



# **Emerging Risks: How the F&D Industry Responds**

**Prague, 21st-22nd April 2009**





# Overview

- Introduction to CIAA:
  - Obligations of Food and Feed Business Operators
  - How does CIAA operate?
- Some case studies:
  - Acrylamide
  - Benzene
  - Substances migrating from packaging
- Lessons learned from the case studies:
  - The CIAA Incident Management System
- Conclusions



# Obligations of Food and Feed Business Operators

- Safety;
- Responsibility;
- Traceability;
- Transparency;
- Emergency;
- Prevention;
- Co-operation

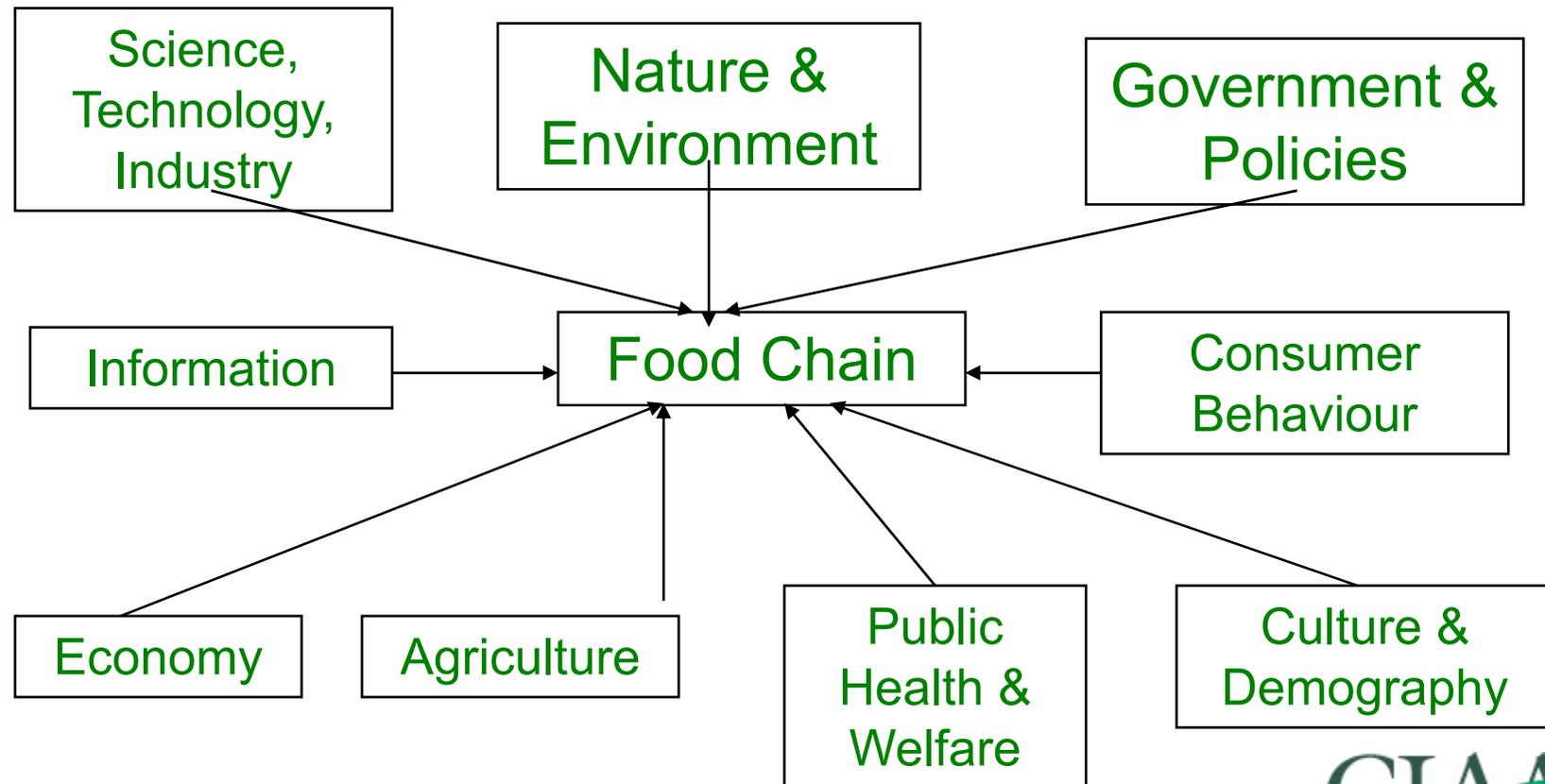


# “Emerging Risks” – What Are We Talking About?

- **Definition of emerging risk:** Potential food- / feed-borne or diet-related hazard that may become a human health risk in the (near) future.
- Emerging risks can result from 3 different types of hazards, such as:
  - An unidentified new form of a known hazard (e.g. unidentified mycotoxin, avian influenza?)
  - A hazard which is not well-known at the time of its appearance in food (e.g. acrylamide)
  - A well-known re-emerging hazard: (e.g. salmonella infection)
- Excluded are:
  - Unidentified hazards of which nothing is known;
  - Well-characterised hazards which are controlled.



# The Holistic View





# Building Consumer Trust in the Food Chain





# How does CIAA operate?(1)

- R&D (Research) and SCIENCE
- FSM (Food Safety Mgt) (including feed and hygiene)
- CONT (Contaminants)
- Process Contaminants Technical Working Group
- INGR (Ingredients)
- NORM (Int.Standards)
- NOVF (Novel Foods)/GMOs
- MAT (Food Contact Materials)
- Various consumer information Working Groups



## How does CIAA operate?(2)

Besides internal expert expertise CIAA:

Refers to ILSI as a source of science regarding risk assessment, e.g.

- Use the outcome of the work of Task Forces on both chemical and microbial risk assessment
- Consider the Threshold of Toxicological Concern Concept ( TTC ) which is being more widely applied for non-genotoxic chemicals

CIAA is involved in particular projects, such as FACET

- Project on methods for additives , flavours and packaging to refine and agree on exposure methodology to improve exposure assessments

CIAA is involved in ETP Food for Life



## Case Study: Acrylamide

- Not a new risk – new discovery
- Industry wishes to play a role
- Long-term issue
  - Global impact
  - Does not only affect processed foods
- Should not become a competitive issue
- Need collective stakeholder approach

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# Case Study: Acrylamide

- **Natural parameters**  
e.g. agronomic factors and biological and chemical parameters of crops & bulk ingredients
- **Product composition**  
e.g. changes in recipes
- **Process conditions**  
e.g. thermal input or pre-treatment of product or ingredients
- **Finished product characteristics**  
e.g. colour, moisture, taste, shelf-life



# Case Study: Acrylamide

- Codex Alimentarius March 2009 - draft Alinorm 09/32/41  
Acrylamide Code of Practice
- CIAA Toolbox is recognised as a key source of information
- Following further amendments, Code of Practice will be submitted to Codex Commission for adoption at Step 8



# Case Study: Benzene in Soft Drinks (2006)

- Formation of benzene can occur when ascorbic acid and sodium benzoate react together under certain conditions;
- The industry has been working to eliminate, or at least minimise, trace benzene formation through a variety of approaches;
- Industry continues to closely monitor the situation;
- The levels of benzene found in some beverages represent a negligible amount compared to the overall benzene intake from environmental sources, and even from other foods;
- The levels of benzene found in soft drinks do not pose health concerns.



# Case Study: Benzene in Soft Drinks

- **RECOMMENDATION 1: REVIEW**  
Beverage companies to review existing products and new formulations considering known information regarding procedures for prevention / minimisation of benzene formation
- **RECOMMENDATION 2: TEST**  
Beverage companies to perform analytical sampling of appropriate products for benzene through accelerated storage tests
- **RECOMMENDATION 3: REFORMULATE**  
Beverage companies to reformulate affected products in which benzene may be present, to eliminate / reduce benzene formation to fullest extent possible
- **RECOMMENDATION 4: MONITOR POST-LAUNCH**



# Case Study: Benzene in Soft Drinks

- Codex Alimentarius March 2009 - Draft Alinorm 09/32/41
  - Discussion Paper on presence of benzene in soft drinks
    - Level of benzene generally below permitted WHO guideline level for drinking water
  - International Council of Beverages Associations (ICBA) Guidance on how to mitigate potential benzene formation in beverages
- Codex conclusion: No need to develop Codex Code of Practice at this stage. ICBA Guidance sufficient for time being.



# Case Study: Migrating Substances from Packaging

- **Week 37, 2005:** ITX in a liquid food package triggers rapid alert to all Member States;
- **30 November 2005:** Commission Standing Committee meets to assess situation;
- **9<sup>th</sup> December 2005:** EFSA issues final Opinion on ITX:  
*“The presence of ITX (2-Isopropylthioxanthone) in food, whilst undesirable, does not raise health concerns at the levels reported. ITX is a substance which has been found in minute quantities in liquid baby milk and other products packaged in cartons.”*  
=>Packaging supplier committed itself to phasing out use of this substance in packaging for milk, fatty liquids and juices



# Case Study: Migrating Substances from Packaging

- At the initiative of CIAA, a joint industry Working Group (ad hoc Group) comprising the F&D, packaging and ink industries, and led by the packaging industry, was launched in January 2006



# Lessons to be Learned

- CIIA Incident Management System established in June 2006 to:
  - Play a coordinating, facilitating role, in response to signals of emerging incidents (nature, scope, who is potentially affected) and,
  - For those incidents affecting a number of companies and/or products across a number of Member States, provide guidance on how this could be managed from an industry-wide perspective, including the establishment of a specific team to manage the day-to-day aspects of the incident



# The Management of Emerging Risks: The CIAA Perspective (1)

- CIAA Incident Management System is prepared to react within 48 hours, but does not replace the responsibilities of individual companies.
- This team will :
  - 1) Analyse emerging issues by considering:
    - The nature of the issue:
      - Industry risk assessment;
      - Industry risk management proposals and/or steps taken;
      - Discussion and analysis of industry risk management decisions/options
  - 2) Communicate:
    - With national incident groups and establish procedures for sharing information;
    - With media, stakeholders and other concerned parties as appropriate



# Management of Emerging Risks: The CIAA Perspective (2)

- The F&D industry is prepared to provide support to risk managers to prevent / solve emerging issues related to the following as quickly as possible:
  - A food safety risk;
  - An emerging issue: limited data / no specific regulation;
  - A significant consumer/media perceived risk
- When a company becomes aware of new information which may affect product safety, it shall perform an initial risk assessment, either alone or with other affected partners of the chain => coordinated approach
- Affected companies will take prompt action and, where relevant, in a manner consistent with the modus operandi (chemical substances) recently published by DG SANCO
- Need for coordinated approach between Commission and MS



# CIAA Incident Management System: Some Examples

- **Active:**
  - LL Rice 601
  - Coumarin in cinnamon
  - Guar gum contaminated with PCP and dioxins
  - Mineral oil in sunflower oil
- **Monitoring:**
  - Melamine in products imported from China
  - Dioxin in Irish pork
  - Salmonella typhimurium in peanut butter



# Recommendations

- Early and adequate use of all relevant information / signals as to what could be an emerging risk is crucial;
- Early evaluation of the hazard and the exposure, including remediation of knowledge gaps, should be carried out.
- Informing media and public in a timely manner is essential
  - Early evaluation to be carried out in a way that facilitates clear understanding of the problem
  - Communication and co-ordination between all parties concerned should be fair and complete
- Measures related to emerging risks to be based on an appropriate risk/benefit analysis



# Conclusions

When a food company becomes aware of new information possibly affecting product safety, the manufacturer takes responsibility for initiating appropriate actions to:

- Protect consumer health;
- Maintain consumer trust both in and between the food industry and the authorities;
- Maintain trust between the food industry and the authorities;
- Maintain confidence in company brands, and
- Minimise economic implications for companies and for society at large



# Where to find more information about CIAA



**CIAA Public Website**  
**<http://www.ciaa.be>**

Access to news and positions





**THANK YOU FOR YOUR ATTENTION**

**CIAA**