



# National Programme 3 Guidance

## You should use National Programme 3 if you:

- Brew, distill, manufacture alcoholic beverages (not including wine), vinegar or malt extract.
- Manufacture non-alcoholic beverages.
- Manufacture oils or fats (other than butter) for human consumption.
- Manufacture food additives (and dietary supplements).
- Process grain (includes milling, malting rolling and roasting).
- Handle food for retail (includes scooping ice cream and reheating manufacture prepared food).
- Process herbs or spices (includes loose tea).
- Manufacture dry mix products (includes cake mixes, powdered desserts, drinks, flavourings and soups).



# Contents

Introduction	5
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## Setup

◦ Taking responsibility	13
◦ Checking the programme is working well	19
◦ Places and equipment	23
◦ Suitable water	27
◦ Competency and training	33

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## Day jobs

◦ Cleaning and sanitising	37
◦ Checking for pests	41
◦ Maintaining equipment and facilities	43
◦ Personal hygiene	47

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## Producing, processing or handling

◦ Producing, processing or handling food	53
◦ Sourcing, receiving and tracing food	57
◦ Safe storage and display	61
◦ Knowing what's in your food	65
◦ Separating foods	69

◦ Thoroughly cooking or pasteurising food	73
◦ Reducing water content in food	77
◦ Making food acidic	81
◦ Keeping foreign matter out of food	83
◦ Packaging and labelling	87
◦ Transporting food	93

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## **Troubleshooting**

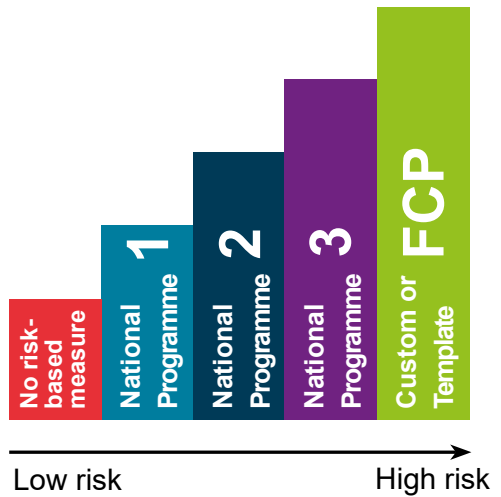
◦ When something goes wrong	95
◦ Recalling food	97

## What is a National Programme?

A National Programme (NP) is a set of rules that medium and lower risk food businesses need to follow to comply with the Food Act 2014. These rules are there to help you manage food safety risks and stop people getting sick. There are three levels of NPs based on the food safety risk involved in particular types of food business. Level 3 is medium to high risk.

Under a NP, you don't need written procedures or a documented food control plan (these are only required for high risk food businesses), but you do need to keep records for some of the things you do.

For a NP you also need to register with your local council or the Ministry for Primary Industries, and get checked (verified).



## **You can choose to write your own rules**

You don't have to follow this programme – you can decide to write your own food safety and suitability rules, by writing a custom (or bespoke) Food Control Plan. Your own rules will have to be checked (evaluated) to ensure they will manage food safety and suitability appropriately.

Even if you write your own rules NP 3 verification frequencies will apply to your business.

A guide to writing your own rules is here: <http://mpi.govt.nz/document-vault/12843>

## **Why should I read this booklet?**

This explains the rules that apply to NP 3. It includes an overview of what a food business needs to do to get started, what the law requires, what records must be kept, and what a verifier will check.

## **Where can I find more information?**

You can check the Food Regulations 2015 here: [www.legislation.govt.nz](http://www.legislation.govt.nz)

If you have any questions contact MPI or your local council.

Visit [www.mpi.govt.nz/foodact](http://www.mpi.govt.nz/foodact)

MPI: [info@mpi.govt.nz](mailto:info@mpi.govt.nz) 0800 00 83 33

Find your local council: [www.lgnz.co.nz](http://www.lgnz.co.nz)

# Instructions

## How to use this guide

This guide tells you what things your verifier will check, and outlines where you need to keep records. To help you make sure that you are keeping the right records for the right things we have placed icons throughout this document:



**Record keeping  
needed**



**Think: Some key things  
to notice or remember**

Each topic has three sections: Know, Do and Show.



Know

**Know** has general information about why this topic is important to food safety and gives ideas for how you can comply with food law.



Do

**Do** outlines what you must do to comply with the food safety laws.



Show

**Show** outlines what your verifier will ask you to demonstrate or the records they will expect to see.

Sometimes things go wrong, and your food might become unsafe or unsuitable. You need to be able to identify when something has gone wrong, and be able to fix it. You need a procedure in place and you need to keep records. These records are listed throughout the document. Follow the **'When something goes wrong'** card.

The **green** pages outline information about setting up your business and staff training.

The **blue** pages outline information about cleaning and sanitising, maintaining equipment and facilities, and personal hygiene.

The **orange** pages outline information about control steps commonly used in NP 3 businesses. These procedures have already been proven to reduce or eliminate hazards so food is safe and suitable. You only need to use the orange pages which apply to your business.

The **red** pages outline what to do when something goes wrong.

## Icons for different types of food business

These are icons for specific types of food business. Where you see an icon the rules only apply to that type of food business. Where there are no icons, the rules apply to all NP 3 businesses.



**Brewery,  
vinegar and  
malt**



**Manufacturer  
non-alcoholic  
beverages**



**Manufacturer  
oils or fats**



**Manufacturer  
food additives**



**Process  
grain**



**Retailers that  
handle food**



**Processors  
of herbs or  
spices**



**Manufacturer  
dry mix  
products**



## Overview of getting started



### Set up

- Read this guide.
- Plan how you will implement food safety.
- Contact and get a letter from a verifier saying they will verify you.



### Register

- Complete the registration form and any supplementary forms required by your council or MPI.
- Submit application, including fee.



### Operate

- Follow the procedures.
- Put your records in place.
- Keep records up to date.
- Contact your verifier and arrange a time to be verified.
- Focus on top 5 requirements.



### Verification

- Ensure you can demonstrate how you make safe and suitable food.
- Provide necessary records.



# Requirements for National Programme 3

## Records required

NP 3 Records	Required	When something goes wrong
Competency and training	✓	
Sickness	✓	
Water test results (self-supply only)	✓	
Pests		✓
Maintenance		✓
Sourcing, receiving and tracing	✓	
Storage and display		✓
Separating food		✓
Thoroughly cooking or pasteurising food		✓
Reducing water content		✓
Making food acidic		✓
Foreign matter		✓
Packing and labelling		✓
Transporting food (temperature)	✓	
Checking the programme is working well		✓
Recalling food		✓

# Overview of the Top 5 requirements

These are the 5 most important things to get right every time. They will always be checked by your verifier.



## Competency & Training

Know how to make safe and suitable food.



## Cleaning

Keep food and surfaces clean and tidy.



## Personal Hygiene

Wash hands and avoid contaminating food.



## Sourcing, receiving & tracing

Check and record what comes in and out of your business.



## Process controls

Make sure that you control parts of the food chain, or your process, that are the best, or last, place to manage specific food safety risks.





# Taking responsibility

## K

### Know

#### What do you need to know?

- It is your responsibility to make sure the food your business produces, handles and/or sells is safe and suitable.
- You don't need to be a food safety expert but you do need to know enough to make good food safety and suitability decisions for your business. This guide is intended to help you do that.
- Overall, you as the owner are responsible, even if you employ people to help manage food safety and suitability.



Not all the sections in this guide may be applicable to your business – you don't have to follow rules that don't apply to you (for example if you don't package food you don't have to follow the rules about packaging). If you are unsure about whether a section applies to your business seek advice from a consultant, your verifier or your registration authority (local council or MPI).

#### Food safety vs. food suitability

- **Food safety** is about preventing food from causing illness or harm. Food can be unsafe if it contains certain 'hazards'. Hazards fall into 3 categories:

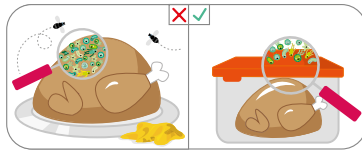


Know

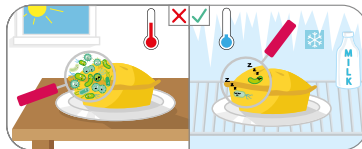
- 1 **Biological (bugs):** Certain bugs can make people sick. Food can be unsafe if it has high enough levels of these bugs.
- 2 **Chemical:** Many chemicals can make people sick if in or on food.
- 3 **Physical (foreign):** Glass, metal or other sharp objects can sometimes get into food and cause harm.

- Food suitability is about making sure food meets customer expectations and doesn't contain anything unexpected or offensive (yuck).
- Taking responsibility for food safety means understanding the possible hazards that could make your food unsafe and taking steps to:

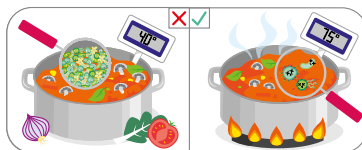
- keep bugs out,



- reduce bugs to safe levels,



- eliminate or remove bugs.





## Know

- Taking responsibility for food suitability means:
  - only using foods or ingredients that are fit for purpose,
  - labelling food correctly, and
  - making sure any claims about your food are true.

### Keeping customers safe

NP 3 businesses are considered to be medium to high risk – it is possible that you can make people sick with your food. It's important for you to know, understand and follow the rules.

- Following the rules will help your business as:
  - about 86% of people that get sick from food don't report it – but they still look for someone to blame,
  - about 75% of people don't think that they got sick from food they made themselves, and blame someone that sold food to them,
  - most people believe it was one of the foods they last ate that made them sick – when it actually could have been something they ate days or weeks ago,
  - about 40% of people that get sick will not buy the food they blame for making them sick again (and might tell their friends not to buy it),
  - if someone reports illness, a food safety officer investigates their complaint – this means you might be visited even when you didn't have anything to do with making someone sick.



## Know

### Keeping records

- Keeping good records will help you prove you didn't make people sick.
- There are some records you need to keep, others you might like to keep for good practice. Where you aren't required to keep records it is your choice whether you wish to keep records or other evidence to keep track of how well you are managing food safety and suitability.
- Without records it will be harder to prove your food is safe and suitable which could lead to:
  - recalling food,
  - stopping sale of food,
  - having to make certain improvements to your processes or practices,
  - fines or prosecution.

All of the above can cost your business in time, money or reputation.

- There is more helpful guidance and tools available in the '**Record Blanks**' on <http://www.mpi.govt.nz/dmsdocument/16717-food-business-record-blanks>.

### Advice and guidance

- You can get advice and guidance from others, for example consultants or verifiers.
  - **Consultants** can design systems, processes and procedures for you – but can't take away your responsibilities. It is part of their job to help you understand how to make good decisions about food safety and suitability – especially when things don't go to plan.



# K

## Know

- **Verifiers** can provide advice and coaching (options and examples) about how you can make sure your business is making safe and suitable food but they cannot make your decisions for you.

# D

## Do

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### What do you need to do?

- Always follow the food safety and suitability rules.
- Make sure you have enough trained and competent staff (and supervisors if necessary) to achieve the safety and suitability of food.
- Get verified.
- Keep a copy of all documents or records required for at least 4 years.
  - All records must to be accurate, easy to read, and identify what was done, when it was done, and who did it.
- Make sure records are easily accessible.
- Give written notice to your registration authority of any significant change in your business – if possible before making the change, or at least within 10 working days after the change occurs.

# S

## Show

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### What do you need to show?

- Your verifier might ask:
  - whether you have given certain food safety responsibilities to other people and, if so, how you know they are doing a good job of keeping food safe and suitable,
  - whether there have been any changes to what you do, make or sell since the last time they were there,
  - whether there are stresses or pressure on the business that have meant staff cuts or changes to save costs - and how you have taken food safety and suitability into account when making these decisions.



# Checking the programme is working well

**K**

**Know**

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## What do you need to know?

- It is your responsibility to regularly check that food safety and suitability is being well managed in your business.
- What to check and how often, depends on the effect of something going wrong in your business (e.g. if something really important to food safety has gone wrong you might have to recall food back to the point where you last had evidence everything was under control – so it's important to check these things more often).
- An internal check can also be done if a business you supply audits your business, however this should not be the only one.
- You should check:
  - that people are doing what they need to,
  - the procedures you have put in place are being followed and are effective,
  - your facilities and equipment remain suitable for the food activities at your business.
- You or one of your staff must be your own internal verifier (self-auditor).



## Know



Checking should be done regularly. You don't need to check everything all at once, or at every check. e.g.: you might check that temperatures of fridges are being taken (and recorded) every day or every shift, but checking that the training has been undertaken, is effective and records are up-to-date might be done only every few months.

### Why is self-auditing important?

- You are responsible for your business and the food you produce, not your verifier or the government. If you wait for someone else to tell you what is going wrong in your business it may become costly, and you may make people sick.
- Check the programme is working well by (for example):
  - checking whether staff are carrying out key food safety behaviours (e.g. washing hands etc.),
  - checking records are being completed and kept,
  - looking through records to check that things are working as expected (e.g. fridges are keeping foods under 5°C),
  - reviewing **'When something goes wrong'** information and checking that steps have been taken to prevent problems from happening again,
  - running food safety quizzes with staff,
  - using the **'Show'** sections in this guidance to ask the same questions or check the same things that your verifier would ask or look at,
  - testing the environment or foods for certain bugs or chemicals to show procedures (e.g. cleaning) are effective.

# K

## Know

### Some notes about testing:

- There are specific requirements for testing in some situations (e.g. self-supply water). There are also rules about certain limits for bugs or chemicals. A limit doesn't mean you always have to test the food for that bug or chemical. If you are thinking about using sampling and testing to show your programme is working well, this shouldn't be the only check that you do. It is not possible to test your way to food safety.
- Testing can be a useful tool, but has limitations. If, for example, testing results find harmful bugs that might mean some part of the process is not working well.
- A negative result may not prove that your plan is working perfectly (or that the food is safe). Bugs, in particular, are not usually evenly distributed in food – it's possible to test some food and get a negative result when another part of the food in the same batch has high levels of harmful bugs.



Imagine you have a batch of 200 apples packed into 10 sacks and you think it's possible there might be 1 or 2 bad apples in the batch. You open 1 sack and pull out 1 apple – if it's a good apple does it prove all the other apples are good?

How many sacks do you have to open, and how many apples do you have to pull out (sample) to be sure that you either find the bad apples or prove that the batch contains no bad apples? What if, once an apple has been taken out of the sack, you aren't allowed to sell it?

Would you 'test' to find the bad apples in the sacks – or put processes in place to make sure you found and removed any bad apples before you packed them in the sacks in the first place?

# K

## Know

- If you want to include testing as one of your checks it is often more effective to test the environment rather than final foods.
- If you use sampling and testing as part of your procedure for checking, it is highly recommended that the testing plan is developed by an expert. If you don't have an expert in your business, a consultant, your verifier or MPI can provide information about putting together a sampling and testing plan.

◦

# D

## Do

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### What do you need to do?

- Set up procedures for regularly checking that you and your staff are making safe and suitable food and meeting your requirements and responsibilities under the Food Act 2014.
- Follow the procedure on **'When something goes wrong'** if your self-checks identify mistakes or actions that could have made food unsafe or unsuitable.

# S

## Show

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### What do you need to show?

- Show your verifier:
  - how you check that your procedures are working well,
  - results of the checks you have made,
  - results of the tests you have carried out.



# Places and equipment

## K

### Know

#### What do you need to know?

- When choosing places and equipment for your food business there are some things you should consider, such as:
  - what the place has been previously used for,
  - that rooms and equipment can be easily cleaned and maintained,
  - that there is adequate lighting and ventilation,
  - that equipment is designed for food use and for the process you are intending to use it for.

#### Why is choosing good places and equipment important?

- Places and equipment are the foundation of a food business, and the choices you make determine how hard you and your staff will have to work to know food is always safe and suitable.
- It's often things which are easily overlooked that can result in food being contaminated and people getting sick. For example:
  - a light breaking and spreading glass into food,
  - food crops absorbing heavy metals or chemicals in soil from a previous land use (e.g. shooting range, battery factory etc.) into their root systems and leaves,

# K

## Know

- dust and dirt carrying bugs getting into food from the neighbouring supply yard loading compost, fertiliser etc. into trucks,
- buildings constructed from materials that could be a source of bugs, chemicals or foreign matter getting into your food.
- It's best to source equipment especially designed for food use and for the process you are intending to use it for.
- It's best to choose places and equipment that prevent as many food safety risks as possible.

# D

## Do

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### What do you need to do?

- Manage and food safety/suitability risks associated with places and equipment
- Check previous use of land and buildings, and don't use areas that are likely to make food unsafe.
- If your neighbours do things that could cause food to be unsafe or unsuitable, work out how to minimise the chance that this could happen.
- Make sure any buildings used for your food business are big enough to accommodate the number of staff you plan to have working there and allow for design of a good workflow.
- Design your workflow so you can safely move around your area (e.g. so you don't carry unsafe foods or ingredients through areas where safe food is being handled).



# D

## Do

- Make sure buildings, fittings, fixtures or equipment are not made of materials that could be a source of bugs, chemicals or foreign matter getting into your food, or work out how to minimise or eliminate the chance that food could become contaminated from these sources.
- Ensure all areas where food will be handled or stored can be easily cleaned.
- Limit the amount of dust dirt, fumes or pests that can get into buildings used for handling, processing or storing food.
- Provide places for storage of cleaning chemicals and maintenance compounds away from food.
- Make sure there are toilets and places to wash hands close to food handling areas (including where horticulture crops are being harvested).
- Provide for rubbish areas away from food processing/preparation areas
- Make sure you have equipment for measuring control points (e.g. thermometers for checking fridge/chiller temperatures) and that it is accurate and working properly.
- Food in vending machines must be kept safe.

# S

## Show

### What do you need to show?

- Your verifier might ask:
  - how you know the location hasn't previously been used for something that will make food unsafe,
  - what you do to manage risks from activities of your neighbours,
  - why you chose the equipment you are using,
  - how you know the building, fixtures, fittings and equipment aren't a risk to the safety or suitability of your food.
- Your verifier will observe workflow and whether staff can easily work and maintain good personal hygiene.



# Suitable water

**K**

**Know**

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## What do you need to know?

- Suitable water must be:
  - safe to drink if it is used for food preparation, washing food contact surfaces/equipment, and for staff to wash their hands,
  - clean and fit for purpose when used for any other activities in growing or making food.

## Why is it important to ensure water is suitable?

- Water can carry harmful bugs and chemicals that can make people sick. These might be because the water is contaminated at the source, or because water pipes and storage containers become contaminated.
- It's important to consider how you use water in your business, and make sure that the water is not going to be a source of food contamination. If you use a council or registered water supply most of this is done for you.

## If you use self-supply water

- You will need to prove it is suitable for use by having it tested at an accredited lab (there is information on the MPI website about these).
- You will need to know where near-by activities and naturally occurring chemicals could make your water supply unsafe.



## Know

- Keep water tanks:
  - clean and in good condition to stop the build-up of sediment, and
  - covered to stop animals, birds and dirt from contaminating water.
- You may need to install operate and maintain and maintain (e.g. replacing filters) a water treatment system, following the manufactures instructions, to ensure water is suitable for use with food.
- You might need to treat roof, surface or ground water using filtration, chlorination or UV disinfection to make it suitable for use.
- Self-supply water sources may be subject to other legislation as well.

### **For ground water supply only**

- Bores should be designed and maintained so they are protected from surface contamination.

### **For roof water supply only**

- Additional risks to contamination of your water can be reduced by:
  - collecting water only from clean roofs and gutters made from safe materials (e.g. no lead based paints, bitumen, exposed timber or copper gutters),
  - putting screening gutters up, removing overhanging branches and vegetation, and mounting aerials and satellite dishes away from water collection areas,
  - installing a first flush device (a device which diverts the first flush of water when it rains).

# D

## Do

### What do you need to do?

- For water for food processing, hand washing and cleaning, either:
  - use a potable (council/registered) water supply, or,
  - check that your roof, surface or ground water supply is tested at least once every year in an accredited lab and meets the following limits:

Measurement	Criteria
<i>Escherichia coli</i>	Less than 1 in any 100 ml sample*
Turbidity	Must not exceed 5 Nephelometric Turbidity Units
Chlorine (when chlorinated)	Not less than 0.2mg/l (ppm) free available chlorine with a minimum of 20 minute contact time
pH (when chlorinated)	6.5 – 8.0

\**Escherichia coli* testing must be performed by an accredited lab.

- Test any new supply of water before using it in food areas.
- Test roof, surface or ground water supplies within 1 week of knowing about a change to the environment or of activities that may affect the safety and suitability of the water.

# D

## Do

- For surface and (insecure) ground water intakes must be:
  - at least 10m away from livestock,
  - at least 50m away from potential sources of contamination including silage stacks, offal pits, human and animal waste, potential chemical stores and tanks

### All water supplies

- Only use water tanks, containers, pipes, outlet taps and treatment systems for any water supplies on site that are suitable for drinking water (or are “food-grade”). Regularly check and maintain these.
- Clearly mark outlet taps, tanks, and pipes that do not contain clean water. These must not be used for food processing, hand washing and cleaning.
- If your water supply becomes unsafe (or you’re advised by your supplier it is unsafe):
  - don’t use it, or
  - boil it for at least 1 minute before use, or
  - disinfect it with chlorine before use, or
  - use another supply of water which you are sure is safe (e.g. bottled water).
- Always throw out any food which has been contaminated by unclean/unsuitable water.



It is recommended you record the water source for each of the locations you operate in.

# S

## Show

### What do you need to show?

- Your verifier will:
  - ask how you know your water is fit for purpose,
  - ask you about how you check and maintain water equipment and facilities.

### For self-supply water

- Your verifier will:
  - ask to see test results for any roof, surface or ground water supplies that are used for food preparation, washing food contact surfaces/ equipment or for hand washing,
  - ask what near-by activities could affect the safety of your water,
  - ask you to show them how you know any water treatment system is working properly,



### Will you keep records for this?

You need to keep **records** of self-supply water tests.







# Competency and training

## K

### Know

#### What do you need to know?

- Not all staff and visitors need training in all things – but they must know how to keep food safe when doing their particular job.
- You need to train your team before you:
  - start making and selling food,
  - introduce or change a procedure.
  - whenever you think you/your staff need it.
- Training should include good food safety practices like:
  - hand washing and wearing clean clothing,
  - keeping away from food when sick,
  - keeping foods separate in the food preparation area,
  - cleaning and sanitising,
  - sourcing, receiving and tracing food,
  - checking that process steps are managing risks,
  - what to do if something goes wrong.
- Some processes and equipment used will need staff to undergo specialised training, for example, some heat treatment processes such as UHT, retorting etc.
- You can train staff any way that works for your business. You could consider:
  - working under supervision,

# K

## Know

- buddy training,
  - courses (in-house or external),
  - using videos, games and quizzes as training methods.
- If you are a one person business you can try using online training tools, food safety courses or seek help from a consultant.

### Why is training important?

- Everyone has a role to play in keeping food safe and suitable. Staff need to know that what they do can affect food safety – especially if something doesn't happen as it normally would.



Not all of the things that affect food safety are 'common knowledge' so it pays to be trained properly so you or your staff don't accidentally get it wrong.

# D

## Do

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### What do you need to do?

- Train all staff and visitors so they know what they need to do to keep food safe and suitable while they are in your business.
- Nominate the person or people that must make sure all staff and visitors are trained so they know how to meet the rules.

# D

## Do

- Write down what people need to be trained to do for the tasks that affect food safety in your food business. Include the training needed for:
  - the day-to-day manager(s),
  - staff,
  - visitors (e.g. delivery people, contractors etc).
- Keep a record of the training you or your staff or visitors have completed, and when they completed it.

# S

## Show

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### What do you need to show?

- A verifier will watch staff working, they will ask questions about:
  - what they do,
  - how they do it,
  - why they do it,
  - what happens when things go wrong (or changes).



### Will you keep records for this?

- You need to keep **records** (you can find some optional templates and examples of ways to keep training records in the '**Record Blanks**' on <http://www.mpi.govt.nz/dmsdocument/16717-food-business-record-blanks> ).





# Cleaning and sanitising

## K

### Know

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#### What do you need to know?

- Cleaning and sanitising are 2 different things:
  - cleaning removes dirt, grease and most bugs from surfaces,
  - sanitising kills harmful bugs left on clean surfaces.

#### Cleaning

- Food contact surfaces and equipment should be cleaned every day that food touches it (it's best to clean as you go). If food contact areas are not used for a few days they should be cleaned before they are used again (to remove dust and dirt that has settled there in between use).
- It's important to clean staffrooms, bathrooms and toilets. This minimises the chance of staff bringing bugs from these areas into places where food is handled or processed.
- It is a good idea to keep storage rooms clean and tidy.
- Your cleaning equipment (brooms, mops, cleaning cloths), can become a source of contamination if they aren't cleaned or replaced regularly too.
- Using disposable cleaning cloths or washing cleaning cloths after each days use is recommended.

# K

## Know

- If you are using automated “clean-in-place” (CIP) systems, you should have an expert install the system and confirm it is working properly. Let your verifier know if you are using CIP – they might need to get a technical expert to confirm it’s working OK as part of the verification.

### Why is cleaning & sanitising important?

- Bugs love to hitch a ride on dust and dirt so an unclean area is also a food contamination area.
- Cleaning doesn’t remove all bugs, so if you’re manufacturing products for sale you also need to sanitise food surfaces to kill any bugs that are left behind after cleaning (sanitisers don’t work properly on unclean surfaces, so always clean before sanitising).
- Dirty premises can attract pests like mice, rats and cockroaches which can spread disease.
- Even if food is fully packaged at all times it’s a good idea to keep things clean. If the outside packaging gets dirty that will contaminate the hands of people who open the package and this may, in turn, contaminate the food.
- Rubbish (including liquid waste) can be a source of food contamination. Bugs will grow in it.

# D

## Do

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### What do you need to do?

- Sweep, vacuum or mop floors, wipe benches and clean food contact surfaces, equipment, staff facilities and storage areas regularly and when needed.
- Use clean hot soapy water or food safe cleaning chemicals according to the label instructions.

# D

## Do

- Clean brooms, mops and other cleaning equipment regularly.
- Store cleaning equipment and chemicals away from food.
- Always sanitise food contact surfaces and equipment after cleaning.
- Use sanitising chemicals designed for use in food areas and follow the instructions on the label.
- Sort and/or wash dirty laundry (if you choose to supply your staff with clean clothing) away from food.
- Store rubbish away from food and remove it from the premises regularly.
- Make sure people can't mistake rubbish for food/ ingredients.
- Clean bins and rubbish areas regularly.

# S

## Show

---

### What do you need to show?

- Your verifier will:
  - look around your business and check that everything looks clean and tidy. They will also ask you and/or your staff when and how you clean and sanitise.
- Your verifier might:
  - ask how you clean and sanitise equipment or food contact areas that are hard to get to,
  - ask how you remember to clean equipment or areas that only need occasional cleaning (e.g. ceilings, light fixtures),
  - ask how often rubbish is removed.



Show



You do not need to keep records but some businesses like to use a cleaning schedule and/or a cleaning record. Examples of these are in the **'Record Blanks'** on <http://www.mpi.govt.nz/dmsdocument/16717-food-business-record-blanks>





# Checking for pests

**K**

**Know**

---

## What do you need to know?

- Pests such as mice, birds and insects can spread disease. They do this by picking up bugs from dirty items such as waste and transferring them to food and food equipment.
- You need to take steps to control pests and prevent them from contaminating food.

**D**

**Do**

---

## What do you need to do?

- Check for and remove any signs of pests daily (e.g. droppings, empty full traps, dead insects).
- Clean and sanitise any affected equipment and areas that come into contact with food.
- Dispose of any affected/contaminated food.

**S**

**Show**



---

## What do you need to show?

Show your verifier how you check for pests.

## Will you keep records for this?

You need to keep records about types and numbers of pests found - you can keep separate records for this or use the same record system you use for **'When something goes wrong'**.





# Maintaining equipment and facilities

## K

### Know

#### What do you need to know?

#### Why is maintenance important?

- A common way bugs or other harmful things (e.g. chemicals, bits of glass or metal etc.) get into food is from things breaking, breaking down or getting damaged. Bugs especially like to hide and grow in pitting, cracks, crevices or holes, and if they find a hiding space where food is stored, prepared, processed or handled they often get into food and make it unsafe.
- Equipment such as chillers, freezers might become inefficient or break down allowing temperatures to rise and allow bugs to grow in food stored there.
- Sometimes it's the things you can't see (e.g. water pipes) or don't see all the time (e.g. the inside of some equipment) that break down or become dirty/contaminated resulting in unsafe or unsuitable food. It's important to remember to sometimes check the things not in plain view.
- Measuring equipment (e.g. thermometers) can become a lot less accurate over time (and you need to know that the temperature is accurate to know that bugs aren't able to grow).

# K

## Know

- If you expand your business to make more food, different kinds of food, or have more people working at once, your workflow can be affected and ready-to-eat food can be contaminated by getting too close to raw, unsafe food, or allergens can end up in foods they shouldn't be in.
- Not all chemicals and compounds (like grease, oil, etc.) are designed to be used with food, and some chemicals can make people sick if they get into food.



Some overseas studies have shown that businesses that keep up with regular, preventative maintenance can save around 50% in maintenance and repair costs compared to those that wait for something to break down before doing any maintenance or repairs. Also, if you wait until something breaks down you might also incur costs associated with managing unsafe or unsuitable food.

# D

## Do

---

### What do you need to do?

- Regularly review that you haven't outgrown your location, or negatively impacted workflow through any growth or changes to the amounts and types of foods you are growing, making or selling.
- Regularly check your premises for signs of deterioration (e.g. holes in floors and walls).
- Only use equipment and facilities that are in good condition and working properly.
- Service your equipment regularly.
- Calibrate any measuring equipment you use (e.g. thermometers regularly).

# D

## Do

- Ensure maintenance compounds and chemicals are:
  - fully labelled, stored, sealed and only used following the manufacturer's instructions,
  - stored and transported in containers that can't be mistaken for food containers.

# S

## Show

---

### What do you need to show?

- Show your verifier:
  - what you do to check your premises and equipment are designed for food use and are in good working order,
  - how you store maintenance compounds and chemicals.
- Your verifier might ask:
  - how often you do maintenance checks,
  - what you check for during maintenance checks,
  - how you remember to service equipment, especially if this only needs to be done infrequently (e.g. once a year),
  - how you are calibrating measuring equipment, and how often.



## Will you keep records for this?

- You must keep to records of when something goes wrong with maintenance. You can use the same record system you use for **'When something goes wrong'**.



Some businesses like to use a separate maintenance schedule and/or a maintenance record instead. Examples of these are in the **'Record Blanks'** on <http://www.mpi.govt.nz/dmsdocument/16717-food-business-record-blanks>.



# Personal hygiene

**K**

**Know**

---

## What do you need to know?

- Ways to protect food from contamination by people include:
  - washing hands,
  - not working with food when sick with anything that causes vomiting or diarrhoea,
  - wearing clean clothes.

## Why is personal hygiene important?

- One of the most common ways bugs get into food is from people – mostly from their hands.



About 30% of people are natural carriers of a bug (*Staphylococcus aureus*) that can cause food poisoning – and good personal hygiene is the only way to prevent it becoming a problem in your food.

- Regularly washing hands in soapy water for 20 seconds, rinsing and drying them properly (using paper towels, single use cloths, or an air dryer) is one of the best and easiest ways to help prevent bugs getting into your food.
- Wash your hands:
  - before handling food,
  - after coughing or sneezing,

# K

## Know

- after using the toilet,
  - after using their phone,
  - after taking out rubbish,
  - after touching something they think is dirty.
- Uncovered cuts and sores can spread bugs and make food unsafe and unsuitable, especially if they are weeping or infected.



If people are wearing gloves (whether to cover sores or for any other reason) they should wash their gloved hands or replace the gloves in all the same situations when ungloved hands should be washed.

- Harmful bugs can be transferred to food through a sick person's faeces, vomit and other body fluids (e.g. blood, snot).
- Staff must seek medical advice if they:
  - have jaundice, or
  - have vomited or had diarrhoea 2 or more times in a day, or
  - have been sick with a tummy bug for more than 24 hours.
- Staff who have had a tummy bug should not work with food until 48 hours after they feel better.



Think about ways to balance peoples' need to earn an income even when sick (and so might be tempted to try to hide their illness) and the business need to prevent contamination of food by sick people.



# K

## Know

- Dirty clothing can contaminate food, surfaces and equipment.
- Wearing clean clothes (overalls or aprons etc.) helps to keep bugs out of food.
- If staff contaminate food, you might have to recall it. See '**Recalling your food**'.

# D

## Do

---

### What do you need to do?

#### Wash hands

- Always have water, soap, paper towels, single-use cloths or an air dryer available for use.
- Wash hands in soapy water for 20 seconds, and dry thoroughly.
- Everyone working in your business must regularly wash their hands especially.
- Cuts or sores on food handlers must be completely covered (e.g. with band aids and/or gloves) or they must not handle food.

#### Manage sick staff

- Implement a sickness policy so you/your staff don't work with food when sick with an illness that can be passed on through food.
- Any staff or visitors (including contractors) who have vomited or had diarrhoea in the 48 hours before entering the food premises, or who develop these symptoms when on the premises, must tell the day-to-day manager (or the person in charge) immediately.

# D

## Do

- Staff must stay away from the food processing area until they are well, if they have an illness they can pass on through food.
- Sick staff may be able to complete tasks that do not come into direct contact with food or food preparation areas.

### **Wear clean clothing**

- Clean clothing must be worn (e.g. overalls or apron etc.) before handling food or entering food preparation areas (this applies to contractors and visitors too).
- Staff must either wear their own clean clothing, or wear clean clothing that you provide for them.
- Remove outer protective clothing (e.g. aprons etc.) before leaving the food preparation area (e.g. to go to the toilet, outside etc.)

# S

## Show

---

### **What do you need to show?**

- Your verifier will:
  - check everything they need is there by washing their hands when they enter your business.
- Your verifier might:
  - ask you to tell them who is responsible for making sure your hand washing area is fully stocked and cleaned,
  - ask how you know people are washing their hands when they should,
  - ask staff about when they wash their hands, and may ask them to show how they wash their hands,

# S

## Show

- ask what happens if someone has a tummy bug or gets sick,
- check that everyone who handles food puts on clean clothing/aprons at the start of (or, as required, during) each shift,
- ask how you make sure clean clothing is worn,
- ask you questions about your rules around clean clothing or any issues you have had with your rules.



### Will you keep records for this?

- You need to keep **records** about staff reporting as sick and what you have done to ensure they aren't a source of food contamination (you can find some optional templates and examples of ways to keep sickness records in the '**Record Blanks**' on <http://www.mpi.govt.nz/dmsdocument/16717-food-business-record-blanks>).





# Producing, processing or handling food

## K

### Know

#### What do you need to know?

- Identifying and controlling hazards will help to keep your food safe when preparing, processing or handling food.
- It's your job to identify and control hazards to keep your food safe when it's being prepared, processed or handled.
- The hazards you need to know are:
  - bugs (e.g. listeria, *E. coli*, salmonella, campylobacter etc.),
  - chemicals (e.g. cleaning products, pest control products),
  - foreign matter (e.g. glass, stones, metal).
- Not all control steps may not all be applicable to your business – you don't have to follow the ones that don't apply to you (for example if you don't package food you don't have to follow the rules about packaging).
- Not all hazards can not be controlled in all food businesses (for example it's not possible for a manufacturer of frozen vegetables to directly control the application of agricultural compounds onto horticultural produce) – your responsibility is to control hazards that can be controlled in your business.



## Know



If you are unsure about whether a section applies to your business seek advice from a consultant, your verifier or your registration authority (local council or MPI).

- In addition to the specific procedures in this guide, you should also:
  - follow any directions for use and storage on labels or advised by suppliers,
  - keep non-shelf stable foods out of the temperature danger zone (5°C - 60°C),
  - follow the 2 hour/4 hour rule, (see '**Safe storage and display**'),
  - keep cold foods below 5°C,
  - defrost foods in the fridge/chiller when possible,
  - keep hot foods above 60°C,
  - reheat food to above 60°C (75°C is best) before placing in a bain-marie or food warmer,
  - wash fruit and vegetables before preparing, cooking and/or eating, unless labelled 'Pre-washed' or 'Ready-to-eat'.



As well as giving you the taste, texture, appearance or quality you want for your food, some of the steps can also double as a safety or suitability control step. For example, if you cook or heat something for a 'delicious food' reason, following the cooking or pasteurising procedures means you will also kill bugs that make food unsafe.

# D

## Do

---

### What do you need to do?

- Identify the food related processes your business uses.
- Identify the types of hazards (bugs, chemicals and foreign matter) that you need to control in your business.
- Select the control steps you will apply in your business.

# S

## Show

---

### What do you need to show?

- Your verifier will:
  - ask you to take them on a tour of your business and point out the different processes you have,
  - ask how you decided which process control steps to include in your business,
  - ask you about the types of hazards you are controlling in your business.







# Sourcing, receiving and tracing food

**K**

**Know**

---

## What do you need to know?

- You should use trusted suppliers (e.g. registered food business) for your food, ingredients and processing aids to give you a good start to making safe and suitable food.
- You need to check the food you receive:
  - is not damaged,
  - is at the right temperature,
  - is not past its use-by date.
- You need a system to keep track of the food/ ingredients/inputs you receive.
- You need to be able to trace and recall your product immediately if you need to.

## Why is sourcing, receiving and tracing important?

- Using trusted suppliers gives you confidence that the foods/ingredients/inputs are safe to use. This can save you time and money, and prevent people getting sick from your food.
- Some foods must be kept cold (chilled or frozen) to stop bugs growing and they can become unsafe quite quickly if not kept at the right temperature.



Know



It's best to be there to receive deliveries - if chilled or frozen food is delivered out of hours how will you know whether it was at the right temperature – and that it will still be safe by the time you get there?



Do

---

## What do you need to do?

### Source

- Keep a list of your suppliers and their contact details.
- If you are an importer of food, the requirements you need to meet are outlined here:  
<http://www.mpi.govt.nz/document-vault/10823>

### Receive

- You must always check:
  - the temperature of chilled food and, if it is above 5°C, apply the 2 hour/4 hour rule (see '**Safe storage and display**'),
  - frozen food is frozen,
  - packaging is not damaged or dirty,
  - food is not past its use-by date.
- Always put chilled food away first, then frozen food, and then food that can be stored at room temperature.

# D

## Do

- When receiving food, start your tracing system by:
  - keeping your receipts, or
  - writing down the type(s) and quantity of food(s) you got from each supplier, or
  - using an electronic (e.g. bar-coding) system to track what you received, when and who from.

## Trace

- Create a tracing system by keeping a list of your suppliers and their contact details.
- Use your tracing system to:
  - identify any food you still have in your business that is unsafe or unsuitable and make sure it is moved away from other food and won't be distributed or sold
  - either:
    - recall everything, or
    - recall the specific batch(es) that contain the unsafe/unsuitable ingredients (only if you have kept detailed records).



To be able to recall specific batches you will need to have kept records that include supplier details, brand and batch IDs and best before/use-by dates etc.

- Test your tracing systems regularly to prove you can quickly identify and prevent sale or distribution of, or recall, unsafe/unsuitable food if you need to.

# S

## Show

### What do you need to show?

- Your verifier will:
  - ask you who your suppliers are and how you check that they are trusted suppliers.
- Your verifier might:
  - observe receipt of a delivery of food to your business,
  - check your records relating to receiving food,
  - ask how you have tested your tracing system. They might also conduct a tracing test using an ingredient you have received or a batch of food you have produced.



### Will you keep records for this?

- You must keep **records** of:
  - your suppliers,
  - the type and quantity of food/ingredients you have received (including the date of receipt),
  - the temperature of chilled food when it was received,
  - what foods ingredients or inputs have gone into (or onto),
  - who you sell/deliver your food to (unless it is direct to the final consumer).



# Safe storage and display

**K**

**Know**

## What do you need to know?

- Food that is not covered, clearly labelled or stored away from food can become contaminated.
- You need to know how to keep food (including food in vending machines) at the right temperature to stop bugs from growing.
- Foods and ingredients (including food in vending machines) should not be used or sold past their use-by date.
- Food needs to be stored away from non-foods (e.g. perfumes used in cosmetic or household cleaning products) as they can be absorbed by food and make it unsafe or unsuitable.
- Storage conditions to keep food safe will either be on the food label or provided by the supplier.



'Display' means the storage of food in a retail/public area.

# K

## Know

### Why is safe storage and display important?

- It is possible for food to become unsafe while not being used and being stored.
- Foods that are stored in rooms/stack systems (i.e. not on the floor) that can be easily cleaned, are less likely to be contaminated.
- Floors can be a source of contamination as pooling water and dirt which can be brought into storage areas on shoes and tyres can make food unsafe.
- Some foods must be kept cold (chilled or frozen) to stop bugs growing (e.g. milk, meat). Some foods we kept cold so the final customer enjoys them (e.g. beer). You need to know the difference so you can keep food safe.
- Storage conditions to keep food safe will be listed on the label, or provided by the supplier.
- Some foods (e.g. powdered foods) need to be stored in a place where humidity is controlled to prevent the food from absorbing moisture. If dried foods absorb too much moisture this allows bugs to grow and the food to become unsafe.
- Many foods have a use-by date because bugs can grow slowly in them even when they're stored safely. Foods with a use-by date can make people sick if they eat them after this date. It's important to have a stock checking/rotation system so you don't use food which is past its use-by date.
- A best before date is different from a use-by date. A best before date indicates the quality of the food might not be as good after this date, but it is unlikely to make people sick if they eat it.

# K

## Know

- Packaging comes into contact with food, so it's important to keep it stored as safely as you would keep food, so it doesn't contaminate food.



**Storage is a top 5 requirement for retailers who handle food.**

# D

## Do

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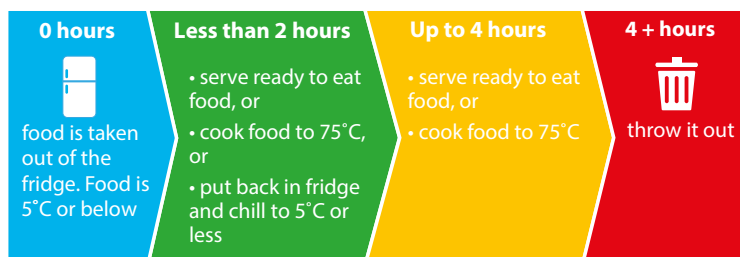
### What do you need to do?

- Store food and packaging safely.
- Create a system for making sure that food is regularly checked for use-by dates and can't be used or sold after the use-by date.
- Check daily that chilled food is being kept at 5°C or lower by:
  - using a calibrated probe thermometer to check the temperature of food or other substance (e.g. a container of water), or
  - using a calibrated infrared thermometer to measure the surface temperature of the food, or
  - using a calibrated automated system to monitor the internal temperature or surface temperature of your food, or
  - using another method that accurately measures the temperature of food.
- Check that food in the freezer is still frozen. You don't have to measure the temperature of the frozen food.

# D

## Do

- Follow the 2-hour/4-hour rule, as shown in the diagram below:



- If you are storing foods that need to be under controlled humidity to keep them safe, install and monitor a humidity control system.

# S

## Show

### What do you need to show?

- Show your verifier:
  - how you check the temperature of chilled food,
  - how you control and check humidity (if required),
  - that food is stored appropriately, labelled and covered.





# Knowing what's in your food

**K**

Know

---

## What do you need to know?

- The Australia New Zealand Food Standards Code (the Code) contains rules you may need to meet:
- The Code is found here: <http://www.foodstandards.govt.nz/code>
- The Code includes rules about:
  - which foods or ingredients are allergens,
  - which additives, preservatives and processing aids can be (or must be) used with particular foods,
  - ingredients that can't be used in food – or need to be approved before they are used,
  - composition rules that only apply to some foods, (e.g. fruit juice, edible oils etc.)
- You can check the Code or ask your consultant, verifier or registration authority for more information.
- If you think a food isn't labelled correctly, especially if it probably has an allergen that isn't listed (e.g. a frozen pie doesn't list wheat flour or gluten) – check with your supplier before selling it.

# K

## Know

### Why is knowing what's in your food is important?

- Rules about using some ingredients and inputs in food take into account the effects on human health across a whole diet lifetime. Sometimes use of ingredients or inputs is limited to certain foods to ensure people's health is not put at risk by getting too much, or too little, of a substance or nutrient. The rules also take into account views of the general public about what they expect to be in their foods (or not).
- New ingredients, or inputs, that are found or developed need to be assessed as safe before they can be used in foods.
- Knowing and being able to tell customers what's in your food will allow them to make informed choices. This is especially important for people with food allergies. Food allergies can result in life-threatening reactions that can occur within minutes of eating the food.
- If you are making foods on behalf of other businesses (e.g. a contract manufacturer) you are responsible for ensuring any ingredients used in your business are safe and suitable (it's not okay to receive mystery ingredients and mix them together).



**Retailers that handle food:** Even if you are selling food made and packaged by others, it's your responsibility to check that the food is labelled correctly. **'A guide to food labelling'** will help know what you should check for: <http://www.mpi.govt.nz/document-vault/2965>



Know



**Allergen Info:** There are 11 common food allergens you must know about. These are sulphites, cereals containing gluten (e.g. wheat), shellfish, eggs, fish, milk, peanuts, soybeans, sesame seeds, tree nuts and lupin.



Do

---

## What do you need to do?

- Keep details of the ingredients you use (e.g. write down and follow your recipes) so you know what ingredients and allergens they contain.
- Check recipes or specifications meet the rules in the Code.
- Check the labels of your ingredients or the foods you use.
- Any processing aids, additives (e.g. colours), preservatives, vitamins or minerals must be food grade and permitted for use.
- You must be able to tell customers whether a food contains each individual allergen if they ask. For packaged foods this information must be on the packaging. All staff must be able to tell your customers if your food contains allergens.
- If you think a food isn't labelled correctly, especially if it probably has an allergen that isn't listed (e.g. a frozen pie doesn't list wheat flour or gluten) – check with your supplier before selling it.

# S

## Show

---

### What do you need to show?

- Your verifier will:
  - ask how you know what is in the ingredients you use,
  - ask how you know the recipes or specifications you use meet the requirements of the Code.
- Your verifier may:
  - ask staff to tell them which foods contain allergens.



# Separating foods

## K

### Know

#### What do you need to know?

- Separation means using time or distance (or both) to:
  - prevent bugs on raw/uncooked food from getting on to cooked/ready-to-eat foods (e.g. salad),
  - keep food that doesn't contain allergens separate from foods that do,
  - keep non-food goods, like poisonous/dangerous chemicals or animal feeds, away from food,
- Allergens are listed in the **Know** section of '**Knowing what's in your food**'.
- Some simple steps can reduce the chance of accidental contamination:
  - use different spaces and equipment for foods likely to contain high numbers of bugs (like chicken or dirty vegetables) than foods that are cooked or ready-to-eat,
  - process raw/uncooked foods at different times from cooked/ready-to-eat foods, and thoroughly clean and sanitise surfaces,
  - washing hands, and if required, changing protective clothing (e.g. aprons) between handling raw/uncooked foods and cooked/ready-to-eat foods.

# K

## Know

- use different spaces and equipment, or
- process food at different times, or
- thoroughly clean and sanitise surfaces, boards, knives and other utensils between use.

### Why is separation is important?

- Accidental contamination of food is one of the most common reasons food becomes unsafe.
- Separating food will stop people getting sick and possibly dying.
- Poisons and dangerous chemicals can make people sick if they get into food.
- Processing all allergen-free foods before you process allergen-containing foods, can add some extra protection.



For a list of the allergens you need to know about see **'Knowing what's in your food'**.

# D

## Do

### What do you need to do?

- Keep raw/uncooked food from spreading bugs to cooked/ready-to-eat food.
- Keep foods that contain the allergens listed in the **Know** section of **'Knowing what's in your food'** from contaminating food/allergen free foods.
- Keep all products not intended for human consumption (e.g. chemicals and pet food) away from food.

# S

## Show

---

### What do you need to show?

- Show your verifier how you separate:
  - raw and cooked/ready-to-eat products,
  - allergen-containing foods and allergen-free foods,
  - dangerous chemicals or poisons and food.
- Your verifier may ask you or your staff to explain how they know which foods you make or serve contain allergens.







# Thoroughly cooking or pasteurising food

**K**

**Know**

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## What do you need to know?

- Thoroughly cooking or pasteurising food is:
  - heating food to a specific temperature and holding it at that temperature long enough to kill the bugs that can make people sick or die,
  - heating food evenly (preventing cold spots) to make sure all active/growing bugs are killed,
  - checking that the correct temperatures are reached every time.

## Why is thoroughly cooking or pasteurising food is important?

- Many foods can be contaminated with bugs that could make people sick or cause death.



Raw foods can be contaminated with thousands or millions of bugs.

- Cooking or pasteurising can kill these bugs and make your food safe to eat. It's important to check the temperature with a thermometer (or equivalent) because food can look cooked when it isn't and look uncooked when it is.
- Thorough cooking kills millions of bugs (1 in a million can be expected to survive). Higher risk foods (e.g. meat, poultry, rice) need to be thoroughly cooked.

# K

## Know

- Pasteurisation kills thousands of bugs (1 in 100,000 can be expected to survive).
- Pasteurisation can be used when other food safety controls will also be used, (e.g. refrigeration, acidification, fermentation, addition of preservatives to food and/or application of a use-by date and directions for use and storage).

# D

## Do

---

### What do you need to do?

- Identify the foods that need to be thoroughly cooked or pasteurised.

### Thoroughly cook

- Heat foods following one of the temperature/time combinations:

Internal temperature	Minimum time at temperature
75°C	30 seconds
73°C	60 seconds
70°C	3 minutes
68°C	5 minutes
65°C	15 minutes
63°C	31 minutes

# D

## Do

### Pasteurise food

- Heat foods following one of the temperature/time combinations in the table below:

Internal temperature	Minimum time at temperature
75°C	15 seconds
72°C	60 seconds
71°C	2 minutes
69°C	5 minutes

### Cooking or pasteurising

- If your registration authority has approved a different time/temperature combination, make sure you meet it.
- Heat the food evenly so all parts of it reach the temperature/time combination.
- Make sure the food doesn't become recontaminated with bugs after it has been cooked or pasteurised.
- After thoroughly cooking or pasturing:
  - secure the food immediately, or
  - keep the food above 60°C until it's served, or
  - rapidly cool the food.

# D

## Do

- When cooling freshly cooked food, it must get from:
  - 60°C to 5°C (or below) in less than 6 hours or it must be thrown out,
  - 60°C to room temperature or 21°C (whichever is colder) in less than 2 hours, then room temperature or 21°C (whichever is colder) to 5°C (or below) in less than 4 hours.

# S

## Show

---

### What do you need to show?

- Show your verifier:
  - your cooking or pasteurising process,
  - how you know you are meeting the time/temperature requirement(s) applicable to your food and process,
  - how you prevent recontamination of freshly cooked or pasteurised food,
  - how you cool your food (if applicable).



# Reducing water content in food

**K**

Know

---

## What do you need to know?

- If you are drying or concentrating your food to make it safe, there are water activity rules you need to meet.
- Water activity relates to the amount of water that is available, to support the growth of bugs, in your food. It is not the same as the overall moisture content of a food as some moisture in food is not available for bugs to use for growth.
- Lowering the water activity to less than 0.85 can prevent bugs from growing.
- **Concentration** lowers the water activity in your food by using evaporation, reverse osmosis, ultrafiltration or freeze concentration.
- **Drying** lowers the water activity and moisture content in your food using evaporation. Many dried foods are concentrated before being dried.

## Why is controlling water activity important?

- Harmful bugs need water to grow. Lowering the water activity removes the water bugs need to grow.
- Lowering water activity alone doesn't always kill harmful bugs. Lowering the moisture content of food often also has the effect of raising the salt or sugar concentration in foods – which can kill many bugs.

# K

## Know

- It's important that the method you use for concentration or drying results in water being removed evenly from the food. If there are some spots with a higher water activity, bugs can still grow in these parts and cause the food to become unsafe or unsuitable.
- Once the water activity of your food is below 0.85, it is important to protect it from absorbing water from the air, or other foods during its shelf-life. This can be done by:
  - using packaging that prevents moisture absorption, or
  - storing the food in a humidity controlled environment.
- If the water activity increases again, any bugs that are still alive can start growing again, and cause the food to become unsafe or unsuitable.

# D

## Do

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### What do you need to do?

- Identify the foods that need to be dried or concentrated.
- Only use methods you use for concentrating or drying foods that give an even result, or ensure that no part of the food has moisture content more than 0.85.
- The water activity for each batch of food must be below 0.85.

# D

## Do

- Use one of these methods to test the water activity of your food:
  - use a calibrated water activity meter, or
  - send samples to an accredited lab, or
  - prove that if you follow a consistent method that the water activity can be relied on to be below 0.85 (this option is recommended only when the target water activity is below 0.80).
- Package or store concentrated or dried foods in ways that prevent the food from absorbing water from the air, environment or other foods.

# S

## Show

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### What do you need to show?

- Show your verifier:
  - your method for concentration or drying,
  - how you know the water activity is below 0.85 for each batch of food,
  - how you know the water activity in the food is even, and that no part of the food exceeds 0.85,
  - how you make sure the finished food is prevented from absorbing water.







# Making food acidic

## K

### Know

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#### What do you need to know?

- If you ferment or acidify your food to make it safe, there are pH rules you need to meet.
- Lowering the pH to less than 3.6 kills most harmful bugs.
- Lowering the pH to between 3.6 - 4.6 creates an environment which harmful bugs find hard to grow in. If you lower the pH to between 3.6 - 4.6, you will still need to either pasteurise or thoroughly cook food to make it safe.
- It's important that the method you use to acidify food results in an even pH, throughout the food, to prevent bugs growing.
- **Fermentation** is when good bugs are purposefully grown in food to compete against harmful bugs and slow them down.
- When fermenting, you need to know the signs that the bad bugs are winning, so you can stop unsafe food being made.
- **Acidification** is when acid is added to food to stop or slow down the growth of harmful bugs.

# D

## Do

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### What do you need to do?

- Identify the foods that need to be fermented or acidified.
- If you're acidifying food, you must use a method that achieves a consistent pH.
- If you're fermenting food, you must use a method that allows the good bugs to grow well and evenly throughout your food.
- Use one of these methods to measure pH:
  - use a calibrated pH meter,
  - send samples to an accredited lab.



You can choose to prove your method works to achieve a consistent pH. Your method must be relied on to be +/-0.1 of the target pH.

- Test your final food to be sure the pH is stable at either:
  - 3.6 or less, or
  - between 3.6 - 4.6
- If your pH is between 3.6 - 4.6, you must also either pasteurise or thoroughly cook your food.

# S

## Show

---

### What do you need to show?

- Show your verifier:
  - how you ferment or acidify your food,
  - how you know the pH in the food is even, and is either less than 3.6 or between 3.6 - 4.6,
  - if you are fermenting, how you knew the fermentation is working,
  - if your pH is between 3.6 - 4.6, how you pasteurise or cook your food.



# Keeping foreign matter out of food

**K**

**Know**

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## What do you need to know?

- Many food complaints made to authorities are related to finding foreign matter in foods.
- Foreign matter includes dead pests (e.g. flies, mice etc.), hair, fingernails, band aids, coins or jewellery, bits of cleaning cloth, razor blades, nuts, bolts, plastic and cardboard, stones, twigs, glass, metal shards, etc.

## Why is managing the risk of foreign matter in foods important?

- Some foreign matter is unsafe, including hard or sharp objects like glass, hard plastic or stones etc. These can cause damage to the mouth, tongue, throat, stomach, intestine, teeth and gums.
- Keeping foreign matter out of food is important and can be done in a variety of ways. This depends on the types of foods and chance of foreign matter occurring.



## Know

- Food is unsafe if you think it contains:
  - glass,
  - hard or sharp foreign matter that measures 7mm to 25mm, in length, or
  - hard or sharp foreign objects less than 7 mm or between 25mm and 77mm in length and the primary intended consumers of the product are:
    - children under 6 years old,
    - elderly people,
    - people with dentures.
- Foreign matter from people or pests that gets into food that won't be treated (e.g. heated) to kill bugs (or after treatment to kill bugs) can cause people to get sick.
- Much of the foreign matter found would not cause illness or harm, but could damage your reputation.
- Even if foreign matter doesn't cause harm or make your customer sick, they will often link it to unsafe food practices.
- Many of the procedures in this guide will help, but you could also consider filtration or sieving, visual inspection, colour sorting, implementing jewellery policies for workers, metal detection, x-ray inspection, etc.

# D

## Do

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### What do you need to do?

- Implement procedures to prevent foreign matter getting into food and/or to detect foreign matter in final products.
- Always make sure nothing in your process contaminates your food with foreign matter.
- Calibrate and check the performance of any foreign matter detection equipment such as metal detectors, x-ray or colour sorting units.

# S

## Show

---

### What do you need to show?

- Show your verifier:
  - how you keep foreign matter out of food, or check that it is not present in final foods,
  - how you know any foreign matter detection equipment is regularly calibrated.





# Packaging and labelling

## K

### Know

#### What do you need to know?

- Unsafe and/or unsuitable packaging can make your food unsafe. You need to know that the packaging you use is food grade so it keeps your food safe.
- Not all foods have to be labelled, but for those that are, the labels must meet the rules in the Australia New Zealand Food standards Code (the Code).
- Foods can become unsafe over time, even though they still might look, smell and taste OK. It's important to let your consumer know when to eat your food by, by calculating the shelf-life and providing a Best Before or Use By date. You need to make sure you calculate this date correctly.

#### Package

- Only use packaging that doesn't cause, or contribute to, food becoming unsafe or unsuitable.
- Check that packaging is food grade when you buy it. Either:
  - purchase packaging labelled as being suitable for food, or
  - get an assurance from your supplier that it is food grade.



## Know

- Check that packaging is intended for your type of foods or use (e.g. honey drums have a liner suitable for use with acidic foods, that won't flake, peel or degrade).
- Handle and store packaging with the same care as a food or ingredient.
- If you are packaging food:
  - calculate the food's shelf-life,
  - identify whether you need to either:
    - label your food, or
    - provide a packing or specification sheet with bulk foods.

### Why is packaging important?

- Packaging protects your food from becoming unsafe or unsuitable.
- Anything that touches your packaging (i.e. bugs, chemicals or foreign matter) can make your food unsafe or unsuitable.

### Labelling

- You must meet the rules about labelling in the Code for any foods you label.
- If you are supplying bulk foods these will generally need to be accompanied with a packing or specification sheet. You must supply the same information that would go on the food label.
- Labels or specification sheets will generally need to include:
  - name of the food,
  - lot/batch identification,





## Know

- name and address of your New Zealand or Australian business,
  - any applicable advisory statements, warning statements and declarations,
  - any conditions for storage and use,
  - ingredients list,
  - date marking (e.g. use-by, best before etc.),
  - nutrition information panel,
  - information about nutrition, health and related claims (only if you've made a claim),
  - information about characterising ingredients and components,
  - if the product is or has been made with genetically modified foods or irradiated foods.
- 
- If you receive or supply any bulk food, you must check that any label information that is needed is also supplied.



Not all foods need this, e.g. fresh fruit and vegetables

- If your food doesn't have to be labelled, you must still be able to tell your customers:
  - what's in the food,
  - any warning statements,
  - if the food is made from or contains genetically modified ingredients or irradiated foods.



## Know

### Why is labelling important?

- Labels allow your customers to make good and safe food choices.
- Some of your customers may have medical conditions (e.g. allergies) which require them to include or avoid certain foods in their diet.
- Consistency in the layout of label (e.g. having a nutrition information panel and using minimum font sizes) can help your customers make good food choices.
- MPI has developed a guide to help you create your food label. Follow 'A guide to food labelling' <https://www.mpi.govt.nz/document-vault/2965> to write your label.

### Why calculate the shelf-life of a food

- You may need to work out the shelf-life of a food so that you can apply either a use-by or best before date.
- There is a guide to help you work out shelf-life. Follow 'How to determine the shelf-life of food' <http://mpi.govt.nz/document-vault/12540>
- Food that has a shelf-life of more than 2 years, or is an individual portion of ice cream or ice confection (e.g. a popsicle) does not need to be date marked.

# D

## Do

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### What do you need to do?

#### Package

- If you are packaging food:
  - calculate the food's shelf-life,
  - identify whether you need to either:
    - label your food, or
    - provide a packing or specification sheet with bulk foods.

#### Label

- You must meet the rules about labelling in the Code for any foods you label.

# S

## Show

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### What do you need to show?

- Show your verifier:
  - your packaging and how you know it is safe and suitable for the foods you are packaging,
  - your food labels and how you know what to put on your labels.
- Your verifier might:
  - how you worked out the shelf-life of a food.





# Transporting food

## K

### Know

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#### What do you need to know?

- Food can become unsafe at any point in the supply chain.
- If a food needs to be kept under temperature or humidity control to stop bugs from growing to levels that will make people sick, it is important to make sure temperature/ humidity is kept constant through the whole chain – including while being transported.
- While food is being transported, the vehicle it's being transported in should be considered a food premises or food room – keep it clean and separate food as you would in a kitchen or store room.
- If you are contracting someone else to transport food, you need to check that they are a registered food business.
- Food and non-food goods need to be kept separate.
- Only use vehicles suitable for the type and amount of food being transported.

## D

### Do

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#### What do you need to do?

- All parts of the vehicle that you use to transport food or food equipment must be clean (and sanitised if going to be in direct contact with ready-to-eat food).

# D

## Do

- Always transport and deliver food at the correct temperature:
  - keep frozen food frozen,
  - transport chilled food cold (at or below 5°C) and monitor this regularly (using a thermometer or equivalent),
  - transport hot food hot (above 60°C),
  - only deliver food in the temperature danger zone (5°C-60°C) if it's going to be eaten within 4 hours of entering the temperature danger zone.
- Control and check humidity or atmosphere conditions where this is required to keep food safe.

# S

## Show

---

### What do you need to show?

- Show your verifier:
  - how you check food is kept at the correct temperature and/or humidity when being transported,
  - how you control temperatures and keep foods separate while transporting food,
  - your vehicle(s) used for transporting food.



### Will you keep records for this?

You must keep temperature and/or humidity records for each transport vehicle and transport run, where these are required to be controlled



# When something goes wrong

**K**

Know

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## What do you need to know?

- When things go wrong (and they will sometimes), you need to take immediate action to keep food safe and suitable. This could include:
  - isolating affected product and preventing it being used, distributed or sold (in some cases you might be able to reprocess the food to make it safe and suitable). It may need to be recalled if it's already been sold or distributed,
  - contacting your verifier. They can help you identify options for what you can do to fix it, if you need them to. (They will not fix the problem or make decisions for you).

## Why is having a process in place for when something goes wrong important?

- People will sometimes make mistakes that can affect food safety or suitability. It is important these mistakes are dealt with and any food that is not, or might not be safe and suitable, is not sold. See '**Recalling food**'.
- If a customer complains about your food or something they have seen in your business related to food safety or suitability, you need to investigate it.
- If it turns out something has gone wrong, the same steps outlined in the **Do** section below apply.

# D

## Do

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### What do you need to do?

- Set-up procedures that allow you to react quickly when something goes wrong.
- As soon as a problem affecting food safety and/or suitability is identified:
  - identify all food that is, or could be unsafe or unsuitable,
  - prevent it from being sold or, determine if a recall is necessary,
  - notify your verifier that there is (or has been) a problem as soon as possible,
  - fix the problem,
  - take action (or make changes) to prevent the problem from happening again,
  - keep clear, accurate records of all the actions you took once the problem was identified. You must keep these records for at least 4 years.

# S

## Show

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### What do you need to show?

- Show your verifier:
  - how you investigate customer complaints,
  - what you do when something goes wrong.
- Your verifier might ask:
  - about things that have gone wrong, and what has happened since,
  - to see records for things that have gone wrong,
  - staff what they do if they make a mistake which affects food safety or suitability.





# Recalling food

## K

### Know

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#### What do you need to know?

- There are 2 kinds of recall:
  - trade level – where food that has been distributed to stores is being recalled,
  - consumer level – where there is public notification of the recall.
- There are 2 main reasons you might need to recall food:
  - something has gone wrong in your business,
  - something has gone wrong in a supplier's business and you have already used the ingredient, input, equipment, packaging or food they are recalling.
- The records you must keep can help in your procedure for recalling food. Traceability is extremely important in a recall situation.
- A recall is needed if you have doubts your food is safe and suitable and you have already sold or distributed some or all of it.
- A recall procedure is not needed if you only sell food directly to the final consumer and is for immediate consumption.



## Know

### Why is having a recall procedure important?

- If you think food may be unsafe or unsuitable and it has already been sold, it is your responsibility to do everything you can to prevent that food from making people sick.
- It's important to consider if:
  - you can quickly identify which trade customers have the food and how you will contact them,
  - you have to notify the public not to eat the food you are likely to need to take out media advertisements, and will need to arrange this.
- It's important to give useful advice to the customer e.g. anything they need to do (e.g. certain symptoms) if they have already eaten the food?
- There are a number of organisations that provide guidance to help develop a recall procedure, including MPI. see <http://www.foodsafety.govt.nz/elibrary/industry/recall-guidance-material-template/>.
- It is useful to test your recall procedure once in place.
- You should work out how you will know if the recall is successful e.g. how much product was distributed compared to how much you got back, and/or how quickly you were able to recall the product.
- You should test your recall procedure occasionally by having mock recalls.

# D

## Do

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### What do you need to do?

- Recall food that you know is or might be unsafe or unsuitable (that is likely to be in the food chain or customers' homes (hasn't been eaten yet)).
- If you decide to recall, you must:
  - notify MPI as soon as possible and at least within 24 hours,
  - call 0800 00 83 33 and ask for the Food Compliance team (if during work hours) or ask for the on-call MPI Food Safety Officer (if calling after hours).

# S

## Show

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### What do you need to show?

- Show your verifier:
  - the procedure or plan you have in place to recall food if you have to,
  - records for any mock recalls you have carried out,
  - records for any food recalls you have carried out.

