

Application of a Diphasic Dialysis Technique to the Extraction of Aflatoxins in Dairy Products

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A new method is described for the extraction of aflatoxins from milk and milk products based on a diphasic dialysis technique, followed by detection and quantification of aflatoxins by TLC. Recovery was 65 to 99% for aflatoxins B₁, G₁, and M₁, and the detection limit in milk and yogurt was .01 to .02 ppb for all aflatoxins studied. In cheese, the detection limit was .03 to .04 ppb for aflatoxins B₁ and G₁ and .1 ppb for aflatoxin M₁.

The main advantages of this technique are its simplicity; sensitivity; very economical use of reagents, thereby minimizing environmental pollution; efficiency, allowing the quick processing of a high number of samples; use by laboratories with little equipment; and a sensitivity comparable with that of much more sophisticated techniques.

Key Words: technique • dialysis • aflatoxins • dairy products

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