





# The role of risk ranking in risk analysis

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### What is Risk Analysis?



Structure

Systematic approach

 Applied within an overarching framework for management of food related risks to human health.



Risk assessment

Risk management

Risk communication



#### What is Risk Assessment?



- Structure
- Systematic approach
- Applied within an overarching framework for management of food related risks to human health.



- Risk assessment A scientifically-based process consisting of the following steps: (i) hazard identification, (ii) hazard characterization, (iii) exposure assessment, and (iv) risk characterization.
- Risk management
- Risk communication



### What is Risk Management?





- Structure
- Systematic approach
- Applied within an overarching framework for management of food related risks to human health.

- Risk assessment
- Risk management- The process, distinct from risk assessment, of weighing policy alternatives, in consultation with all interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of fair-trade practices, and, if needed, selecting appropriate prevention and control option
- Risk communication



#### What is Risk Communication?

• Structure

Systematic approach

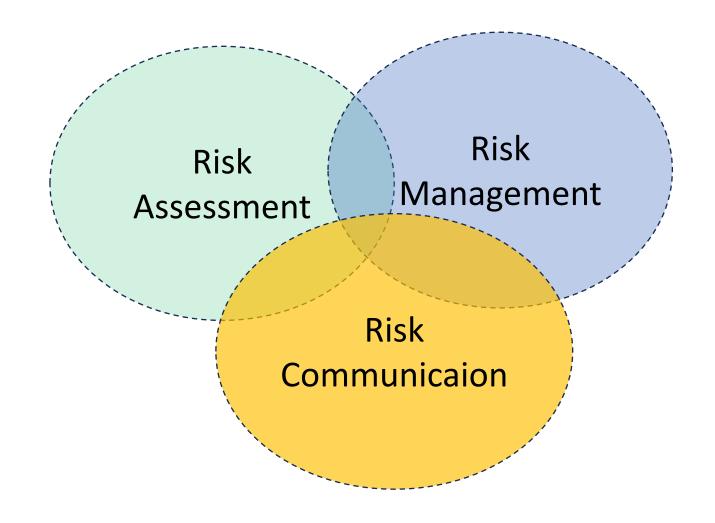
 Applied within an overarching framework for management of food related risks to human health.



- Risk assessment
- Risk management
- Risk communication The interactive exchange of information and opinions throughout the risk analysis process concerning risk, risk-related factors, and risk perceptions, among risk assessors, risk managers, consumers, industry, the academic community, and other interested parties, including the explanation of risk assessment findings and the basis of risk management decisions.

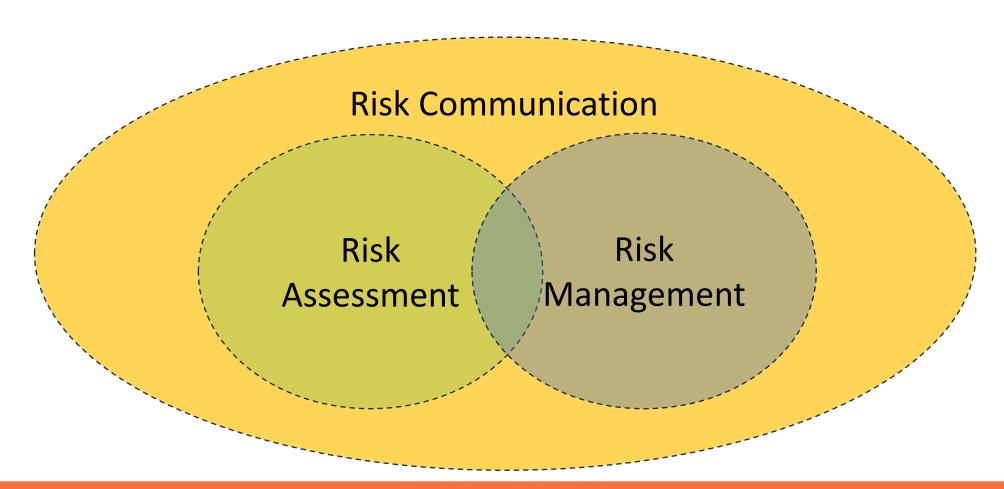


# What is Risk Analysis?





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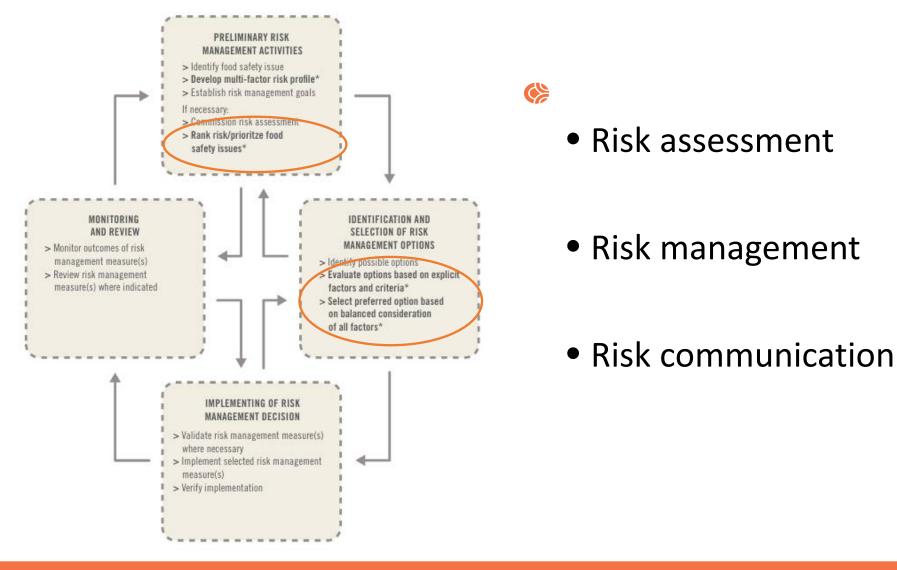
## Tools to support risk analysis



Select the tool according to the task



### What is Risk Management?





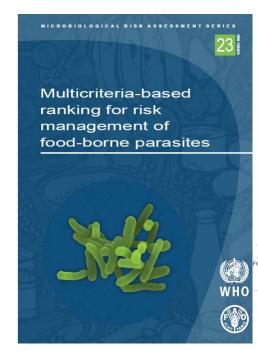
### What is Risk Ranking?



Risk ranking is the systematic analysis and ordering of foodborne hazards and/or foods in terms of the public health risk based on the likelihood and severity of adverse impacts in a target population.

### Foodborne parasites

"review the current status of knowledge on parasites in food and their public health and trade impact in order to provide CCFH with advice and guidance on the parasite-commodity combinations of particular concern, issues that need to be addressed by risk managers, and the options available to them."





- Illness
- Distribution
- Morbidity severity
- Mortality potential to increase
- Trade relevance
- Impact on vulnerable communities

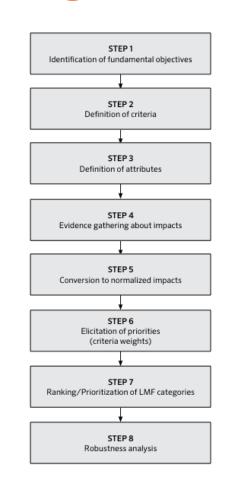
SUIDELINES ON THE APPLICATION OF GENERAL PRINCIPLES OF FOOD HYGIEN TO THE CONTROL OF FOODBORNE PARASITES

Adopted 201



#### Low moisture foods

- Which LMF and associated microbiological hazards should be considered as the highest priority for the Committee to address?
- Which information is relevant to the risk management of the microbiological hazards associated with the identified range of LMF?

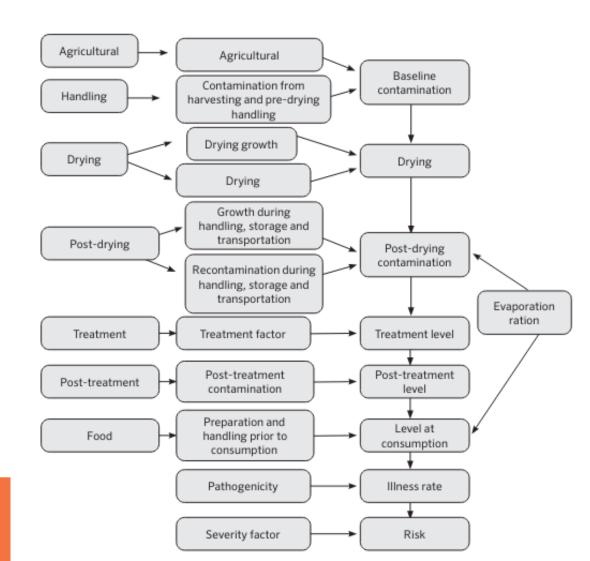


- Scopingsystematic review
- Calls for data
- Expert panel
- Other data collation mechanisms – expert elicitation, databases



#### **Spices and herbs**

 "...identify the range of spices to be covered in the Codex Code, and the critical points for control of Salmonella and/or other foodborne pathogens."





- GUIDANCE FOR GOVERNMENTS ON PRIORITIZING HAZARDS IN FEED (CXG 81 – 2013)
- Ranking as an input to Prioritization
- Prioritization: systematic analysis and ordering of foodborne hazards or food safety issues based on a consideration of public health impacts resulting from risk ranking and other factors such as social, economic and political considerations.

- Step 1. Identification of the hazard, the feed and the edible product potentially associated with food safety problems.
- Step 2. Identification and definition of the criteria by which each selected hazard/feed/edible product combination will be quantified.
- Step 3. Assignment of criterion-based values to the hazard/feed/edible product combinations.
- Step 4. Normalization of these values to make them comparable between criteria.
- Step 5. Weighting of the criteria to reflect their relative importance.
- Step 6. Combining the weighted normalized values for each hazard/feed/edible product combination to produce a score, and ranking of the scores to obtain the order of priority.
- Step 7. Reporting of the process, methods and results.



# Value of risk ranking from an international perspective – codex standard setting

- Very adaptable
- Handle large amounts of information on multiple hazards, foods
- Approach can also be used to evaluate interventions
- Facilitates prioritization (for RM and/or RA)
- When done systematically can be updated



### Thank you

- Webpage: http://www.fao.org/fao-who-codexalimentarius/en/
- Twitter: @FAOWHOCodex

