



CLEANING AND SANITISING

The Issue – SANITISING FOOD CONTACT AREAS AND EQUIPMENT

Some food businesses are unclear about what to sanitise and how to do it. Inadequate sanitising of food contact surfaces may allow harmful bacteria to survive and contaminate food.

Background

Clause 20 of the Food Safety Standard 3.2.2 requires food businesses to ensure the following are clean and sanitised:

- a) eating and drinking utensils; and
- b) food contact surfaces equipment – whenever food that will come into contact with the surface is likely to be contaminated.

What is the difference between cleaning and sanitising?

Cleaning means the removal of visible dirt or residual food matter. It can leave behind bacteria that are too small to be seen. Sanitising is using heat or chemicals to destroy any dangerous bacteria that might remain.

Cleaning and sanitising should usually be done as separate processes. A surface needs to be thoroughly cleaned before it is sanitised as sanitiser effectiveness is reduced in the presence of food residues and detergents.

What needs to be sanitised?

- Eating and drinking utensils such as glasses, cups, plates and cutlery;
- Food contact surfaces such as cutting boards and knives used for ready-to-eat foods;
- Equipment such as mixers and slicers which are used for ready-to-eat foods. For example, a mixer used for preparing a cold set cheese cake must be sanitised, but a mixer exclusively used for preparing cake mixes needs only to be cleaned, as baking the mix will kill any bacteria that the mixer could have introduced;
- Benches and sinks, if they don't make direct contact with ready-to-eat food, don't need to be sanitised but do need to be cleaned.

Methods of sanitising

There are two methods of sanitising:

1. Using hot water; or
2. Using chemicals.

1. USING HOT WATER

Manual sanitation using hot water

The water has to be hot and a minimum of 77°C for at least 30 seconds contact time to be effective. At this temperature, serious scalding is possible and so hot water sanitising is only recommended for use with specialised equipment such as dishwashers or processing machinery with CIP (cleaning-in-place) technology.

Sanitising using a dishwasher

Dishwashers are an effective means of using hot water to sanitise eating and drinking utensils and other heat resistant equipment such as cutting boards, knives and metal mixer bowls.

Commercial dishwashers use high water temperatures for a relatively short time. Domestic dishwashers use a lower temperature but their long cycle times can allow for effective sanitation. 'Low' or 'economy' settings should not be used on domestic dishwashers, as a temperature of 65°C should be reached. If unsure whether your domestic dishwasher can achieve 65°C, refer to the operating manual or contact the manufacturer.

2. USING CHEMICALS

Commercial sanitisers

The most commonly used sanitisers in food businesses use either chlorine or QATs (quaternary ammonium compounds) as active ingredients. Most suppliers of sanitisers tend to recommend QATs because they have a longer shelf life than most chlorine sanitisers, less odour and unlike chlorine, are not corrosive on most metal surfaces.

Suppliers can provide advice on:

- Suitability of a sanitiser for use in a food business;
- The correct concentration to use;
- Contact time (important – don't overlook this); and
- Whether it needs to be rinsed off. Use of a no-rinse sanitiser can save time and water if the sanitiser is used according to the manufacturer's instructions.

Combined detergent/sanitisers

Specially designed combined detergent/sanitisers, carefully used in accordance with the manufacturer's instructions, may be appropriate for some small businesses with limited sanitation requirements and a single bowl sink. These products should be effective on lightly soiled surfaces with no protein or fat residues.

SANITISING FOOD CONTACT AREAS

Bleach as a sanitiser

Small businesses with straightforward sanitising requirements can use normal bleach, which can readily be purchased from supermarkets. Bleaches generally range from 4% to 10% chlorine as indicated on the label. Plain bleach only should be used; not bleaches with added 'lemon scent' etc.

To make up 10 litres (about a standard sized bucket or sink), refer to the following table:

Amount of bleach to add to 10L warm water – Sanitise for 10 minutes	
Using household bleach (4% Chlorine)	Using 'Hospital bleach' (10% Chlorine)
25 mL	10 mL

Non-preferred alternatives

Methylated spirits is not recommended as a sanitiser for food contact surfaces as it will leave chemical residues which may taint food rendering it unsuitable.

Citrus based cleaners are not proven to have a sanitising effect and should be used as cleaning agents only.

Vinegar and lemon juice are not recommended for commercial situations in the absence of evidence that they are consistently effective.

How to sanitise using a chemical sanitiser and a double bowl sink

Best practice involves up to four 'wet' steps using a double bowl sink by one of two methods. Method 1 requires use of a container for the sanitiser; Method 2 involves emptying and refilling one of the sinks.

METHOD 1

1. Set up a clean plastic tub or bucket containing sanitiser at the correct concentration on a bench or draining board;
2. Wash utensils and equipment in the first sink using warm water and detergent;
3. Rinse in clean water in the second sink;
4. Place into the tub of sanitising solution for the required time;
5. Rinse again (unless a 'no rinse' sanitiser is used) in the second sink; and
6. Drain dry or dry with a clean tea towel.

METHOD 2

1. Wash utensils and equipment in warm water and detergent in the first sink;
2. Rinse in clean water in the second sink;
3. Empty the first sink, clean and refill with sanitiser at the correct concentration;
4. Place into the sink of sanitising solution for the required time;
5. Rinse again (depending on the sanitiser) in the second sink; and
6. Air dry or dry with a clean tea towel.

Sanitising with a spray bottle

A spray bottle of sanitiser can be used for bench tops or equipment not suitable for washing in a sink or dishwasher. A spray bottle can also be used for single tasks such as sanitising a cutting board.

Before using the spray, ensure the surface to be sanitised is properly cleaned and thoroughly rinsed. Apply the spray and allow sufficient time for the sanitiser to work (see manufacturer's instructions) and wipe off with a clean sponge or cloth. The cloth used to wipe off the sanitiser must be clean to ensure it does not recontaminate the surface. Ensure spray bottles containing sanitiser are properly labelled.

Cost effective cleaning

Cleaning takes time and costs money. Well designed and organised premises can reduce the time required for thorough cleaning.

- All items must be stored off the floor. Allowing 150mm clearance from the floor gives plenty of room for cleaning beneath shelving and equipment.
- Undertake regular maintenance e.g. filling holes and replacing damaged tiles.
- Keep only what you need at the premises. Minimise stock holdings. Why clean and store things you don't use?
- IMPLEMENT AND DISPLAY A CLEANING SCHEDULE so all staff know their cleaning responsibilities.
- Implement and maintain a regular pest control programme.
- Keep wood out of the kitchen. Wood absorbs moisture, provides a breeding ground for bacteria and cannot be easily cleaned and sanitised.
- Wipe down with paper towels. Dish cloths can spread bacteria.
- If hosing down, use a high volume LOW PRESSURE hose. High pressure hoses splash dirt onto surfaces and create aerosols that may contain and spread bacteria.