Steering Food Safety Through Regulatory Processes

SESSION 5: Sustainable Food Safety in Food Processing

International Science Council Meeting
17 November 2021
Food Safety is an Encompassing Discipline

Intersect for 3 Policy Agendas: Agriculture, Health and Trade

Enhancement of food safety performance of Food Production System can not be Carried out without the

Backing of the enhancement of food regulatory backstops

Food Safety at the Intersect of the Agriculture, Health and Trade Agendas
Ensuring the Safety, Quality and Authenticity of Food is a Shared Responsibility:

- **Industry – Primary Responsibility**
  - Sourcing ingredients.
  - Safe & sanitary conditions of production & sale.
  - Honest representation to consumers.

- **Consumers**
  - Choice of food and consumption as per direction.
  - Food handling and conservation as per recommendation to avoid spoilage and contamination (including cross-contamination).

- **Regulators**
  - Delegated authority from consumers to oversee “food” on their behalf.
Control programs are the collective actions and activities in place to manage specific food safety hazards, assure quality and safety of food and fair practices in the food trade.
An Effective Food Safety Competent Authority:

- Anchors its actions and operations in a *robust legislative and regulatory framework* that enables it to “develop, establish, implement, maintain and enforce a national food control system”.
- Bases its food safety decisions on the application of the *Risk Analysis Principles*.
- Ensures effective *food regulatory operations* both for *standard setting* and *compliance and enforcement*.
- Is supported by a **focused**:
  - *Scientific capacity for risk assessment* and
  - *Laboratory operations*. 
Incremental and Integrated Food Regulatory Interventions

Regulators:
- Regional and National
  - GAP
  - Approval/Standards: e.g. Pesticides, Vet Drugs, Feed Additives

Regulatory Oversight and Interventions
- Chemical/Microbial Hazards Surveillance, Risk Assessment, Food safety standards
- FBO registration
- GMP/HACCP Supervision on Process, Inspection on the market, Food recall

Hazards & Control
- GMP/GHP/HACCP Hygiene Practice
- Food Additives
- Allergens
- Packaging
- Equipment/Tools

Gaps & Overlaps

Food Monitoring
- Surveillance
- Foodborne Disease
- Monitoring
- Epidemiology
- Investigation

Regulatory Oversight and Interventions
- GMP/GHP Hygiene Practice
- Temperature

Food Safety Interventions by Manufacturers/Producers
- Farm
- Production
- Processing
- Distribution
- Logistics
- Retail
- Consumers
Benefits of the The Incremental Approach

Value Chain
Development of Food Safety Interventions
Applied as Part of FBOs’ due diligence to address Risks:
In application of general provisions of food safety requirements and of voluntary approaches

Food Safety Standard Development
Competent Authorities use Industry Experience to Develop Voluntary Codes of Practice / Standards
Which may evolve to mandatory measures

Food Safety Standard Adoption & Implementation
Enabling Mechanisms
Support to Industry towards Enhanced Compliance
Non-Competitive Guidance
Sector Specific Guidance
Food Safety Solutions to Facilitate Adoption of Enhanced Standards

Certification of Adherence
Accreditation of Certifying Partners

EVALUATION OF PERFORMANCE

REGULATORY ENHANCEMENTS
Level Playing Field: Standards
Compliance Verification
Incident Management, Recalls, etc.

REGIONAL AND NATIONAL PROGRAM COORDINATION & ENHANCEMENT

Domestic Markets
Exports
Managing Innovation: Areas with High Velocity of Change:

- Disruptive Technologies: e.g., cold pasteurization techniques
- Packaging applications
- Novel Sources of Proteins / Novel Foods
- Meeting Sustainability Objectives

Availability of Resources to Address Emerging Food Regulatory Issues
Example of Collaboration: Co-Regulation

Example of Food Packaging Applications

Most common food–package interactions:

Migration of **Low Molecular Weight** Substances:
- Stabilizers
- Plasticizers
- Antioxidants
- Monomers
- Oligomers

Extract – Presentation by Dr. Mark Feeley

GFORS | GLOBAL FOOD REGULATORY SCIENCE SOCIETY
Several Questions Emerge In Assessments

- How to assess FP chemicals with low estimated exposures and limited toxicology data?
- How to define low exposure from a chemical risk?
- Addressing Lack of Toxicological Data: Possible existence for a functional relationship between structure and activity.

Extract – Presentation by Dr. Mark Feeley
From 2000 to 2012, a probable daily intake estimate was calculated for total of 424 chemical migrants from packaging materials.

58% below 0.025 ug/kg bw/day
Collaboration is everything.

Global Food Regulatory Science Society (GFORSS)
Centre(s) of Excellence in Food Regulatory Science

- Support Availability of Data that Condition Scientific Assessments for Regulatory Purposes
- Support Formulation of Food Regulatory Measures and their evaluation
- Aim for Availability of Competencies through Capacity Building
- Create Communities of Practice in Food Regulatory Science Disciplines