Biotech Laboratories
AIR FOOD WATER ENVIRONMENTAL TESTING

Food Preparation Surface Testing

A compulsory component of all food safety plans is the cleaning and disinfection of surfaces that come into contact with food. As with all control points there is a need to monitor that the risk is being controlled. Microbiological evaluation of surfaces is the most accurate method to verify that the process is effective.

It is important to realise that food contact surfaces may include:

- benches
- storage trays
- storage tubs
- Bain-marie containers
- chopping blades and other utensils
- mixing bowls and bowls of machinery mixers and cookers

The list will differ for each food manufacturer, but it basically comprises of every item that comes into contact with your product. All listed surfaces must be properly cleaned and disinfected.

There are commercially available test kits that detect ATP or protein on surfaces. These provide quick results but do not report the number of viable bacteria present. Only a culture for growing bacteria will provide the definitive proof that cleaning is effective. A Standard Plate Count is all that is required with an acceptable limit of less than 6 bacteria per square centimetre. We supply all the equipment necessary to perform the sample collection. It is recommended that an area no larger than 25 cm^2 be tested (5 cm x 5 cm template for most surfaces or 12.5 cm x 2 cm templates for large knives).

When testing a wet surface, a dry swab can be used. When surfaces are dry the swab must be pre-moistened to enable bacteria to be removed from the surface. A dry swab will not effectively sample bacteria from a dry surface. We can also provide contact agar slides which are pressed lightly against the surface and returned to the laboratory for culture and reporting.

It is important to test only those surfaces that have been cleaned and disinfected. Do not test surfaces that are ‘in use’. Also it is important that the sanitiser has had sufficient exposure time as specified by the manufacturer. We recommend that testing is only performed in the morning before any use of surfaces as this evaluates not only the cleaning and sanitising process but also the environmental factors that could contaminate a surface between cleaning and the next time it is used.

Testing should be done regularly. Should you decide you have 24 surface tests to be performed yearly, it would be best do 2 tests every month rather than 12 tests twice a year. Regular testing will detect outliers quickly, such as staff cleaning procedure errors or sanitiser concentration variations, rather than discover the problem 6 months down the track.

Also in some circumstances, State Health authorities have required the routine testing of areas that do not come in contact with food, such as handles and walls of refrigeration chambers such as bulk food storage cold rooms and commercial refrigerators. In these cases specific food pathogens such as Listeria monocytogenes, have been required as a presence/absence test.

We can perform counts and presence/absence testing for the full range of bacterial food pathogens. Please contact us for further information.