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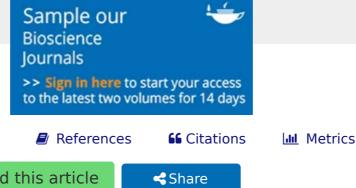
Distribution and stability of Aflatoxin M₁ during processing and ripening of traditional white pickled cheese

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Figures & data

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Abstract

Full Article

The distribution of aflatoxin M_1 (AFM₁) has been studied between curd, whey, cheese and pickle samples of Turkish white pickled cheese produced according to traditional techniques and its stability studied during the ripening period. Cheeses were produced in three cheese-making trials using raw milk that was artificially contaminated with AFM₁ at the levels of 50, 250 and 750 ng/l and allowed to ripen for three months. AFM₁ determinations were carried out at intervals by LC with fluorescence detection after immunoaffinity column clean-up. During the syneresis of the cheese a proportionately high concentration of AFM₁ remained in curd and for each trial the level was 3.6, 3.8 and 4.0 times higher than levels in milk. At the end of the ripening, the distribution of AFM₁ for cheese/whey + brine samples was 0.9, 1.0 and 1.3 for first, second and third

spiking respectively indicating that nearly half of the AFM_1 remained in cheese. It has been found that only 2–4% of the initial spiking of AFM_1 transferred into the brine solution. During the ripening period AFM_1 levels remained constant suggesting that AFM_1 was quite stable during manufacturing and ripening.

Keywords:

 $\mbox{ Aflatoxin } \mbox{M}_1 \mbox{ traditional white pickled cheese } \mbox{ stability } \mbox{ distribution }$

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Related Research Data

Fate of Aflatoxin M1 in Brick and Limburger-like Cheese

Source: Journal of Food Protection

Fate of Aflatoxin M1 in Cheddar Cheese and in Process Cheese Spread

Source: Journal of Food Protection

Occurrence and Stability of Aflatoxin M1 in Milk and Milk Products: A Worldwide Review

Source: Journal of Food Protection

Verhalten von Allatoxin M1 whrend der Reifung und Lagerung von Kese

Source: European Food Research and Technology

Ability of Dairy Strains of Lactic Acid Bacteria to Bind Aflatoxin M1 in a Food Model

Source: Journal of Food Protection

Fate of Aflatoxin M1 in Parmesan and Mozzarella Cheese

Source: Journal of Food Protection

Detection of aflatoxin M1 in cheese samples by ELISA

Source: Food Control

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