Health Research Institute Laboratories

Report Number S0001770- 20171106
Report Date 2017-11-06

Certificate of Analysis

Sample Description: bread
Client: Moms Across America Mission Viejo
Sample Mass: various

Sample Numbers: S0001770-1790
Receipt Date: 2017-09-15
Test Date: 2017-10-27
Shipment Temp: Ambient
Storage Temp: +4°C

Samples:				Results:		
Sample ID#	Sample Description/ UPC Code	Lot # and Expiration Date	Sample Mass (g)	Glyphosate (ng/ml)	AMPA (ng/ml)	Effective Glyphosate Level (ng/ml)
S0001777, S0001780 S0001781, S0001782 S0001785, S0001789 S0001790	Conventional white bread brands (7 pooled samples)	various	15 g of each sample, composited	8.08	4.03	14.13
S0001775, S0001779 S0001784, S0001786 S0001787, S0001788	Conventional whole grain bread brands (6 pooled samples)	various	15 g of each sample, composited	129.70	7.52	140.98
S0001770, S0001771 S0001772, S0001776 S0001778	Organic bread brands (5 pooled samples)	various	15 g of each sample, composited	10.57	1.11	12.24
S0001773, S0001774 S0001783	Gluten-free bread brands (3 pooled samples)	various	15 g of each sample, composited	4.85	1.08	6.47

Methods

Sample Analysis: HRI TM #8 "Glyphosate and AMPA Detection by LC-MS/MS"

Sample preparation employed a modification of the method described in Chamkasem, Narong, Cynthia Morris, and Tiffany Harmon. 2016. "Direct Determination of Glyphosate, Glufosinate, and AMPA in Milk by Liquid Chromatography/tandem Mass Spectrometry." *Journal of Regulatory Science* 3 (2): 20–26.

LC-MS/MS analysis employed a modification of the method described in Jensen, Pamela K., Chad E. Wujcik, Michelle K. McGuire, and Mark A. McGuire. 2016. "Validation of Reliable and Selective Methods for Direct Determination of Glyphosate and Aminomethylphosphonic Acid in Milk and Urine Using LC-MS/MS." Journal of

Environmental Science and Health, Part B 51 (4): 254–59. doi:10.1080/03601234.2015.1120619.

Limit of Quantitation (LOQ) and Limit of Detection (LOD) are sub-part per billion for this method and are determined for each sample.

Effective Glyphosate Level calculated according to Food and Agriculture Organization (FAO) method where total glyphosate residue is the sum of the weight of glyphosate + 1.5 × the weight of its metabolite AMPA.

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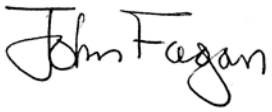

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