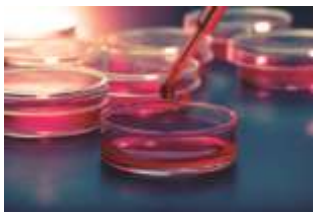
FCS FOOD CONSULTING SERVICES

NEWSLETTER

November 2016 - Volume 2, Issue 11

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MEASURING THE TEMPERATURE OF REFRIGERATORS AND FREEZERS

The first thing to realise is that the in-built thermometers (especially the analogue dials that look a bit like a clock) are notoriously inaccurate. Digital gauges are more accurate in our experience. Many units, especially smaller ones like chest freezers, lack inbuilt gauges completely notwithstanding that this is illegal in terms of R962. Therefore, we strongly advocate getting the ideal, a digital hand-held thermometer because these are generally more accurate and their accuracy (or otherwise) can be independently verified as per the reminder below.

The infra-red thermometers (that often have a laser pointer to assist in their use and are sometimes nicknamed “laser guns” for this reason and due to their appearance) are also not that accurate and cannot be easily verified by the below protocol. Hence we now deduct points if these are the only ones available.

1. Place the thermometer in such a way that the probe is more or less in the middle of the chamber (not too close to the cooling fans / motor, nor too close to the door / lid.
2. Allow at least 3 minutes for the reading to stabilise. Read the device as soon as possible after opening the door or lid because the cold air can rapidly escape.
3. If the temperature seems to warm, clean the probe of the thermometer and then spray on the QAC-based sanitised usually applied to the work tables. Carefully insert the probe into a food that has been in the fridge for a while (ideally 24h) but is not defrosting and take the reading. Use a food with high moisture where you do not have to compromise the packaging to pierce it. Fruits and vegetables are good for this, milk and dairy items less so.
4. If the reading is still too high, repeat the procedure and record the best of the three readings (between the air temperature and the two food readings). You are entitled to do this because the air temperature fluctuates massively with opening of the door but the water inside moist foods will resist temperature changes extremely well and represent the “average” of the temperature for the last several hours prior to the reading being taken.

Alternatively, it is in many ways simpler to keep a small bottle of sanitiser (labelled as such) in each fridge and simply put the probe in this when a temperature is taken. The only risk is that the bottle gets removed or lost. The procedure is the same for freezers except that most frozen foods are too hard to pierce with the probe without damaging it besides ice cream and the like and butter or margarine. It is thus worth considering placing a small tub of ice cream (rather than sanitiser) in each freezer purely for temperature monitoring purposes. It should be labelled as such.

Verifying your hand-held digital thermometer

Further experience has allowed us to slightly improve the below advice given in a recent newsletter.

1. Place a scoopful of ice cubes into a glass with a small amount of cold water (about 30ml) to facilitate melting. If necessary, crushed ice can be substituted.
2. Insert your thermometer within the iced water and allow the temperature to approximately stabilise.
3. Vigorous stirring is allowed and indeed encouraged to hasten the melting.
4. Record the lowest reading you get in the case of fluctuations.

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CLEANING AND SANITISING NYLON CUTTING BOARDS

Nylon cutting boards are amongst the most high-risk items in the kitchen. Just to repeat what we have recommended before, they should be cleaned as follows:

1. Scrub with a nylon-bristled brush only. Do not use steel wool, steel pot scourers, scourer pads, sponge-scourers or scrapes/planes.
2. Add some additional concentrated manual detergent or multi-purpose cleaning detergent to the boards whilst scrubbing.
3. After the boards are spotlessly clean and feel free of grease, sanitise them in one of the following ways:
    a. Spray them with a suitable sanitiser (QAC- or chlorine-based) whilst already in the upright storage racks.
    b. Immerse them in a similar solution, in which case the solution must be clean and changed often to maintain activity and the boards must be fully immersed. Unlike the normal rinsing sink, chlorine may be used and the temperature can be cool since the boards need to soak for several hours or—ideally—overnight. In fact, chlorine cannot be hotter than about 38 ℃ for safety's sake.
    c. Run them through the automatic dishwashing machine (this does not replace the scrubbing described above which is the actual cleaning step).
    d. In the top two cases the sanitising solution must be correctly-diluted and in the last case the ware washer must be working properly, with hot enough temperatures.
4. Nylon cutting boards must be correctly stored, either upright in a rack (not touching each other), or left in the sanitiser until used. Nylon cutting boards must not be stored on surfaces awaiting use, and cannot be stored in a pile!
5. As with all pot-wash items, they should be stored on a clean rack, located on a clean shelf or table, and well away from potential cross contamination risks.

Because we know that nylon cutting boards are amongst the most-frequently contaminated items in a kitchen, FCS has always split the actual assessment of their handling in the report into detailed step-by-step checkpoints to mirror and remind clients of the correct procedures above.

It follows logically that a failure at an early step (for example, a low concentration of sanitiser) has a "knock-on" or cascading effect on the subsequent steps which depend on it. We thus deduct all such consequential penalties to underline the risk with the notable exception of the cleaning step.

However, as with all such procedures, failure to properly clean at the outset can fatally compromise the subsequent attempts at sanitation. In recognition of this, FCS will shortly begin penalising **all the steps** in the sanitation protocol if the initial cleaning step is incorrect since it is virtually impossible to sanitise a dirty or greasy nylon cutting board no matter what technique is used.

5. For the hot reading, place a small pot on the stove or gas burner, add water and bring to the boil.
6. Alternatively, if you are boiling a non-greasy food (like rice or potatoes) this pot can be conveniently substituted instead. Make sure the thermometer is cleaned and sanitised before and after this.
7. Insert your thermometer within the boiling water, and allow the temperature to approximately stabilise.
8. The water must be on a rapid or "rolling" boil (i.e. bubbling on top) and you should carefully stir the thermometer in the water (be careful to avoid scalding).
9. Take the highest reading you get.

GOOD TO KNOW:

ALUMINIUM IN THE KITCHEN

Aluminium and wooden items are highly discouraged within a commercial kitchen. Why? Aluminium is a form of reactive cookware.

Non–reactive cookware, such as ceramic and stainless steel, while not as effective at conducting heat, are non-reactive, meaning they do not interact with the chemical structure of the food or change the look or edibility of the food.

However, Aluminium is a soft and highly reactive metal form of cookware. It conducts heat very efficiently, and therefore, does a great job of cooking our food evenly. However, these metals are reactive with acidic and alkaline foods, and the metal can migrate in measurable amounts into food when cooking. For example, if cooking with ingredients such as tomatoes or lemon juice, the food can take on a metallic flavour, especially if the cooking time is very long. Light coloured foods, like eggs, can develop grey streaks. Over exposure of aluminium has been linked to brain disorders, behavioural abnormalities and many published journal articles link excessive aluminium exposure to Alzheimer's disease.

WOOD IN THE KITCHEN

Wooden spoons have been used as far back as the Palaeolithic Era, the earliest known versions simple pieces of wood used to scoop foods just not liquid enough to drink. They have even been found in Egyptian tombs! With wooden utensils long and varied history and favouritism in home kitchen, why is it so discouraged in commercial kitchens?

- Wood will not stand up to the intensive use of the commercial kitchen environment and so will changes colour and texture
- If continuously wet, the density and shape will change
- Easily chipped, allowing wood pieces to fall into food
- Wood is difficult to clean and properly sanitise
- Wood retains the flavour of and is easily stained by pungent foods
- Flammable

Information:

Copper and iron are also "reactive" metals. Foods will also pick up chemical elements from theses metals, causing us to ingest them. Our bodies process iron relatively easily, but have a harder time eliminating copper. The small amount ingested from cookware won't harm us but you do not want to use copper for everyday use.