
P97. SURVEILLANCE OF AFLATOXIN M1 IN RAW MILK SAMPLES FROM SOUTHERN TURKEY

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Aflatoxins are produced by various species of *Aspergillus* spp., *Penicillium* spp. and *Rhizopus* spp. under certain conditions. They are characterized by causing teratogenic, mutagenic and cancerogenic effects on human and animal. Intake of aflatoxin B1 by dairy animals is metabolized to aflatoxin M1 (AFM1) in liver and transferred into milk. Therefore, AFM1 specifically is important in milk and milk products. In this study, AFM1 levels in 72 raw milk samples collected from six southern cities of Turkey (Adana, Adıyaman, Gaziantep, Kahramanmaraş, Malatya, Osmaniye) were monitored with Enzyme-Linked Immunosorbent Assay (ELISA) for 18-week period in winter and spring seasons of 2015. Mean values of AFM1 in raw milk samples within the experimental period ranged between 32.4-55.0 ng/l. The highest raw milk AFM1 values were detected in samples from Adana (52.7 ng/l), Adıyaman (52.3 ng/l), Gaziantep (55.0 ng/l) and Kahramanmaraş (55.0 ng/l), which were above the permissive value of Turkish Food Codex (<50 ng/l). However, mean AFM1 values for samples from Malatya (32.4 ng/l) and Osmaniye (45.5 ng/l) were below the permissive value. The surveillance of AFM1 should be routinely performed in raw milk samples for public health concerns.

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