



MPI National Chemical Contaminants Programme

Processed Fresh Milk Survey 2015

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1 Executive Summary

This report of a survey of processed fresh milk provides a summary of results for the determination of glyphosate and aminomethylphosphonic acid (AMPA) compounds in processed fresh milk and cream.

MPI directed the collection of sixty processed fresh milk or cream samples from a range of retail outlets. The samples were tested by an MPI recognised dairy laboratory using an MPI approved method. The results are reported under the laboratory's IANZ accreditation scope.

No glyphosate or AMPA residues were detected in any of the processed fresh milk or cream samples analysed. These results support the findings of the National Chemical Contaminants Programme that glyphosate and AMPA residues are not detected in liquid dairy products sourced from New Zealand.

2 Sampling

Sixty commercially available, processed fresh milk or cream samples were collected from various retail outlets and submitted to a MPI Recognised Dairy Laboratory for testing (Table 1). The samples were checked thoroughly by the laboratory to confirm sample integrity prior to commencing sample preparation for testing. All the sample containers were still sealed at the time of receipt – there was no evidence of tampering. The sample containers, along with the individual identifier information on each container were individually photographed and recorded. All sampled containers are securely held by the laboratory at -18°C.

3 Testing Methodology

The processed fresh milk and cream samples were tested for Glyphosate and Aminomethylphosphonic Acid (AMPA) by Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) at a MPI Recognised Dairy Laboratory. The limit of quantification (LOQ) of this method is 0.01mg/L and the limit of reporting (LOR) is 0.05mg/L.

4 Results

Glyphosate and AMPA were not detected in any of the sixty commercial processed fresh milk or cream samples analysed (Table 1).

Table 1: Processed fresh milk or cream samples collected and the results of testing for glyphosate and AMPA

Sample	Supplier Name	Matrix	Packaging	Glyphosate Results	AMPA Results
Silver Top 1	Brand A	MILK	Bottle	<LOR*	<LOR*
Silver Top 2	Brand A	MILK	Bottle	<LOR*	<LOR*
Blue Top 1	Brand A	MILK	Bottle	<LOR*	<LOR*
Blue Top 2	Brand A	MILK	Bottle	<LOR*	<LOR*
Lite Blue 1	Brand A	MILK	Bottle	<LOR*	<LOR*
Lite Blue 2	Brand A	MILK	Bottle	<LOR*	<LOR*

Sample	Supplier Name	Matrix	Packaging	Glyphosate Results	AMPA Results
Green 1	Brand A	MILK	Bottle	<LOR*	<LOR*
Green 2	Brand A	MILK	Bottle	<LOR*	<LOR*
Yellow 1	Brand A	MILK	Bottle	<LOR*	<LOR*
Yellow 2	Brand A	MILK	Bottle	<LOR*	<LOR*
Silver Top 1	Brand B	MILK	Bottle	<LOR*	<LOR*
Silver Top 2	Brand B	MILK	Bottle	<LOR*	<LOR*
Blue Top 1	Brand B	MILK	Bottle	<LOR*	<LOR*
Blue Top 2	Brand B	MILK	Bottle	<LOR*	<LOR*
Lite Blue 1	Brand B	MILK	Bottle	<LOR*	<LOR*
Lite Blue 2	Brand B	MILK	Bottle	<LOR*	<LOR*
Green 1	Brand B	MILK	Bottle	<LOR*	<LOR*
Green 2	Brand B	MILK	Bottle	<LOR*	<LOR*
Yellow 1	Brand B	MILK	Bottle	<LOR*	<LOR*
Yellow 2	Brand B	MILK	Bottle	<LOR*	<LOR*
Orange	Brand A	MILK	Bottle	<LOR*	<LOR*
Blue Top 1	Brand C	MILK	Bottle	<LOR*	<LOR*
Lite Blue 1	Brand C	MILK	Bottle	<LOR*	<LOR*
Green 1	Brand C	MILK	Bottle	<LOR*	<LOR*
Blue Top 1	Brand D	MILK	Bottle	<LOR*	<LOR*
Lite Blue 1	Brand D	MILK	Bottle	<LOR*	<LOR*
Green 1	Brand D	MILK	Bottle	<LOR*	<LOR*
Blue Top 1	Brand E	MILK	Bottle	<LOR*	<LOR*
Lite Blue 1	Brand E	MILK	Bottle	<LOR*	<LOR*
Blue Organic	Brand F	MILK	Pouch	<LOR*	<LOR*
Green Organic	Brand F	MILK	Pouch	<LOR*	<LOR*
Blue Top 1	Brand A	MILK	Carton	<LOR*	<LOR*
Blue Top 2	Brand A	MILK	Carton	<LOR*	<LOR*
Whole Organic	Brand F	MILK	Carton	<LOR*	<LOR*
Blue	Brand G	MILK	Bottle	<LOR*	<LOR*
Light Blue	Brand G	MILK	Bottle	<LOR*	<LOR*
Silver	Brand G	MILK	Bottle	<LOR*	<LOR*
Orange	Brand A	MILK	Bottle	<LOR*	<LOR*
Green Organic	Brand H	MILK	Bottle	<LOR*	<LOR*
Blue Organic	Brand H	MILK	Bottle	<LOR*	<LOR*
Black	Brand B	MILK	Bottle	<LOR*	<LOR*
Blue Top 1	Brand B	MILK	Carton	<LOR*	<LOR*
Blue Top 2	Brand B	MILK	Carton	<LOR*	<LOR*
Cream	Brand B	CREAM	Bottle	<LOR*	<LOR*
Cream	Brand A	CREAM	Bottle	<LOR*	<LOR*
Single Cream	Brand G	CREAM	Bottle	<LOR*	<LOR*
Double Cream	Brand G	CREAM	Bottle	<LOR*	<LOR*
Yellow 1	Brand B	MILK	Carton	<LOR*	<LOR*
Yellow 2	Brand B	MILK	Carton	<LOR*	<LOR*
Purple	Brand B	MILK	Carton	<LOR*	<LOR*
Yellow	Brand B	MILK	Carton	<LOR*	<LOR*

Sample	Supplier Name	Matrix	Packaging	Glyphosate Results	AMPA Results
Lite Cream	Brand B	CREAM	Bottle	<LOR*	<LOR*
Cream	Brand C	CREAM	Bottle	<LOR*	<LOR*
Yellow	Brand D	MILK	Bottle	<LOR*	<LOR*
Cream	Brand D	CREAM	Bottle	<LOR*	<LOR*
Cream	Brand D	CREAM	Bottle	<LOR*	<LOR*
Cream Organic	Brand H	CREAM	Bottle	<LOR*	<LOR*
Cream	Brand A	CREAM	Bottle	<LOR*	<LOR*
Cream Organic	Brand H	CREAM	Bottle	<LOR*	<LOR*
Green 1	Brand A	MILK	Bottle	<LOR*	<LOR*

Note: * LOR = 0.05 mg/L