

Occurrence of Foreign Matter in Food: Applied Identification Method - Association of Official Agricultural Chemists (AOAC) and Food and Drug Administration (FDA)

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Abstract : The aim of this study is to present the results of a retrospective survey on the foreign matter found in foods analyzed at the Adolfo Lutz Institute, from July 2001 to July 2015. All the analyses were conducted according to the official methods described on Association of Official Agricultural Chemists (AOAC) for the micro analytical procedures and Food and Drug Administration (FDA) for the macro analytical procedures. The results showed flours, cereals and derivatives such as baking and pasta products were the types of food where foreign matters were found more frequently followed by condiments and teas. Fragments of stored grains insects, its larvae, nets, excrement, dead mites and rodent excrement were the most foreign matter found in food. Besides, foreign matters that can cause a physical risk to the consumer's health such as metal, stones, glass, wood were found but rarely. Miscellaneous (shell, sand, dirt and seeds) were also reported. There are a lot of extraneous materials that are considered unavoidable since are something inherent to the product itself, such as insect fragments in grains. In contrast, there are avoidable extraneous materials that are less tolerated because it is preventable with the Good Manufacturing Practice. The conclusion of this work is that although most extraneous materials found in food are considered unavoidable it is necessary to keep the Good Manufacturing Practice throughout the food processing as well as maintaining a constant surveillance of the production process in order to avoid accidents that may lead to occurrence of these extraneous materials in food.

Keywords : extraneous materials, food contamination, foreign matter, surveillance

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