

 West Lothian Council	<b>Environmental Health</b>		<b>SUBJECT:</b> <b>HANDLING AND STORAGE OF CHILLED AND FROZEN FOOD</b>
	4	Food Safety/Food Hygiene	<b>NUMBER:</b> FH23
<b>Revised:</b> 24/12/07		Health & Safety	<b>KEYWORDS:</b> CHILLED AND FROZEN FOODS
		Public Health	
<b>Status:</b> TRADE ADVICE		Pollution Control	
		Pest Control/Dog Warden	

## Information Sheet FH23

### Chilled and Frozen Foods

#### Introduction

Scotland has its own law on temperature control which is different from the rules in the rest of the UK. This information sheet is based on rules that apply in Scotland, and on recognised best practice found in the various Industry Guides. It gives a summary of the areas where controlling the temperature of food is important.

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

#### Why is it Important?

Keeping food cold reduces the rate at which bacteria grow and multiply. This allows us to keep food safely for longer. But cold does not kill bacteria, and many types continue to grow and multiply in the cold, even though they do so much more slowly. So it is important to control both the temperature food is kept at, and the length of time that it is stored.

#### Temperature Measuring Equipment

Many fridges and freezers are fitted with thermometers, which show the **temperature of the air** in the unit, and this gives an indication as to how well the unit is working. This temperature should be checked and recorded at least once, and preferably twice, every day.

Whether a display thermometer is fitted or not, it is good practice to routinely check the temperatures of the food being stored as well. To do this properly you will need a thermometer which is accurate, and 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 with 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 check your thermometer for accuracy every so often. This is called calibration. There are companies who will do this and issue a certificate, usually once a year. This can be very important if you prepare and/or store 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 a few seconds to get an accurate reading – just wait until the number has not changed for a few seconds and then take the reading.

To check chilled or frozen food, which will normally be wrapped or packaged in some way, simply place the probe between two packs so that it touches them both. This gives a reasonably accurate reading of the temperature of the food, rather than the air temperature, without having to put the probe into the food itself.

The probe must be cleaned regularly. 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 chemists and 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 – 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.

## **Deliveries**

Your suppliers must deliver food to you at the right temperature, which means that the delivery will come in a refrigerated or freezer van. Make sure the food is at the correct temperature, i.e. no warmer than 8 °C for chilled food, and no warmer than minus15 °C for frozen food (some suppliers may have their own limits, please check accordingly).

It is good practice to write down the delivery temperatures at the time so you can show that the food was delivered at the correct temperatures. You can ask the driver to record the temperature on your delivery note for example, or simply do a 'between pack test' as described above.

## **Own Purchase & Uplift**

Maybe you buy and collect your food from your own suppliers. In this case you must ensure that you only buy from reputable suppliers, and check for yourself that it is being kept at the right temperature as far as you can – for example by checking their display thermometers at the time you buy. If you do not have your own refrigerated or freezer compartment van you should use cool boxes or insulated bags, with freezer packs. You must ensure that you take the food as quickly as possible back to your premises and get it straight into cold storage again.

## **Storage**

Your refrigerator should be able to keep the food at a temperature of between 0 to 5°C, and never more than 8°C. Frozen food should be stored at minus18°C or below.

All food should be wrapped or covered, and dated to help with stock rotation. It is best if raw and ready to eat foods are stored in separate fridges, however if you only have one fridge then raw foods should be stored at the bottom

Staff carrying out routine temperature monitoring checks should be trained to know -

- The method to be used for checking, and what written records to keep,
- The correct temperatures for each refrigerator or freezer,
- What to do if the temperatures are wrong, e.g. tell the boss, move food to another unit, call the engineer etc.

## **Labelling**

Packaged foods will have an expiry date stamped on them – but if you open the packaging then this date will no longer apply. You must then decide how long the food can safely be kept. The same applies if you make up some food which you plan to store for later use.

The amount of time depends on the type of food, and whether it will be kept in the refrigerator or the freezer. Most food will last up to 3 months in the freezer, but usually only 1 to 3 days in the refrigerator.

Food should be labelled to show when it was made (or first opened) and the date by which it must be used. You must check the dates every day and make sure that you throw away any food which has reached its expiry date.

## **Defrosting**

Apart from some foods which are made to be cooked from frozen (it will say so on the label), it is important to make sure that frozen food is thoroughly defrosted, all the way through, before use. It is best to check this with a probe thermometer.

Frozen food should always be defrosted in a cool place, and the best place for this is in the refrigerator. This means that while the food is defrosting it will still always be at a safe temperature. This can take some time, so you will have to plan ahead. Defrost raw food at the bottom of the refrigerator to avoid defrosting juices dripping onto other food.

Microwave ovens can be useful for defrosting quickly, but follow the manufacturers' instructions. Defrosting raw meat in the sink, or under running water, can be dangerous as the splashing water can spread bacteria over a large area, and we do not recommend this method. It is important to make sure that all food is thoroughly defrosted before use, and that defrosting cooked food must always be separate from raw foods.

## **Display For Sale**

In the same way that food is stored in the fridge, you must make sure that the temperature for display is between 0 to 5°C , maximum 8°C. If you display high risk food without chilling it, then it should only be on display for 2 hours at most, and then thrown away.

All food on display should be wrapped or covered and dated to help with stock rotation. If open food is on display, then it must be protected by sneeze screens. Tongs, serving spoons, etc should be provided where appropriate, and these must be regularly washed

during the period of service. Staff serving food from displays must wash their hands regularly.

### 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)

### Thermometer Suppliers

Supplier	Location	Tel	E-mail / web site
ARCO Ltd	Avon Mill Ind Est, Mill Rd, Linlithgow Bridge, EH49 7QY	01506 841 510	Linlithgow.branch@arco.co .uk
Nisbets PLC	Fourth Way, AvonMouth, Bristol, BS11 8TB	08451 405 555	www.nisbets.co.uk
S. Brannan and Sons	Leconfield Industrial Estate, Cleator Moor, Cumbria, CA25 5QE	01946 816 625	www.brannan.co.uk