



## INTRODUCING CAWTHRON IN BLENHEIM

Cawthron is an independent, community based, organisation governed by a board of trustees, based in Nelson.

Activities at Cawthron include research, advice, and analytical services in our areas of scientific expertise.

With the establishment of the Blenheim office, we will continue offering all these services, with the added advantage of being “just down the road” for our Marlborough customers.

## BLENHEIM LABORATORY

Cawthron’s Blenheim Laboratory is staffed with an experienced enthusiastic team, working in new premises that are located in Grovetown Park.

We are servicing the Marlborough region offering a wide range of microbiological tests.



Rachael Rebecca Michelle

Our main goal is to work with customers to help meet their analytical requirements by producing timely and accurate results.

The lab has a sample reception service where customers can come in to collect sample kits and bottles, and drop samples off for testing in either the Blenheim or Nelson Laboratory.

Please don’t hesitate to contact us:

**Cawthron**  
**Grovetown Park**  
**State Highway 1**  
**Private Bag 1007 Blenheim**

**Phone (03) 579 2270**  
**Fax (03) 579 2210**  
**Email: [Blenheimlab@cawthron.org.nz](mailto:Blenheimlab@cawthron.org.nz)**  
**WWW.CAWTHRON.ORG.NZ**

## OUR ANALYTICAL SERVICES

### Sample testing includes but is not limited to:

Drinking water  
 Well/Bore waters  
 Swimming pool waters  
 River waters  
 Irrigation waters  
 Effluent and discharge monitoring  
 Seawater and Shellfish  
 Food Products: Raw ingredients, processed or end product.

### Organism testing includes but is not limited to:

*Coliforms / Faecal Coliforms / E.coli*  
*Staphylococcus aureus*  
*Yeasts and moulds*  
*Listeria sp.*  
*Salmonella sp.*  
*Bacillus cereus*  
*Clostridium perfringens*

As well as offering a range of Microbiology testing on site we are fully supported by Cawthron Nelson for testing and advice on Food Chemistry, Nutraceuticals, and Environmental testing.

## QUALITY CONTROL & ACCREDITATIONS

All Cawthron’s testing procedures have undergone rigorous method validation, are approved by The New Zealand Food Safety Authority, and are performed in accordance with our lab’s IANZ/ISO 17025 accreditation.

### Other Accreditations include:

FDA US Food & Drug Administration  
 NZDWS NZ Drinking Water Standards



## NELSON LABORATORY SERVICES

Cawthron Laboratory Services provides a comprehensive range of testing and analysis across several sectors. There are six specialist labs covering microbiological, natural products, environmental, food, phytoplankton, freshwater and marine biotoxin testing.

*Marine Biotoxins* – shellfish testing for export and public health purposes.  
 Risk management advice.  
 Test method development.

*Phytoplankton* – early warning systems for shellfish industry and regulatory bodies. Harmful algal blooms.  
 Analysis of fresh water algae and toxins.

*Food Chemistry analysis* – for production and regulation, export Certificates of Analysis, and label claims.

*Environmental testing* – chemical testing of samples for nutrients and trace elements, for regulators (monitoring) and industry (compliance).

*GMP Nutraceuticals testing* – for Good Manufacturing Practice Certification of Nutraceuticals and natural remedies.

*Microbiological testing* – for industry compliance.

For Nelson testing enquiries please contact: **Customer Services**

**Ph: 03 548 2839**  
**Fax: 03 546 9464**  
**Email: [lab@cawthron.org.nz](mailto:lab@cawthron.org.nz)**

## INFORMATION ON ASPECTS OF MICROBIOLOGY

### APC : Aerobic Plate Count

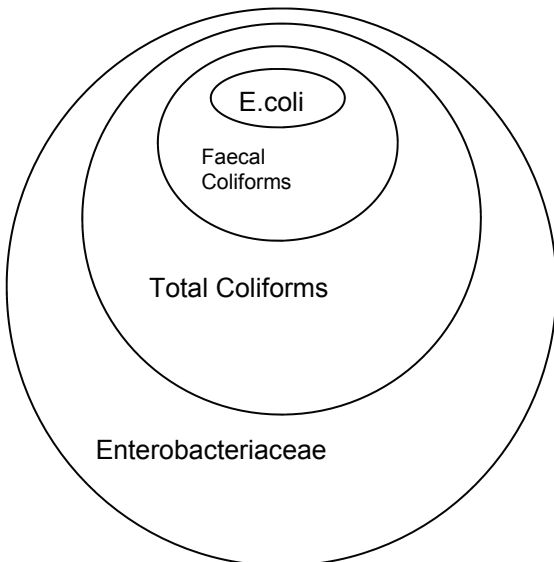
APC, Total viable count, is used as an indication of product quality and factory hygiene.

- This method counts all live bacteria in a sample.
- A high APC count usually indicates contamination.
- Product should be handled as little as possible during processing.

### E.coli

*E.coli* can be used as an indicator of hygiene status in factories and faecal contamination in waters and food products.

- It has many of the same attributes and grows well in the same environment as human pathogens.
- Human pathogens are hard to test for. If they are present it is usually in small numbers, and they can remain hidden in a sample. This is why indicator organisms like *E.coli* are used.



- Known food-borne pathogens are –  
*Vibrio*,  
*Shigella*,  
*E.coli 0157*,  
*Listeria*,  
*Campylobacter*  
*Salmonella*.

### Listeria

These bacteria are naturally occurring in the environment, on plants and in soil.

*Listeria* species are not all pathogenic, common *Listeria* isolates are *L.seeligeri*, *Livanovii*, and *L.innocua*.

*L.monocytogenes* is the only pathogenic species.

*L.innocua* is often found with, and may mask the presence of *L.monocytogenes*.

### Salmonella

\**Salmonella* are from human or animal faeces and are usually found in products of animal origin.

\*Humans can be non symptomatic carriers of *Salmonella*.

Environmental monitoring for these pathogens is extremely important and selected trained staff should be encouraged to vigorously pursue these organisms during swabbing.



We have included some web sites which maybe interesting to look at, and help you come to grips with microbiology.

#### HOW TO APC

<http://www.cfsan.fda.gov/~ebam/bam-3.html#conventional>

#### E.coli info

<http://www.ewg.org/reports/givemeafake/ecoli.html>

#### GENERAL USE

<http://www.microbes.info/index.html>

#### FOOD SAFETY LINKS

<http://www.foodsafe.org.nz/links.htm>

#### BAD BUGS BOOK

<http://vm.cfsan.fda.gov/%7Emow/intro.html>

A different way of looking at things.

<http://www.oasisdesign.net/water/quality/coliform.htm>

This last one is not meant to be taken too seriously !

## CAWTHRON IS COMMITTED TO

- Having a customer-focused culture, striving to provide a high level of service to our clients and working with them to ensure their analytical needs are being met.
- Adding value to our services by offering a high level of technical expertise and experience to our customers.
- Being available to “trouble shoot” and problem solve with industry.
- Taking advantage of the link we have with research groups and consultants based at Cawthron, enabling us to offer clients a complete service from results to interpretation to recommendations.
- Working in an electronic environment where we are able to get results to clients electronically and in various formats as required by our customers.

**Our laboratory services, analysis & advice deliver maximum returns to our customers.**

