

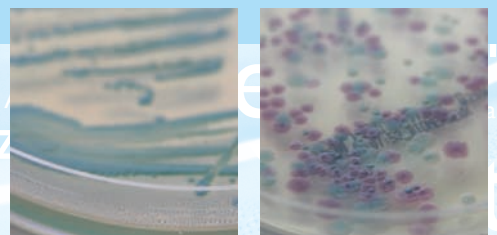
Microbial identification

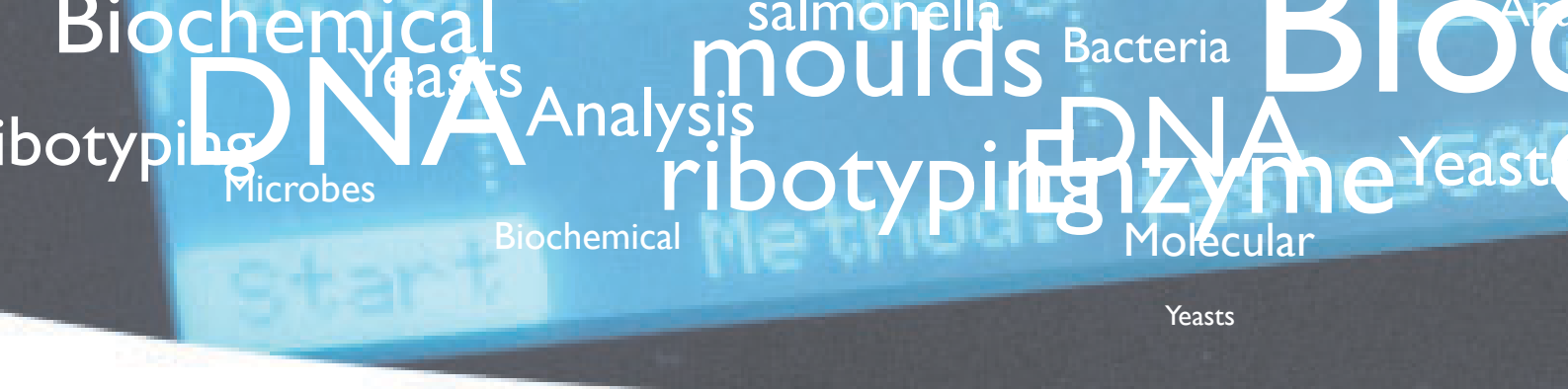
and characterisation services



Users' guide to services

- Foodborne pathogens
- Spoilage incidents
- Tracing microbial contaminants
- Microbiological troubleshooting
- Food safety advice





Solving problems with microbes

Identification and characterisation of microbes is essential in the management of food safety and quality, tracing contaminants and troubleshooting problems such as spoilage.

Contact us to discuss the approach that's best for you - we tailor our services to your needs.

Services

Identification – provides the name of the organism (to genus or species level), which can help identify whether it poses a safety/spoilage concern or is likely to be heat resistant, for example. This can include a standard or premium report.

Standard report – lists the samples analysed, methods used and micro-organism(s) found

Premium report – a more flexible format providing sample details, summarising the approach used, and listing the species identified, with additional tailored information where requested.

Characterisation (typing) – this groups organisms that share similar DNA fragment patterns or antigenic profiles, to assist with tracking/tracing contamination or strain authentication.

Additional information – As part of the tailored service, this can include details of possible sources of the problem organisms, links to known food poisoning outbreaks or other supporting information, as agreed.

Approaches

We use a wide range of molecular (DNA-based) and other techniques - picking those that best solve your problem, to offer a comprehensive tailored service. Approaches include:

Biochemical methods – a variety of approaches including enzyme-based tests

PCR (polymerase chain reaction) – A DNA 'amplification' method for detecting particular genes or other DNA sequences, for example, for confirmation of specific micro-organisms

Rep PCR – a form of PCR that detects 'repeated DNA sequences' to give a DNA fragment pattern that helps characterise micro-organisms

Ribotyping – used for characterisation and identification, this technique can group isolates according to the similarities of their DNA fragment pattern (characterisation) or identify matches in patterns against a database of isolates (identification).

Sequencing – Analyses the 'DNA code' of a gene found in all bacteria or a gene found in all yeasts, to allow comparison against a database of micro-organisms to select the closest matches.

Chemical Analysis

Microbes, DNA, Enzymes, Moulds, Bacteria, salmonella, Isolates

Contact us to discuss the options – Timing is often critical in these analyses, so contact us at the earliest opportunity.

If necessary we can isolate and purify micro-organisms from food samples and environmental samples, for identification or characterisation, or we can work directly on your isolates.

	Bacteria		Yeasts		Mould investigation service
Identification services	Biochemical (enzyme based)	Molecular (DNA based) <ul style="list-style-type: none"> • Sequence analysis • Ribotyping 	Biochemical (enzyme based)	Molecular (DNA based) <ul style="list-style-type: none"> • Sequence analysis 	Phenotypic to species level (visual)
Characterisation services		Molecular (DNA based) <ul style="list-style-type: none"> • Rep PCR • Ribotyping 		Molecular (DNA based) <ul style="list-style-type: none"> • Rep PCR 	Molecular (DNA based) <ul style="list-style-type: none"> • Rep PCR
Rapid confirmation services		Molecular (DNA based) <p><i>Salmonella</i> by PCR</p>	See opposite for outline of approaches. Supplementary information on individual techniques is available on request.		

Please note that for urgent analyses we need to be given as much notice as possible to meet your needs and arrange out-of-hours work if necessary.



What next?

Contact us to discuss your requirements. We can talk you through the options. See details below or the separate insert which lists contact details.

Urgent samples

We are able to process urgent isolates and to provide additional services on request. Please contact us for further details or if you would like additional information on any of the current services. Supplementary details on the techniques we use are available on request.

Prices

Our analysis is quoted on an individual basis to tailor our work to your needs. We are more than happy to provide quotations on request.

Sample types

We analyse isolates sent directly from the client or as a follow up to other investigations we have done on your behalf. Our services cover bacteria, yeasts and moulds. Our skilled team uses the latest technologies to deliver a tailored service to clients. A list of the services currently available is detailed inside.

Sample submission

Samples or isolates must be sent in suitable packaging that complies with the legal requirements relating to the postage and transport of biological materials. All isolates must be adequately protected against damage and leakage in transit. Recommendations for the packaging of cultures are available on request. We would ask that samples are sent with either a completed submission form or a letter detailing:

- the analysis required
- nature of the sample
- growing conditions previously used to culture the isolate
- contact name at your company
- full postal address, telephone number and email address

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