



# Guide to Good Hygiene Practice



*Published by:*

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ISBN 1-904465-03-X



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# Letter from The Chairman

## Welcome to Country Markets Ltd.

This *Guide to Good Hygiene Practice* is the collaborative work of the Food Safety Authority of Ireland, the Health Service Executive and Country Markets Ltd.

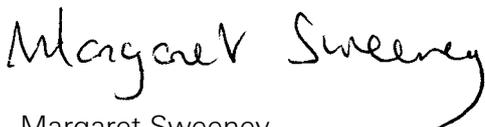
The guide is aimed at the low-risk producers in country markets who account for the majority of food produced and sold at our weekly markets. Producers of high-risk foods are directed towards the Food Safety Authority of Ireland's *Safe Catering Pack* for best practice.

Country Markets Ltd is a national cooperative established in 1946, with branch markets throughout the country and currently has 1,042 members. All branches are governed by the same rules, see [www.countrymarkets.ie](http://www.countrymarkets.ie). Country Markets Ltd is a co-operative society which runs local markets throughout Ireland in order to sell fresh farm, garden and home produce and craftwork of its members.

Country Market Ltd products are sold directly to the customer. A standard label is used on pre-packed food items which include the Country Markets Ltd logo, branch location, individual producer number, a list of ingredients on baked/cooked produce and the national organisations address. Loose baked products are also sold at some of our markets.

The branch market rather than the individual member registers with their local environmental health officer in the Health Service Executive. An up-to-date list of producers is available at each market.

I recommend using this guide to help maintain a high standard of food safety within Country Markets Ltd.



Margaret Sweeney  
**National Chairman**  
**Country Markets Ltd**

## Foreword

This is a guide to good hygiene practice to assist members when producing low-risk food at home for sale at Country Markets Ltd venues around the country. It has been developed by Country Markets Limited, the Health Service Executive's (HSE) Environmental Health Service and the Food Safety Authority of Ireland (FSAI).

Your kitchen is firstly for normal domestic use. Any food you produce there for sale must be done on a domestic scale. Food produced for sale is limited to what you can produce safely using domestic scale equipment and appliances. The only additional equipment that may be used is a second domestic fridge for storing ingredients or finished products.

In order to produce safe food, it is essential you understand the risks involved and how to control them. Before you start, you must have basic food hygiene conditions and practices in place (these are called 'pre-requisites'). You must also know what can go wrong in your kitchen, what you can do to prevent it and make sure you are doing it. In simple terms, it involves controlling ingredients and supplies coming into your kitchen and what you do with them after that.

This guide lists "What can go wrong" to make food unsafe to eat. It also sets out what must be done to prevent these things from going wrong. These preventative measures are listed under the heading 'How can it be prevented' and they must be followed.

Country Markets Ltd members traditionally produce mainly low-risk foods. This guide focuses on these activities. If you produce high-risk food, we recommend that you use the FSAI's *Safe Catering Pack* or *Irish Standard I.S. 340:2007 Hygiene in the Catering Sector* (available from the National Standards Authority of Ireland). The reason for this is that in addition to knowing what can go wrong and how to prevent it, when high-risk food is being produced, you also need to check that what you are doing is correct (monitoring and verification) and what to do if it is not (corrective action) in a more structured way. Definitions and examples of low and high-risk foods can be found in Part 1 of this guidance.

### NOTE:

**Everyone's domestic kitchen and circumstances are different and not every kitchen will be suitable for the safe production of food for sale outside of the home, particularly high-risk food.**

Recommendations contained in this guide are best practice and not legal requirements.

Your kitchen is subject to inspection by your local environmental health officer (EHO) from the HSE. How often your kitchen may be inspected will depend on the level of risk associated with the food you produce. If you are producing high-risk food, it is strongly recommended that you contact your local EHO before you start to discuss what you propose to do and what requirements you will be expected to meet.

If you produce honey, you may be supervised by the Department of Agriculture, Food and the Marine (DAFM).

If you produce food at the market (apart from teas and coffees) it is outside the scope of this guidance. You will need to follow the FSAI's *Guidance Note No. 16: Food Stalls*; the FSAI's *Safe Catering Pack* or *Irish Standard I.S. 340:2007 Hygiene in the Catering Sector*.

*"In order to produce safe food, it essential you understand the risks involved and how to control them."*

# Part 1: General

## Purpose and Scope

The purpose of this guide is to set out what is required for members of Country Markets Ltd to comply with food law.

This *Guide to Good Hygiene Practice* meets the requirements of Regulation (EC) No 852/2004 as amended on the hygiene of foodstuffs. The European Communities (Hygiene of Foodstuffs) Regulations, 2006 [S.I. No. 369 of 2006 as amended] gives effect to this European Communities Regulation.

This guide applies to those members involved in the production of foodstuffs for sale at the markets operated by Country Markets Ltd, provided that they are working on a domestic scale in premises used primarily as a dwelling house. Domestic scale means the quantity of food that can be produced safely in a domestic kitchen, using domestic scale equipment and appliances. The only appliance that may be added to the appliances normally found in a domestic kitchen, is a second domestic fridge.

The scope of this guide is aimed at those members producing low-risk food.

Such food producers would include people involved on a domestic scale in the production of:

- Baked products
- Preserves
- Chocolates
- Production and packaging of honey

Food producers, who prepare or produce food in their home for sale at the markets operated by Country Markets Ltd and who comply with the requirements of this guide will also comply with the requirements for food safety in the European Communities (Hygiene of Foodstuffs) Regulations, 2006 as amended. Regulations also exist on issues other than food safety, e.g. food labelling, and these also must be complied with. See the FSAI's factsheet *Food Information for Consumers at Markets operated by Country Markets Limited* for more information.

## Structure of the Guidance

This guide is set out in four parts:

- Part 1: General
- Part 2: Notification and Registration
- Part 3: Requirements under General Food Law
- Part 4: Hygiene Requirements

## Definitions

**Contamination:** The presence of undesirable chemicals, e.g. detergent; foreign bodies, e.g. glass; or living organisms, e.g. *Salmonella*, in a food, e.g. a cooked chicken product is contaminated with *Salmonella*

**Cross-contamination:** The transfer of microorganisms from one source such as raw food, people, equipment or the environment, to another source such as cooked food, e.g. raw meat held on the top shelf of a fridge drips onto a cake held on the bottom shelf and bacteria will spread from the meat to the cake

**Detergent:** A chemical used to remove grease, dirt and food particles from a surface, e.g. washing-up liquid, soap

**Disinfectant:** A chemical or process used to reduce numbers of microorganisms but not necessarily microbial spores on a surface to a safe or acceptable level, e.g. chlorine, i.e. bleach, ultra-violet light

**Domestic Scale:** The quantity of food that can be produced safely in a domestic kitchen, using domestic scale equipment and appliances; where the only appliance that may be added to the appliances normally found in a domestic kitchen, is a second domestic fridge

**HACCP (Hazard Analysis and Critical Control Point):** A systematic approach to identifying and controlling hazards, i.e. dangers that could pose a danger to the preparation of safe food. HACCP involves identifying what can go wrong; planning to prevent it and making sure you are doing it

**Hazard:** Something that has the potential to cause harm. Hazards, i.e. dangers, may be biological, chemical or physical, e.g. *Salmonella* in cooked chicken (biological hazard), detergent in milk (chemical hazard) or glass in a breakfast cereal (physical hazard).

- Biological hazards include the contamination of food by microorganisms or their toxins and the growth and survival of microorganisms.
- Chemical hazards include the presence of pesticides and detergent residues at unacceptable levels.
- Physical hazards include hair and insects.

**High-risk food:** Food which are ready to eat, may contain or can support the growth of dangerous organisms, i.e. pathogens, and which will not be subjected to any further processing, such as cooking, which could destroy or reduce numbers of such organisms to a safe level prior to consumption, these include fresh soft fruit, leafy green vegetables, freshly prepared salads, cooked pasta, meats and dairy products

**Low-risk activity:** Activity where the potential to cause harm to consumers is low, e.g. baking biscuits and brown bread

**Microorganism:** A life-form that generally cannot be seen with the naked eye, e.g. bacteria, viruses, yeasts, moulds and parasites

**Potable water:** Water meeting the minimum requirements laid down in Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption. S.I. No. 122 of 2014 transposes this Directive. Potable water, drinking water and water intended for human consumption have the same meaning

**Prerequisites (prerequisite hygiene requirements):** Hygienic practices and procedures that must be in place before and while producing food, e.g. premises, equipment, staff training, pest control, and waste management

**Sanitiser:** A chemical or process used to clean and reduce numbers of microorganisms on a surface, e.g. chlorine, ultra violet light

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## Classification of Foods

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From a microbiological perspective, foods can be classified under three headings:

- High-risk foods
- Medium-risk foods
- Low-risk foods

### HIGH-RISK FOODS

High-risk foods are foods (including beverages) that are ready-to-eat, may contain or can support the growth of dangerous organisms, i.e. pathogens, and will not be subjected to any further processing, such as cooking, which would destroy or reduce numbers of such organisms to a safe level prior to consumption. These include raw seafood, freshly prepared salads, some meats and dairy products. Ready-to-eat food is any food which is normally consumed in its raw state or food which has been cooked or processed and does not require further cooking or processing to ensure its safety, e.g. coleslaw, cooked sliced meats and smoked salmon. High-risk foods also include foods that have been substantially handled after they have been cooked, such as loose or packaged sliced meats, sandwiches and salads; and foods eaten after their 'use-by' date.

The following ready-to-eat foods are high-risk foods:

- Fish and shellfish, cooked and raw
- Meat and meat products cooked and raw, particularly undercooked or lightly cooked meat
- Cooked poultry and poultry products
- Cook-chill and cooked freeze meals
- Milk and milk products, particularly unpasteurised milk and milk products
- Eggs and egg products, particularly products made from raw egg such as tiramisu, mousse and homemade mayonnaise
- Cooked rice and cooked pasta
- Salads
- Soft fruits and leafy green vegetables
- Pre-prepared fresh fruit and salad
- Raw sprouts and sprouted seeds
- Fresh hummus, if made using tahini paste
- Unpasteurised fruit and vegetable juices
- Unchlorinated drinking water from private wells and group scheme sources
- Food containing the above as ingredients, e.g. sandwiches, baked goods

High-risk foods must be kept at or below 5°C or above 63°C. They must not be handled unnecessarily and they must be segregated from raw foods.

### MEDIUM-RISK FOODS

Medium-risk foods are foods which contain pathogens or support the growth of food poisoning microorganisms but require cooking or other processing which will eliminate or reduce numbers of such organisms to an acceptable level.

Medium-risk foods would include raw foods which may contain food poisoning microorganisms. They include:

- Fish
- Meat and meat products
- Poultry and poultry products
- Eggs and egg products
- Vegetables
- Fruit juices

Store these foods at or below 5°C. This will minimise the growth of food poisoning microorganisms, if they are present. To avoid cross contamination, segregate these foods from high-risk foods. This is most important.

Fresh whole eggs in intact shell do not require refrigeration before they reach the final consumer, i.e. at retail level or if produced on the member's farm before they are sold from the market stall. Eggs should be stored at a consistent temperature to ensure optimal conservation of their quality. Ideally, the storage temperature should be less than 20°C. High temperatures encourage moisture loss and quality reduction. However, the storage at home of fresh whole eggs in intact shell, i.e. once they are purchased from the Country Markets Ltd stall or purchased by a member from a retail outlet, must be at or below 5°C.

#### NOTE:

**Normal cooking will kill food poisoning microorganisms. It will not destroy the toxins which some microorganisms produce. These toxins are poisonous if consumed in large amounts.**

### LOW-RISK FOODS

Low-risk foods are foods which do not support the growth of food poisoning microorganisms or foods that have been thoroughly cooked and served direct from the oven or pot.

The following foods are low-risk foods:

- Butter
- Sugar
- Salt
- Dried foods such as pasta, spices and milk powder
- Canned and long-life food products
- Cereals such as oats, wheat and corn
- Breakfast cereals
- Jams/Marmalades
- Long life sauces and dressings
- Flour
- Fruit (other than soft fruit)
- Long-life pickled products
- Oils and fats
- Biscuits
- Sweets
- Tea/Coffee/Most beverages (not including milk or fruit juices)
- Bread
- Fresh pesto
- Fresh hummus, if not made using tahini paste

They must be treated as high-risk foods if they have to be stored in a fridge, e.g. spreads, which are a blend of oils/fats and water, some handmade chocolates and foods which require refrigeration once opened.

Low-risk foods rarely contain food poisoning microorganisms. They may contain microorganisms which cause food spoilage. Raw flour, for example, often contains mould which will grow if the flour becomes damp or even *Salmonella* from time to time. Flour dust in bakeries is often the cause of finished bakery goods becoming mouldy.

While a range of high, medium and low-risk foods are listed above as examples of typical foods that fall into the three classifications, some of these foods may not be produced or sold at Country Markets Ltd markets. The lists are designed to assist members when deciding if their business comes within the scope of this guidance or not.

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## Food Law

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Food must be safe for consumers to eat. Food legislation lays down rules which food producers must comply with in order to supply safe food. The hygiene rules apply to all food businesses, but the legislation does allow some flexibility based on risk. Other pieces of food legislation deal with issues such as traceability, food information (labelling), marketing standards and food contact materials, e.g. packaging.

The main rules that apply are:

- General food law – safe food and traceability
- Hygiene of foodstuffs – notification, hygiene and HACCP
- Food information regulations – general and product specific

Other specific rules may apply to certain food production.

Most of Ireland's food law comes from EU legislation. Generally, EU legislation is transposed into Irish law (Statutory Instruments) in order to authorise organisation(s) to enforce the legislation in Ireland, and also to lay down penalties for non-compliance with the legislation.

Taking the hygiene of foodstuffs legislation as an example, the EU legislation is Regulation (EC) No 853/2004 on the hygiene of foodstuffs, which is transposed into Irish law as the European Communities (Hygiene of Foodstuffs) Regulations, 2006 [S.I. No. 369 of 2006].

### WHERE CAN YOU FIND THE LEGISLATION?

It is important that you read the legislation so you can work out how it applies to your food business. There is a comprehensive food legislation section on the FSAI's website: [www.fsai.ie](http://www.fsai.ie) from which both EU and national legislation can be downloaded. Irish legislation is also available free of charge to download from The Stationery Office, Government Publication's website: [www.irishstatutebook.ie](http://www.irishstatutebook.ie).

As well as the legislation itself, the EU and the FSAI have produced guidance documents to help you understand the requirements. Information is available on the legislation and publications sections of the FSAI website: [www.fsai.ie](http://www.fsai.ie) and from the FSAI Advice Line on 1890 336677.

The essential elements of food law that apply to your business are discussed in the following parts. For convenience, extracts from the hygiene legislation are included in Appendix A.

## Part 2: Notification and Registration

All food producers must notify their local HSE Environmental Health Office. As Country Markets Ltd operates as a co-operative, each branch of Country Markets Ltd will notify the HSE on behalf of its members. Individual members will supply details to their branch chairman. Country Markets Ltd National Secretary will sign each branch notification form and forward it to the HSE. The chairman of each branch will ensure that up-to-date lists of members and their details<sup>1</sup> will be available to EHOs.

A Country Markets Ltd member who trades as a food business operator outside of the organisation will be required to notify the HSE on an individual basis.

On receipt of the notification form, the HSE will register the branch.

As Country Markets Ltd operates as a co-operative, should any matters arise following an inspection of a market or a member's premises, Country Markets Ltd will take responsibility. Any correspondence from the HSE will be addressed to Country Markets Ltd's national office and the branch secretary copied. Where an individual member is involved, they will be copied also.

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<sup>1</sup> This includes name, address, contact details and types of foods produced (per Country Markets Ltd template)

# Part 3: Requirements Under General Food Law

## Introduction

Regulation (EC) No 178/2002 sets down the general principles of food law which must be followed, e.g. labelling (food information), food safety requirements, product withdrawal and recall and traceability. Some of these principles have been set out in more specific rules and guidance. This regulation is transposed into Irish law by the European Communities (General Food Law) Regulations, 2007 [S.I. No 747 of 2007]. The requirements of this Regulation apply to anyone producing food to be placed on the market regardless of the type, size or quantity of food involved.

## Food Safety Requirements

Unsafe food must not be placed on the market. Unsafe food is food that is injurious to health or unfit for people to eat. Where you become aware that food you produced is unsafe and has been sold at the market, e.g. consumer complaint, the customer and the HSE must be told. If you have concerns, ask your EHO for advice as to what you should do. The best way to tell the customer is to put up a notice at the market stall and comply with any other request by the EHO.

## Traceability

All food businesses must have an effective traceability system in place. You must be able to trace food one step back to your suppliers and if you are supplying food to other businesses, one step forward to your customers. As members of Country Markets Ltd are selling directly to the final consumer, supplier traceability is all that is required:

- Supplier traceability is particularly important if a food safety problem is discovered by your supplier and you need to identify which products you received from them. You need to keep the following information for all products supplied to you: name and address of supplier, e.g. wholesaler, importer or manufacturer
- Accurate description of product supplied
- Date of delivery/purchase

This information may be contained on the invoices, receipts or dockets you get from your supplier.

In addition to the general rules for traceability above, more specific information is required for food of animal origin, e.g. milk or eggs used for baking. The additional information required for foods of animal origin is:

- The volume or quantity of the food
- A reference identifying the lot or batch

It is best practice to keep this additional information for all products supplied to you and not just for those of animal origin. Records must be kept at least until the food is likely to have been consumed. This varies depending on the food concerned. As a rule of thumb, this means that the information must be kept at least until after the 'use-by' or 'best-before' date on the food has passed. Keep documents such as invoices and receipts in a way that makes it easy for you or an EHO to check.

Traceability is also required for packaging and other materials and articles intended to come into contact with food. Regulation (EC) No 1935/2004 requires that food business operators should at least be able to identify the businesses from which, and to which, packaging and other materials and articles are supplied.

Further information on traceability is available in the FSAI's *Guidance Note No. 10 Product Recall and Traceability*.

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## Food Information for Consumers

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Food information for consumers (food labelling) is used to inform consumers of the properties of foods. The most important rule is that the labelling, presentation and advertising of food (including its shape, appearance or packaging) must not mislead the consumer. This includes the way food is displayed and any information supplied with it, e.g. menu boards, leaflets and information displayed at the market.

The labelling that must be applied to food is dependent on the type of food being placed on the market and whether it is sold loose or pre-packaged. Allergen labelling will be required for loose food from 13th December, 2014.

There are general labelling rules which apply to all prepacked foodstuffs placed on the market. Along with the general labelling rules, there are additional labelling rules and marketing standards which apply to specific products or where claims are made, including nutritional or health claims.

Further information on the legal requirements for food information for consumers sold at markets is available on the FSAI website [www.fsai.ie](http://www.fsai.ie) and specifically in the FSAI's Factsheet: *Food Information for Consumers at Markets operated by Country Markets Ltd.*

*“All food businesses must have an effective traceability system in place. You must be able to trace food one step back to your suppliers and if you are supplying food to other businesses, one step forward to your customers.”*

# Part 4: Hygiene Requirements

## General

To produce food on a domestic scale which is safe to eat you must:

- Comply with general rules which relate to food hygiene
- Use the principles of HACCP to identify, evaluate and control hazards that are significant for food safety, where necessary

Basic food hygiene conditions and practice called 'prerequisites' must be in place in your kitchen and at the market. Prerequisites include, where appropriate:

- Supplier control
- Cleaning and sanitation
- Maintenance
- Personal hygiene
- Pest control
- Plant and equipment
- Premises and structure
- Services (compressed air, ice, steam, ventilation, water etc.)
- Storage, distribution and transport
- Waste management
- Zoning (physical separation of activities to prevent potential food contamination)

When these prerequisites are in place you then need to look at the steps you use to produce and market your food. The flow diagram in the section on food production includes most of the activities/steps in your business. You might not be doing all these activities, in which case you can skip to the next activity/step that applies to you.

In the section on food production, the principles of HACCP are used to identify what can go wrong to make food unsafe to eat. This is done for each activity/step. The measures that are necessary to prevent things going wrong are then identified. They are listed under 'How can it be prevented?' So if you follow this part for the prerequisites and for the activities/steps in the food production section that apply to your specific business, you will have complied with your legal requirements.

## Domestic Premises

### WHAT CAN GO WRONG (WHEN USING DOMESTIC PREMISES)?

- Food can become contaminated as a result of:
  - Normal domestic activities
  - Poor hygiene
  - People, pets or pests entering the food preparation areas
  - Facilities being too small
  - Working when ill
  - Changing/feeding babies in the food preparation area
  - Cleaning chemicals
- Production of too much food for the size of the kitchen
- Insufficient/unsuitable fridge space to keep food chilled
- Lack of equipment necessary to cool food fast enough after cooking
- The type of food being produced or the process involved presents too high a risk to take place safely in a domestic kitchen

### HOW CAN IT BE PREVENTED?

- Make sure that the areas where food is to be prepared or produced are:
  - Not used as sleeping quarters for people or pets
  - Cleaned before starting to prepare or produce food
  - Not used for normal domestic activities when preparing or producing food

#### NOTE:

**Normal activities would include consuming food, preparing food for domestic consumption, and sorting, washing, drying, ironing and folding clothes.**

- Clean and disinfect or sanitise, before use, the surfaces and equipment that cooked or ready to eat food comes into contact with. Only use clean utensils and equipment including dish cloths and tea towels.
- While food is being prepared or produced, keep children including infants, non-food workers, animals and pets out of the preparation area.

**NOTE:**

**Pets should always be kept out of the kitchen.**

- iv. If you are producing or using a medium/high-risk food, you have to store it in a fridge. A separate fridge is required for this purpose. The family fridge cannot be used. Where a separate fridge is required, ingredients which require refrigerated storage, must be stored in this fridge. Store cooked food above raw food.
- v. Wash your hands properly and frequently, particularly after using the toilet, handling refuse, raw food etc. Make sure that you have a wash hand basin/separate sink solely for use for hand washing, in or close to the food preparation area.
- vi. You must limit the amount of food you produce to the amount that you can safely produce in your kitchen. This will depend on the type of food you produce, the size of the kitchen, the storage you have and the risks of contamination and cross contamination.
- vii. Do not work if you are ill, particularly if suffering from vomiting/diarrhoea, infected skin wounds, flu, coughing and infections of the mouth, throat, eyes or ears.

**RECOMMENDATIONS**

- i. Machines used for washing or drying clothes should not be located in the kitchen or in an area where food is stored.
- ii. You should have a wash hand basin for washing your hands in the kitchen.

**Prerequisites****Premises****WHAT CAN GO WRONG (WHEN THE PREMISES ARE NOT SUITABLE)?**

- i. Food can become contaminated as a result of normal domestic activities.
- ii. Food can become contaminated from the environment in which it is prepared or stored.

**HOW CAN IT BE PREVENTED?**

- i. Keep the area around the premises clean and tidy.

**NOTE:**

**This will help prevent the breeding of insects and prevent dirt being brought into the premises on shoes or boots.**

- ii. Maintain the areas used for food preparation and storage so that they can be properly cleaned. This includes the tops of presses, ceilings, walls and floors.
- iii. Make sure that there is no flaking paint and replace damaged tiles and damaged grouting between tiles.
- iv. Make sure that floors are durable and that floors and walls can be cleaned.
- v. Surfaces which will be in contact with food must be kept in good condition, be easy to clean and where necessary, to disinfect. The materials used must be smooth, washable, corrosion-resistant and non-toxic.
- vi. Make sure that countertops and tables etc. are free of cracks and crevices.
- vii. Provide sufficient natural or artificial ventilation so as to prevent condensation on the ceiling or walls.
- viii. Make sure that the level of lighting is sufficient at all times to allow food to be handled safely, and cleaning to be carried out effectively.
- ix. Keep ornaments and any other knick-knacks in the kitchen or food storage areas to a minimum. If present, they must be kept clean.
- x. Store cleaning chemicals safely so as to prevent contamination of food.

**NOTE:**

**Normal domestic finishes are suitable if they are in good repair and kept clean.**

## Equipment

### WHAT CAN GO WRONG (WHEN USING EQUIPMENT)?

- i. Unsuitable or damaged equipment can lead to the contamination of food.
- ii. Food can be stored, cooked and/or cooled at incorrect temperatures if equipment is faulty.

### HOW CAN IT BE PREVENTED?

- i. Use only domestic scale equipment which was manufactured for food use and which has not been used for other purposes.
- ii. Do not use broken or cracked equipment.
- iii. Make sure that the fridges and freezer are capable of storing food at the correct temperature.

#### NOTE:

**Food in fridges must be kept at 5°C or lower and in a freezer at -18°C or lower.**

- iv. Check freezers regularly to make sure they are working properly. Use visual clues like frosting on food, any defrosting, signs of water damage to boxes etc.
- v. Have equipment installed so that it does not lead to the build-up of dirt in, under or around it.
- vi. Maintain equipment in good repair.

### RECOMMENDATIONS

- i. The kitchen sink should be a double sink so as to allow equipment and utensils to be washed in one sink and then rinsed in the other sink. Alternatively, one sink and a dishwasher should be provided.
- ii. Fridges should be fitted with a fridge thermometer which shows the actual temperature rather than a dial.
- iii. Thermometers should be tested periodically to make sure they are working properly. A simple check is to immerse the thermometer in iced water (0°C) and boiling water (100°).

## Water and ice

### WHAT CAN GO WRONG (WHEN USING WATER AND ICE)?

- i. Both water and ice can be contaminated with microorganisms, chemicals or foreign bodies.

### HOW CAN IT BE PREVENTED?

- i. You must have an adequate supply of potable water (drinking water), which is to be used whenever necessary to ensure foods are not contaminated.
- ii. Use only potable water for making ice, washing food, cooking and rinsing food contact surfaces.
- iii. You must know the source and quality of the water you use. If you are on a private well, it must be properly maintained and the water treated to meet the legal standards for potable water.
- iv. You must know the internal plumbing arrangements in your premises. The internal plumbing must be maintained in such a condition that it does not cause, contribute to, or give rise to a risk of non-compliance of the potable water with the legal standards.
- v. Only water taken directly from the incoming pipe (from the rising main if you are on a public supply or from the well if you are on a private supply) can be regarded as potable water. Water cannot be regarded as drinking water if it has been stored in a tank or if the sanitary authorities have issued a warning that the water is unsuitable for drinking.
- vi. Water taken from a private well or a group scheme can only be regarded as drinking water if it has been tested at the point of use and at the frequency required by S.I. No. 122 of 2014: European Communities (Drinking Water) Regulations, 2014. It must comply with these Regulations.

If you are on a private well, you must take special care to ensure the drinking water is not contaminated. The main risk to your well is contamination from human or animal waste. Many areas in Ireland have high groundwater vulnerability, which makes contamination of well water more likely. If your well is vulnerable to contamination and is not properly constructed, it is possible that human or animal waste from septic tanks, land spreading or runoff from the surrounding land may enter your well. Contaminated water can make you or anyone who consumes the water ill. One way of ensuring the safety of private well water is to treat the water, e.g. by chlorination.

If you are concerned about your well water, contact your local authority or your EHO for advice. If you suspect that your water may be contaminated, it may be advisable to boil your water until you have had your well water tested.

Further information on private wells is available from the Environmental Protection Agency at <http://www.epa.ie/water/dw/hhinfo/>

## Cleaning

### EFFECTIVE CLEANING

To clean kitchen equipment and utensils:

- First remove debris
- Then wash with a detergent
- Rinse
- Then disinfect with near boiling water or with a food grade disinfectant which is non-perfumed and does not leave a residue

Chopping boards, utensils, and equipment used in contact with food, should be chosen so that they can be cleaned and disinfected in a dishwasher. If this is not possible, the two sink method of cleaning and disinfecting utensils and equipment should be used. Use one sink for washing with the detergent and the other for rinsing and disinfecting.

All food contact surfaces should be first cleaned with a detergent solution and then rinsed with clean water.

The surfaces and equipment, including food thermometers, that ready to eat food or cooked food comes into contact with, must be cleaned and disinfected. This can be done by using water above 82°C or by using a disinfectant or a sanitiser. Where the surfaces cannot be dried in air, the surfaces can be dried using a clean cloth or a paper towel.

### WHAT CAN GO WRONG (IF CLEANING IS NOT DONE PROPERLY)?

- i. Dirt can attract pests or be a source of food for microorganisms.
- ii. Dirty dishcloths, floor cloths or tea towels can cause microbiological contamination.
- iii. The use of incorrect cleaning products or incorrect cleaning procedures can cause the chemical contamination of food.
- iv. The use of old cloths, wire wool etc. can cause physical contamination of food.

### HOW CAN IT BE PREVENTED?

- i. Clean the premises, including fittings and fixtures and particularly those items you handle, such as electric plugs, door handles, light switches and brushes, as frequently as necessary to ensure that the premises are always visually clean.
- ii. Clean equipment, food preparation surfaces, utensils, food containers, crockery, etc. after each use and before reuse, where necessary.
- iii. Clean and disinfect or sanitise before use, the surfaces and equipment that cooked or ready-to-eat food comes into contact with. This includes thermometers.
- iv. Empty and clean containers used for storing loose flour, cereals, sugar and similar products, as frequently as necessary and at least once every month.
- v. Keep the extraction hood over equipment visually clean and clean it at least once every three months.
- vi. Clean reusable bins after each use if a reusable bin is used to collect food waste within the premises.
- vii. Clean up product spillages as soon as possible and never leave them overnight.
- viii. Make sure that cleaning products are clearly labelled or marked and that they are stored in a separate area to food.
- ix. Never transfer cleaning products into food containers.
- x. Use only food grade disinfectants or sanitisers and use them at the correct concentrations.
- xi. Wash and disinfect or sanitise, reusable dishcloths, cleaning cloths, pot scrubs etc. at least daily.
- xii. Empty the water used to wash the floor in an external gully.

#### NOTE:

**Market premises must be visually clean. Crockery, knives, spoons etc. and any surfaces which ready-to-eat food comes in contact with, must be cleaned and disinfected or sanitised.**

## RECOMMENDATIONS

- i. Cleaning as you go is strongly recommended.
- ii. Do not use the brushes and cleaning equipment that you used for cleaning in the kitchen or food storage areas for cleaning other areas, particularly yards etc.
- iii. Do not use sponges for cleaning as they are virtually impossible to clean.
- iv. Cloths used for cleaning floors should be a different colour to other cloths.
- v. Prepare a cleaning checklist.

## Pest control

### WHAT CAN GO WRONG (IF PEST INFESTATION OCCURS)

- i. Food can be contaminated either directly or indirectly by domestic animals, pests such as rodents, birds and insects. They can carry disease which can be transferred to food or they can be a source of food poisoning microorganisms.

### HOW CAN IT BE PREVENTED?

- i. If evidence of infestation is found in or around the premises, take action to eliminate it.
- ii. Do not allow domestic animals to enter areas where food is stored or prepared.
- iii. Do not use fly sprays, fly paper or chemical fly strips in the kitchen while food is being prepared.

## RECOMMENDATIONS

- i. A fly screen should be installed on windows that are opened for ventilation.

## Waste disposal

### WHAT CAN GO WRONG (WHEN STORING OR HANDLING FOOD WASTE)?

- i. Food waste if not properly stored and handled, can attract pests which in turn can cause food poisoning.

### HOW CAN IT BE PREVENTED?

- i. Remove refuse containers every day from the kitchen. These containers must be clean.
- ii. When food waste has to be stored, store it in a sealed container or a covered bin.

## Personal hygiene

### WHAT CAN GO WRONG (WHEN PERSONAL HYGIENE IS IGNORED)?

- i. Food can become contaminated as a result of poor hygiene practices.

### HOW CAN IT BE PREVENTED?

- i. Do not prepare or handle food if you are suffering from an:
  - Infection of the mouth, throat, nose, ears or eyes
  - Infectious skin disorder
  - Illness with any of the following symptoms – a persistent cough, fever, diarrhoea or vomiting
- ii. Do not prepare food to be placed on the market, if any member of the household is suffering from diarrhoea or vomiting.
- iii. Wash your hands, including forearms when exposed, using a non-perfumed soap, as frequently as necessary to keep them clean and always:
  - Before starting work or after a break
  - After handling or preparing raw food
  - Before handling cooked or ready-to-eat food
  - After handling waste
  - After cleaning duties
  - After using the toilet
  - After blowing nose, sneezing or coughing
  - After eating, drinking, smoking or using a phone
  - After collection of garden products or the removal of outdoor footwear
- iv. Do not smoke, drink, eat or chew gum while preparing or handling food.
- v. When handling or preparing food:
  - Wear a clean apron or equivalent protective clothing
  - Keep your fingernails clean and short and free of nail varnish or false nails
  - Do not wear jewellery except for plain wedding rings and sleeper ear rings
  - Do not wear excessive perfume, deodorant or aftershave

#### NOTE:

Containers and bins used to store food waste should be kept on a surface that can be easily cleaned.

- vi. Disposable gloves can be effective in helping prevent the transfer of food poisoning microorganisms onto food. If you wear disposable gloves:
- Hands must be washed thoroughly before and after use
  - Gloves must only be used once. Change gloves between tasks, e.g. after touching raw meat, poultry, fish, eggs; before touching ready-to-eat foods; after emptying bins; after cleaning; after handling money etc.
  - Discard used gloves after each task

### RECOMMENDATIONS

- i. Long hair should be tied back. A hair net should be worn when preparing food. The reason is to prevent hair from entering the food.

## Personal facilities

### WHAT CAN GO WRONG (WHEN PERSONAL FACILITIES ARE NOT ADEQUATE)?

- i. Inadequate facilities can contribute to poor personal hygiene practices.

### HOW CAN IT BE PREVENTED?

- Make sure that there is a wash hand basin, with hot and cold running water, close to the food preparation area.
- Make sure that there is soap and single use hand towels close to the hand washing facilities.
- There must be a toilet within the premises. The toilet cannot lead directly into the kitchen or other food areas, and it must be ventilated either by an outside window or by an extraction fan.

#### NOTE:

**The use of a nail brush is not recommended unless it is kept in a sterilising solution.**

#### NOTE:

**The use of liquid bactericidal soap in a dispenser is recommended. The use of disinfectant wipes for hands is also recommended where high-risk food is being prepared.**

## Training

### WHAT CAN GO WRONG (IF TRAINING IN HYGIENE IS INADEQUATE)

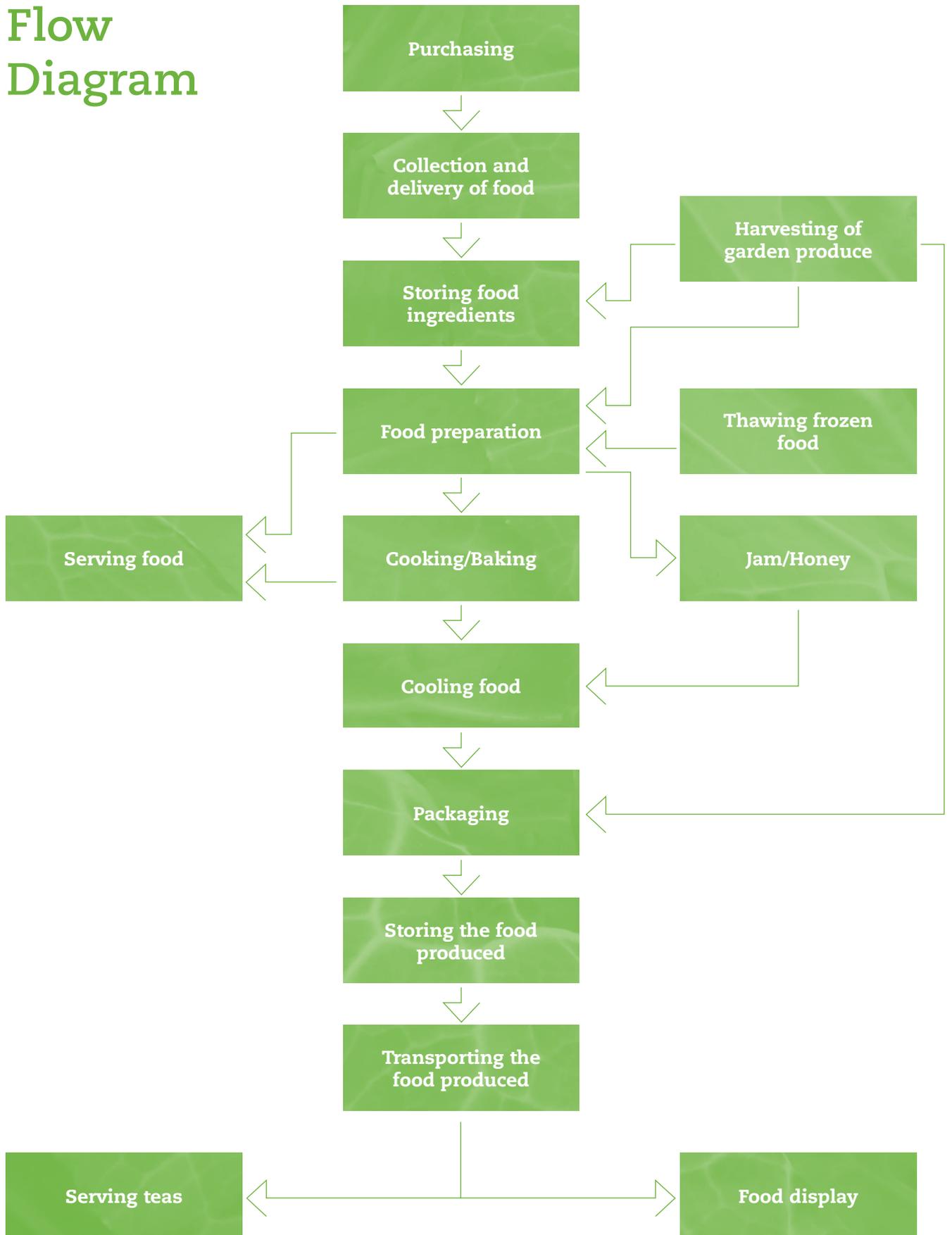
- i. Food can become contaminated due to lack of knowledge of food hygiene.

### HOW CAN IT BE PREVENTED?

- If you are involved in preparing or producing food you must be instructed and/or trained in food hygiene to allow you to do your job safely. All food handlers should be instructed in basic food hygiene before they start work.
- Ensure that the training addresses:
  - The reasons for good hygiene practices
  - The causes and prevention of food poisoning and food spoilage
  - Personal hygiene
  - Cleaning
  - Pests and pest control
- Make sure that you and anyone helping you is aware of the contents of this guide and of the basic principles of food hygiene.

The FSAI has produced a range of training material in traditional and in e-learning format which is available at [www.fsai.ie](http://www.fsai.ie)

# Flow Diagram



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## Food Production

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### REASONS FOR CONTROLLING THE TEMPERATURE OF FOOD

Controlling the temperature of high and certain medium-risk food from the time of purchasing your ingredients to the sale of your products at the market, is critical to food safety.

The temperature of high and certain medium-risk food must be controlled to:

- Prevent food poisoning
- Control the increase in number of microorganisms

There are some microorganisms which if present in food, will cause food poisoning. There are other microorganisms which produce toxins. These toxins which are poisonous chemicals, can also cause food poisoning.

Normal cooking will destroy food poisoning microorganisms, but will not destroy all toxins. To protect public health, you must make every effort to keep the number of microorganisms on food to a minimum. This will reduce the risk of toxins being present at a sufficient level to cause food poisoning.

Hold perishable raw food at or below 5°C. This will help prevent the growth of those microorganisms which could cause food poisoning.

For cooked food, eat or serve the food immediately after cooking. Where this is not possible, hold the food at or above 63°C, or cool it to 5°C or below immediately after cooking. This will help prevent the growth of those microorganisms which could cause food poisoning.

If the growth of microorganisms which could cause food poisoning is reduced, so also will the growth of those microorganism which cause food spoilage. This will be of benefit in extending the shelf-life.

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## Purchasing

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### WHAT CAN GO WRONG (WHEN PURCHASING FOOD OR PACKAGING)?

- i. The food or ingredients you buy may be contaminated.
- ii. Packaging material that comes in contact with food may be unsuitable or may be contaminated.

### HOW CAN IT BE PREVENTED?

- i. Only buy food, food ingredients and food packaging from suppliers who you believe will supply suitable and safe products.
- ii. Keep a record of the names and addresses of who you buy your food and packaging from.
- iii. Don't buy more food than you need.

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## Collection of food

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### WHAT CAN GO WRONG (WHEN COLLECTING FOOD FROM THE SUPERMARKET OR CASH AND CARRY)?

- i. If food which should be kept in a fridge is not kept cold, microorganisms can grow on the food. They can also grow on frozen food if it is allowed to thaw or partially thaw.
- ii. Cross contamination can occur if different types of food are not segregated, e.g. cooked and other groceries such as raw meat.
- iii. Food can be contaminated by chemicals, foreign matter or a dirty vehicle.

### HOW CAN IT BE PREVENTED?

- i. When collecting food make sure that:
  - The interior of the vehicle used is clean and free from conditions that could cause the contamination of food
  - Reusable containers, such as trays, boxes and shopping bags if used, are clean
  - Chilled food is transported under refrigerated conditions if it is not for immediate use
  - Frozen food is transported under refrigerated conditions if it is not for immediate use
  - Raw foods which could contain harmful microorganisms are segregated from ready-to-eat foods
  - Cooked or ready-to-eat food is not placed below raw food

- Domestic, garden and other chemicals, including detergents and toiletries, are not transported with food unless they are totally segregated from it
- Make sure food is within date, especially food with a 'use-by' date

**NOTE:**

Insulated or other containers may be used to transport chilled food once the temperature does of the food does not exceed 5°C. They may also be used to transport frozen food if the food doesn't thaw or partially thaw during transportation.

**NOTE:**

Raw foods which could contain harmful microorganisms include fish and fish products; meat and meat products; poultry and poultry products; egg and egg products; fruit and vegetables.

- ii. Transfer the food you collect into suitable storage without delay

*“Normal cooking will destroy food poisoning microorganisms, but will not destroy all toxins. To protect public health, you must make every effort to keep the number of microorganisms on food to a minimum.”*

## Harvesting garden products

### WHAT CAN GO WRONG (WHEN HARVESTING GARDEN PRODUCTS)?

- i. Garden produce may contain insects and/or microorganisms. It may also contain residues of herbicides or pesticides.
- ii. Your clothing and footwear can become dirty when collecting garden produce. This dirt, if brought into the kitchen, can cause food contamination.

### HOW CAN IT BE PREVENTED?

- i. When harvesting vegetables, remove roots, clay and insects from the vegetables before bringing them into the food preparation area.
- ii. When collecting fruit, remove any insects present before bringing the fruit in to the food preparation area.
- iii. Harvested fruit and vegetables must be thoroughly washed before use. Care must be taken to avoid contamination of clean produce. This is particularly important for fruit, vegetables and leafy greens which will not be cooked.
- iv. Keep dirty eggs separate from clean eggs. Clean dirty eggs before bringing them into the kitchen or the food preparation area. You must use the eggs you have cleaned immediately after cleaning.
- v. Make sure that dirt from the garden, out houses, hen houses etc, is not brought into the kitchen or other food preparation areas on your clothing or footwear.

**NOTE:**

You must wash your hands after collecting garden produce or removing outdoor footwear.

- vi. If you use herbicides or pesticides, only use them in accordance with the suppliers' instructions.

### RECOMMENDATION

- i. The use of herbicides and pesticides is not generally recommended. If you use herbicides and/or pesticides, you should keep a list of the herbicides and/or pesticides used and when they were used.

## Storing food ingredients

### WHAT CAN GO WRONG (WHEN STORING FOOD INGREDIENTS)?

- i. Food can spoil and become unusable if it is kept for too long.
- ii. If perishable or high-risk food is not kept cold, harmful microorganisms can grow on the food.
- iii. Food can be contaminated if it is stored with garden or other chemicals.
- iv. Dry goods such as flour, cereals, rice and sugar may contain mites or weevils.

### HOW CAN IT BE PREVENTED?

- i. The kitchen must be large enough for different types of food to be stored separately. This will reduce the danger of cross contamination.
- ii. Store dry goods including flour, grains and cereals in an area which is clean, dry and free of condensation. If bins are used for storage, keep them covered and do not top them up.
- iii. Food must not be stored directly on the floor.
- iv. Store perishable and high-risk food ingredients in a fridge.
- v. Keep the fridge at 5°C or lower. Keep the freezer at -18°C or lower. This does not apply during the defrost cycle.
- vi. Food for business and the household should be separated.
- vii. Do not use food which has passed its 'use-by' date. Use the oldest food first.
- viii. Where you are producing food to be placed on the market which is high-risk food, you must store it in a separate fridge to the family fridge.
- ix. Do not store cooked or ready-to-eat food in the same fridge as raw food unless the cooked and ready-to-eat food is both covered and separated. Do not store raw food above cooked or ready-to-eat food. This will prevent cross-contamination.
- x. Do not store domestic, garden or other chemicals including detergents and toiletries, with food. On no account can any chemicals be transferred to food containers or containers similar to those used for food.
- xi. Do not store garden or other chemicals in the kitchen or in a food storage area.

### RECOMMENDATIONS

- i. Fridges should be fitted with a thermometer. A probe thermometer should be used to check temperature.
- ii. Dry goods should be stored in lidded airtight containers.

## Thawing frozen food

### WHAT CAN GO WRONG (WHEN THAWING FOOD)?

- i. Microorganisms can grow while food is being thawed. They often grow on the surface of food if the surface temperature of the food rises above 5°C.
- ii. If food is not fully thawed before it is cooked, the centre of the food may not be fully cooked. This could result in the survival of food poisoning microorganisms.

### HOW CAN IT BE PREVENTED?

- i. Thaw food completely before cooking it, unless the food is normally cooked from the frozen state.
- ii. Always thaw frozen food which cannot be cooked from frozen in a:
  - Fridge
  - Microwave oven with a proper thawing cycle

#### NOTE:

**A microwave oven is not suitable for thawing large joints of meat or whole poultry.**

- iii. Make sure that the food is fully thawed (between -1° and +3°C) by checking the centre of the food. Check for ice in the food using your hand, a skewer or a probe thermometer. Use a clean thermometer and sanitise it after use. With poultry, check the joints are flexible.
- iv. As a general rule, you should not refreeze food. However, you can defrost food, cook it and freeze it again.

## Food preparation

### WHAT CAN GO WRONG?

- i. Cross contamination can occur when food is being prepared.
- ii. Harmful microorganisms can grow if the temperature of any part of the food remains between 5°C and 63°C for too long.
- iii. Foreign matter such as hairs, flies and flaking paint can enter food when it is being prepared.

### HOW CAN IT BE PREVENTED?

- i. Use separate equipment and utensils for ready-to-eat food and raw food. This includes knives and bowls.
- ii. Use separate work surfaces, including chopping boards, for ready-to-eat food and for raw food. Chopping boards can be made of wood or plastic.
- iii. Do not prepare ready-to-eat food on a chopping board or other surface which was used to prepare raw meat, raw fish or raw poultry.
- iv. Make sure that all ready-to-eat food is physically separated from raw food.
- v. Keep the time the food spends outside of the fridge as short as possible. Take small quantities of food out of the fridge at a time.
- vi. Wash vegetables (with the exception of onions and hard cabbage) and fruit before use.
- vii. When handling clean food utensils, crockery, glassware, cutlery etc. handle them only by the surfaces which do not come into contact with food.
- viii. Use frozen food within 24 hours of thawing.

- ix. Use only pasteurised eggs, eggs from a *Salmonella* free flock, eggs produced under the Board Bia Egg Quality Assurance Scheme or eggs produced under an equivalent quality assurance scheme to produce uncooked/lightly cooked ready-to-eat egg products such as mayonnaise and pavlova.

#### NOTE:

**If you are using your own eggs from your own farm, the flock (regardless of the size) must be registered under animal health regulations with DAFM. The FSAI recommends that the flock is periodically tested for *Salmonella*. In this way, you can demonstrate to your EHO that you have considered the risk and are verifying controls by flock testing. Testing certificates should suffice as documentary evidence of these controls. You may also use local farm eggs that are stamped and graded in compliance with the egg marketing legislation. The stamp is sufficient to demonstrate the safety of the egg as these flocks have to be tested for *Salmonella* under the control of DAFM.**

### RECOMMENDATIONS

- i. Do not wear gloves when handling food unless they are disposable gloves. Both the inside and the outside of the gloves must be clean.

#### NOTE:

**Gloves can cause hands to perspire if they are worn for long periods. This perspiration can be a source of food poisoning microorganisms.**

- ii. Equipment should be colour coded where different types of food are prepared. The following is the generally accepted colour code:
  - a. Blue – Raw fish
  - b. Red – Raw meat
  - c. Green – Salad and fruit
  - d. White – Dairy and baking products
  - e. Yellow – Cooked meats
  - f. Brown – Vegetables

## Cooking/Baking

### WHAT CAN GO WRONG (WHEN COOKING OR BAKING FOOD)?

- i. Food poisoning microorganisms can survive if food is not fully cooked or baked. The microorganisms that survive can then rapidly increase in number, under the right conditions.
- ii. Food can be contaminated by the equipment used to stir or to whisk food, if the equipment is used for raw or partially cooked food and then for cooked food without cleaning.
- iii. A dirty cookery thermometer can contaminate food.

### HOW CAN IT BE PREVENTED?

- i. Treat bakery products which contain high-risk fillings, as high-risk foods.
- ii. When adding a high-risk filling to a bakery product, add the filling either cold (5°C or lower) or hot (63°C or higher).
- iii. As raw flour may contain mould and sometimes *Salmonella*, make sure that baked products are not contaminated by raw flour.
- iv. Follow manufacturer's instructions when using microwave ovens for cooking.

### RECOMMENDATIONS

- i. As there can be cold spots in microwave ovens, they are not recommended for cooking food products which could contain food poisoning microorganisms. The presence of cold spots could result in part of the food not reaching the required temperature that is necessary to kill all food poisoning microorganisms. In addition, microwave ovens lose power over time.

## Cooling food

### WHAT CAN GO WRONG (WHEN COOLING FOOD)?

- i. Food may become contaminated as a result of cross contamination.
- ii. Harmful microorganisms may grow on or in food if it is not cooled quickly.

### HOW CAN IT BE PREVENTED?

- i. Cool food as quickly as possible to 5°C or lower after cooking/baking. Place in the fridge within two hours. This would not be necessary for foods such as bread which are not normally stored in a fridge.

#### NOTE:

Placing very hot food in a fridge can result in the fridge becoming too warm. This can cause other food in the fridge to increase in temperature.

- ii. When cooling food make sure that cross contamination does not occur.

#### NOTE:

You cannot use your kitchen for domestic activities while food is being cooled in the open.

### RECOMMENDATIONS

To cool food quickly:

- Divide it into smaller portions or spread out the food in shallow trays. Liquids can be stirred regularly to speed up cooling
- Place food in a container which is in turn placed in a container of ice
- Move food to a cooler area

## Jam making

### WHAT CAN GO WRONG (WHEN MAKING JAM)?

- i. Fruit may contain insects, foreign matter and chemicals, such as insecticide.
- ii. Mould can grow on jam if there is not enough sugar in the jam.
- iii. Jars used for jam can be a source of contamination.

### HOW CAN IT BE PREVENTED?

- i. Pick over fruit to remove any foreign matter.
- ii. Make sure that there is at least 6kg of sugar for every 10kg of finished jam.
- iii. Inspect each jar and discard any jars that are damaged or where you have any suspicion that they have been used for non-food items or materials.
- iv. Wash all jars, re-inspect them and then sterilise them.
- v. Pour the jam while hot into hot sterile jars and then seal the jar with a jam cover or a sterilised lid.

### RECOMMENDATIONS

- i. To sterilise jars, put clean jars into an oven preheated to 180°C, for at least five minutes. To sterilise lids, sterilise them in boiling water. Alternatively, jars can be washed in the dishwasher on a hot cycle and be allowed to air dry in the dishwasher.

## Honey

### WHAT CAN GO WRONG (WHEN SEPARATING AND PACKING HONEY)?

- i. Honey can become contaminated from the equipment used to separate it or from the environment in which it is separated.
- ii. Honey can pick up contamination from the jars in which it is packed.

### HOW CAN IT BE PREVENTED?

- i. Make sure that the extractor is clean and free from rust.
- ii. Screen the extracted honey to remove foreign bodies and wax.
- iii. Make sure that the containers used to store bulk honey are both clean and airtight and have not been used for non-food products.
- iv. Inspect each jar and discard any jars that are damaged or where you have any suspicion that they may have been used for non-food items or materials.
- v. Wash all jars, re-inspect them and then sterilise them.
- vi. Keep the honey house clean, when it is in use.
- vii. Where you have a separate honey house, it must contain a wash hand basin.

### RECOMMENDATIONS

- i. The extractor should be made of stainless steel.
- ii. Store the extracted bulk honey in airtight containers with the minimum amount of air present in the container.
- iii. When bottling honey, place the bulk container in a heated cabinet, at a maximum temperature of 46°C for three days and then filter the honey through nylon organza or an equivalent filter into a bottler.
- iv. Place the bottle in a heated cabinet, at a maximum temperature of 40°C for 24 hours to remove air bubbles and then fill the honey into sterile jars.
- v. To sterilise jars, put clean jars into an oven preheated to 180°C, for at least five minutes.
- vi. For comb honey, clean the section and pack in standard containers for sale.
- vii. For cut comb honey, pack it in a standard container for sale.

**NOTE:**

The Federation of Irish Beekeepers' Associations provides labels which help ensure traceability.

DAFM has produced a number of publications on honey including: *The Beekeepers Ideal Honey House*; *DAFM Beekeeper's Inspections – Common Inspection Issues and their Solutions and Lead Contamination in Honey, October 2013*. They are available at <http://www.agriculture.gov.ie/farmingsectors/beekeepinghoney/>

## Storing food produced

### WHAT CAN GO WRONG (WHEN STORING THE FOOD THAT WAS PRODUCED)?

- i. Food can spoil and become unfit to eat if it is kept for too long.
- ii. Harmful microorganisms can grow on high-risk food if the temperature in the fridge is too high.
- iii. Chemicals contamination can occur if food is stored with domestic, garden or other chemicals.
- iv. Cross contamination can occur.

### HOW CAN IT BE PREVENTED?

- i. Food should be covered, stored in clean containers or wrapped to prevent contamination, drying out or being tainted by other food.
- ii. Store high-risk food in a fridge or a freezer.

**NOTE:**

You must have a separate fridge for the food you produce if it has to be stored in a fridge.

- iii. Keep the temperature of the fridge between 5°C or lower and freezers at - 18°C or lower (do not put hot food in the fridge; do not leave the door open or open the door too often).
- iv. Never store cooked or ready-to-eat food below raw food.
- v. Food that does not require refrigerated storage should be stored in a suitable storage area. This storage area must be large enough so that the food you produce is separate from other foods.
- vi. Store dry goods in a clean, dry storage area free from condensation and pests.
- vii. Do not store domestic, garden or other chemicals, including detergents and toiletries, with food.

### RECOMMENDATIONS

- i. Stored cooked food should be labelled properly with the date of preparation.
- ii. Food should be used on a 'first-in first-out' basis.

## Transporting the food produced

### WHAT CAN GO WRONG (WHEN TRANSPORTING THE FOOD YOU PRODUCED)?

- i. Microorganisms can grow on chilled food if it is not kept cold.
- ii. Cross contamination can occur if different types of food are not segregated.
- iii. Food can be contaminated by chemicals, foreign bodies or a dirty vehicle.

### HOW CAN IT BE PREVENTED?

- i. When transporting the food which you produce make sure that:
  - The interior of the vehicle you use is clean and free from conditions that could cause the contamination of food
  - Reusable containers, such as trays and boxes if used, are clean
  - High-risk food is transported in pre-cooled insulated containers (ice-packs can be used for this purpose)
  - Frozen food is transported under refrigerated conditions
  - Hot food is maintained above 63°C
  - Raw foods which could contain harmful microorganisms are segregated from one another
  - Cooked or ready-to-eat food is segregated from raw food
  - Cooked or ready-to-eat food is not placed below raw food
  - The food is placed in clean containers or clean packaging
  - Flowers, potted plants and craft items are segregated from food
  - Domestic, garden and other chemicals, including detergents and toiletries, are not transported with food unless they are totally segregated from it

#### NOTE:

When transporting chilled food, the core temperature must not exceed 5°C.

#### NOTE:

Raw foods which could contain harmful microorganisms include fish and fish products; meat and meat products; poultry and poultry products; egg and egg products; fruit and vegetables.

## Display of food (when sold in a market)

### WHAT CAN GO WRONG (WHEN DISPLAYING FOOD FOR SALE)?

- i. Microorganisms can grow if the temperature of the food rises above 5°C.
- ii. Contamination can be caused by:
  - Handling of food or sneezing or coughing over food
  - Displaying food in a dusty or dirty environment
  - Animals, insects and flies

### HOW CAN IT BE PREVENTED?

- i. Display all high-risk food in packages, covered or otherwise suitably protected.
- ii. Keep high-risk food in insulated containers and below 5°C until immediately before the market is opened.
- iii. If high-risk food is displayed at room temperature, only display as much food as will be sold within 60 minutes. Do not sell or supply high-risk food which has been on display for more than 60 minutes.
- iv. Display ready-to-eat food in a separate area to raw food. Raw food includes vegetables and eggs.
- v. Display flowers, potted plants and craft work on a separate counter to food.
- vi. Avoid cross contamination when packing and storing customer's orders.

### RECOMMENDATIONS

- i. Display the minimum quantity possible of high-risk food. The purpose of this is to prevent the food on display from reaching room temperature.
- ii. Handle reusable food containers with care and do not store them in the sales area. Only display the amount of high-risk foods that will be consumed within 60 minutes of being put on display.

## Serving teas (when served at a market)

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### WHAT CAN GO WRONG (WHEN SERVING TEAS)?

- i. Crockery and utensils may become contaminated with microorganisms.

### HOW CAN IT BE PREVENTED?

- i. Make sure that all crockery and utensils are clean and that any cracked crockery is thrown out.
- ii. Suitable facilities must be available or arrangements in place to clean crockery and utensils.

### RECORDS

The following must be kept:

- i. A list of suppliers of food and packaging
- ii. The quantity and type of food produced on a daily or weekly basis as appropriate
- iii. The temperature of all fridges and freezers, taken at least once per week

#### NOTE:

The temperature of fridges and freezers should be checked daily but need only be recorded weekly.

#### NOTE:

A small diary may be used for keeping these records. The records should be kept for a year.

- iv. Laboratory reports for water testing if you are on a private well or group scheme

*“Display the minimum quantity possible of high-risk food. The purpose of this is to prevent the food on display from reaching room temperature.”*

# Appendix A: Food Law

The specific requirements of food law now generally come from EU legislation. The EU legislation is then transposed into Irish law by Statutory Instruments (S.I.s) where the offences, penalties and enforcement powers are set out. You need to read both together.

As this guidance focuses on the hygiene requirements, they have been included here. Details on the other legislation mentioned in this guidance are available on the FSAI website under legislation at [www.fsai.ie](http://www.fsai.ie)

## Hygiene of Foodstuffs Regulations

Relevant extracts from Regulation (EC) No 852/2004 on the hygiene of foodstuffs and the European Communities (Hygiene of Foodstuffs) Regulations, 2006 [S.I. No. 369 of 2006]:

## Regulation (EC) No 852/2004 on the hygiene of foodstuffs

### Article 4

#### GENERAL AND SPECIFIC HYGIENE REQUIREMENTS

1. Food business operators carrying out primary production and those associated operations listed in Annex I shall comply with the general hygiene provisions laid down in part A of Annex I and any specific requirements provided for in Regulation (EC) No 853/2004<sup>2</sup>.
2. Food business operators carrying out any stage of production, processing and distribution of food after those stages to which paragraph 1 applies shall comply with the general hygiene requirements laid down in Annex II and any specific requirements provided for in Regulation (EC) No 853/2004.
3. Food business operators shall, as appropriate, adopt the following specific hygiene measures:
  - (a) compliance with microbiological criteria for foodstuffs;
  - (b) procedures necessary to meet targets set to achieve the objectives of this Regulation;
  - (c) compliance with temperature control requirements for foodstuffs;
  - (d) maintenance of the cold chain;
  - (e) sampling and analysis.
4. The criteria, requirements and targets referred to in paragraph 3 shall be adopted in accordance with the procedure referred to in Article 14(2). Associated sampling and analysis methods shall be laid down in accordance with the same procedure.
5. When this Regulation, Regulation (EC) No 853/2004 and their implementing measures do not specify sampling or analysis methods, food business operators may use appropriate methods laid down in other Community or national legislation or, in the absence of such methods, methods that offer equivalent results to those obtained using the reference method, if they are scientifically validated in accordance with internationally recognised rules or protocols.
6. Food business operators may use the guides provided for in Articles 7, 8 and 9 as an aid to compliance with their obligations under this Regulation.

<sup>2</sup> Regulation (EC) No 853/2004 laying down specific hygiene rules for food of animal origin

## Article 5

### HAZARD ANALYSIS AND CRITICAL CONTROL POINTS

1. Food business operators shall put in place, implement and maintain a permanent procedure or procedures based on the HACCP principles.
2. The HACCP principles referred to in paragraph 1 consist of the following:
  - (a) Identifying any hazards that must be prevented, eliminated or reduced to acceptable levels;
  - (b) Identifying the critical control points at the step or steps at which control is essential to prevent or eliminate a hazard or to reduce it to acceptable levels;
  - (c) Establishing critical limits at critical control points which separate acceptability from unacceptability for the prevention, elimination or reduction of identified hazards;
  - (d) Establishing and implementing effective monitoring procedures at critical control points;
  - (e) Establishing corrective actions when monitoring indicates that a critical control point is not under control;
  - (f) Establishing procedures, which shall be carried out regularly, to verify that the measures outlined in subparagraphs (a) to (e) are working effectively; and
  - (g) Establishing documents and records commensurate with the nature and size of the food business to demonstrate the effective application of the measures outlined in subparagraphs (a) to (f).

When any modification is made in the product, process, or any step, food business operators shall review the procedure and make the necessary changes to it.

3. Paragraph 1 shall apply only to food business operators carrying out any stage of production, processing and distribution of food after primary production and those associated operations listed in Annex I.

4. Food business operators shall:
  - (a) provide the competent authority with evidence of their compliance with paragraph 1 in the manner that the competent authority requires, taking account of the nature and size of the food business;
  - (b) ensure that any documents describing the procedures developed in accordance with this Article are up-to-date at all times;
  - (c) retain any other documents and records for an appropriate period.
5. Detailed arrangements for the implementation of this Article may be laid down in accordance with the procedure referred to in Article 14(2). Such arrangements may facilitate the implementation of this Article by certain food business operators, in particular by providing for the use of procedures set out in guides for the application of HACCP principles, in order to comply with paragraph 1. Such arrangements may also specify the period during which food business operators shall retain documents and records in accordance with paragraph 4(c).

## Annex II Chapter III

Requirements for movable and/or temporary premises (such as marquees, market stalls, mobile sales vehicles), premises used primarily as a private dwelling-house but where foods are regularly prepared for placing on the market and vending machines

1. Premises and vending machines are, so far as is reasonably practicable, to be so sited, designed, constructed and kept clean and maintained in good repair and condition as to avoid the risk of contamination, in particular by animals and pests.
2. In particular, where necessary:
  - (a) appropriate facilities are to be available to maintain adequate personal hygiene (including facilities for the hygienic washing and drying of hands, hygienic sanitary arrangements and changing facilities);
  - (b) surfaces in contact with food are to be in a sound condition and be easy to clean and, where necessary, to disinfect. This will require the use of smooth, washable, corrosion-resistant and non-toxic materials, unless food business operators can satisfy the competent authority that other materials used are appropriate;
  - (c) adequate provision is to be made for the cleaning and, where necessary, disinfecting of working utensils and equipment;

- (d) where foodstuffs are cleaned as part of the food business' operations, adequate provision is to be made for this to be undertaken hygienically;
- (e) an adequate supply of hot and/or cold potable water is to be available;
- (f) adequate arrangements and/or facilities for the hygienic storage and disposal of hazardous and/or inedible substances and waste (whether liquid or solid) are to be available;
- (g) adequate facilities and/or arrangements for maintaining and monitoring suitable food temperature conditions are to be available;
- (h) foodstuffs are to be so placed as to avoid the risk of contamination so far as is reasonably practicable.

## European Communities (Hygiene of Foodstuffs) Regulations, 2006 [S.I. No. 369 of 2006]

### Regulation 4

- (1) A food business operator who fails to comply with the general hygiene requirements laid down in Annex II to the EC Regulation<sup>3</sup> is guilty of an offence.
- (2) Where a food business operator derogates from the general hygiene requirements referred to in paragraph (1) in accordance with the derogations set down in Commission Directive 96/3/EC of 26 January 1996, as amended by Commission Directive 2004/4/EC of 15 January 2004, and in Commission Directive 98/28/EC of 29 April 1998, he or she is not guilty of an offence.
- (3) A food business operator who fails to adopt any specific hygiene measures required in accordance with Article 4(3) (b), (c), (d) or (e) of the EC Regulation, where the criteria, requirements or targets referred to in Article 4(4) have been adopted in respect of that specific hygiene measure in accordance with Article 14(2) of the EC Regulation, is guilty of an offence.
- (4) A food business operator who fails to carry out sampling and analysis methods laid down in accordance with Article 14(2), as referred to methods laid down in accordance with Article 14(2)

### Regulation 5

- (1) A food business operator who fails to comply with the requirements of Article 5(1) and (2) of the EC Regulation is guilty of an offence.
- (2) A food business operator is guilty of an offence if the operator -
  - (a) fails to provide the official agency with the evidence required by the official agency, in the manner that the official agency requires, taking account of the nature and size of the food business, of the operator's compliance with Article 5(1) of the EC Regulation,
  - (b) fails to ensure that the documents describing the procedures developed in accordance with Article 5 of the EC Regulation are up-to-date at all times, or
  - (c) fails to retain such documents and records, as the operator is obliged to retain pursuant to Article 5(4) (c) of the EC Regulation, for the periods specified in paragraphs (3), (4) and (5).
- (3) In the case of foodstuffs requiring the indication of a 'use by' date in accordance with Article 10 of Directive 2000/13/EC of the European Parliament and of the Council of 20 March 2000, the documents and records shall be retained for three months after the expiry of the relevant 'use by' date.
- (4) In the case of foodstuffs requiring the indication of a 'best before' or 'best before end date' in accordance with Article 9 of Directive 2000/13/EC of the European Parliament and of the Council of 20 March 2000, the documents and records shall be retained for one year after the expiry of the relevant 'best before' or 'best before end' date, as the case may be.
- (5) In the case of foodstuffs for immediate consumption, the documents and records shall be retained for three months after the sale of the foodstuff.

<sup>3</sup> Regulation (EC) No 853/2004 on the hygiene of foodstuffs





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