

Title Studies on contamination level of aflatoxins in some dried fruits and nuts of Pakistan
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Abstract

The occurrence of aflatoxins in dried fruits and nuts was surveyed in this study. One hundred and eighty samples of dried fruits and nuts were purchased from retail shops and local markets of different locations of NWFP and Northern areas of Pakistan. The samples were analyzed for total aflatoxins by immune affinity (IAC) clean-up with liquid chromatography and fluorescence detection. The results showed the percentage of contamination for total aflatoxins in the samples such as in; dried apricot (20%), dates (10%), dried figs (50%), dried mulberries (26%) and raisins (20%), while in apricot kernels (26%), almonds without shell (30%), walnuts with shell (40%), walnuts without shell (70%), peanut with shell (40%), peanuts without shell (50%), pistachios with shell (20%), pistachios without shell (50%) and pine nuts with shell (20%). The highest contamination levels of aflatoxins were found in one peanut sample (14.5 µg/kg) and one pistachio sample (14 µg/kg). Among all the contaminated samples, one dried apricot, three dried fig, one raisins, one apricot kernels, two walnuts with shell, three walnuts without shell, one peanuts with shell, two peanuts without shell and two pistachios without shell samples were above the suggested limit for total aflatoxins (4 µg/kg), set by EU regulations.