

Food Additives & Contaminants >

Volume 23, 2006 - [Issue 8](#)

131 Views | 33 CrossRef citations to date | 0 Altmetric

Original Articles

Occurrence of aflatoxin M₁ in retail milk samples from Bogotá, Colombia

G. J. Diaz  & E. Espitia

Pages 811-815 | Received 08 Jan 2006, Accepted 09 Mar 2006, Published online: 20 Feb 2007

 Cite this article  <https://doi.org/10.1080/02652030600681617>

Sample our
Food Science & Technology
Journals
>> [Sign in here](#) to start your access
to the latest two volumes for 14 days

 Full Article

 Figures & data

 References

 Citations

 Metrics

 Reprints & Permissions

Read this article

 Share

Abstract

A study was conducted to establish the occurrence and levels of contamination of aflatoxin M₁ (AFM₁) in retail milk from Bogotá, Colombia. A total of 241 samples were analysed during 2004 and 2005. Samples were cleaned up by an immunoaffinity column and AFM₁ was quantified by liquid chromatography with fluorescence detection. A total of 69.2 and 79.4% of the samples analysed during 2004 and 2005, respectively, were found to contain levels of AFM₁ above 10 ng l⁻¹. Levels of contamination ranged from 10.7 to 213.0 ng l⁻¹ in 2004, and from 10.6 to 288.9 ng l⁻¹ in 2005. Despite the high incidence of AFM₁ found in the milk samples analysed, all samples complied with current local regulations, which allow AFM₁ content in milk up to 400 ng l⁻¹. However, due to the high incidence of AFM₁ in milk found in the present study, it is recommended that a permanent surveillance programme be established for

milk consumed in Bogotá in order to prevent milk lots containing levels above the regulatory level entering the food chain.

Keywords:

Aflatoxin M₁

survey

immunoaffinity clean-up

liquid chromatography

Related Research Data

[Analysis of Aflatoxins in Poultry and Pig Feeds and Feedstuffs Used in Colombia](#)

Source: Journal of AOAC International

[Occurrence of aflatoxins in selected colombian foods](#)

Source: Mycotoxin Research

[Occurrence of aflatoxin M₁ in domestic milk in Japan during the winter season](#)

Source: Food Additives & Contaminants

[Liquid Chromatographic Determination of Aflatoxin M₁ in Milk Powder Using Immunoaffinity Columns for Cleanup: Interlaboratory Study](#)

Source: Journal of AOAC International

[Occurrence and Stability of Aflatoxin M₁ in Milk and Milk Products: A Worldwide Review](#)

Source: Journal of Food Protection

[Mechanisms of Aflatoxin Carcinogenesis](#)

Source: The Annual Review of Pharmacology and Toxicology

[Cytochrome P450-mediated metabolism and cytotoxicity of aflatoxin B₁ in bovine hepatocytes](#)

Related research

People also read

Recommended articles

Cited by
33

Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2026 Informa UK Limited [Privacy policy](#)

[Cookies](#) [Terms & conditions](#) [Accessibility](#)

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG



Taylor & Francis
by informa