Information Sheet FH01

Safer Cooked Meat Production Guidelines

Introduction

The inadequate cooking and / or subsequent poor handling can make meat very dangerous. This guide covers the most important points – but it cannot give full details of all aspects, and your particular circumstances may not be covered.

This guide is to help you prepare safe cooked meat. It applies especially to cooking joints, poultry, meat loaf and meat pie fillings, and cold cooked meats.

The Food Standards Agency has provided information called *E. coli O157 Control of Cross – contamination, Guidance for food business operators and local authorities*. The guidance can be found at https://www.food.gov.uk/sites/default/files/ecoli-cross-contamination-factsheet.pdf

If there is any part you are not sure of, or if you need more detail, then please contact us on 01506 280000 or email environmentalhealth@westlothian.gov.uk and we will try to help. Remember, it is your duty to provide safe food.

The Main Dangers

There are 5 main dangers or 'hazards' that you need to know about and avoid:

- Harmful germs from raw meat can be spread and infect other foods. This is called “cross contamination”.
- If meat is undercooked then harmful germs can survive.
- Slow cooling after cooking will allow spores to grow into new germs and produce a poison.
- Poor handling practices can put germs back on to cooked meat.
- Lack of good refrigeration during storage allows germs to multiply to high numbers.

The methods in this guide are designed to overcome these main dangers.
Preparation

There are a few ‘golden rules’ which should help you avoid problems:

- Ideally use an area which is away from any cooked or ready to eat food, i.e. complete separation. If you cannot do this, then separate by a particular area within the kitchen, or separate by time.
- Train your staff. Make sure that everyone preparing meat has had proper training in good personal hygiene, and is working to a high standard. See information sheet FH16
- Never wash raw meat, as splashes can spread germs.
- Wash your hands before and after handling the raw meat. See information sheet FH09
- Thoroughly clean and disinfect the raw meat preparation area after you finish. A detergent solution should be used to clean surfaces before they are disinfected, using a chemical meeting BS EN 1276 or BS EN 13697. You may also use a combined chemical (often called a ‘sanitiser’ or a ‘bactericidal detergent’). The disinfectant should meet BS EN 1276 or BS EN 13697. Always follow the manufacturer’s directions for use.
- Utensils should, ideally, be washed in a dishwasher where disinfection is by heat. If hand washing them, wash raw and ready to eat utensils separately. The process should be to wash, rinse in clean water, disinfect and a final rinse in clean water if directed by the manufacturer. The disinfectant should meet either BS EN 1276 or BS EN 13697. It is important to use the correct disinfectant, at the right concentration, for the appropriate contact time. Always read the label and follow the instructions on any chemical cleaners. See information sheet FH06
- The less preparation you have to do yourself, the better. Consider asking your supplier if they can deliver the meat ready prepared for cooking, e.g. meat ready trimmed and diced for pie filling reduces the risk of contaminating your kitchen, and is much less work!
- It is best to use joints or quantities of less than 2.5 Kgs (about 6 lbs.) as this helps with thorough cooking and allows more rapid cooling.

Cooking

In general, all meat, especially poultry, should be well cooked. If you want to cook “rare” meat then you need specialist advice, and we will be happy to help with this. The ‘golden rules for cooking meat are:

- Make sure that germs are killed by ensuring that the centre of the meat reaches a safe temperature. Higher than +75°C (°C) for at least 30 seconds should be safe. If you want to cook to a lower temperature for a longer time, then you will need to take specialist advice. Please contact us for help.
- You must monitor the cooking process by checking the centre temperature of the meat. To do this properly you will need an electronic probe thermometer. An ordinary meat thermometer is not accurate enough. Check at least one item from every batch of cooking.
- The probe must be absolutely clean and germ free when it is used. Special probe wipes (not ordinary wet wipes) should be used for this.
- Check the accuracy of your probe thermometer regularly. Boiling water will give a reading of +100°C, and mix of water and melting ice a reading of 0°C. If your thermometer is more than +/- one degree out then change the battery and repeat the process. If it still reads out with the acceptable range then replace it.
- It is best to keep a written record of your monitoring and calibration, just in case there is a query later on.
Cooling

If you are going to keep the cooked meat for later use it must be cooled as quickly as possible, and then kept under refrigeration. **Cooling meat slowly is very dangerous.**

‘Quickly’ means cooling to lukewarm within about one hour, and then putting it in to the refrigerator to allow cooling to continue safely, within a total time of about 90 minutes. There are several good ways of achieving this. If you are having any difficulty then please contact us.

You should check the temperature of cooling meat during this process using a probe thermometer (don’t forget the probe wipes!) and keep a written record of your results.

Handling After Cooking

Food poisoning from cooked foods often occurs because of bad handling habits. To avoid them, remember:

- Cross-contamination from raw foods often causes problems, so keep cooked meats well apart at from raw foods all times.
- Have separate utensils, cutting boards and storage containers for ready to eat foods and for raw meat.
- Clean and disinfect the area where cooked product will be handled. This must be separate from any area in which raw products are handled.
- Always wash your hands immediately before handling cooked products.
- All equipment must be thoroughly cleaned and disinfected before and after use on cooked foods.
- All meat products must be stored under refrigeration.
- The recommended storage temperature is between +1°C to +5°C. This must be monitored and recorded frequently. You must also decide what action needs to be taken if a warmer temperature is found.

You will need to assess the safe storage and display life of cooked meat products, and have a system to make sure that this is not exceeded.

Reheating

We would advise that foods to be served hot be thoroughly reheated to a temperature above 82°C.

Help Available

Remember, we are here to help you provide food in a safe way, so ask for help if you are unsure of any aspect. Contact us on 01506 280000 or environmentalhealth@westlothian.gov.uk