

Risk analysis is a structured approach to assessing food safety risks and consists of three interactive processes – *risk assessment, risk management and risk communication*. Risk analysis provides national food safety authorities with a systematic and disciplined approach for making evidence-based food safety decisions. It provides particular value in addressing complex, persistent and evolving hazards in different parts of the food supply chain. Risk analysis is used to develop an estimate of the risks to human health, to identify and implement appropriate measures to control the risks, and to communicate with stakeholders about the risks and measures applied.



FOOD SAFETY RISK ANALYSIS: FEATURES AND BENEFITS

Internationally recognized

Adopted by Codex; thus supports international food safety harmonization and thereby trade

Based on science

Risk assessment and science-based food safety measures are recognised and promoted by WTO

Consumer protection focus

Provides a scientific evaluation of where in the food chain to take the most effective control steps

Adaptable

Can be applied to address a range of food safety concerns including emerging food pathogens

Inclusive

Promotes stakeholder participation; facilitating balanced decision-making and compliance

Enables tailored decisions

Supports informed decision making and allows consideration of available resources and local situations





Implementing Food Safety Risk Analysis in food control systems

Applying risk analysis principles in developing modern national food safety systems requires investment of effort and resources by national governments. However, this investment more than pays off by ensuring that food safety programmes are focused on addressing priority problems and by building public confidence in the national food control system.



The FAO/WHO Food Safety Risk Analysis: A guide for national food safety authorities- based on the risk analysis principles adopted by Codex - aims to assist food safety control authorities understand and apply risk analysis in food control. Through training and other capacity development activities, FAO works with key stakeholders in countries to promote application of risk analysis approaches to support decision-making on how to improve the food safety situation in the country. FAO also engages at subregional and regional levels to encourage collaboration among countries that may have common problems and common interests. The main emphasis of FAO's risk analysis training and related capacity development

efforts is to enhance food safety professionals' ability to:

- understand risk analysis and how it can be applied to support national-level decision-making related to food safety management;
- understand internationallyaccepted approaches applied to chemical and microbiological risk assessments as a basis for evaluation of domestic food safety risks;
- be aware of national data required to support risk assessment and the importance of risk assessorrisk manager interaction;
- > promote transparency, stakeholder involvement and better coordination among government agencies involved in food safety issues at the national level.

Looking forward

FAO is collaborating with WHO in the development of resource materials and tools to make the risk analysis approach more accessible. These include: a risk analysis toolkit, which will provide a range of practical tools, training materials tailored to specific audiences and information on the application

of risk analysis to strengthen existing food control systems; more focussed web-based tools to support risk management decisions, for example, to assess the performance of microbiological sampling plans, and the management options for the control of specific pathogens in chicken meat.

These risk analysis programmes, guidelines and tools have been progressively contributing to enhanced understanding and implementation of risk analysis to improve consumer protection and trade outcomes both nationally and globally.

