A Study of Aflatoxin Levels

in

Selected Local Foods and Feeds

by

Jane Felmine

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ABSTRACT

This study evaluates three methods for detection and quantification of aflatoxins in selected commodities. The methods described are:

(i) Minicolumn Procedure (screening procedure)
(ii) Thin Layer Chromatography (TLC), and
(iii) High Performance Liquid Chromatography (HPLC)

Results of the precision and recovery studies indicated that HPLC is the most sensitive and precise method, followed by TLC and finally minicolumn.

Sixty-four samples of foods and feeds collected from leading manufacturers during the wet and dry seasons from December 1982 to June 1984 were analysed by the screening procedure. Of the eight samples selected for further confirmatory tests by TLC and HPLC only one peanut butter sample was confirmed aflatoxin positive by both methods. However, the level of aflatoxin determined was well below the US permitted level of 20ppb total aflatoxins.

The author recommends long-term studies involving the various regional and governmental agencies in cooperation with local importers, manufacturers and retailers.