

# Accepted Manuscript

Prevalence and trends of bacterial contamination in fresh fruits and vegetables sold at retail in Canada

Nelly Denis, Helen Zhang, Alexandre Leroux, Roger Trudel, Henri Bietlot



PII: S0956-7135(16)30093-7

DOI: [10.1016/j.foodcont.2016.02.047](https://doi.org/10.1016/j.foodcont.2016.02.047)

Reference: JFCO 4903

To appear in: *Food Control*

Received Date: 13 January 2016

Revised Date: 25 February 2016

Accepted Date: 26 February 2016

Please cite this article as: Denis N., Zhang H., Leroux A., Trudel R. & Bietlot H., Prevalence and trends of bacterial contamination in fresh fruits and vegetables sold at retail in Canada, *Food Control* (2016), doi: 10.1016/j.foodcont.2016.02.047.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

1 **Prevalence and trends of bacterial contamination in fresh fruits and**  
2 **vegetables sold at retail in Canada**

3  
4 **Authors: Nelly Denis, Helen Zhang, Alexandre Leroux, Roger Trudel and Henri Bietlot**  
5 **Canadian Food Inspection Agency, Canada**

6 **Corresponding Author: Nelly Denis**

7 **Address: Canadian Food Inspection Agency**

8 **1400 Merivale Road, Ottawa, Ontario Canada K1A 0Y9**

9 **Phone number: 1-613-773-6261; Fax: 1-613-773-5959**

10 **Email address: nelly.denis@inspection.gc.ca**

11 **Abstract**

12 In recent years, fresh fruits and vegetables have been linked to numerous foodborne illness  
13 outbreaks in different regions of the world, including in Canada. In light of rising concerns over the  
14 microbial safety of these commodities, the Canadian Food Inspection Agency conducted retail surveys to  
15 obtain information on the occurrence of bacterial pathogens in a wide range of produce available in the  
16 Canadian marketplace (local vs. imported, organic vs. conventional). Samples (n=31,329) were collected  
17 across Canada over four years (2009 - 2013) and consisted of leafy vegetables (n=12,073), leafy herbs  
18 (n=6,032), green onions (n=3,381), cantaloupes (n=3,230), tomatoes (n=4,837) and berries (n=1,776).  
19 These samples were analysed in ISO 17025-accredited laboratories for various bacterial pathogens  
20 (*Salmonella*, *E. coli* O157, *Shigella*, *Campylobacter* and *Listeria monocytogenes*), as well as for generic  
21 *E. coli*, an indicator of fecal contamination. The Wilson confidence interval was used to determine the

Download English Version:

<https://daneshyari.com/en/article/6390130>

Download Persian Version:

<https://daneshyari.com/article/6390130>

[Daneshyari.com](https://daneshyari.com)