

Challenges in communicating risks with food - some examples

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Risk Communication

Place in Risk Analysis

- Working principles for risk analysis for food safety for application by governments. *CAC/GL 62-2007.*
- The risk analysis should follow a structured approach comprising the three distinct but closely linked components of risk analysis (risk assessment, risk management and risk communication) as defined by the Codex Alimentarius Commission, each component being integral to the overall risk analysis



RISK ANALYSIS, as defined by WHO/FAO

Risk assessment

- Hazard identification
- Hazard characterization
- Exposure assessment
- Risk characterization

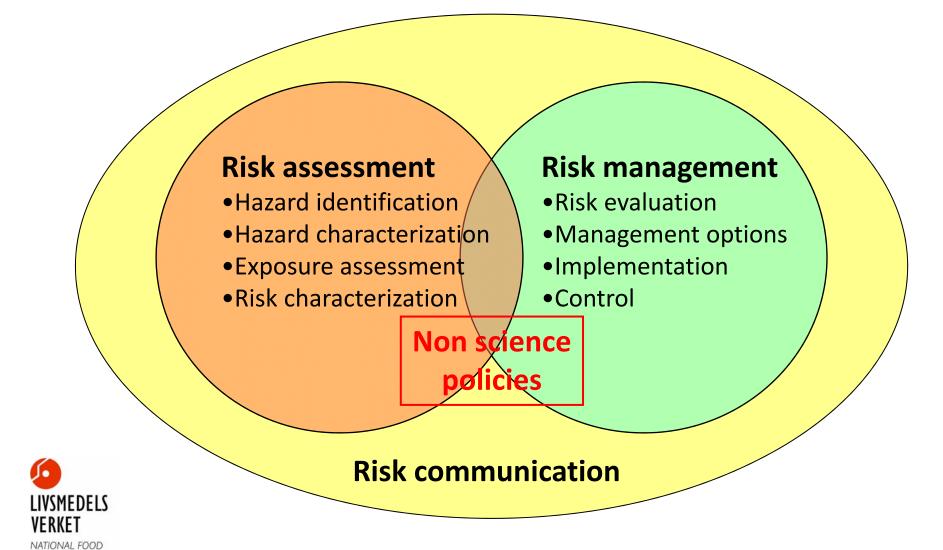
Risk management

- Risk evaluation
- Management options
- Implementation
- Control





Risk analysis as a concept



The five golden rules of communication Adopted from Jörgen Schlundt, WHO

- Tell them what you know
- Tell them what you don't know
- Tell them why you don't know it
- Tell them what you will do to get the knowledge
- Tell them when you will return with the information



The Challenges of Risk Perception

- knowledge from Behavioural Sciences

- High perception of risk if:
 - low trust in the source of information
 - limited personal control
 - partly unknown unclear information
 - serious consequences
 - risk for me benefit for someone else
- Difficult to change once a decision has been taken
 - Based on values and attitudes
- Important to set the stage early



What does the consumer want to know?

- The truth
- What has been found
- What are the risks
- What is being done to minimize the risks



TRANSPARENCY IN BOTH ASSESSMENT AND MANAGEMENT!

- "Heads of National Food Agencies" Working Group on Transparent Use of Risk Assessment in Decision Making
 - BPA in baby bottles, Anti-microbial treatments for poultry, Authorization for GMO:s, Limits for radioactivity in foods from Japan



Recommendations for Risk Communication

- European Food Safety Authority, EFSA, Parma, Italy
 - Advisory Forum
 - Turkish representatives
 - İrfan Erol and Özbag Nergiz, Ministry of Food,
 Agriculture and Livestock, General Directorate of Food and Control
 - Working group on Communication
 - When Food is Cooking up a Storm proven recipes for risk communication (2012)







http://www.efsa.europa.eu/en/search/doc/riskcommguidelines.pdf

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Example of a recent Risk Communication -background documents (2013)

Rapport I - 2013

Contaminants and minerals in foods for infants and young children

Part 1: Analytical results

by Veronica Öhrvik, Joakim Engman, Barbro Kollander and Birgitta Sundström

http://www.slv.se/upload/dokument/rapporter/ke miska/2013_livsmedelsverket_1_part1_contaminan ts_and_minerals_in_foods_for_infants_and_young_ children_analytical_results.pdf



Rapport 1 – 2013

Contaminants and minerals in foods for infants and young children

Part 2: Risk and benefit assessment

by Gabriela Concha, Hanna Eneroth, Helena Hallström and Salomon Sand

http://www.slv.se/upload/dokument/rapporter/ke miska/2103_livsmedelsverket_1_part_2_contamin ants_and_minerals_in_foods_for_infants_and_you ng_children_risk_and_benefit_assessment.pdf

Example of a recent Risk Communication

Rapport I - 2013

Contaminants and minerals in foods for infants and young children

Part 3: Risk- and benefit management

by Rickard Bjerselius, Emma Halldin Ankarberg, Anders Jansson, Ingrid Lindeberg, Jorun Sanner Färnstrand and Cecilia Wanhainen



The following food groups were included

- Infant formula and follow-on formula
- Cereal-based porridge and gruel for infants and young children
- Foods for special medical purposes (FSMP) for infants (0-12 months) and children over one year of age
- Foods for normal consumption, i.e. certain ordinary foods that infants and young children are likely to consume, such as soya-, rice- and oat-based alternatives to milk

As, Pb, Cd, Mn, Cu and Fe were analysed



Problems identified - metals

As

- Levels in rice drinks exceed EU standard value of 10μg/L for drinking water
- 1 dl of rice drink gives an exposure close to BMDL₀₁, set by EFSA

Cd

Exposure below limits but uncertainty whether the established
 TDI protects small children

Pb

 FSMP resulted in exposures exceeding the recommendations from EFSA that there should be a margin of at least 10 to the established reference point



Problems identified - minerals

Mn

- High exposures from gruels, porridge products and FSMP compared to WHO TDI (which was deemed necessary to revise)
- Need for establishing an Upper Limit for Mn for infants and young children

Fe

 Need for establishing an Upper Limit for Fefor infants and young children

• Cu

Need for establishing an Upper Limit for Cu for children under
 12 months



Actions taken – advice to consumers

- Parents are advised not to give rice-based drinks to children under the age of six due to the presence of arsenic.
- Parents are advised not to give young children only ricebased porridge and gruel, but to vary the types due to the presence of arsenic.
- Parents are advised to vary the types of porridge and gruel for young children due to the presence of lead and cadmium.
- Parents are advised not to always give the same plant-based drink but to vary the type and the brand due to the presence of cadmium.



Advice for healthcare and medical services

- Healthcare and medical services are temporarily advised, if alternatives are available, not to prescribe MiniMax child enteral formula/Nestlé as the sole source of nutrition until the levels of arsenic have been reduced.
- Healthcare and medical services are temporarily advised, if alternatives are available, not to prescribe the products for special medical purposes that contain manganese in such quantities that the tolerable daily intake, TDI, may be exceeded or to restrict the quantity of the product until the levels of manganese have been reduced.



To inform/refer the case to responsible control authorities in Sweden

- To inform the control authorities concerned that levels of lead in PKU gel/Vitaflo are judged to be so high that the product cannot be considered to meet the requirements for food safety in accordance with Regulation (EC) No 178/2002, article 14.
- To inform the responsible control authorities of the products in which the analysed content exceeds the established maximum levels for iron, copper and manganese, for further processing. The products referred to are porridge and gruel and foods for special medical purposes.
- To inform the responsible control authorities of the products where discrepancies exist between the analysed mineral content and the declared mineral content, for further processing. The products referred to are infant formulae and follow-on formulae (manganese), foods for special medical purposes for infants and young children (iron and manganese) and cereal-based porridge and gruel for infants and young children (iron).

Information for companies

 To inform the companies concerned of the results of the analysis and Livsmedelsverket's conclusions with regard to exceeding health-based guideline values and falling below recommended intake. The products referred to are infant formula and follow-on formula (lead), foods for special medical purposes for infants and young children (iron, copper, manganese, arsenic and lead) and cereal-based porridge and gruel for infants and young children (manganese, arsenic, lead and cadmium).



To inform the EU Commission

- To inform the EU Commission that the legislation regarding added amounts of
- minerals/maximum levels in the products needs to be reviewed. The products referred to are infant formula and follow-on formulae (manganese), foods for special medical purposes for infants and young children (iron, copper, manganese) and cereal-based porridge and gruel for infants and young children (iron, copper, manganese).
- To inform the EU Commission that the need to add certain minerals in cereal-based porridge and gruel for infants and young children should be considered.
- To work actively for the introduction of an EU-wide maximum level for inorganic arsenic in rice.
- To work actively for the introduction of and a lowering of the EU-wide maximum levels for cadmium and lead in foods intended for infants and young children.

Proposal to the European Food Safety Authority, EFSA

- A proposal has been made to the European Food Safety Authority, Efsa, to be prepared for a question from COM to make an assessment on health-based reference values for children for the minerals iron, copper and manganese.
- To inform Efsa of the content data from the project, which could form a basis for the EU Commission in the work to revise the maximum levels for the heavy metals arsenic, lead and cadmium.



Conclusions

- Risk Communication is directed to many groups and needs to be tailored according to their respective needs
- It is vital that the whole picture is communicated at the same time try not to give "off the record" information
- Science, Management and especially Value Based Judgements must be described in a transparent way
- It is a huge task to coordinate all the necessary communication activities





Thank you for you attention and please forgive me for my absence!

Any questions?

