

Safety Corner

What is risk-based food safety?

Theoretically, food poisoning is 100% preventable if everyone follows the five key food hygiene principles recommended by WHO:

- Prevent the spread of germs from possible source of contamination, such as people, pets, pests, unclean utensils, etc.
- Separate raw and cooked foods
- Cook foods for appropriate time and temperature to kill germs
- Store food at the proper temperature
- Use safe water and cooked materials

Food can serve as a growth medium for bacteria that can cause food poisoning, and can also transmit disease from person to person. Although standards and regulations are in place to guard food safety, food poisoning, including cases with multiple victims, is not uncommon even in the developed countries. To prevent food-borne illness and to avoid potentially severe health hazards, food safety has now become a scientific discipline that addresses growing, handling, distribution, and storage of food. Since hazards to food safety can occur at any stage in the food life cycle, it is essential that adequate control be in place through the combined effort of all parties in the food life cycle.

ISO 22000 is an international standard derived from the ISO 9000 family for food safety. The standard specifies the requirements for a food safety management system that involves interactive communication, system management, prerequisite programs, and food hazard analyses. ISO 22000 requires that all reasonably foreseeable hazards in a food life cycle, including those that may be associated with the type of process and facilities used, are identified and assessed. The hazard analysis, such as the Hazard Analysis and Critical Control Points (HACCP), can also be used to document what, whom, why, when, and how, as well as the strategy and programmes to be used by an organisation to control hazards. Thus, within the ISO 22000 family of standards, conducting hazard analysis is the key to an effective food safety management system, as it can also assist in organizing the knowledge and communicating the findings to the stakeholders.

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