

 <b>West Lothian Council</b>	<b>Environmental Health</b>		<b>SUBJECT:</b> <b>HANDLING    HOT</b> <b>FOOD            FOOD</b>
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		Public Health	
<b>STATUS:</b> TRADE ADVICE		Pollution Control	
		Pest Control/Dog Warden	

## Information Sheet FH22

### Safety in Preparing Hot Food

#### Why is the temperature of hot food important ?

Some types of bacteria can cause food poisoning. Thorough cooking is the best way to kill these bacteria and make sure that food is safe.

But some special types of bacteria can survive cooking by forming spores. If the food then cools down too slowly, then the spores hatch out into living bacteria again.

To deal with both these problems, you must control the temperature of cooked food at all stages. This Information Sheet tells you what to do at each stage to make sure that your food is safe. If you want to use different methods to these, you must be sure that they are still safe. Please talk to us and we will help you with this.

In this Information Sheet, all temperatures are given in degrees Centigrade, which is written like this :- °C.

#### Cooking

It is always safer to cook food fresh when it is needed, and serve it straight away, rather than to cook in advance and store the food for later use. The more complicated the process of cooking, cooling, storing, and re-heating becomes, the greater the chance of mistakes being made.

In general, high-risk food should be cooked to a temperature above 75°C for 15 seconds all the way through, and you can check periodically this when you cook. This is the safest method, and we recommend that you follow this.

Alternatively, if you often cook batches of the same recipe and quantity, you can follow a set method that will give a consistent result. You only need to check the final temperature of a batch every so often to make sure that the method is still working. There are risks in doing this, and if you want to work this way then you should discuss it with us first.

A few high-risk foods can be safely cooked to a lower temperature, e.g. rare steaks, and some fish dishes. This does not apply to any food containing minced or mixed meats – such as burgers and chip steaks – which always have to be cooked thoroughly. If you have any doubts about what to do then please ask us.

## **Cooling**

Sometimes food is cooked in advance, and then cooled and stored until it is needed. If this is not done properly, spores can hatch out and cause food poisoning – even if the food has been cooked properly in the first place.

The way to stop spores hatching is to cool the food quickly. From the end of cooking, your target is to get the food cool enough to go into a refrigerator or freezer within 1½ hours. “Cool enough” means about 35°C – which is just luke-warm. You must not put hot food into cold storage, but there is no need to wait until food is absolutely cold before chilling or freezing it – that can take too long to be safe.

Cooling food fast enough to meet the 1½ hour target may need some care. For example, if you leave a full pan of stew or a large joint to cool in a hot kitchen, then they will still be far too hot in the middle at the end of this time. So you will need a method to cool food faster.

This method might include :-

- Cooking joints no bigger than 6lbs (2.7Kg) or cutting larger joints into smaller pieces after cooking so they lose heat faster.
- Pouring liquid foods into shallow trays.
- Having a cool place with good ventilation to cool food in.
- Using fans to blow air over cooling food.
- Bagging the food and packing it in ice.
- Using a blast chiller.

We recommend that you keep a written record of the cooling times and temperatures of batches of high-risk foods you prepare. This is not difficult, and we can give you record sheets to help you organise this.

## **Reheating**

Heating pre-cooked food up again can be just as important as cooking it properly in the first place, it must be reheated to above 82°C.

Re-heating must be done quickly because slow warming can allow spores to hatch. And food must only be re-heated once; if it has still not been sold then it must be thrown away at the end of trading.

Microwave ovens are useful for re-heating food. For packaged foods, you should follow the instructions on the pack for your type of oven, and then use your probe thermometer to check that it has reached 82°C.

## **Hot Holding/ Display for Sale**

Food which is being kept hot, on display for example, must be kept above 63°C.

Equipment such as a bain-marie or a heated cabinet are designed to keep food hot, but are often not powerful enough to heat food up quickly. So, food should be cooked or reheated to the correct temperature (see above) before being kept hot.

Again, the temperatures should be checked regularly using a probe thermometer.

## **Transport**

Home delivery meals should be put in suitable containers with a close fitting lid, and placed in an insulated box or bag. Delivery times should be as short as possible.

You should be able to show that your method of delivering hot food is capable of holding the food at a safe temperature until the delivery is completed.

## Temperature Measuring Equipment

Keeping a careful and accurate check on the temperature of food is the key. To do this properly you will need a thermometer which is safe to use with food. We recommend that you use an **electronic probe thermometer**. These are battery operated, have a stainless steel probe which is safe to use in food, and show the temperature as a number on a small screen. It is worth investing in a good quality probe as you will use it a lot, and you do not want it to let you down! It rarely pays to buy the cheapest type you can find.

There are many suitable types available at a range of prices. There are a number of suppliers in the area, and we can give you a list if you need one.

## Accuracy

You should periodically check your thermometer for accuracy. This is called calibration. There are companies who will do this and issue a certificate; usually such certified calibration is carried out once a year. This can be very important if you prepare a lot of high-risk foods.

It is also easy to carry out your own checks, and we suggest that you do this monthly. Put the end of the probe into a mixture of water and ice, and it should read 0°C. Put it into boiling water and it should read 100°C. One degree either way is accurate enough for ordinary use. If the reading is outside these limits then it will need adjusting or repairing. The manufacturer's instructions will give you more information on this.

## Using a Probe Thermometer

Using a probe thermometer is quick and easy once you get into the routine, and will save you from some serious problems. It only takes seconds to get an accurate reading – just wait until the number has not changed for a 15 seconds and then take the reading.

The probe must be clean before it is used. It is best to do this using proper 'Probe Wipes' which are designed to clean and kill bacteria at the same time. These are widely available from catering equipment suppliers. Simply wiping the probe with a cloth, or rinsing it under the tap is not enough and can be very dangerous. Ordinary hand wipes or baby wipes are not the same, and do not work as probe wipes.

Keep your probe and probe wipes handy in the kitchen – not in a drawer or box, because they will not get used. A good place to keep them is in the refrigerator – everyone can find them quickly, and the wipes will not dry out.

## Further help

Remember it is your responsibility to ensure that the food served to your customers is safe. If you would like help, or need any further advice, then please contact us on 01506 282500 or [environmentalhealth@westlothian.gov.uk](mailto:environmentalhealth@westlothian.gov.uk)