

# HACCP MANUAL

By Liz Williams



Are you confident that the food you serve is safe?

*This pack aims to help you understand what can go wrong when preparing food and what you must do to make sure you never place your customers and thus your business or operation at risk of a food safety incident.*

*Having worked through this pack you will be able to meet your legal obligation as a Food Business Operator to –*

***‘put in place, implement and maintain a permanent procedure or procedures based on HACCP principles’***

## HACCP PROGRESS RECORD

<i>TASK</i>	<b>DATE</b>	<b>Signature</b>
<b>1 GOOD HYGIENE PRACTICES IN PLACE AND METHODS OF WORKING WRITTEN FOR -</b>		
Maintenance		
Suppliers and Ingredients		
Identification and Traceability		
Allergens		
Transport controls		
Stock Controls		
Temperature Controls		
Food Protection and Cross-contamination		
Personal Hygiene		
Training		
Cleaning		
Pest Control		

Waste management		
<b>2. IMPLEMENT AND MAINTAIN A HACCP SYSTEM</b>		
List of Suppliers Compiled		
Ingredients Lists Obtained from Suppliers where needed		
Menu/dishes grouped into main categories		
Flow Charts Drawn for each group (optional)		
Hazards identified at each stage and procedures written for their control		
Records in Place		
Regular Review Procedure in Place		

# CONTENTS

1. Introduction and how to use this pack
2. How to build a food safety (HACCP) system
- 3 . Stages in building a system
4. Record Keeping
5. How to review a HACCP system

## 1. INTRODUCTION TO FOOD SAFETY OR HACCP SYSTEMS

As the owner of a successful catering establishment, who offers its customers a wide range of dishes made from a variety of ingredients you have the responsibility to ensure that all food served is safe to eat.

At the beginning of 2006 the regulations regarding how you produce food safely changed. The new regulations require food operators to assess the dangers to food safety (referred to as hazards) at each stage the food is handled in their kitchen and to put in place procedures to remove or control the hazards.

This pack aims to help you meet the requirements of these new regulations.

It has been developed by Gwynedd Council Food Safety Team for use by larger catering establishments such as restaurants, hotels and take-aways, who would be expected to have a full written and documented food safety (HACCP) system in place.

Using the pack will help you –

- Comply with food hygiene regulations
- Make safe food
- Train your staff so that they have a good understanding of food safety
- Protect the reputation of your business

The owner and manager of the business should work together to make sure the pack is used correctly and effectively. As the tasks are completed complete the progress record at the beginning of the pack. This will give you a clearer idea of how well you are progressing.

Most kitchens share a number of basic preparation and cooking stages and will need to control similar food safety hazards. For this reason a number of control steps will be common to many establishments. The key objective of the pack is therefore to provide you with a table of the most common hazards encountered and the most effective control measures. This table (to be found in section 3) is the key to building your HACCP system. You must however make sure you have assessed all the ingredients and processes in your kitchen in case you have unique and special recipes.

Please be aware that it is not a definitive guide and is not the only way of complying with the new regulations on food hygiene, and you may prefer to obtain the new 'Safer Food, Better Business' pack from the Foods Standards Agency (Wales).

Should you require any further assistance please contact a member of our Food Safety Team in your area.

## 2. HOW TO BUILD A FOOD SAFETY SYSTEM

There are two basic stages to go through to implement a food safety system.

### 2.1 ESTABLISH GOOD HYGIENE PRACTICES

In order to build a good foundation for your food safety system it is important to establish sound basic food hygiene routines, which your staff understand well and follow automatically.

These good practices are included in the General Hygiene Requirements for all food business operators and are listed in annex 11 of the General Food Hygiene Regulations (EC 852/2004)

These good practices are also to be found in the separate Good Hygiene Practices Manual which includes the following -

- Good design of premises to allow easy cleaning, maintenance and efficient flow of materials
- Instructions on how and when to clean pieces of equipment and the general environment
- Personal Hygiene rules which staff should always follow in order to ensure no harmful bacteria are passed onto the food being prepared.
- Control of your stock to make sure oldest ingredients are always used first and out of date ingredients are never used
- Guidance on how to manage your suppliers to make sure you know exactly what ingredients you are buying
- Training of staff
- Measures to prevent unwanted foreign material entering the food at any stage
- Measures to prevent the food becoming contaminated with toxic or bad tasting chemicals
- Controls and measures needed to ensure you are aware of all allergens present in the food you serve so that any allergic customers come to no harm
- Controls to prevent food becoming contaminated with harmful bacteria from uncooked raw food, dirty equipment or work surfaces (often referred to as cross-contamination controls)
- Measures such as temperature controls to prevent bacteria growing in the food

The GHP manual contains guidance on each good practice and gives examples of the type of records you need to keep in each section to show that correct methods of working have been followed and that certain routines are well established.

Ensure that your staff are trained and motivated to understand the importance of maintaining these routines. Where appropriate issue written instructions for them to follow.

When your staff can be relied upon to follow these good hygiene practices then you will find that many of the common hazards (especially physical and chemical hazards) in your kitchen will be adequately controlled.

## **2.2 IMPLEMENT A FOOD SAFETY OR HACCP SYSTEM**

Having established general good hygiene practices and routines it is important to move on to put in place a HACCP system specific to process stage in your kitchen.

By following the steps below you should be able to identify control and monitor hazards, which could lead to food poisoning or make the food unfit to eat.

### **STEPS**

1. Categorise dishes into groups based on main ingredients and processes you undertake.
2. If it helps construct a flow diagram to show the process steps for each group of ingredients or dishes
3. Identify the hazards at each recipe step by deciding whether there is a risk of contamination, bacterial growth or survival at each of recipe stage (i.e C, S or G)
4. Using the typical hazard analysis table provided determine the controls, monitoring procedures and corrective action for each hazard identified and complete the analysis form for each recipe stage.
5. This analysis form can then be issued as a controlled procedure for your kitchen staff to follow when preparing the recipe item.
6. Continue to complete a HACCP analysis form for each group of ingredients or dishes



### **3. STEPS IN BUILDING A HACCP SYSTEM**

#### **3.1 STEP 1**

##### **CATEGORISE YOUR INGREDIENTS AND DISHES**

Begin by listing the types of menu dishes you prepare based on the main ingredient used to make the dish and the processes undertaken.

A suggested list is included in this section. Ingredients are grouped according to the food safety risk they present and the processes they undergo – e.g whether eaten raw, cooked, chilled frozen and reheated etc.

Having listed all the types of dishes, you may find that in order to identify the hazards involved in their preparation it helps to compile a flow chart showing the various stages in sequence.

## 3.2 STEP 2

### HOW TO CONSTRUCT A FLOW CHART FOR EACH GROUP OF DISHES

In order to help you identify hazards at each stage you may find it useful to list all the steps involved (known as process steps) and perhaps draw a flow diagram or chart.

It is important that you think carefully about what happens in your kitchen. If you are the manager or owner of the business you should therefore ask your chef/cook to work with you to identify the steps.

Some foods such as sandwiches and salads will be prepared with no cooking needed, others will undergo a cooking stage. Some will be served immediately, some will be defrosted, others will be stored and held chilled or hot. Be sure to include all such stages in your diagram.

It is likely that your flow chart for each group will consist of all or some of the following stages -

- \* Ordering and purchase of ingredients or ready-prepared dishes (known generally as raw materials)
- \* Delivery or collection of raw materials
- \* Receipt and acceptance of raw materials
- \* Storage of the raw materials – either frozen, chilled or at room temperature (referred to as ambient)
- \* Preparation of the ingredients – e.g defrost, peel, chop, wash
- \* Cooking of the dish components
- \* Holding of some cooked dishes or items hot e.g gravy, sauces.
- \* Cooling and refrigeration of some items
- \* Re-heating of some dishes e.g pre-cooked lasagne
- \* Serving of the dish on site – hot or cold
- \* Serving of the dish off-site – hot or cold e.g market stalls, marquees,

The hazards encountered in ordering, purchasing and receiving materials will be controlled by following the procedures outlined in your GHP manual for supplier controls, stock rotation, traceability and pest control.

Therefore your flow charts and hazard analysis will only need to start at the storage stage.

## **3.3 STEP 3**

### **HOW TO CARRY OUT A HACCP ANALYSIS**

Now that you have identified all the groups of dishes and stages or process steps which take place in your kitchen it is time to consider what can go wrong at each stage and what you must do to prevent or minimise the risk of making your food unsafe.

To help identify what can go wrong at each stage, it is probably useful consider the type of hazards one is likely to encounter in a kitchen and what can make food unsafe to eat.

#### **3.3.1 HAZARDS**

Hazards can generally be divided into three major types ( although increasingly allergens are also becoming of more significance as potential hazards and are therefore also included in this section) -

##### **Microbiological hazards**

Food which contains harmful or pathogenic bacteria when eaten can make people ill. The number of bacteria required to make people ill depends on the type of bacteria. Some bacteria are also more difficult to kill than others and spread more easily. This is why some bacteria such as E Coli 0157 are more dangerous and why some bacteria such as Salmonella can survive in the body for a long time after the symptoms have disappeared.

There are a number of steps that can be taken to help make sure foods do not contain such bacteria. These are mostly aimed at making sure that the food we buy is of good quality and then preventing bacteria getting into the food and growing.

This means we must stop 'clean' food getting in contact with -

- \* raw food which may contain harmful bacteria,
- \* dirty surfaces such as tables, utensils, equipment
- \* dirty hands

**Contamination** - All the practices we adopt to prevent bacteria entering food are said to prevent contamination and some of the most effective ways to prevent contamination is to keep the food covered wherever possible, make sure all surfaces and hands are clean when food is handled and most importantly stop cooked food coming into contact directly or indirectly with raw food.

**Growth** - Foods are most dangerous when any bacteria present have been given the opportunity to multiply and increase in numbers. To multiply most bacteria require water, food and warm temperatures. This is why keeping food at the correct temperatures in the fridge or freezer helps to prevent bacterial growth and keeps the food more safely.

**Survival** - Although bacteria grow best at warm temperatures, if exposed to high temperatures for long enough most but not all will be killed. Be aware that some bacteria can go into a spore stage, which will survive cooking temperatures. Given time these will grow to dangerous levels when the food is cooled. This is why it is important to cool food in four hours or less.

## Physical Hazards

These include any foreign material, which you would not expect to find in your food. Hair, finger nails, pieces of wood, metal, plastic, glass and insect debris are examples of what can find their way into food if the kitchen is not kept clean and tidy and if worn utensils and equipment are not replaced.

## Chemical Hazards

If chemicals used in the kitchen find their way into your food then not only will they taste unpleasant but the chemicals may also be dangerous. Examples of chemicals, which could find their way into food are cleaning chemicals, lubricants used to oil parts of your equipment.

It is important to note that foods especially high fat foods can sometimes pick up unpleasant tastes if they have been stored next to chemicals either in your store area, fridge or even when delivered next to chemicals in a van.

## Allergenic Hazards

It is important for all caterers to be aware of food allergies and take the matter seriously. This is because when someone eats a food, to which they are allergic, it can cause a very severe reaction and even kill the person. This reaction is known as anaphylaxis.

It is therefore essential that when someone asks you whether a dish contains a certain allergen that you give the correct answer. You can only do this if you know exactly what the ingredients contain when you buy them and then make sure they do not become contaminated with known allergens.

Severe allergic reactions are most commonly caused by the following foods -

- \* peanuts (also called groundnuts)
- \* other nuts grown on trees – almonds, hazelnuts, walnuts, brazil nuts, cashews, pecans, pistachios, macadamia nuts,
- \* gluten –found in wheat, rye, barely, oats
- \* fish
- \* shellfish
- \* sesame seeds
- \* celery
- \* mustard
- \* eggs
- \* milk
- \* soya
- \* sulphur dioxide and sulphites

These are the ingredients, whose presence must be clearly labelled when you buy pre-packed food. It also important that as a caterer you alert your customers to the presence of any above of the allergens when their presence may not be obvious e.g unrefined nut oils can be used in salad dressings, cakes can contain praline or marzipan, sauces can contain milk, flour or soya, some Greek dishes can contain sesame seeds.

Although there is no legal requirement to include allergens when assessing hazards, we do recommend that you do develop procedures to enable you to answer customer queries

accurately. We have therefore included a section on allergens in the Good Hygiene Practices Manual.

### **3.3.2 CONTROLS**

Once you have identified the hazards at each stage, the next stage is to decide whether the hazards need to be controlled at this step and how you are going to do this.

Most physical and chemical hazards can be controlled by following Good Hygiene Practices and therefore most attention should be given to controlling microbiological hazards in your kitchen. This is best done by preventing bacteria

- contaminating the food,
- preventing their growth by controlling temperatures and times or
- by killing them with adequate cooking.

Therefore the two most important controls you must implement effectively are those aimed at reducing cross-contamination risks and those aimed at preventing bacterial growth and survival.

It is therefore essential that you ask three fundamental questions at each stage (see basic questions on next page) –

- **C** - Can contamination be present or occur at this step, is the risk significant and will the food become unsafe if control is lost?
- **G** - Can microbes grow at this step, is the risk significant and will the food become unsafe if control is lost?
- **S** - Can microbes survive at this step, is the risk significant and will the food become unsafe if control is lost?

If the answer is yes then the stage becomes what is known as a **critical control point** and cross-contamination and time and temperature controls need to be introduced.

### **3.3.3. MONITORING CHECKS AND RECORDS**

In order to prove that you have hazards under control it is necessary to carry out certain checks and sometime record those checks. This is sometimes referred to as monitoring the hazards. Checks need to be thorough if you are to know that you are producing food safely.

Most checks need to be carried out daily, some may be best carried out before your kitchen starts to operate, some whilst your kitchen is active, and some at the end of the working day. Other checks can only be carried out when a process is carried out such as reheating or an event takes place such as a delivery arrives.

In addition to daily checks you as manager or proprietor should carry out a second independent check on a regular basis to ensure your controls are working effectively.

The way you record the checks should suit you and your staff. For instance it may not be practical to record the temperature every time you probe food. Instead decide on a frequency of recording checks that suits you. What is essential is that you record what actions you take when things go wrong, therefore if you decide to reduce the number of recorded checks it is recommended that you also establish a food safety diary or log book.

Although the food hygiene regulations do not specify what checks and how frequently they should be carried out or recorded, it is important that you as the person responsible for food safety have sufficient confidence in your system. For example, in order to be assured that your system is working well you may decide to carry out an independent audit once a week, on the other hand if you have confidence in your staff this could be reduced to a monthly check.



### **3.3.4 HACCP ANALYSIS PLANS**

The hazards you identify, the controls you put in place and the actions you need to take should things go wrong need to be recorded and communicated to your staff in the kitchen. The best way of doing this is to compile a HACCP analysis for each category of dish offered on your menu. This can then be used to train the food handlers in your kitchen to make sure they understand your HACCP procedures. .

To help you complete the HACCP analysis charts for your menu we have included –

- a blank HACCP analysis form for you to complete
- a completed typical HACCP analysis table for process steps found in most kitchens. This typical hazard analysis table shows hazards, controls and corrective actions for the recipe process step you have identified.
- an example of a completed HACCP analysis chart for roasting chicken.

You will note that the blank form that follows requires you to complete the following columns -

The first column - **recipe step** - list here the recipe process stage,

The second column – **hazard** - identify whether the hazard is contamination, bacterial growth or survival i.e insert a C, G or S.

The third column – **key control** – for the process step under consideration, select from the typical hazard analysis table the appropriate control and monitoring procedure i.e enter contents of the two key control columns into this column in your table

The last column – **corrective action** – include instructions for your staff as to what to do when things go wrong and control is lost. The information for this column can be found in the last corrective action column of the typical hazard analysis table.

When all these columns have been completed for each recipe stage you will have completed your HACCP analysis for the menu item.

These analysis sheets can then be used to train your staff in correct HACCP based procedures.

**HACCP CHART TEMPLATE FOR IDENTIFYING HAZARDS AT EACH STEP**

Hazards you should consider	Presence of bacteria	Contamination with bacteria during preparation	Growth of bacteria	Physical and chemical contamination such as wood, glass, hair, cleaning chemicals.
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**CCP = CRITICAL CONTROL POINT; GHP = CONTROLLED BY GOOD HYGIENE PRACTICE**

<b>STEP</b>	<b>POSSIBLE HAZARDS – WHAT CAN GO WRONG?</b>	<b>DO I NEED TO CONTROL THE HAZARD AT THIS STEP? CCP or GHP</b>	<b>HOW DO I CONTROL THE HAZARD?</b>	<b>HOW DO I MAKE SURE THE CONTROLS ARE IN PLACE?</b>	<b>WHAT SHOULD I DO IF THINGS GO WRONG AND THE HAZARD IS NOT CONTROLLED?</b>

## TYPICAL HACCP ANALYSIS CHART - HAZARDS, KEY CONTROLS AND CORRECTIVE ACTIONS

	STEP	POSSIBLE HAZARDS – WHAT CAN GO WRONG?	HOW DO I CONTROL THE HAZARD? [KEY CONTROL]	HOW DO I MAKE SURE THE CONTROLS ARE IN PLACE? [MONITORING]	WHAT SHOULD I DO IF THINGS GO WRONG AND THE HAZARD IS NOT CONTROLLED? [CORRECTIVE ACTION]										
1	Any stage	Microbiological Contamination	Prevent contamination – store separately and use different utensils and contact surfaces when handling raw and ready to eat foods cover food whenever possible organise workflow so as to reduce risk of cross-contamination.	By training and supervision ensure staff follow cross-contamination rules re. surfaces, utensils, equipment, sinks, personnel etc. when storing, preparing and serving food.	Dispose of any ready to eat food that could have been contaminated by raw food.  Retrain staff and re-enforce cross-contamination rules										
2	Purchase and Delivery														
3	Storage	Ingredient or food out of date	Label stored foods with use by and best before dates and ensure they are within date when used. [N.B. use by dates of own made foods and opened packs need careful assessment]	Check stock rotation at regular intervals.	Dispose of all foods that are out of date.  Retrain staff and re-enforce food storage rules.										
4	Cooking	Bacterial survival if cooking temperature not high enough for long enough	<p>Ensure correct temperature /time combination for type of food being cooked.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>CORE TEMP</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>75°C</td> <td>30 seconds</td> </tr> <tr> <td>70°C</td> <td>2 minutes</td> </tr> <tr> <td>65°C</td> <td>10 minutes</td> </tr> <tr> <td>60°C</td> <td>45 minutes</td> </tr> </tbody> </table> <p>N.B these temp/time combinations apply to cooking only and will NOT destroy toxins or bacterial spores already present so hot food MUST be held above 65°C to prevent spore germination and food must be reheated to above 82°C to destroy toxins.</p> <p>With liquids/semi-liquids ensure good heat penetration by stirring well at regular intervals.</p>	CORE TEMP	TIME	75°C	30 seconds	70°C	2 minutes	65°C	10 minutes	60°C	45 minutes	<p>Probe centre temperature of cooked food using calibrated thermometer.</p> <p>Stir liquid / semi liquid food well before checking temperature.</p> <p>Ensure you clean probe carefully with antiseptic wipes before and after temperature check.</p> <p>Ensure staff have access to and follow correct cooking procedures.</p>	Continue cooking until the food reaches the specified temperature for the specified time.
CORE TEMP	TIME														
75°C	30 seconds														
70°C	2 minutes														
65°C	10 minutes														
60°C	45 minutes														
5	Cold storage/holding or serving	Bacterial growth and/or spore germination if temperature not low enough	Ensure that food to be held cold is held below 5°C	<p>Probe centre of chilled food using calibrated thermometer. [Stir liquid or semi-liquids before taking temperature]</p> <p>Ensure you clean probe carefully with antiseptic wipes before and after temperature check.</p> <p>Ensure staff have access to and follow correct cold storage/holding procedures.</p>	<p>Determine for how long IN TOTAL the food has been kept above 5°C . If less than 4 hours in total ensure that temperature is reduced to below 5C and food is held at this temperature until eaten. Alternatively if food cannot be cooled to below 5°C eat food immediately or discard.</p> <p>If kept at above 5°C for more than a total of 4 hours then dispose of food.</p> <p>Record incident in food safety diary or log book.</p> <p>Retrain staff in cold storage/holding procedures.</p>										

	STEP	POSSIBLE <b>HAZARDS</b> – WHAT CAN GO WRONG?	HOW DO I CONTROL THE HAZARD? ( <b>KEY CONTROL</b> )	HOW DO I MAKE SURE THE CONTROLS ARE IN PLACE? ( <b>MONITORING</b> )	WHAT SHOULD I DO IF THINGS GO WRONG AND THE HAZARD IS NOT CONTROLLED? ( <b>CORRECTIVE ACTION</b> )
5.	Defrosting	Bacterial growth and cross-contamination from raw to ready to eat  Poor heat penetration to centre of food – ice-plug in centre.	Minimise opportunity for cross-contamination and bacterial growth by defrosting food in covered container in fridge.  Ensure that high risk foods such as chicken and turkey which are to be cooked later are thoroughly defrosted so as to ensure centre reaches temperature of 75°C or any other specified time /temperature combination. Ensure no ice remains in centre of food.	Check contents of fridge and house keeping standards at end of each day.  Check centre of any defrosted foods carefully to ensure completely defrosted before placing in oven to cook. [Should be above 0C]  Train staff in correct procedure for defrosting foods.  Ensure staff have access to and follow correct written procedure for defrosting foods.	Discard any ready to eat foods you suspect may have been contaminated by raw foods during the defrosting process.  Continue to defrost any foods which still appear frozen in the centre.  Record any corrective action taken in food log or diary.  Retrain staff in defrosting procedures.
6	Hot holding or serving	Bacterial growth and/or spore germination if temperature not high enough	Ensure that food to be held hot is held above 65°C  Stir liquid or semi-liquid food at regular intervals to ensure heat distribution.	Probe centre of hot food using calibrated thermometer. Ensure you clean probe carefully with antiseptic wipes before and after temperature check. Stir liquid or semi-liquid foods before checking.  Ensure staff have access to and follow correct hot holding procedures.	Determine for how long IN TOTAL the food has been below 65°C. If less than 2 hours in total ensure that the temperature is increased to 65°C and held there until food is eaten. Alternatively if food cannot be heated to 65°C eat immediately or discard. If kept below 65C for more than 2 hours dispose of food.  Record incident in food safety diary or log book. Retrain staff in hot storage/holding procedures.
7	Cooling after cooking	<b>G</b> - Bacterial growth and/or spore germination if temperature not reduced to less than 5C quickly	Ensure that cooked food which is to be stored in the fridge or freezer is cooled to below 5°C within 90 minutes. - This can be achieved by –  Using a blast chiller Portioning so that only small portions of food need to be cooled Spreading out in shallow trays and placing a fan on the food (protect from contamination as far as possible but do not cover as this will slow cooling).	Train and supervise staff in correct procedure for cooling foods.  Ensure staff have access to correct procedure.  Probe centre temperature periodically whilst cooling to ensure method is safe and food reaches 5°C in less than 90 minutes. Stir liquid or semi-liquid foods before checking. Stir liquid or semi-liquid foods before checking.  Ensure you clean probe carefully with antiseptic wipes before and after temperature check.	If food has not cooled to below 5°C within 90 minutes it should be disposed of.  Record incident in food safety diary or log book and revise cooling procedure.  Retrain staff in correct cooling procedure.
8.	Reheating	<b>S</b> - Toxins not destroyed if food not reheated to a high enough temperature.	Ensure previously cooked chilled or frozen food is reheated to 82°C	Probe centre temperature of hot food using calibrated thermometer. Stir liquid or semi-liquid foods before checking. Ensure you clean probe carefully with antiseptic wipes before and after temperature check. Ensure staff have access to and follow correct reheating procedures.	Continue heating until temperature reaches 82°C. If not achievable dispose of food and check equipment is working correctly. Record incident in food diary or log book and revise reheating procedure. Retrain staff in reheating procedures.

## INSTRUCTION ON HOW TO ROAST POULTRY SAFELY



<b>STEP</b>	<b>KEY SAFETY POINT</b>
1. Remove covered chicken from bottom of fridge	Check chicken not in contact with any other food in fridge and check that shelf life has not expired.
2 Smear the chicken with butter/oil and season with salt and pepper.	
3. Place chicken in roasting tin and calculate cooking time - 20 minutes per pound and 20 minutes over.	
4. Place chicken in oven pre-heated to 190°C.	
5. Baste the chicken regularly during cooking to keep it moist.	
6. At end of cooking time check that the chicken is thoroughly cooked.	Probe the chicken at its thickest part - into the leg or breast, with a calibrated thermometer you know is working correctly. Ensure the temperature is above 75°C. If below 75°C return to oven for further cooking and check temperature again.
7. If chicken is to be served hot later then keep it in warm oven/cupboard.	Check temperature is maintained above 65°C by probing as above. If temperature drops below 65°C assess how long it has been at this lower temperature. If less than 2 hours then heat quickly to above 75°C. If more than two hours or for an unknown period of time dispose of chicken.  Inform your supervisor and enter details in the safe food diary.

## COOKING OF CHILLED ROAST CHICKEN

DO I CARRY OUT THIS STAGE	POSSIBLE HAZARDS - WHAT CAN GO WRONG?	DO I NEED TO CONTROL THE HAZARD?	HOW DO I CONTROL THE HAZARD?	HOW DO I MAKE SURE THE CONTROLS ARE IN PLACE?	WHAT SHOULD I DO IF THINGS GO WRONG AND THE HAZARD IS NOT CONTROLLED?
Yes	Harmful bacteria already present when bought.	Control Point but not critical	Ensure chicken bought from reputable supplier, is used within use by date and stored below 5C at all stages until ready to cook.	<p><b>Buy only from suppliers you know.</b></p> <p><b>Check use by date on receipt and on removal from fridge before cooking.</b></p> <p><b>Check temperature of fridge and probe temperature of high risk foods daily.</b></p>	<p>Discard if use by date has been exceeded. Contact supplier or if stored too long raise awareness of the need to check fridge daily. If fridge is not working correctly contact service engineer. Assess if the chicken is safe to eat by considering how long it is likely to have been stored above 5C. If less than 4 hours then transfer to another fridge. If unknown then dispose of chicken.</p>
	Contamination with harmful bacteria during preparation	Not critical - General Food Safety Controls in Place	Unlikely for chicken to become contaminated but important to prevent chicken contaminating other foods. Therefore keep chicken covered in bottom of fridge, ensure staff use dedicated coloured boards and utensils	<p><b>At the end of each day check fridge for tidiness and correct storage.</b></p> <p><b>Train and supervise staff in correct cross-contamination procedures.</b></p>	<p>Re-organise fridge.</p> <p>Retrain staff</p>
	Survival and growth of harmful bacteria	Control point but not critical  <b>CCP</b>  <b>CCP</b>	<p>Remove chicken from fridge just before you need to prepare and cook it so as to reduce risk bacterial growth.</p> <p><b>Cook the chicken to a temperature above 75°C</b></p> <p><b>If holding roast chicken hot before serving ensure temperature is above 65°C</b></p>	<p><b>Ensure chicken remains out of fridge for less than 90 minutes.</b></p> <p><b>Probe centre temperature of chicken using calibrated thermometer.</b></p> <p><b>Check that temperature of chicken is maintained above 65°C using a calibrated thermometer.</b></p>	<p>If out of fridge for more than 90 minutes discard, Essential to ensure cooked to above 75°C if out of fridge for more than 60 minutes.</p> <p><b>Increase cooking temperature and/or time in oven until chicken centre reaches 75°C.</b></p> <p><b>Assess how long food has been held below 65°C. If less than 2 hours reheat quickly to above 75°C. If more than 2 hours or if time</b></p>

					unknown dispose of food.
DO I CARRY OUT THIS STAGE	POSSIBLE HAZARDS - WHAT CAN GO WRONG?	DO I NEED TO CONTROL THE HAZARD?	HOW DO I CONTROL THE HAZARD?	HOW DO I MAKE SURE THE CONTROLS ARE IN PLACE?	WHAT SHOULD I DO IF THINGS GO WRONG AND THE HAZARD IS NOT CONTROLLED?
	Physical and chemical contamination such as wood, glass, hair, cleaning chemicals.	Not critical - General Food Safety Controls in place	Remove packaging carefully and place in bin.  Follow general food safety controls listed below - cover hair, correct storage chemicals, well-maintained equipment	Observe and supervise trained staff.	
	Presence of or contamination with undeclared allergens	Not critical - General Food Safety controls in place	Highly unlikely but check ingredients list for any hidden allergens.  Make sure there is no opportunity for chicken to become contaminated with nuts, seeds or any other allergens at any stage.	Observe and supervise trained staff.	

**WHICH GENERAL FOOD CONTROLS SHOULD I FOLLOW?** Supplier and Purchasing Controls, Temperature Controls, Thermometer Checking Procedure, Staff Personal Hygiene Rules, Protection of Food and Cross - contamination controls, Allergen Controls.

**SUGGESTED RECORDS WHICH I COULD KEEP** - All in One Food Safety Monitoring Record, Cooking and Hot Holding Records, Product Intake Form, Storage Temperature Records, Training Records.

## 4. WHAT RECORDS DO I NEED TO KEEP?

In this pack you will find examples of records, which will help prove you have the hazards you have identified under control. You can use or adapt them to suit the needs of your business.

You may decide to keep one record for each process step or to combine several steps into one record such as the All in One Food Safety Monitoring Record. You may also find staff prefer to fill records when they are placed at the point of use.

We would also recommend that you keep a food safety diary or log book which records things that go wrong in your kitchen and the action you took at the time. In this way you will be able to prove that you have produced safe food at all times.

It is important that the records are checked by someone who understands your food safety system and is able to take action should he find that control has been lost at any time. He should also highlight to the owner any breakdown in the system and any stage where correct practices are not been followed on a regular basis. You may consider asking this person to sign that the records have been checked.

Records should be filed safely and we recommend that they are kept for three years.

Records you should consider keeping include the following -

RECORD	WHY NEEDED?
List of suppliers and ingredients	So that you know your suppliers and ingredients and buy ingredients of consistent quality
'All in one' Food Safety Monitoring Record	This is an all-in –one record which covers the control of most hazards.
Product Intake Form	This form can be used to record checks on raw materials you purchase if the all in one form is not used.
Monthly Chilled Food Storage Record	Used to record fridge and freezer temperatures if the all in one record is not used.



RECORD	WHY NEEDED?
Hot Holding Temperature Record Sheet	Used to prove that the temperature at which foods are held are sufficiently high to prevent bacterial growth. (above 65°C)
Hot Temperature Record	Again used to prove that the temperature to which the food is cooked or reheated is sufficiently hot to kill bacteria and that food is chilled quickly.
Probe /Thermometer Checking Record	Used to prove that thermometers are working correctly.
Cleaning Schedules	These specify frequency and method of cleaning and are to be signed by person carrying out the cleaning.
Weekly/Monthly Food Safety Audit Check Lists	These lists are useful to carry out weekly or monthly checks that the food safety management system is operating as specified.
Return to Work Questionnaire	This make sure your staff are fit to work and are not carrying any contagious diseases likely to contaminate food.
Training Records	These are essential in order to prove that you have trained your staff to understand your HACCP system
HACCP Review Records	This records the checks you have carried out to make sure your HACCP system is working effectively and does not need updating. .
Food Safety Diary or Log	Can be used instead of some records to record that 'all in order' or that corrective actions were taken in the event of loss of control. .

Although at times it may appear time consuming in a busy kitchen to complete all the information required on some records, they do prove invaluable in proving that the food you have produced is safe to eat.

The law does however allow some degree of flexibility and does not expect small low risk owner operated businesses to maintain the same number of records as larger businesses offering more extensive menus.