facility, a supply of–
    4. warm running water;
    5. soap; or
    6. other items that may be used to thoroughly clean hands.
5. Ensure hand washing facilities are only used for the washing of hands, arms and face.

6. Provide, at or near each hand washing facility–

    7. single-use towels or other means of effectively drying hands that are not likely to transfer pathogenic microorganisms to the hands; and

    8. a container for used towels, if needed.

For further information

Queensland Health have a variety of fact sheets with detailed information on food safety. These fact sheets can be accessed at www.health.qld.gov.au.

TOPIC 1 – FOLLOW FOOD SAFETY PROGRAM

Access information from food safety program to ensure food handling is completed safely

FSANZ FOOD SAFETY STANDARDS INFORM SAFE FOOD HANDLING

Food Standards Australia New Zealand (FSANZ) develops and manages regulatory standards for food (which includes beverages). FSANZ takes Codex Alimentarius into account when developing and revising domestic regulatory food standards.

The Food Standards Code comprises of 4 chapters of food standards, where standards on related matters are grouped together into parts, which in turn are collected into the four chapters.

Chapter 1 Introduction and standards that apply to all foods

Chapter 2 Food standards

Chapter 3 Food safety standards

Chapter 4 Primary production standards

The Food Standards Code has the force of laws – from each state and territory.
It is a criminal offence in Australia to supply food which does not comply with relevant food standards.

FSANZ Food Safety Standards:

3.2.1. Food Safety Programs.
Note * Retail and Food Service businesses do not require a formal food safety program - as per FSANZ Code 3.2.1

A food safety program is a documented program that identifies and controls food safety hazards in the handling of food in a food business. Retail and Food Service businesses have not generally been required to have a formal documented food safety program, but to follow the requirements of FSANZ 3.2.2. and 3.2 3

3.2.2. Food Safety Practices & General Requirements

This standard sets out specific food handling controls related to the receipt, storage, processing, display, packaging, transportation, disposal and recall of food.

Other requirements relate to the skills and knowledge of food handlers and their supervisors, the health and hygiene of food handlers, and the cleaning, sanitising, and maintenance of the food premises and equipment within the premises.

3.2.2A Food Safety Management Tools*
(applicable to some foods service and retail businesses)

Standard 3.2.2A is an extension of the Standard 3.2.2 food safety requirements.
It draws on and applies requirements in 3.2.2. and 3.2.3.

It applies to Australian businesses in food service, catering and retail sectors that handle –

- unpackaged,
- potentially hazardous food that is
- ready to eat.

The standard requires these businesses to implement either two or three food safety management tools (in addition to their existing Chapter 3 obligations), based on their food handling activities.
The three tools are

1. food safety supervisor,
2. food handler training and
3. substantiation of critical food safety controls.

3.2.3. Food Premises and Equipment

This Standard sets out requirements for food premises and equipment that, if complied with, will facilitate compliance by food businesses with the food safety requirements of Standard 3.2.2 Food safety practices and general requirements.

The objective of this Standard is to ensure that, where possible, the layout of the premises minimises opportunities for food contamination.

Food businesses are required to ensure that their food premises, fixtures, fittings, equipment, and transport vehicles are designed and constructed to be cleaned and, where necessary, sanitised.

Businesses must ensure that the premises are provided with the necessary services of water, waste disposal, light, ventilation, cleaning and personal hygiene facilities, storage space and access to toilets.

Monitor food safety according to organisational processes and document as required

Monitoring or checking that food safety hazards are under control is central strategy to keeping food safe and suitable.

The checks and records a business needs to keep depends on the

- Food industry sector
- Need for the business to be HACCP certified or licensed by a regulatory authority
- Applicable food standards for the business.

3.2.2A requires the substantiation of key food safety controls tool, for Category One businesses. This means businesses must show they are meeting certain 'prescribed provisions'.

The prescribed provisions are existing food safety standards for temperature control, food processing and cleaning and sanitising food preparation surfaces and utensils.

The prescribed provisions are key and existing food safety requirements (from 3.2.2) that businesses must control to make sure the food they sell is safe. For potentially hazardous foods, category one businesses must show that they manage food safety controls.

Records will be needed to show compliance with clauses from 3.2.2.

- Receive potentially hazardous foods under temperature control.
  subclause 5(3); [on temperature control during food receipt]
- Store potentially hazardous foods under temperature control.
  paragraph 6(2)(a); [on temperature control during food storage]
- Process potentially hazardous foods in a safe manner
  paragraph 7(1)(b)(ii); [on pathogen reduction during food processing]
  subclause 7(2); [on minimising time during food processing]
- Cool potentially hazardous foods in a safe manner
  subclause 7(3); [on cooling food]
- Reheat potentially hazardous foods in a safe manner
  subclause 7(4); [on reheating food]
- Display potentially hazardous foods
  paragraph 8(5)(a); [on temperature control during food display]
- Transport potentially hazardous foods under temperature control
  paragraph 10(b); and [on temperature control during food transport]
- Clean and sanitise
  clause 20. [on cleaning and sanitising]

A business can demonstrate they are meeting the prescribed provisions and monitoring food safety in a number of ways including:

- writing on templates- freely provided by authorities
- Writing on business foo safety forms
- Recording food safety information electronically

- Writing on invoices
- keeping photos or videos

Records kept for a minimum of 3 months from date of activity

Alternate compliance for 3.2.2.A can be

- having written instruction sheets or procedures
- walking and talking through the process with the food regulator.

HACCP:

> *HACCP (Hazard Analysis Critical Control Point) is the systematic preventative approach to food safety.*
>
> *It addresses physical, chemical, and biological hazards as a means of prevention through process control*
>
> *This approach has significant benefits to organisations operating within the food supply chain as it enables them to determine key controls over processes and concentrate resources on activities that are critical to ensuring safe food.*
>
> *-"HACCP." Web. 13-11-2015. <http://www.haccp-org.eu/project_content/about_haccp_sa_poc.html.>.*

[1]

What does HACCP mean?

- H = Hazard
- A = Analysis
- C = Critical
- C = Control
- P = Point

A HACCP food safety program uses HACCP Codex methodology and principles, that surpass the requirements of 3.2.1 Food Safety Programs in the Food Standards Program

Reasons to implement a food safety program:

One of the primary reasons for having a documented food safety system in place is to demonstrate to your clients, your commitment to consistently supply food which is safe. Litigation is another reason to implement a food safety system. If you or anyone else in the

[1] "HACCP." Web. 13-11-2015. <http://www.haccp-org.eu/project_content/about_haccp_sa_poc.html.>.

organisation supply food which is proven to have been contaminated by a process performed by you or whilst in your care you are liable for prosecution.

If there is a food recall, it may prove damaging to your business. It may result in a public recall. Food recalls can cost businesses significant amounts of money, not to mention possible bad publicity.

A documented HACCP food safety system will give you access to markets previously unattainable.

Any organisation which is involved in cooking, processing, growing, transporting, supplying or serving fresh, frozen or any type of food should have an HACCP based food safety system.

Certain industry sectors in different states may require a certified HACCP food safety program that is audited annually by an independant food safety auditor to ensure the business is implementing the HACCP food safety program.

Specific food safety program templates exist for the dairy, meat, seafood, shellfish and food for vulnerable person's schemes. Access the template for each scheme under industry sector requirements and then select the scheme. Food businesses are responsible for customising the food safety program template to reflect the:

- Hazards
- Management practices and procedures
- Any relevant licensing regulations appropriate to them

Control identified food safety hazards relevant to operations

Food business operators have a legal duty to ensure the food they sell is safe and suitable.

Food business have a responsibility to control food safety hazards that could occur.

Control actions are any action or activity that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level

FOOD SAFETY HAZARDS

There are three types of food safety hazards which can make food unsafe or unsuitable:

- physical food safety hazards
- chemical food safety hazards including allergenic food safety hazards
- biological food safety hazards.

Food Safety Hazards:
A Hazard is any biological, chemical, or physical agent in, or condition of, food with the potential to cause an adverse health effect. For example:

- Biological hazards:
  - Microbiological (includes Bacteria, Fungi, Viruses, Microscopic Parasites, and Algae)

Some of these are Pathogens (poisonous microorganisms)

- Physical hazards:
  - Foreign objects such as glass, wood, stones, sticks, insects, plastic, jewellery
- Chemicals that may contaminate the food e.g.
  - Cleaning products
  - Allergens
  - Mycotoxins (e.g. aflatoxins produced by fungi)
  - Heavy Metals
  - Food Additives

How can pathogens be controlled?

- Over time, by controlling temperature and acidity
- By providing staff training
- Using pest control measures
- Using HACCP as a basis for hazard identification and controls in food safety programs

CRITICAL CONTROL POINTS:

Each business will have in place procedures at the "critical control points" in processing

or preparing of food, where there is a high risk of contamination or food spoilage. Common critical control points for hospitality businesses are:

- Purchasing and delivery
- Stock control and food storage
- Preparation
- Cooking
- Cooling
- Reheating
- Holding or display
- Service

Each business needs to identify the hazards and appropriate controls that are relevant to their business and operation

Physical food safety hazards:

Physical food safety hazards are either

materials unintentionally introduced to food products (foreign objects)
or
naturally occurring objects that are hazardous to the consumer.

A physical food safety hazard can occur at any stage of processing and production, some examples include:

- stones, sticks, seeds, weeds, or any other physical hazard that may occur during harvest of raw materials
- bones, or bone shards, feathers, insects and/or insect body parts
- wood splinters and fragments
- glass fragments
- hard (brittle) plastics
- soft plastics
- personal items including hair, fingernails, band-aids, jewellery parts
- metal shavings, bolts or other physical hazards that may occur due to equipment breakdowns or failures
- any item of packaging or the food itself that could present a choke hazard.

Physical food safety hazards (also referred to as foreign matter or foreign objects) can cause injuries such as:

- cuts to the mouth or throat
- damage to the intestines

- damage to teeth or gums
- choking.

Recalls for foreign physical hazards are common:

Controls for Physical Hazards:
Practices and procedures that will help to control physical food safety hazards include

Approved supplier program
- Only purchasing raw materials, ingredients, and packaging materials from approved suppliers with systems and processes in place to prevent or eliminate physical food safety hazards.

Receival procedures
- Visual inspection of raw materials, ingredients, and packaging materials at receival.
- Visual inspection of delivery vehicles.

Personal hygiene practices and procedures
- No jewellery policy.
- No pockets in uniforms.
- No personal effects permitted in processing and/or packaging areas.

Premise hygiene procedures
- Clean as you go and making sure food scraps and packaging waste are disposed of correctly.
- Maintaining clean and tidy work areas.

Pest control.

Preventive maintenance program to maintain equipment so no breakages. Controlling maintenance and repair tools and equipment

Conducting inspections of food processing areas to identify any issues that may result in a physical food safety hazard.

Chemical food safety hazards:

Food can become contaminated by a variety of chemicals

- Agricultural residues, for example, pesticides, herbicides, fertilisers, and other chemicals used during primary production.
- Cleaners, sanitisers, oils, lubricants, pesticides, and other chemicals found in food processing facilities.
- Food additives, for example, preservatives such as sulphur dioxide, or excessive use or misuse.
- Environmental contaminants, for example, heavy metals (lead, cadmium, mercury, and arsenic).

Food recalls for chemical hazards are common including cleaning and sanitizing chemicals improperly applied.

Biological food safety hazards:

Biological hazards caused by micro organisms growing or being in the food
Presence of bacteria, moulds, yeast, viruses etc pose a major hazard to the safety of food.

Food poisoning micro-organisms:

These make the food unsafe to eat. Illness or disease may result after eating foods contaminated with these micro-organisms. They are called pathogenic micro-organisms or pathogens (i.e. harmful to humans).

Food spoiling micro-organisms

These cause foods to be no longer fit to eat because they are contaminated with certain types of micro-organisms that cause the food to deteriorate

The control the risk of microbial contamination in foods using two major strategies:

- Limiting the microbial contamination of food.
- Limiting or controlling the growth of micro-organisms in food

Reduce initial contamination of foods by micro-organisms:

- Select fresh, good quality foods.
- Keep the physical handling of foods to a minimum.
- Clean equipment, utensils and premises and vehicles.
- Restrict entry of dust, pests, animals, etc.

Limit the growth of micro-organisms:

- Reduce time—use foods as soon as possible.
- Turn over stock quickly.
- Throw out old food that is 'suspect'.
- Prepare only the amount of food that will be used.

Store and handle foods correctly:

- Hot (above 60°C)
  or
- Cold (below 5°C).

That is, keep the food out of the 'danger zone', the zone where dangerous bacteria can multiply.

Food Safety Controls should be validated.
Here is a list of common food safety controls and source of validation

The criteria used for safe handling of food within this guide is based on reliable published sources of food safety information.

Food Handling Activity	**Critical limit or food safety controls**	**Validation Source**
Receival of Food	A food business must take all practicable measures to ensure it only accepts food that is protected from the likelihood of contamination. Practical receival measures include: • sourcing food from reputable suppliers • having specific, agreed instructions with suppliers • inspecting randomly selected food items from a delivery, for visible signs of contamination	Safe Food Australia Standard 3.2.2 Division 3 5 (1)
Receival of PHF Food	• only accept potentially hazardous food that is at a temperature of: (a) 5°C or below; or (b) 60°C or above • ensure that food which is intended to be received frozen, is frozen when it is accepted	Safe Food Australia Standard 3.2.2 Division 3 5 (3) 5 (4)
Storage of food	Store food …protected from the likelihood of contamination. Storage conditions will not adversely affect the safety and suitability of the food	Safe Food Australia Standard 3.2.2 Division 3 6 (1)
Cold Storage of PHF	store it under temperature control;	Safe Food Australia Standard 3.2.2 Division 3 6 (2)
Frozen Storage	if it is food that is intended to be stored frozen, ensure the food remains frozen during storage.	Safe Food Australia Standard 3.2.2 Division 3 6 (2)

	Hard frozen, does not include partly thawed	
Preparation of PHF RTE food	The time that food is kept at temperatures that permit the growth of pathogenic microorganisms must be kept to a minimum during processing. Ready-to-eat potentially hazardous food brought out of refrigeration, If the total time is: • less than 2 hours, the food may be used, or refrigerated for later use • between 2 and 4 hours, the food may still be used • 4 hours or longer, the food needs to be thrown out	Safe Food Australia Appendix 2
Thawing	There are several ways that frozen potentially hazardous food can be thawed: Refrigeration: Thawing food under refrigeration maintains it at 5°C (or below) Running water: Food may be thawed more quickly by submerging under cool running water Microwave As part of the cooking process At room temperature – ensuring the food does not go above 5 °C	Safe Food Australia Standard 3.2.2.
Cooking	7.1 ii) …….use a process step that is reasonably known to achieve the microbiological safety of the food. The microbiological safety of food is usually achieved through heating processes such as cooking. Core temperature of at least 75°C for poultry, stuffed, minced , formed meat	Safe Food Australia Standard 3.2.2. 7.1 Safe Food Australia Appendix 3 Limits for food processes

	70°C for 2 minutes or heating to 75°C	
Cooling	The cooling of cooked potentially hazardous food needs to be as quick as possible. 7(3) A food business must, when cooling cooked, potentially hazardous food, cool the food: (a) within two hours — from 60°C to 21°C; and (b) within a further four hours — from 21°C to 5	Safe Food Australia Standard 3.2.2
Clean	Whatever method is used it must achieve the intended outcome: that is, that the utensil or surface looks clean, feels clean and smells clean. Warm to hot water is generally needed (54°C to 60° C) is recommended. Detergents should be appropriate for the task	Safe Food Australia Appendix 6
Sanitise	Sanitising can be achieved through the use of hot water, chemicals or other processes. Some examples are: • soaking items in very hot water (at least 80°C) • soaking items in diluted bleach • saturating items with 70% alcohol • applying a commercial food-grade sanitiser according to the manufacturer's instructions, with particular attention to the required concentration and contact time	Safe Food Australia Appendix 6
Dishwasher Temperature	Incoming water should be at the temperature specified by the manufacturer for the machine used. Generally, commercial dishwashers should be able	Safe Food Australia Appendix 6

	to use high temperatures (greater than 80°C) in their sanitation rinse cycles.	
Batch	A batch is defined as product made using the same process and/or packaged under the same conditions within a 24-hour period.	NSW Food Authority Food Safety Schemes manual

Take corrective action within scope of job responsibility when non-compliance and food safety hazards are identified and report to relevant personnel as required

A recall system for managing problems with products will ensure the operator is able to:

- Control the product that is released from their control
- Quickly and effectively recall or withdraw product from the market
- Inform customers if they suspect or become aware product is unsafe, so they do not use it and become ill

FSANZ has developed a food recall system that all food businesses must follow.

Food Service and retail businesses need to follow any recall instructions from suppliers, for any product. This may include stop selling the product and organizing a refund.

Problems with products may be identified by:

- The supplier of goods such as ingredients or packaging (e.g. The supplier discovers a non-compliance with their product after selling it to the food business)
- The food business itself
- A customer or through consumer complaints
- A regulator or verifier

Proper investigation and the regular review of customer complaints can help you to better understand the performance of your food safety system and to identify potential hazards that you may have been unaware of.

Non conforming products:

Consider at least the following points:

How you detect food non-conformances, e.g. Through:

- Investigating and reviewing complaints
- Following up on relevant feedback / notifications from suppliers, verifiers and regulators
- Investigating failures in good operating practices
- Process control checks and monitoring
- Any sampling and testing of product

How you identify which specific food is non-conforming and what is the extent of the problem e.g.:

- Ensuring you identify what caused the problem, why it happened, and how much product is affected (e.g. Using inventory records, product descriptions, batch codes, lot numbers, dates and times etc.)

How you ensure non-conforming food is secured against use or dispatch, e.g.:

- Putting non-conforming food on hold, pending further investigation
- Ensuring product on hold is clearly identifiable/labelled and held in segregated storage or in a designated area away from other food
- Ensuring staff are trained to recognise the product status and the significance if the product was to be dispatched or used
- Ensuring product can only be released on the authority of an appropriate person (e.g. Restricting access the area where product is on hold)

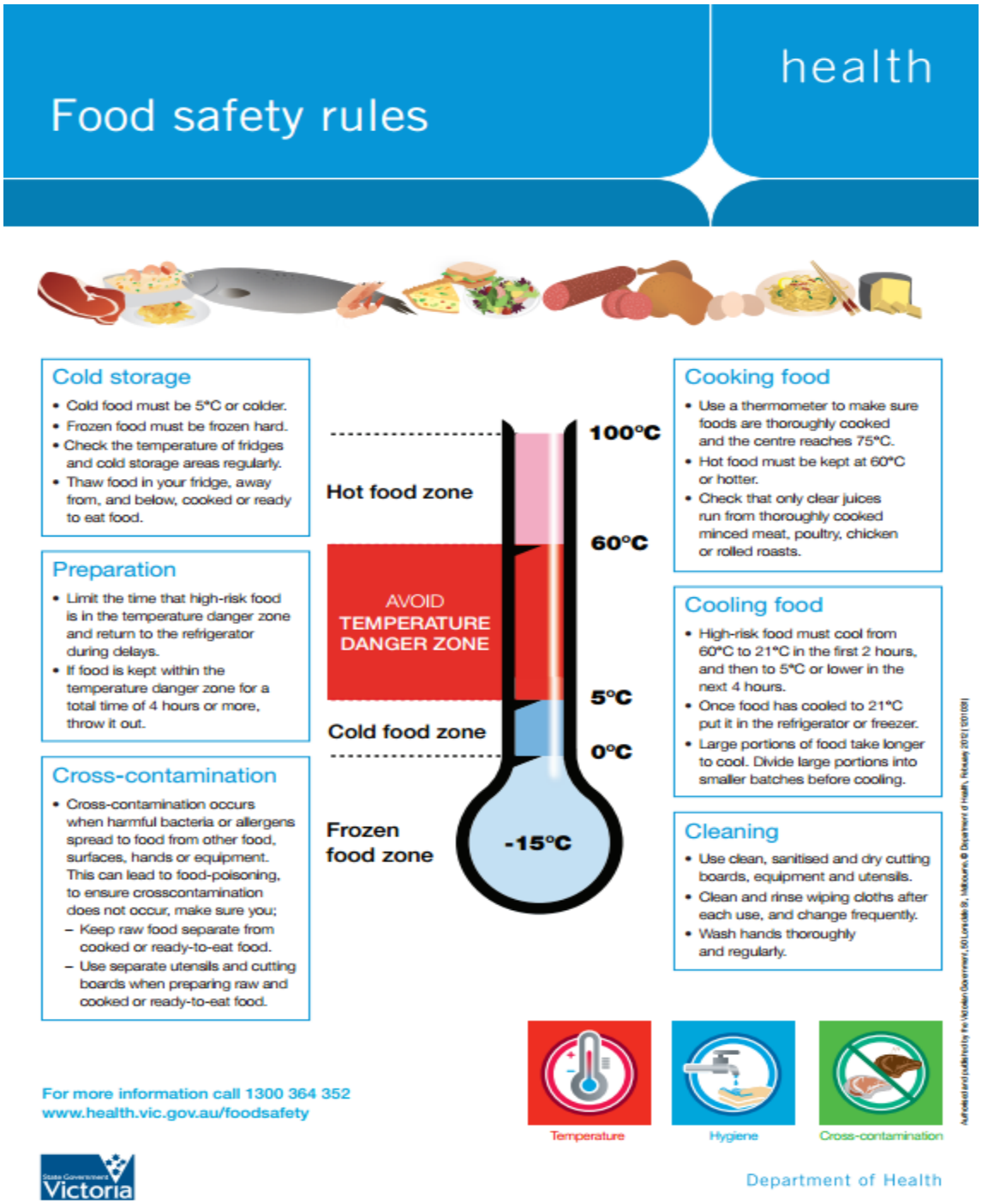
How you manage the non-conforming product. Consider the following corrective actions, as appropriate:

- Re-grading affected food and making it suitable for another purpose (e.g. Disposal to pet food or transfer to animal feed if appropriate. Clearly label the food "not for human consumption")
- Recalling the food

Record food safety information, including equipment breakdowns, according to food safety program

TOPIC 2 – STORE AND HANDLE FOOD SAFELY

Receive and transport food supplies to appropriate storage areas promptly, safely and without damage



From Vic Health

Receival of Food

When you receive potentially hazardous food, you must accept it only if it is 5°C or below, or 60°C or above.

Measure and record the temperatures of these foods when they arrive.

Measure and record the temperatures of these foods when they leave the premises, for example, before they are transported to another site

Receiving Food:

Because hazards such as bacteria and foreign bodies/objects can be introduced into food premises from supplier's ingredients, it is important that items are checked whenever they are received at your kitchen.

To make sure the food that you are receiving is safe for use, you should always follow the below:

- Always buy your supplies from a approved and reputable supplier.
- Store food quickly after you have received and checked the good being delivered.
- Do not be tempted to get your supplies from a discounted or out of date or damaged supplies.
- Use by dates and best before dates are suitable.
- Foods are clearly labelled.
- Foods are free from pests, and pest contamination.
- Foods are checked for;
  - Quality
  - Quantity
  - Size

Remember: - Whether you get your supplies from a supermarket or warehouses. All food safety procedures apply.

Transportation of food

Transportation of high risk foods is often a forgotten link in the food handling process. The same food safety procedures that apply whilst in the food premises (kitchen) also applies when transporting the food.

Food is often transported from suppliers to food premises or from kitchen to venue (such as; boardroom, function room, luncheons and morning teas etc...)

Food suppliers/kitchens/restaurants transporting high-risk food must:

- Transport it under temperature control.
- Protect it from the likelihood of contamination.

Use only dedicated food transport vehicles or containers that are specifically designed to transport food.

Containers should have a lid that can be sealed and fastened to keep out contaminant such as dust, and other forms of contaminants.

Try to avoid using second-hand foam or cardboard containers as they are not durable and cannot be easily cleaned and sanitised.

When transporting food the following procedures must be followed:

- Cold foods must be transported at a temperature less the 5'C in a refrigerated vehicle or in insulated containers; the containers must have ice bricks when food are inside.
- Hot foods must be transported in insulated boxes at a temperature above 60'C.
- Frozen foods must be kept frozen hard at a temperature of -15'C or below, and not be allowed to thaw.
- High-risk foods can be carried out of the temperature control zone (in the danger zone) for more than one hour. Such as pizza's.
- Utensils, crockery, cutlery and packaging need to be protected from contamination and transportation of such items should be similar to that of food.
- Doors of refrigerated vehicles must not be left open during delivery as the temperature of the vehicle may not be able to keep below 5'C.
- All refrigerated vehicles must have a temperature measuring device that constantly measures the temperature within the vehicle carrying area.
- Food should be transported in a manner that protects it from contamination.
- Foods are to be transported in a clean, well maintained vehicle.
- Food should not be stored with chemicals.

Within your organisation there should be in place a policy and procedure that covers the following steps in food handling:

- Receive
- Store – Dry/Cold/Frozen
- Prepare/thaw
- Cook/Reheat

- Cool
- Serve/Self-serve
- Hot/Cold display
- Transport

Bacterial growth and the danger zone

Bacteria are microorganism's that are found in the wider environment. They come in many different forms and have many different side effects. Bacteria have a number of certain elements that will accelerate their growth.

These are:

- Time – in ideal conditions one single bacterium can multiply to 2,000,000 within 7 hours
- Temperature – bacteria is best grown between
- 5°C – 60°C. This is known as the danger zone
- Note: If you freeze food or go colder than 5°C it may not kill the bacteria but only slows its growth. Some bacteria can survive up to a year at -20°C.
- Nutrients – most foods are a good source for bacterial growth
- Water – without water bacteria may slow growth or stop completely, that's why dried foods don't spoil
- Light
- PH – the measure of acidity or alkalinity

Studies done by the "Department of Health" have shown that in ideal conditions:

Bacteria will double their numbers every 20 minutes. For example, if a piece of kangaroo meat infected with 100 food poisoning bacteria is left lying on a kitchen bench on a warm day, the bacteria will double their number every 20 minutes, and in 3 hours, the 100 bacteria will multiply to over 50,000 bacteria.

The following table shows how the bacteria will multiply on the meat over 3 hours:

Time	*Number of bacteria*
Start	*100*
20 minutes	*200*
40 minutes	*400*
1 hour	*800*
1 hour 20 minutes	*1600*
1 hour 40 minutes	*3200*
2 hours	*6400*
2 hours 20 minutes	*12800*
2 hours 40 minutes	*25600*
3 hours	*51200*

-"Department of Health." Web. 12 Nov. 2015 <http://www.health.gov.au/internet/publications/publishing.nsf/Content/ohp-enhealth-manual-atsi-cnt-l~ohp-enhealth-manual-atsi-cnt-l-ch3~ohp-enhealth-manual-atsi>.

[2]It is important to note that once bacteria have entered a person's intestine they can continue to multiply. Although the person may eat food which is only contaminated with a few bacteria initially, they may end up with food poisoning.

[2] "Department of Health." Web. 12 Nov. 2015 <http://www.health.gov.au/internet/publications/publishing.nsf/Content/ohp-enhealth-manual-atsi-cnt-l~ohp-enhealth-manual-atsi-cnt-l-ch3~ohp-enhealth-manual-atsi>.

Food poisoning

Food poisoning occurs after consuming the contaminated food or drink. Symptoms may include:

- Stomach pain
- Cramps
- Nausea
- Vomiting
- Fever
- Headache
- Diarrhoea

Microorganisms can contaminate food and cause people to become ill, these include:

- *Salmonella – one of the most common food borne diseases, symptoms include - Diarrhoea, fever, abdominal cramps, headache*
- *Gastroenteritis – inflammation of the stomach and intestine, symptoms include - Nausea, abdominal cramps, vomiting, diarrhoea, headache, fatigue, fever, muscle aches*
- *E.Coli – thrives in the intestinal tracks of humans, symptoms include - nausea, severe abdominal cramps, watery or very bloody diarrhoea, fatigue*
- *Botulism - A serious but rare illness, symptoms include – double vision, drooping eyelids, slurred speech, dry mouth and difficulty swallowing, weak muscles*
- *Shigellosis – intestinal infection, symptoms include – fever, tiredness, watery or bloody diarrhoea, nausea and vomiting, abdominal pains*
- *Hepatitis A – acute inflammation of the liver, symptoms include – jaundice, fatigue, abdominal pain, nausea and vomiting, diarrhoea, fever, loss of appetite, dark urine*

[3]

People most susceptible to food poisoning are:

- Elderly
- Young

[3] http://edis.ifas.ufl.edu/in722.

- Sick people
- Pregnant

So what can us, as food handlers do in the prevention of food poisoning?

We can take a few simple steps, and these are:

- Always maintain personal hygiene
- Keep the kitchen clean
- Handle food safely
- Cook high-risk food thoroughly
- Keep hot food hot and cold food cold

Store and display food in environmental conditions that protect against contamination and maximise freshness, quality and appearance

Food safety involves implementing resources and strategies to ensure the correct storage, preparation, and preservation of foods, so they are safe for consumption. Food sanitation begins with the purchase or acquisition of food items and ends with the correct storage of leftovers for future use, food disposal and cleaning & sanitising.

Prevention of contamination is one of the most critical aspects of food safety. An important part of contamination prevention is ensuring that foods are correctly stored. Vegetables and meats should be placed in airtight containers and then stored in the freezer for future use. Others foods such as grain products., spices and sugar, whilst not requiring freezing should be stored in sealed containers which provide an effective barrier to airborne pathogens such as bacteria.

All food preparation areas should undergo regular sanitisation. All utensils used in the preparation of foods such as pots and pans, knives forks and spoons should be washed in hot soapy water or run through a dishwasher after use. Following this process helps minimise the opportunity for bacteria to use food residue to breed and contaminate food the next time the utensils are used.

All fruit and vegetables should be thoroughly washed prior to undertaking any food preparation. Doing so helps to significantly remove the amount of pathogens that may be present, therefore reducing the likelihood of foodborne illness. Food such as potatoes which are peeled should be washed after the peeling process to prevent the transfer of contaminants from the peel to the knife and ultimately to the food itself.

Any leftover food should be placed in airtight containers and then placed in a refrigerator or freezer. This helps to preserve the leftovers for future use and protect them from contamination.

Following a food safety plan does not only reduce the risk of contamination, but can also save money. Correct storage of food means that it is less likely to spoil and subsequently result in unnecessary wastage. Following the correct procedures stretches the food budget, and subsequently allows businesses to operate at a lower cost.

Cross Contamination:

Cross-contamination occurs when bacteria from one food item are transferred to another. This is often the result of unwashed benchtops or cutting boards, unwashed kitchen utensils or unwashed hands. Cross-contamination is a serious issue as it can in turn lead to food poisoning.

Since most dangerous bacteria are killed by cooking, the risk of cross contamination is highest where a bacterium from a raw food item food cross contaminates a cooked item or another. An example of this type of cross contamination is if a chef were to cut raw chicken on a cutting board and then later slice fresh tomatoes, or cooked chicken on the same board without washing and sanitising it first.

Cross contamination is far less likely to occur if food safety procedures are followed. Good habits include the regular washing of hands, proper cleaning of kitchen utensils and the sanitisation of work surfaces. In commercial kitchens, different coloured cutting boards may be used for the preparation of different foods such as poultry and vegetables. Doing so reduce the likelihood of cross-contamination.

There are three main types of contamination:

- Physical – insects, hair, glass, metal, wood, other liquids.
- Biological – viruses, bacteria, parasites, moulds, yeasts
- Chemical – cleaning materials, food additives, plant toxins (mould), fish toxins, heavy metals (mercury, lead), allergens

Cross-contamination should be avoided. It can be due to:

- Lack of training
- Laziness.
- Time constraints and shortcuts
- Staff not caring about their work

There are many ways that cross-contamination can occur. It can sometimes simply occur by:

- Using a chopping board for more than one raw product
- Not wash hands properly or frequently
- Using utensils for more than 1 product
- Sneezing on food or surfaces
- Using a tea towel to dry dishes
- Food being stored in incorrect containers
- Wearing dirty clothing
- Not cleaning and sanitising surfaces

An example of cross contamination during storage is:

- A raw chicken (which is considered a high-risk food) whilst thawing in a refrigerator being in contact with cooked meat. Bacteria from the raw chicken are then able to contaminate the cooked meat. If the cooked meat is not heated again before eating, the

bacteria from the chicken are subsequently passed on to the person consuming the meat.

An example of cross-contamination during handling is:

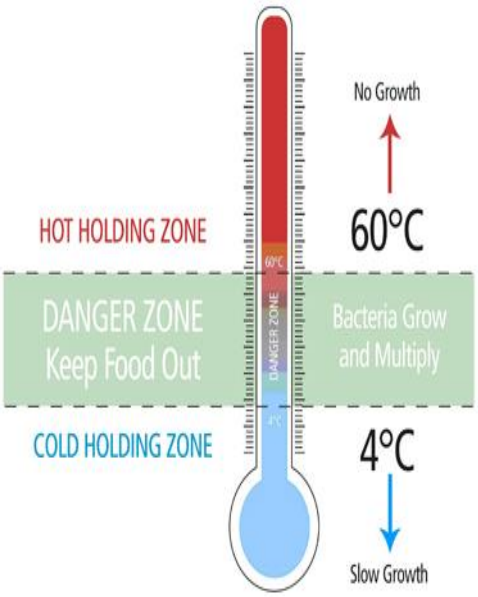
- When preparing uncooked fish which is contaminated with salmonella bacteria, a person uses a knife and cutting board to cut it up. If the knife and the cutting board are not thoroughly washed and the person then prepares another food item using the same knife and board, the bacteria will then be transferred to the next food prepared

Cross-contamination can be avoided when people follow correct procedures for example: once you have finished using one product thoroughly clean down the work area, use a new cleaned and sanitised chopping board, wash your hands thoroughly and dry them well.

TEMPERATURE CONTROL: STORAGE

Although everything we have discussed so far is relevant to the safe handling of food the temperature at which we store things makes a huge difference.

The danger zone is a food safety concept, anyone handling food should know about. It is the measure of the temperature at which bacteria thrives, between 5°C – 60°C.



Food can be safely held out of temperature control for short periods of time without significantly increasing the risk of food poisoning. The time for which food can be safely held between 5°C and 60°C is commonly referred to as the '4-hour/2-hour rule.[4]

4 Hour / 2 hour storage rule

The 4-hour/2-hour rule:

Studies have been done that show food can be safely held out of temperature control for short periods of time without significantly increasing the risk of food poisoning. The time for which food can be safely held between 5°C and 60°C is commonly referred to as the '4-hour/2-hour rule' and is applied as follows:
Total time food is between 5°C and 60°C

Rule is applied as follows:

- *After the first 2 hours (red zone) the food must be either used up or thrown out. It should not be returned to refrigeration or reheated.*
- *Within the first 2 hours (green zone) there are three options for the food: it can be used immediately, returned to refrigeration at or below 5°C, or reheated to 60°C or above. But you must keep track of this time and subtract it from the total 4 hours.*

-"Food safety guidelines - 4-hour/2-hour rule." Web. 12 Nov. 2015 <http://www.foodauthority.nsw.gov.au/_Documents/industry_pdf/4_hour_2_hour.pdf>.

[5]

[4] "Food safety guidelines - 4-hour/2-hour rule." Web. 12 Nov. 2015 <http://www.foodauthority.nsw.gov.au/_Documents/industry_pdf/4_hour_2_hour.pdf>.
[5] "Food safety guidelines - 4-hour/2-hour rule." Web. 12 Nov. 2015 <http://www.foodauthority.nsw.gov.au/_Documents/industry_pdf/4_hour_2_hour.pdf>.

2 Hour 4 Hour Guide

The 2 hour 4 hour guide applies to ready to eat potentially hazardous food (PHF) that is not going to be further processed.

It provides guidance on how long PHF can be held safely at temperatures between 5°C and 60°C and what should happen to it after certain times.

Temperature Danger Zone

5°C ← Danger Zone → 60°C

Total time between 5°C and 60°C – what should be done?

0–2 hours	2–4 hours	4+ hours
Use immediately or refrigerate	**Use immediately Do not refrigerate**	**Do not use Discard**

Documentation

To demonstrate that the 2 hour 4 hour guide is being followed correctly, a food business must keep records of

- the temperature history of PHF
- the time history of PHF – total time includes all the time PHF has been in the temperature danger zone.

So add up transportation, delivery, preparation, cooling and display times to get the total time.

If a food business cannot provide documented evidence it will be deemed non compliant.

Health Protection Service Phone 02 6205 1700

ACT Government Health

www.health.act.gov.au | www.act.gov.au | Enquiries: Canberra 13ACT1 or 132281

Storage of hot food:

Hot food should be cooked and kept above 60°C which is outside the danger zone or when cooling hot food down for cold storage it should be cooled for no longer than 1 hour on the bench then it must be refrigerated immediately to bring the temperature down as quickly as possible to minimize time in the danger zone.

If it is a large quantity of food that you are trying to cool food, break it down into smaller portions, so it becomes easier to bring the temperature down. While the cooling process is happening, it is best to stir the product to allow even cooling and a quicker cool down period.

When you're reheating a hot product from cold try to take it above 60°C as quickly as possible to again reduce it's time in the danger zone. Remember when using bain-marie equipment ensure the temperature is above 60°C before place food into it.

Cold Storage:

All cold storage food should be kept a 5°C or below or if in the freezer at -15°C or colder.

When using cold food try to keep it in the fridge as much as possible, this will keep it in the right temperature area and out of the danger zone.

When thawing frozen food place it in the refrigerator to thaw over a period of time, not in a sink of cold water or out on the bench! This creates a perfect environment for bacterial growth and must be avoided as much as possible!

Never refreeze food that has been thawed once!!!

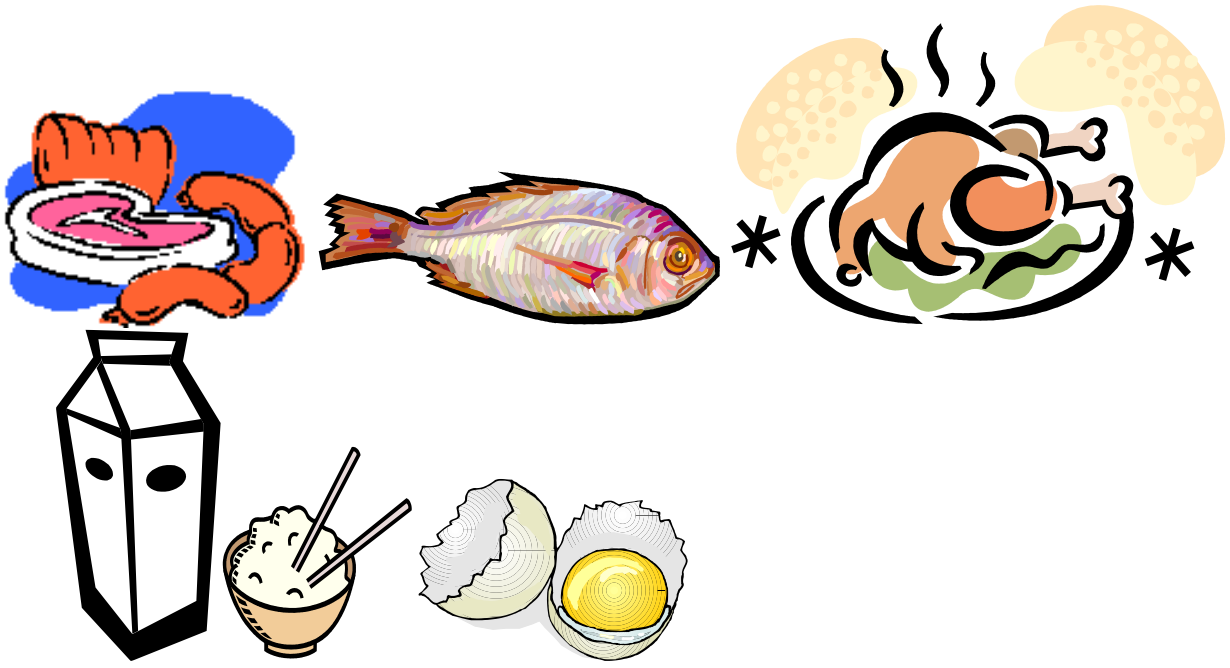
HIGH RISK- POTENTIALLY HAZARDOUS FOODS

Food poisoning bacteria can grow and multiply on some types of food more easily than others. High-risk foods include:

- *Raw and cooked meat, including poultry such as chicken and turkey, and foods containing these, such as casseroles, curries and lasagne*
- *Dairy products, such as custard and dairy based desserts like custard tarts and cheesecake*
- *Eggs and egg products, such as quiche*
- *Smallgoods such as hams and salamis*
- *Seafood, such as seafood salad, patties, fish ,dishes containing seafood and fish stock*
- *Cooked rice and pasta*
- *Prepared raw salads like coleslaws, pasta salads and rice salads*
- *Prepared fruit salads*
- *Ready to eat foods, including sandwiches, rolls, and pizza that contain any of the food above*

All these foods and many more are classified as high-risk, potentially hazardous foods. Correct procedures must be followed at all times when handling them.

Food that are protein rich that comes in packages, cans and jars can become high-risk foods once opened and should be handled and stored correctly eg tinned tuna, beans,



EGG SAFETY

From NSW Food Authority.

Eggs and raw egg product are a common source of food borne illness from *Salmonella*

When handling eggs the following controls should be in place.

- always use clean eggs, free from dirt and cracks
- visually inspect egg when receiving them- check clean , crack free, within date
- keep hands, surfaces and utensils clean and dry before and after handling eggs
- keep eggs in their carton
- keep eggs in the fridge after receival
- use eggs within the recommended date on the carton
- separate whites from yolks using an egg separator
- cook eggs until the white is completely firm and yolk begins to thicken

Foods that contain raw or lightly-cooked egg need extra care, as they can cause food poisoning if not handled correctly.
See the controls recommended by the NSW Food Authority

SAFE PREPARATION OF RAW EGG PRODUCTS

Restaurants, cafés, bakeries and caterers that prepare raw egg products need to follow safe handling practices or use a safer alternative.

Use safer alternatives

Businesses should use safer alternatives to raw eggs in foods which are not cooked:

- use commercially produced dressings, sauces and spreads instead of making raw egg products, or
- use pasteurised egg products instead of raw eggs in ready-to-eat products (products without a further cook step) such as desserts and drinks.

If a business chooses to use raw egg products, they are responsible for ensuring that the risk of Salmonella contamination is managed. They must take steps to ensure the food they supply is safe and suitable.

Foods that contain raw eggs need extra care

Products with raw eggs have been responsible for some of the largest foodborne illness outbreaks in NSW. This is because the disease-causing organism Salmonella is often found on the shell of whole eggs. If handled incorrectly the Salmonella will then contaminate the raw egg product.

Outbreaks harm customers and can severely impact the reputation and trade prospects of a business.

Foodborne illness has been associated with:

- egg dressings, sauces and spreads (e.g. mayonnaise, aioli, egg butter)
- desserts made without an effective cooking step (e.g. tiramisu, mousse, fried ice cream)
- drinks containing raw eggs (e.g. raw egg high protein smoothies).

Requirements for raw egg products

In order to ensure the food is safe to eat, special attention must be given to the preparation, storage and handling of eggs and raw egg products, to prevent the growth of Salmonella.

Acidify raw egg products to keep them safe, using vinegar or lemon juice

To stop Salmonella from growing it is important to:

- acidify raw egg product to a pH at or below 4.2 – this can be done using vinegar or lemon juice
- check and record the pH of the acidified raw egg product with a pH meter or pH paper.

Storage and temperature control of acidified raw egg product

- Keep acidified raw egg products at or below 5°C.
- Make acidified raw egg product fresh every day in small tubs, not in bulk.
- Discard acidified raw egg product within 24 hours.

Receival and storage of eggs

- Only purchase and receive whole eggs that are:
  - clean, not cracked or leaking
  - supplied in clean packaging
  - correctly labelled (i.e. with name of the food, the supplier's name and address, and lot identification or date
  - marking).
- Whole eggs should be refrigerated at or below 5°C, and used by the 'best before' date.

Sanitation and hygiene

This is important in preventing the spread of Salmonella to other foods made by the business.

NSW GOVERNMENT Food Authority

- Clean and sanitise kitchen equipment used for making raw egg products before and after each use.
- Clean and sanitise storage containers and dressings/sauce dispensers between each batch.
- Use separate containers for each batch of food (i.e. do not top up previous dressings and sauces).
- Keep kitchen surfaces and utensils clean and dry.
- Do not wash eggs as this makes them susceptible to further contamination.

Separating egg yolk from egg white

If Salmonella is present on the egg shell, it could be spread throughout the kitchen and onto other foods by your hands. To minimise contact between the egg shell and contents:

- wash and dry hands before and after handling eggs
- use a sanitised egg separator
- do not separate eggs using bare or gloved hands
- do not separate eggs using the egg shell
- do not store liquid raw eggs.
- once whole eggs are cracked, use them immediately in the raw egg product.

Safer egg alternatives are available

- Use pasteurised pulp for foods that traditionally contain raw eggs:
  - liquid, frozen or dried forms of processed whole eggs, egg whites and egg yolks
  - sugared egg yolk (for desserts)
  - salted egg yolk (for mayonnaise, dressings and sauces).

Food laws

The food laws in NSW prohibit the sale of eggs with dirty or cracked shells because this increases the risk of contamination and foodborne illness.

Egg definitions

- 'Dirty eggs' are eggs whose shell is contaminated with visible faeces, soil or other matter (e.g. yolk, albumen, feathers)
- 'Cracked eggs' are eggs with a cracked shell (where a crack is visible to the naked eye or by candling).

In order to protect customers from the risk of foodborne illness, businesses need to comply with Standard 3.2.2, Division 3, Clause 7 to ensure that only safe and suitable food is processed.

More information

This information is a general summary and cannot cover all situations. Food businesses are required to comply with all of the provisions of the Food Standards Code and the Food Act 2003 (NSW).

- Visit the Food Authority website at www.foodauthority.nsw.gov.au to download the following:
  - Guideline: Food safety guidelines for the preparation of raw egg products
  - Risk Assessment: NSW Egg Food Safety Scheme
  - Guideline: Microbiological quality of raw egg dressing
  - Factsheet: 4 hour/2 hour rule
- Visit the FSANZ website at www.fsanz.com.au to download the Food Standards Code (covers general food handling requirements, premises and equipment requirements, and labelling requirements).

About the NSW Food Authority: The NSW Food Authority is the government organisation that helps ensure NSW food is safe and correctly labelled. It works with consumers, industry and other government organisations to minimise food poisoning by providing information about and regulating the safe production, storage, transport, promotion and preparation of food.

Note: This information is a general summary and cannot cover all situations. Food businesses are required to comply with all of the provisions of the Food Standards Code and the *Food Act 2003* (NSW).

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Food Safety Guidelines for the Preparation of Raw and Lightly Cooked Egg Products

FI417_2302

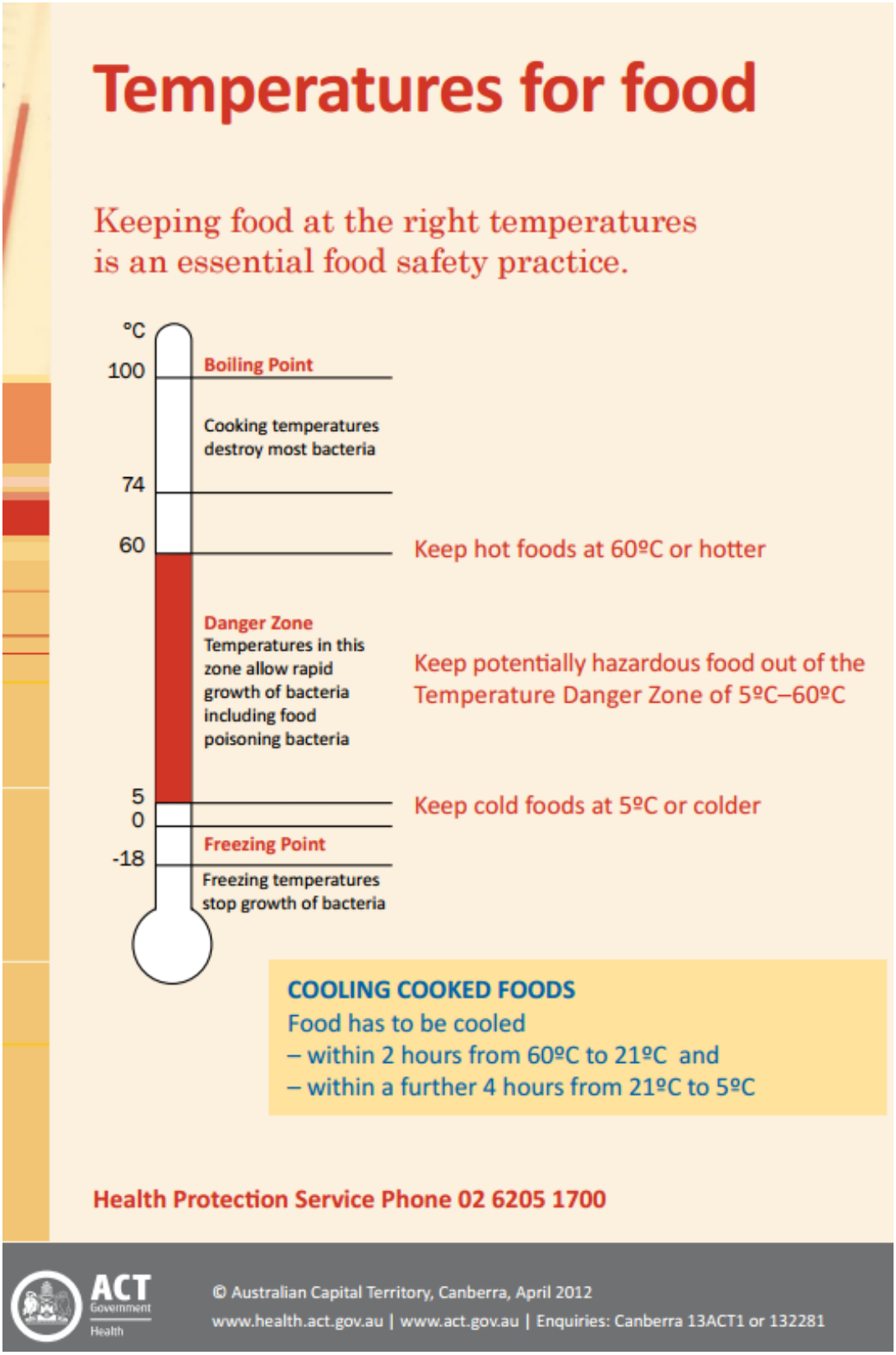
See additional Information on controls for raw and lightly cooked egg products from NSW Food Authority

Documentation

Each business preparing and selling raw or lightly cooked egg products should document the following information. The information should be made available for verification by an authorised officer.

- Recipe of each raw or lightly cooked egg product – where possible, the recipe should aim to achiev a pH of less than 4.2.
- Intended use – for example, salad dressing or dips etc.
- Name of the egg producer and supplier, delivery date of the eggs and the relevant use-by date or batch codes.
- Name(s) of the chef/cook/maker of the raw egg product(s).
- Time and date of each batch of raw or lightly cooked egg product and the quantity – this information should also be recorded on each container of the product made at that time.
- Storage conditions – raw egg products should be kept at 5°C or below at all times other than during manufacture or serving; refrigerator temperatures should be checked and recorded daily with a calibrated thermometer.
- Time out of refrigeration – if the business is applying the '2-hour/4-hour' rule, the time of products outside refrigeration must be recorded.

FI417_2302


Temperatures for food
Keeping food at the right temperatures is an essential food safety practice.
°C
100
Boiling Point
Cooking temperatures destroy most bacteria
74
60
Keep hot foods at 60ºC or hotter
Danger Zone
Temperatures in this zone allow rapid growth of bacteria including food poisoning bacteria
Keep potentially hazardous food out of the Temperature Danger Zone of 5ºC–60ºC
5
0
Keep cold foods at 5ºC or colder
Freezing Point
-18
Freezing temperatures stop growth of bacteria
COOLING COOKED FOODS
Food has to be cooled
– within 2 hours from 60ºC to 21ºC and
– within a further 4 hours from 21ºC to 5ºC
Health Protection Service Phone 02 6205 1700
ACT Government Health
© Australian Capital Territory, Canberra, April 2012
www.health.act.gov.au | www.act.gov.au | Enquiries: Canberra 13ACT1 or 132281

Change or sanitise food-handling implements between handling different food products to avoid cross-contamination

Cross contamination occurs when one object becomes contaminated by either direct or indirect contact with another object which is already contaminated.

Common activities that result in cross contamination include:

- using the same knife or chopping board to cut both raw and ready-to-eat foods
- using the hand wash basin for defrosting food or placing dirty utensils and equipment
- storing food uncovered or on the floor of the fridge or freezer
- storing raw food above ready-to-eat food
- re-using cloths to wipe benches, cutlery and tables
- using a towel to dry hands which is then used for drying equipment, utensils or dishes.

Cross-contamination is the main reason for many food-borne illness outbreaks. Even if meat has been cooked correctly, meals can still become contaminated with pathogens if cross-contamination isn't avoided in the preparation process.

Put simply, if raw foods come into contact with ready-to-eat foods, cross-contamination can occur. While this may seem difficult to stop, avoiding cross-contamination is quite simple if you follow these steps.

Store food in the right place

- Where you store food plays a major role in preventing cross-contamination. When placing foods in the refrigerator, where and how foods are stored is incredibly important.
- Raw meats should always be stored on the bottom shelf. This eliminates the risk of juices dripping onto other foods and contaminating them.
- Raw meat, poultry and seafood should be stored in covered containers or sealed plastic bags to prevent their juices from dripping or leaking onto other foods.
- If you're not planning on using meat within a few days of purchase, it should be placed in the freezer for defrosting at a later date.
- Meats and ready-to-eat foods should never be placed next to each other or on the same shelves.

Chopping Boards

Chopping boards can be an easy place for cross-contamination to occur. Placing ready-to-eat foods such as fresh produce on a surface that held raw meat, poultry, seafood or eggs can spread harmful bacteria. Avoiding cross-contamination across cutting surfaces is avoidable.

- Plastic or glass surfaces should be used for cutting raw meats.
- Use one chopping board for raw meat, poultry and seafood.
- Use a separate chopping board for ready-to-eat foods.
- Use separate plates and utensils for cooked and raw foods.

Before reusing them, thoroughly clean and sanitise plates, utensils and cutting boards that have come into contact with raw meat, poultry, seafood or eggs.

Chopping boards should be replaced if they are excessively scratched or damaged. Damaged chopping boards develop grooves that are hard to clean, making bacteria difficult to eliminate.

Washing Hands and Counters

While you are cooking, you need to ensure that you wash your hands properly. This should include after you handle any raw meats and after cooking. Additionally, all counters and surfaces should be thoroughly cleaned and sanitised after raw meats have been anywhere near them.

Some ways to help prevent cross contamination from include:

- using separate utensils or thoroughly washing and sanitising utensils between handling raw and ready-to-eat foods
- keeping food covered and off the floor during storage
- avoiding any unnecessary contact with food
- storing raw foods, especially meat and fish, on the bottom shelf of the fridge to prevent raw meat juices dripping onto ready-to-eat foods
- keeping cleaning chemicals and other non-food items stored away from food
- regularly changing, or washing and sanitising, cleaning cloths. Never use cloths used for cleaning toilets or similar areas for cleaning anything that may come in contact with food
- ideally, letting equipment and utensils air dry after washing and sanitising
- always washing and thoroughly drying your hands when starting work, changing tasks, or returning from a break (including a cigarette or toilet break).

Cross-contamination is a common factor in the cause of foodborne illness. Microorganisms such as bacteria and viruses from different sources can contaminate foods during

preparation and storage. Proper cooking of the contaminated food in most cases will reduce or eliminate the chances of a foodborne illness.

Cross-contact occurs when an allergen is inadvertently transferred from a food containing an allergen to a food that does not contain the allergen. Cooking does not reduce or eliminate the chances of a person with a food allergy having a reaction to the food eaten.

Effective Cleaning

To effectively remove food protein from surfaces, wash the surfaces with soap and water. Simply wiping the crumbs from spatulas, cookie sheets, cutting boards, or surfaces is not enough. To be safe, purchase a cutting board, plates, and kitchen utensils that will be used for allergy-free foods only. Store these items in a designated area.

Studies have shown that conventional cleaning methods are effective in removing the protein of a food allergen such as peanut. Bar and liquid soap is effective for removing protein from your hands

Always wash hands and change gloves between preparing different menu items.
Clean and sanitize surfaces between every menu item: countertops, cutting boards, flat-top grills, etc.
Always use clean kitchen tools for food preparation: pots, baking sheets, utensils, cutting boards, etc.
Prepare meals on top of barriers like cutting boards, foil, deli paper, etc.

ALLERGENS

From NSW Food Authority

Food Standards Australia New Zealand (FSANZ) sets standards for labelling of products containing food allergens, which includes gluten and sulphite preservatives. Any product containing allergens specified in the Standard must be either:

- declared on a label on packaged food, or
- declared on, or in connection with, the display of food that is not required to be labelled, or
- declared to the customer at the time of purchase if they ask

FSANZ

FSANZ Food Standards Code 1.2.3and schedule 9 list the allergens that must be declared or identifiable in foods on request .

From FSANZ

Table 1: Foods and ingredients to be declared (using these names)

wheat	soy, soya, soybean	pistachio
fish	sesame	pine nut
crustacean	almond	walnut
mollusc	Brazil nut	barley*
egg	cashew	oats*
milk	hazelnut	rye*
lupin	macadamia	sulphites**
peanut	pecan	

* Barley, oats and rye must be declared if they contain gluten.

** Sulphites must be declared when added in amounts equal to or more than 10 milligrams per kilogram of food.

The booklet "Be Prepared. Be Allergy Aware" produced by the Food Authority and Allergy & Anaphylaxis Australia, outlines requirements for food service businesses relating to declaring and managing allergens.

Food service and retailers should

- Ensure everyone understands food allergen risk management and communication
- Implement an effective allergen management plan

- Check for and identify allergens
- Listen to customers and taking their requests seriously
- Accurately communicate allergen requests between front and back of house staff
- Providing clear and accurate allergen information to consumers

Allergy aware checklist provides guidance for best practice allergen management controls

Food Authority

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ALLERGY AWARE CHECKLIST

1 KNOW WHAT IS IN YOUR FOOD

- ☐ Only accept correctly labelled foods.
- ☐ Check all ingredients even in sauces, spices, garnishes, oils, dressings etc for allergens.
- ☐ Avoid ingredient substitution.
- ☐ Be familiar with all ingredients as some may be made from one or more of the food allergens which may not be obvious from their name.

2 LISTEN TO YOUR CUSTOMERS AND BE 100% TRUTHFUL

- ☐ Ask customers if they have any allergies. Take their requests seriously. Listen carefully.
- ☐ Give customers the right information about the content of meals when they ask.
- ☐ Have a specific process to follow if a customer says they have a food allergy.
- ☐ Place the name of known allergens next to menu items, if possible.
- ☐ Ensure you ALWAYS include a note asking customers to disclose their food allergy EVERY time they order food as often not all allergen content is written on the menu.

3 PREPARE FOOD SAFELY

- ☐ Always double check the ingredients with the chef.
- ☐ Handle food safely. Start fresh for meals that must be free of an allergen.
- ☐ Clean work surfaces, utensils and other food-contact items between foods. Even very small amounts can be harmful.
- ☐ Have a dedicated area for preparing allergen free meals (be aware that food that is safe for one person with a food allergy may be unsafe for another person with a different food allergy).
- ☐ Whenever possible, prepare foods for customers with food allergy first.
- ☐ Have some way of identifying the meal for the customer with food allergy.
- ☐ Always take the meal to the customer with a food allergy separately, not whilst carrying other meals.
- ☐ Check the allergen free meal is given to the right customer with the food allergy.

4 EDUCATE YOUR STAFF

- ☐ Ensure your Food Safety Supervisor's training is up-to-date. Recertification includes 'Allergen Management' as a required unit of competency.
- ☐ Train and test all staff regularly in food safety, hygiene and allergen awareness. The National Allergy Strategy (foodallergytraining.org.au) offers free 'All About Allergens' food allergy e-training for food service.
- ☐ Some customers will provide waitstaff with a 'Chef Card' that lists what they are allergic to. The card should be given to the chef who is preparing their meal and then returned to the customer with their specially prepared meal. This assists in communication and helps ensure the right meal is given to the right person.
- ☐ Teach staff of their obligation to declare certain allergens.
- ☐ Ensure your staff are updated on new laws and legislation relating to allergen management.
- ☐ Display The Usual Suspects poster in your kitchen.

FREE ONLINE TRAINING
All about Allergens is a free online course to help anyone working in a food business to learn about food allergens, so they can make their business safe for customers with food allergy **foodallergytraining.org.au**

More resources at **foodauthority.nsw.gov.au** nswfoodauth nswfoodauthority nswfoodauthority

Mark and keep separate from other foodstuffs any food identified for disposal until disposal is complete

Dispose of food promptly to avoid cross-contamination

TOPIC 3 – MAINTAIN PERSONAL HYGIENE STANDARDS

Follow hand washing procedures to minimise risk of contamination

Poor personal hygiene is one of the leading causes of reported foodborne illness and should be one of the foundational pillars of your food safety program. Some of the poor personal hygiene can be attributed to bad personal habits when handling food.

Bad personal habits to avoid when working with food:

- Scratching
- Licking fingers
- Picking of the nose or ears
- Touching open cuts or sores
- Wiping hands on clothing
- Smoking
- Spitting
- Blowing into bags that food is to be placed in
- Touching hair
- Touching parts of the body while handling food

A person preparing food may at some stage scratch themselves, touch their hair or rub their nose. All of these activities will contaminate the hands with bacteria. If this happens, the individual should wash their hands prior to any further food handling to avoid the bacteria being passed to the food.

If a person is handling food sneezes or coughs near uncovered food, then it is highly likely that the food will become contaminated with bacteria. Any food which is suspected to be contaminated in this way should be discarded. Likewise, licking one's fingers while handling food is another way in which harmful bacteria can contaminate food.

One of the most important factors to remember is that you minimise the direct contact you have with ready to eat food. As the food has already been cooked, it is more susceptible to contamination as there is no further cooking involved. If you contaminate the food, your customer then eats it, and they can become sick. So always limit the amount of contact you have with ready to eat food so you can protect your customer's health and well-being.

Personal Hygiene:

Personal hygiene is not only for self-presentation, but it also plays a key role in maintaining hygienic food handling techniques.

Some of the key points to remember are:

- Wearing clean clothes
- Food preparation clothes are not worn to the place of work, but changed into at the place of work
- Hair is tied back, and a hat or hair net is covering any stray bits of hair
- Wear disposable gloves and use tongs
- Protective clothing must not be worn outside the food preparation area
- Tissues are preferable to hankies and dispose of them immediately after use
- Shower and wash hair regularly
- Change gloves whenever you change activities and do not touch surfaces, equipment or parts of the body while wearing them
- Do not cough spit or sneeze on or near food
- Change preparation gloves whenever you change activities
- Remove items from pockets because they may fall into the food

When you are sick, you should not be around food. The risk of spreading the infection to food is high and can infect others very quickly. You should never handle food when sick.

One of the most important ways to prevent contamination when serving food is to ensure you wash your hands. Unfortunately, this often gets overlooked.

When washing hands there is a procedure that will ensure you have washed all bacteria away:

- Wet hands with warm water
- Use enough soap to provide a generous lather
- Work the lather between your fingers and around the nails making sure every area of the hand is properly lathered and scrubbed
- Rinsing hands with warm water, wash from the tips of your fingers down to the wrist, this allows the fingers to be as clean as possible. This should be done for 30 seconds. (singing Happy Birthday is a good gauge for 30 seconds)
- Dry hands well using disposable paper towel or air dryer

When should you wash your hands?

- Before and after handling food
- After smoking
- After touching rubbish
- After going to the toilet
- After eating and drinking
- After touching any part of your body

Appropriate hand washing facilities must be designed, constructed and located in order to:

- Minimise the risk of food contamination
- Allow for easy and effective cleaning
- Allow for easy and thorough cleaning of adjacent areas
- Ensure that they don't provide harbourage for unwanted pests

Taps should have water flow sensors, soap dispensers should be located close to the taps, and disposable paper towels or hand dryers should be readily accessible.

Keep Hands Clean and Food Safe

Hand hygiene Washing your hands

1. Hands are only washed in the basin provided.
2. Use soap to work up a lather.
3. Wash palms, fingers, thumbs, nails and wrists (use a nail brush if necessary).
4. Rinse off soap by washing hands under running hot water.
5. Dry with paper towel.

Staff must wash their hands **before:**

- Starting or re-commencing food handling (for example, starting a shift, returning from a break)

- Handling food

- Wearing disposable gloves

Staff must wash their hands **after:**

- Attending the toilet
- Handling raw ingredients
- Eating or drinking

- Habits that may cause contamination, such as licking fingers, biting nails, smoking, touching pimples or sores
- Coughing, sneezing, using a handkerchief or disposable tissue

- Disposing of or handling waste
- Handling animals
- Handling anything else other than the food (for example, money, cleaning cloths, cleaning equipment)
- Handling any food that may potentially contaminate other food products.

Department of Health

For more information call 1300 364 352
www.health.vic.gov.au/foodsafety

State Government Victoria

Wear appropriate clothing and footwear and maintain uniform cleanliness standards

It is important that all staff wear the appropriate clothing and PPE in the work environment to protect against safety hazards. PPE may be used to protect body parts such as eyes, face, ears, hands and feet.

When handling food and chemicals in a kitchen or a food environment the standard PPE to be worn would be:

- Gloves
- Masks
- Aprons
- Leather shoes
- Chain mail gloves
- Hand mitts

Employees are responsible for:

- Not placing themselves or others at risk of injury
- Using PPE that is provided
- Participating in consultation processes associated with selection, use and training in relation to PPE

Even when wearing gloves, in many situations it may be preferable to use utensils such as tongs or spoons.

Gloves must be removed, discarded and replaced with a new pair in the below circumstances:

- before handling food
- before handling ready-to-eat food and after handling raw food
- after using the toilet,
- smoking, coughing, sneezing, using a handkerchief, eating, drinking or touching the hair, scalp or body.
-

Possible sources of contamination:

On every person, there are items that you wear that can harbour bacteria and contaminants. These include:

- Rings
- Earrings
- Watches
- Band-Aids
- Dirty clothes
- Hair
- Caps
- Nose and facial rings
- Jewellery

In a food handling area, these things should be kept to a minimum:

- All jewellery should be removed whilst working with food as food can get stuck under rings and in the stones, etc... And can fall into food
- Caps and hats should be washed regularly to remove skin cells and sweat. Use disposable caps.
- Hair should always be tied up and in a hair net or cap
- Clothes should not be worn to and from work as germs and bacteria can be picked up along the way and transferred to the food or food surfaces
- Wound dressings should be changed regularly and should be waterproof to prevent contamination. Wound dressings should be a blue colour for easy sighting.
- In all cases, a little thought and following procedures in your workplace should prevent the contamination of food and thus the illness of staff and customers

HEALTH AND HYGIENE REQUIREMENTS OF FOOD HANDLERS

A food handler is anyone who works in a food business and handles food, or surfaces that are likely to come into contact with food (e.g. cutlery, plates). A food handler may be involved in food preparation, production, cooking, display, packing, storage or service.

Responsibilities of food handlers

Under the Food Standards Code, a food handler must take all reasonable measures not to handle food or food surfaces in a way that is likely to compromise the safety and suitability of food.

Food handlers also have specific responsibilities relating to health and hygiene.

Health requirements

Any food handler with symptoms or a diagnosis of an illness (such as vomiting, diarrhoea or fever) must:

- report that they are ill to their employer or supervisor
- not handle food if there is a reasonable likelihood of food contamination as a result of the illness
- if continuing to engage in other work on the food premises, take all practicable measures to prevent food from being contaminated
- notify a supervisor if they know or suspect they may have contaminated food.

Effective hand washing

Hand washing is one of the most important actions you can take to prevent foodborne illness.

Food handlers must:

- wash their hands using hot, soapy water and dry them thoroughly with single-use paper towels
- wash their hands whenever they are likely to be a source of contamination (after using the toilet, smoking, coughing, sneezing, using a handkerchief, eating, drinking or touching the hair, scalp or body)
- wash their hands before handling ready-to-eat food and after handling raw food.

Hygiene requirements

Food handlers must:

- not eat, sneeze, blow, cough, spit or smoke around food or food surfaces
- take all practicable measures to prevent unnecessary contact with ready-to-eat food
- Tie back long hair, and take all practical measures to prevent hair contaminating food
- ensure clothing is clean
- cover bandages and dressings on exposed parts of the body with a waterproof covering
- remove loose jewellery and avoid wearing jewellery on hands and wrists.

Use of gloves

The Food Standards Code does not require food handlers to use gloves.

- From NSW Food Authority

Secure hair & cover all open wounds to minimise risk to food safety

When you are handling food, you will need to ensure that you are using the correct implements to do so. When serving foods you must not use your bare hands you will need to use a clean sanitised implement or barrier:

- Gloves
- Tongs
- Spoons
- Scoops
- Spatulas

When using these items, you must ensure that they are clean and free from contamination from other food stuffs. All implements must be washed and sanitised prior to use and you must have separate implements for each food you are serving.

Report any health issues or illnesses to appropriate personnel

TOPIC 4 – MAINTAIN EQUIPMENT AND WORK AREA

Clean and sanitise equipment, surfaces and utensils following organisational procedures

Having clean work areas and equipment is important for hygiene purposes and presentation to staff and customers. Unclean areas will reflect badly on the business and its staff and therefore customers will not frequent the store.

'Clean' means that all surfaces are free of visible dirt, grease, dust and food waste.

'Sanitise' means to apply chemicals to food contact surfaces to kill bacteria. Very hot water is also used to sanitise, for example, in a commercial dishwasher. Clean and sanitise eating and drinking utensils before they are used. Surfaces that touch ready-to-eat food must be cleaned and sanitised. These surfaces include food preparation benches and chopping boards. Surfaces that are used to prepare raw food and then cooked food must be cleaned and sanitised between uses.

The recommended steps for cleaning and sanitising are:
1. Pre-clean Sweep, wipe or scrape surfaces to remove scraps or residues.
2. Wash Wash in warm water with detergent to remove grease and dirt.
3. Rinse Use clean water to remove any loose dirt and detergent residues.
4. Sanitise – using heat (in dishwasher hot rinse) or chemically sanitise
Rinse
5. Dry Air dry

Tiled surfaces that are cracked or broken, wood, flaking paint and surfaces that are cracked or broken cannot be effectively cleaned.

Food handlers should:

- tidy and clean you go
- wash equipment and clean bench tops after each task
- follow a cleaning schedule that details what will be cleaned, when and how, and who is to carry out the cleaning tasks;
- empty waste bins as required during the day; use bins with lids, and arrange regular collections.

The NSW Food Authority has detailed guidance for cleaning and sanitising in food service retail businesses.

Food Authority

Cleaning and sanitising in retail food businesses

Why do I need to clean and sanitise?

Effective cleaning and sanitising in your food business helps protect you and your customers against the spread of bacteria and other organisms that cause foodborne illness. It also helps to reduce the activity of pests in a food premises by eliminating food sources.

The Food Standards Code requires:

- A food premises, including all its equipment, to be maintained to an acceptable standard of cleanliness, [Std. 3.2.2-19] and
- Food contact equipment, such as kitchen benches, knives, chopping boards, pots, and meat slicers etc., as well as eating and drinking utensils, to be in a clean and sanitary condition.

Difference between cleaning and sanitising

In the food industry, cleaning and sanitising is a two-step process. A surface needs to be thoroughly cleaned before it is sanitised:

1. Cleaning requires the use of warm to hot water, detergent and physical action to remove food debris and dissolve grease and dirt to ensure the surfaces are clean to touch and free of visible matter and odours.
2. Sanitising is the process of applying heat (usually very hot water) or chemicals or a combination of both heat and chemicals, to an already clean surface to reduce the number of bacteria and other organisms to a safe level.

During the cleaning stage detergents ensure food particles are broken down and prevented from depositing back onto the items being washed.

Effective cleaning is 90% of the overall sanitation effort as cleaning removes most of the bacteria present. The job of the sanitiser is to kill the remaining bacteria during the sanitising stage.

Cleaning and sanitising can be done mechanically using dishwashers or manually using wash up sinks and spray bottles.

Image: Benchtop cleaning.

Cleaning and sanitising using dishwashers

All commercial dishwashers operate differently. High temperature dishwashers sanitise using heat (hot water) while low temperature dishwashers are complemented with chemical sanitisers. This is a very technical process and food businesses should use the program that the manufacturer has specified for sanitising. The manufacturer's instructions should always be followed.

Image: A commercial dishwasher.

To sanitise with a dishwasher:

1. Make sure you have a suitable dishwasher that can clean and sanitise quickly and effectively. Domestic dishwashers are generally not suitable and are impractical for busy retail or hospitality food businesses due to the very long cycles required to compensate for the lower appliance temperatures.
2. Use the correct type of detergent or sanitiser as outlined in the manufacturer's instructions.
3. Use the hottest rinse cycle possible as per the manufacturer's instructions
4. Look over equipment and utensils when removing them from the dishwasher to check they are clean
5. Clean the dishwasher so there is no build-up of food residues
6. Regularly maintain and service the dishwasher according to the manufacturer's specifications.

Cleaning and sanitising using sinks or spray bottles

Clear and detailed instructions on how to correctly make up and use chemical sanitisers must be either on the label of the sanitiser or provided by the supplier in a product information sheet.

Always make up and use chemical sanitisers by strictly following the manufacturer's instructions.

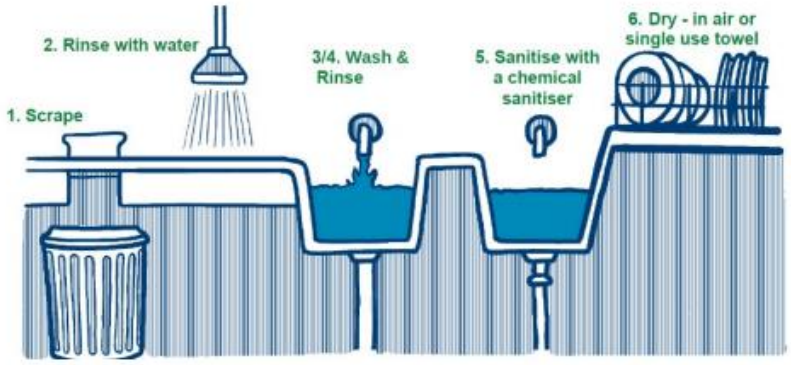

Figure 1: Cleaning and sanitising using a double bowl sink

There are many different types of sanitiser and each will vary greatly in how they should be used. If clear instructions are not provided with the product, such as dilution rates and contact time, seek advice from the supplier or manufacturer and source an alternative product if necessary.

Note: contact time means the amount of time a sanitiser must be in contact with an item, for it to work.

The six recommended steps for effective cleaning and sanitising using sinks are:

1. **Scrape** or wipe away food scraps
2. **Rinse** with water
3. **Wash** using warm to hot water and detergent to remove grease and dirt. Soak if needed.

The FSANZ food safety standards state that a food business must maintain the food premises including fixtures, fittings, equipment and those parts of vehicles that are used for food transportation, to a standard of cleanliness where there is no accumulation of:

- Recycled matter (except in containers)
- Garbage (except in rubbish bins)
- Food waste
- Dirt
- Grease
- Other visible matter

Fixtures, fittings and equipment include:

- Benches
- Shelves
- Sinks
- Hand basins
- Refrigerators
- Cupboards
- Light fittings
- Mixers
- Ventilation
- Processing equipment

Such items are required to be cleaned so as to reduce the likelihood of contamination and presence of pests. In addition to the above legal requirements specific equipment must be clean and sanitary including:

- Eating and drinking utensils
- Food contact surfaces:
  - Benches
  - Mixing bowl
  - Chopping boards
  - Storage containers
  - Display dishes

Cleaning Procedures:

Cleaning a kitchen regularly and thoroughly removes materials that allow the growth and spread of bacteria. Sanitising is the process of destroying microbes that can contaminate food on clean surfaces

A regular cleaning schedule should be in place in every kitchen you work in, it tells you everything in the kitchen that needs cleaning, how regularly it should be cleaned, and when it was last cleaned. This type of recording is in place for a reason; it is to ensure that everything that should be done is done.

Food and rubbish should be disposed of as regularly as needed. Rubbish bins should not overflow and be allowed to spill out onto the floor.

- Pre-clean – remove excess dirt and food scraps by
- Sweeping, scraping or wiping and pre-rinsing with water
- Wash – hot water and detergent
- Rinse
- Sanitise – heat or more common chemical spray
- Polish and dry
- Air dry

By following this simple procedure, you can ensure you've done the best you can to ensure all surface areas are free from bacteria.

Floors are one of the many things that often get overlooked or are just not done thoroughly enough. You should always use hot water and a chemical cleaner. When washing a floor you should follow the procedure below:

- Thoroughly sweep all areas you can gain access to first
- Wet the floor with hot chemical based water first
- Scrub to loosen anything that may be stuck to the floor
- Using a squeegee pull all the water to the drain
- Do a final dry mop of the entire area

Clean and sanitary in relation to utensils and surfaces means:

- Is clean (looks, feels and smells clean)
- Has had the number of micro-organisms on the surface or utensils reduced to a level that:
  - Does not compromise the safety of the food with which it comes into contact

- Does not permit the transmission of infection

This can be achieved by;

- Dishwashers
- Chemical sanitisers
- Hot water (above 80°C)
- Hot water and detergent (sink washing)

Individual items are often cleaned and sanitised using one of the above methods, however they will often differ from one kitchen to the other.

The easiest way to ensure that your kitchen/premises and that your equipment are cleaned and maintained and sanitised to the standard is to design a cleaning schedule and follow it.

Cleaning schedules need to cover:

- What is to be cleaned?
- How it is to be cleaned
- When it is to be cleaned
- What it is to be cleaned with
- Who is responsible to make sure it is cleaned

A fundamental part of running a food service establishment is keeping it hygienically clean. This helps to ensure that laws relating to hygiene are being complied and the establishment is aesthetically pleasing to the public eye.

How well both the premises and equipment are cleaned and maintained depends on the following factors:

- The frequency of cleaning.
- How thoroughly areas and equipment are cleaned.
- The type of areas and equipment.
- The location of area.

Before cleaning begins all equipment and chemicals required should be chosen in accordance with the areas being cleaned. Assembling the equipment and products required on a portable system such as a trolley allows the job to be completed efficiently without stopping to find other pieces of equipment or chemicals.

Preparing Cleaning Chemicals

Manufacturers' instructions and recommendations should be followed carefully when using chemicals. These instructions are often found on packaging but detailed information can also be found on Material Safety Data Sheets (MSDS). Users will obtain safety pointers, correct dilution guidelines and what type of surface the cleaner may be used on.

When using and storing cleaning chemicals the Workplace Health and Safety Act and Environmental requirements must be followed precisely as these chemicals are potentially harmful to humans.

The following steps are a basic outline of how to handle chemicals:

- Carefully follow manufacturer's instructions, recommendations and guidelines.
- Store chemicals in a locked cupboard in original packaging.
- Follow dilution instructions recommended on packaging.
- When necessary wear protective clothing and wipe up spills and drips straight away.
- If injury or illness occurs, follow first aid procedures quickly and efficiently.
- Unless manufacturers' instructions state otherwise, dispose of chemicals in clean sealed containers into a garbage receptacle. Chemicals should never be poured down the sink

[6]It is important that when handling cleaning chemicals that you observe handling and storage requirements for cleaning chemicals, according to manufacturer safety data sheets and store procedures and the food safety program.

Another important aspect of storage is the proper storage of hazardous chemicals, most of which are used in cleaning the workplace. Chemicals must not be stored or contained anywhere where they could contaminate any food product, packaging equipment or any food contact surface.

Chemicals

Chlorine, quaternary ammonia and iodine are the three chemicals commonly used in commercial kitchens for cleaning and sanitization practices. Unfortunately, these chemicals can cause serious harm to employees. Chemical burns and skin irritations are the most prevalent adverse reactions to these substances. There are several steps restaurant employees and managers can take to reduce the risks involved when working with hazardous chemicals.

Regular cleaning tasks are designed to protect customers from food borne illnesses. Unfortunately, the chemicals used to clean and sanitize can pose a threat to restaurant workers.

Latex gloves are often worn to protect the skin from hazardous chemicals. However, some workers may be allergic to latex, so non-latex gloves are recommended to prevent any allergic reactions.

- Skin irritation. Soaps and detergents can cause skin irritation.
- Infections. Broken skin can be infected or burned from hazardous chemicals.
- Burns. Chemicals like oven cleaners, drain openers and grill cleaners can cause burns to the skin and eyes.
- Respiratory harm. Chlorine and ammonia can cause respiratory, skin and eye irritation and death, especially if they are mixed together.7

What Employees Can Do to Protect Themselves?

- Use personal protective equipment (PPE). Dishwashing gloves or splash aprons should be provided by your employer to protect your body from hazardous chemicals.
- Mix chemicals to recommended concentrations. A solution that is too strong can be dangerous and will waste chemicals.
- Never mix chlorine and ammonia. Mixing these chemicals will create a poisonous gas.
- Read the labels. Chemical labels provide proper handling and mixing instructions. Also, familiarize yourself with the Material Safety Data Sheets (MSDS) which provide more in-depth handling information.
- Label cleaning bottles. Indicate what cleaning solution is in the bottle to avoid the risk of accidentally mixing the wrong chemicals together.

What Employers Can Do to Protect Employees?

- Use eco-friendly cleaners wherever possible. They are safer for your guests, employees and the environment.
- Use automated chemical dispensers. Automatic dispensers ensure employee safety and appropriate chemical concentration.

- Provide PPE for all employees. Common personal protective equipment for commercial kitchen employees includes goggles, chemical gloves and dishwashing aprons.
- Store non-compatible chemicals separately. Non-compatible chemicals, like chlorine and ammonia, can create a poisonous gas if mixed. Store them separately to minimize the chances of them mixing if spilled.
- Use lower shelves to store chemicals. Store liquid chemicals on lower shelves to avoid the risk of spills.
- Train employees. Properly train employees in the correct use of cleaning chemicals and what to do in case of an emergency.

Remember that cleaning and other chemicals that are stored within your food premises may and are likely to cause chemical contamination to foods. To ensure that this does not happen, the following procedure should be followed.

Store chemicals in a cool well-ventilated area:

Store chemicals in a separate area away from food:

Do Not Store chemicals in containers which have been used to store food:

Label all chemical containers:

Refer to labels on the container and (SDS sheets:

Do Not Store chemicals in direct sunlight:

Dispose of or report chipped, broken or cracked food handling utensils

A good state of repair is defined as not being broken, split, chipped worn or rusted.

In regards to that you also have the legal requirement that a food business must not use any chipped, broken or cracked eating or drinking utensils for handling food.

Any time you find any of the above mentioned it should be brought to the attention of your supervisor.

Take measures within scope of responsibility to ensure food handling areas are free from insects, pests and vermin and report incidents of animal or pest infestation

When dealing with fixtures and fitting such as:

- Benches
- Shelves
- Sinks
- Hand basins
- Refrigerators
- Cupboards
- Light fittings
- Mixers
- Ventilation
- Processing equipment

There are times when you notice problems, when this occurs you should report the maintenance requirements and problems to relevant personnel without delay. This will avoid extended loss of the machine, as well as money for the company.

3.2.3 of the FSANZ code, which is the standards that looks at the requirements of food premises and equipment. The objective of the standards is to ensure that, where possible the layout of the premises minimises the opportunity for food contamination.

The premises should be inspected regularly to ensure that maintenance problems are identified and rectified before they become a risk to the safety and suitability of food or leads to equipment needing to be replaced.

All kitchens generate waste in food preparation and it is an important issue as it may attract pests, causing bad odours, encourage bacterial growth and cross-contamination, food

that might be contaminated by pests will become unsafe for eating. Pests include mice, rats, cockroaches, flies, ants, birds, beetles and weevils.

The following measures should be taken to reduce waste build up and therefore reduce pests:

- All waste bins should be lined and emptied when full, as well as at the end of each shift.
- Bin Liners should be tied and placed in an external waste disposal bin.
- Ensure all staff washes their hands thoroughly after touching the rubbish or preferably use gloves especially for that purpose.
- Make sure that all rubbish containers are cleaned and sanitised regularly. Making sure that they are cleaned away from any food, food preparation and/or packing area
- Lids must be replaced when not in use.
- Make sure there are enough waste bins for the job being conducted.
- Waste bin must not be confused with food storage bins.
- Waste bins should not be stored near food utensils, crockery or packaging storage areas. This is to prevent cross-contamination from rubbish and food waste, as well as pests.
- Rubbish bins must be durable and pest proof, non-leaking and in good repair, also easily cleaned.

Tips

✓ Design and maintain the food premises so that pests cannot access any place where there is food or any place where they can nest or breed. Install screens on doors and windows that can be opened. Install pest exclusion strips on all doors.

✓ Make sure that the kitchens of premises with dining areas open to the street are insect and vermin proof.

✓ Strategically and safely position ultraviolet insect killers. (These should not be located above food preparation benches.)

✓ Label bait stations with the date of service and secure to the ground.

✓ Use a diary or create a log sheet to record what bait was used, note any pest activity and areas that need to be cleaned or repaired to keep the premises secure from pests.

✓ Use sealed pest-proof containers to store food and ingredients. Completely cover any food on display outside the kitchen.

✓ Ensure regular pest inspections. Consider hiring a licensed pest controller to visit the premises regularly. Licensed pest controllers are responsible to ensure their service is in compliance with legislative requirements and best practice guidelines for use of pesticide. If you hire a licensed pest controller, ask them for an inspection report. This report should give written results of each visit to the food business premises.

✓ If you receive a pest controller's report, promptly treat any pest infestation, including maintenance work or cleaning.

✓ Protect food from possible contamination if chemicals are used for pest control.

✓ Do not permit live animals into the premises. The only exceptions to this are:

– Shellfish and fish intended for food

– Guide dogs, which must be permitted by law

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Control of pests and throwing out contaminated food can be costly for the business.

The external areas for rubbish disposal should be as far away as practicable from the rear door of the food premises, so that odours and pests cannot easily enter the premises.

Making sure that these areas rubbish are:

- Kept in proper containers, usually supplied by the council or a contractor
- Regularly collected

- The area is thoroughly cleaned by sweeping, washing and hosing
- All recyclable rubbish should be flattened to make in more compact.

As mentioned previously:

PURCHASING AND DELIVERY

- Use only use reputable or approved suppliers.
- Deliveries of food supplies should be made at a convenient time for correct checking and storage procedures to be followed
- Check and record the temperature of all perishable
- Check use-by dates
- Check for any damage or opening to packaging or produce
- Check for "freezer burn" or visible icicles inside frozen food wrapping
- Reject the delivery if the delivery does not meet the temperature requirements, if the food is out of date, or if there is any variation in normal colour, texture, odour or general appearance

STOCK CONTROL AND FOOD STORAGE

- Store food immediately and at the correct temperature
- Cover food and make sure it is clearly labelled and dated
- Never store food on the floor
- Separate raw and cooked foods
- Rotate stock on a first in first out (FIFO) basis
- Do not store food near chemicals
- Keep storage areas clean and dry
- Check storage areas daily for pests and cleanliness
- Check and record temperature of cold food storage areas; cool rooms, bench fridges, display fridges and preparation fridges to ensure food is being stored at temperatures that don't allow food microorganisms to grow

PREPARATION

- Always wash hands before commencing any preparation and between raw and cooked foods
- Prepare raw and cooked foods separately and use separate chopping boards and knives
- Adhere to colour coded chopping boards

- white – for dairy and bakery
- yellow – for poultry and game
- red – for raw meat
- brown – for cooked meat
- green – for vegetable and fruits
- blue – for seafood
- Thoroughly wash all fruit and vegetables in clean water before use, to remove soil, insects and any chemical residues
- Use clean and sanitised equipment
- Avoid cross contamination. Cooking destroys most harmful bacteria however cooked foods can be re-contaminated by allowing the transfer of bacteria from raw to cooked food. This can occur with hands, utensils, equipment or surfaces such as benches and cutting boards
- When preparing food, limit the time high-risk foods such as animal products are in the danger zone. This should be less than one hour preparation time for high-risk foods
- Fingers should not be used to taste food. A tasting spoon should be used and washed after each tasting

Thaw foods in a refrigerator, cool room or in the microwave

COOKING

- Cook foods above 75°C
- Chicken and pork cuts must be thoroughly cooked so that the centre is no longer pink. Using a meat thermometer is a good idea when roasting meats
- Record the temperature of potentially hazardous foods when they are cooked

COOLING

- Potentially hazardous food needs to be cooled after cooking as quickly as possible. Hot food needs to be chilled to below 5°C as quickly as possible
- Placing hot food straight into the cool room or freezer is not advisable as it raises the temperature of these storage areas placing the food into the danger zone
- Small portions and shallow containers cool food quickly
- Transfer hot foods into smaller shallow containers
- Stir food to decrease temperatures

- Cool the food container in some ice or cold water

Reheating

- Potentially hazardous food needs to be reheated as quickly as possible
- Do not reheat food in a bain-marie or other hot holding equipment, as the temperature is not sufficient to reheat the food quickly
- Reheat potentially hazardous food once only
- Reheat food to above 75°C

DISPLAY

- Be sure that the bain-marie is above 60°C before filling with food
- Food must be 'HOT' when it is placed into the heated container (cooked or reheated to 75°C)
- Hot food must remain over 60°C throughout the service period
- Cold food must be displayed or held at temperatures <5°C
- Check temperature with thermometer
- Stir foods to keep even distribution of heat
- Use separate serving/ladle utensils for each container of food
- Unwrapped or unpackaged food which is to be displayed on a counter, must be covered at all times, or protected so customers cannot touch or cough on the food
- Raw food and ready to eat food must be separated (e.g. by using plastic partitions)
- Discard any unused food, potentially contaminated food, or food that there is any variation in normal colour, texture, odour or general appearance

SERVICE

- Food is to be served with utensils only
- Foods which are to be held hot for service must not be allowed to fall below 60°c
- Foods which are to be served cold must be kept refrigerated at <5°c until serving time
- Single-use, disposable, take away food and drink containers, lids, and drinking straws must be kept in hygienic, covered receptacles until used

Food Safety Monitoring

Each hospitality business must monitor the food safety hazards and controls in place at the critical control points. Different ways of monitoring or checking food safety hazards may be:

- Check and record food temperature using a thermometer probe
- Check and record the food deliveries at receipt
- Check and record the use by date or preparation date
- Check and record the temperature of cold storage equipment such as fridges, cool rooms, display cabinets and freezers
- Check and record the temperature of hot food storage equipment such as bain maries, warming cabinets
- Check and record the cooking temperature
- Check and record the time and temperature when chilling food
- Check for bacterial growth using bacterial swabs and tests
- Chemical tests

Food production, service and retail businesses are increasingly required to implement rigorous food safety monitoring processes to demonstrate regulation compliance, ensure food quality and prevent litigation in the event of a food-borne illness claim.

Controls for non conforming products

- Putting non-conforming food on hold, pending further investigation
- Ensuring product on hold is clearly identifiable/labelled and held in segregated storage or in a designated area away from other food
- Ensuring staff are trained to recognise the product status and the significance if the product was to be dispatched or used
- Ensuring product can only be released on the authority of an appropriate person (e.g. Restricting access the area where product is on hold)

How you manage the non-conforming product. Consider the following corrective actions, as appropriate:

- Release as is, with customer's agreement (only if they can manage the problem)
- Re-grading affected food and making it suitable for another purpose (e.g. Disposal to pet food or transfer to animal feed if appropriate. Clearly label the food "not for human consumption")
- Re-working or re-labelling affected food where the fault can be removed;

- Rejecting the food and making sure it is denatured before disposal (e.g. Defacing the packaging or puncturing tins before removal to landfill), and where necessary
- Recalling the food

Each food business must take corrective actions if the food hazards are found not to be under control, or the food poses a risk of harm if eaten.

When checking and monitoring food safety, staff need to take action if there is a procedure not followed, or the critical control points are breached, or they feel that there is an incident that may pose a food safety hazard. The corrective action should either remedy the food safety hazard or prevent the food from being consumed. Staff must also take steps to prevent the hazard from happening again.

All corrective actions must be recorded. Examples of some common corrective actions are:

- Rejection of deliveries
- Disposal of out of date food
- Disposal of food items which are not able to be identified
- Organising equipment repairs or service
- Organising pest control services
- Reporting incidents to management

Some examples of incidents where there are indications of a possible food hazard and where corrective actions may be required are:

- Customer complaints
- Out of date food
- Spoilt, unattractive food
- Unclean equipment
- Physical objects found in food
- Pest sightings
- Loose garbage and food residue
- Food poisoning illness reports

Food businesses also need to ensure the safety of food within their wider operating environment. Besides food handling procedures, each business needs to support a clean, healthy environment.

SUPPORT PROGRAMS

"Prerequisite programs" or "support" programs provide the basic environmental and operating conditions which are necessary for the production of safe, wholesome food. These conditions and practices are now considered to be prerequisites for the development and implementation of effective HACCP plans.

Common prerequisite programs may include but are not limited to:

- Maintenance and facilities
- Approved suppliers
- Good food handling procedures
- Cleaning and sanitising
- Personal hygiene
- Pest control
- Staff training
- Chemical handling
- Calibration of equipment
- Traceability and recall
- Internal audit
- Document control

Maintenance & Facilities:

Poorly maintained or damaged equipment and buildings may result in possible physical, chemical and biological contamination of food. Regular maintenance of the building and an equipment service schedule will assist in keeping premises clean and operational.

The premise that food is prepared in should be located, constructed and maintained according to sanitary design principles. One way product flow is recommended to minimise cross-contamination from raw to cooked materials. Food Standards Code 3.2.3 provides information on buildings, equipment and premises.

Approved Supplier

Each business should have an approval system to ensure suppliers have in place effective food safety programs.

Good Food Handling Practices:

To minimise the risk of contamination, all businesses should establish policies and procedures for safe handling practices in the following areas:

- Packaging materials
- Staff movement

- Hand washing and hand hygiene
- Rework and leftovers
- Waste disposal

Cleaning & Sanitising:

All procedures for cleaning and sanitising of equipment and surfaces should be written down and followed. A cleaning schedule should be documented.

Personal Hygiene:

Businesses should develop procedures and policies for employees and other persons to follow which clearly outline the requirements for personal health and hygiene.

- Wear clean clothes or uniforms, preferably changing into/out of a uniform at start and finish of work
- Clean hair, secured or wearing a hair net, cap or other hair covering: facial hair should be trimmed and neat
- Minimal jewellery
- Wounds covered with a waterproof dressing
- Minimal hand contact: use disposable gloves, barriers and utensils for food handling.
- Eat food in areas away from food preparation areas
- Use of disposable tasting spoons or utensils
- Avoid body contact such as touching, coughing, scratching and sneezing
- Daily hygiene regime should include showering, deodorant
- No smoking near food preparation areas
- Good health: sick or ill workers should not return to work until symptoms disappear.
- Thorough hand washing procedures
- No nail polish or false nails in food preparation areas
- Use of personal protective equipment, such as clean aprons, caps, gloves where appropriate

Pest Control

Pest control of common pests such as cockroaches, flies, rodents, ants and other insects is essential. Only a registered trained pest control operator should carry out pest control processes. Pest control should be scheduled and documented.

Staff Training

All staff must be trained to enable them to perform their job safely and competently. All employees should receive orientation training in personal hygiene, GMP, cleaning and sanitation procedures, personal safety and work tasks.

Refer to FSANZ 3.2.2.A training requirements

Chemical handling

Documented procedures must be in place to ensure the segregation and proper use of non-food chemicals in the plant. These include cleaning chemicals, fumigants, pesticides or baits used in or around the plant.

Calibration of equipment;

All equipment used to conduct food safety system checks must be regularly checked for accuracies such as scales and all thermometers. A schedule should list all equipment, plant, etc. that requires calibration. Calibration records should be documented.

Traceability & Recall

All raw materials and products should be identifiable and able to be traced. A recall system should be developed, so product retrieval is possible.

Internal Audit

Each business should conduct an check of its food safety program at least once a year.

Document Control

A business needs to control the documents, policies and procedures it has regarding food safety. This requires version control and controlling access to master documents.

Other examples of support programs might include product development and recipes, glass and wood products control, procedures for labelling, allergen control, and employee, food and customer complaints

SUMMARY

Now that you have completed this unit, you should have the skills and knowledge required to implement safe food storage handling processes in a retail food environment according to a food safety program.

If you have any questions about this resource, please ask your trainer. They will be only too happy to assist you when required.