Preventive Practices from Field and Shelf to Fork to Minimize Chemical Hazards Dietary Intake

Keywords: Heavy metals; Acrylamide; Pesticides residues; Polycyclic aromatic hydrocarbons; Heterocyclic amines

Abstract

Chronic diseases such as cancer, neurodegenerative disorders, cardiovascular and autoimmune diseases have been related with food chemical hazards intake. Therefore, great concern of food manufacturers and authorities is to ensure food safety and quality and minimize exposure to relevant risks. Nevertheless, the latter cannot be totally eliminated, when by employing erroneous treatments extra risks are added. Public awareness and relevant knowledge among food professionals and food handlers is lacking, even on countries that possess advanced food safety systems and strict food legislation. Besides, financial difficulty reinforces people to utilize low quality food and houseware increasing the health related hazards. Regarding the severity for global health and damage costs, the need for information on precautionary practices that will reduce chemical hazards dietary intake is imperative. In the present review certain practices such as thermal processing, washing or appropriate handling of the raw material are listed to educate anyone related with the food sector how to minimize heavy metals, acrylamide, pesticides residues, heterocyclic aromatic amines and polycyclic aromatic hydrocarbons intake and promote health. The introduced simple practices can be applied except for home kitchens, also in quality systems of professional kitchens, warehouses and food industries.