



## The Australian Milk Residue Analysis (AMRA) Survey 2011–2012

The Australian Milk Residue Analysis (AMRA) survey is a national survey, coordinated by Dairy Food Safety Victoria (DFS) on behalf of other state regulatory authorities and the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF).

### Overview

The AMRA Survey provides an independent, national monitoring program for potential agricultural and veterinary chemical residues, and environmental contaminants in Australian bovine milk.

The AMRA Survey plays an important role in the Australian dairy industry by gathering and compiling information on the chemical residue status of Australian milk. In doing so it assesses the effectiveness of the control measures that are in place to ensure food safety outcomes, with respect to chemicals used in the Australian dairy industry. The Survey also provides assurances to importing countries that Australian dairy products are produced under a system that meets their requirements and supports the export requirements of DAFF under the Export Control (Milk and Milk Products) Orders 2005.

DFS is the independent Victorian statutory authority responsible for ensuring that standards which safeguard public health are maintained in the Victorian dairy industry. DAFF is the competent authority responsible for the Australian Government's export certifications. The AMRA Survey is funded by the industry service body, Dairy Australia.

### Random sampling

Raw milk samples are taken randomly from all dairying regions and submitted to independent testing laboratories using National Association

of Testing Authorities (NATA) accredited (or equivalent) methods.

The sampling regime comprises random and stratified random sampling components. Random sampling provides information across all dairying regions of Australia throughout a twelve-month period. Stratified random sampling provides information within predefined parameters such as locality or time of the year. For example, samples analysed for the potential presence of triclabendazole (a liver fluke treatment) are randomly sampled from areas of potential risk – this includes southern temperate regions of Australia where liver fluke is prevalent.

The chemical risk profile for Australian milk supplies is reviewed annually, and the scope of the annual survey is designed to reflect the chemical use patterns in Australia and chemicals of interest to trading partners.

### Follow-up procedures for residue detections

When a sample is detected with a residue, the company, the relevant state regulatory authority and DAFF are notified. Follow-up action is required for milk samples identified at or above the set action levels. The action levels set reflect the Australian Maximum Residue Limits (MRLs) and those of trading partners.

Trace back is undertaken at the farm of origin to determine the source of the residue and the cause of the contamination. Corrective or preventative action may also be implemented depending on the outcome of the investigation. Trace forward may also be conducted to ensure that products manufactured from the affected milk are isolated and tested or undergo a risk assessment to demonstrate they meet the relevant market requirements.

## 2011–2012 AMRA results

Table 1 lists the number of samples tested during the 2011–2012 year. Over this period 1000 milk samples were tested for a range of residues. Of the samples tested, there were no residues detected above the relevant Australian MRL as specified in the Australia New Zealand Food Standards Code.

These results provide objective evidence that the Australian dairy industry's approach to agricultural and veterinary chemical usage is responsible, effective and in accordance with good agricultural practice. It also demonstrates that the food safety programs adopted by the dairy industry are successful in managing potential residue contaminations.

**Table 1: AMRA Survey results (1 July 2011–30 June 2012)**

Compound	No. of samples tested	No. of samples compliant
antimicrobials	300	300
Macrocyclic Lactones	230	230
Benzimidazoles	70	70
Triclabendazole	30	30
Levamisole	20	20
Organophosphates & Synthetic Pyrethroids	230	230
Organochlorines	30	30
Aflatoxin M1	30	30
Chloramphenicol	30	30
Chemical Elements*	30	30
<b>Total</b>	<b>1000</b>	<b>1000</b>

\* Chemical Elements tested were: Arsenic, Copper, Chromium, Cadmium, Mercury and Lead

The Australian Milk Residue Analysis (AMRA) Survey is the independent residue monitoring program for the Australia dairy industry. It is supported by:

Dairy Food Safety Victoria, NSW Food Authority, Safe Food Production Queensland, Tasmanian Dairy Industry Authority, Dairy Authority of South Australia, Western Australia Department of Health, Department of Agriculture Fisheries and Forestry.

### Useful websites

[www.dairysafe.vic.gov.au](http://www.dairysafe.vic.gov.au)

[www.apvma.gov.au](http://www.apvma.gov.au)

[www.foodstandards.gov.au](http://www.foodstandards.gov.au)

[www.daff.gov.au/nrs](http://www.daff.gov.au/nrs)

[www.dairyaustralia.com.au](http://www.dairyaustralia.com.au)

### For further information contact:

Dairy Food Safety Victoria (DFSV)  
on + 61 3 9810 5900 or  
email: [info@dairysafe.vic.gov.au](mailto:info@dairysafe.vic.gov.au)

The program is supported and funded by Dairy Australia on behalf of the Australian dairy industry.

