• Introduction to GFSI
• Food Fraud Mitigation
Introduction to GFSI
High-profile food safety crises
Audit fatigue with duplication and divergence
Multiple recalls from shared supply chains

CEOs of world food retailers agreed to take collaborative action

The Global Food Safety Initiative was launched in 2000
The vision
Safe food for consumers everywhere

The mission
Provide continuous improvement in food safety management systems to ensure confidence in the delivery of safe food to consumers worldwide.
GFSI objectives

- Reduce food safety risks
- Manage cost in the supply chain
- Develop competencies and capacity building
- Facilitate knowledge exchange and networking

What GFSI does

- Recognition of food safety management schemes to defined requirements in its Guidance Document
- Brings together food safety experts within a global network
- Drives global change through multi-stakeholder projects on strategic issues
A Global Multi-Stakeholder Platform
Platform for Collaboration

THE GLOBAL FOOD SAFETY INITIATIVE
GFSI Tools for Change

Benchmarking & Recognition with scopes from farm to fork

Auditor Competence

Guidance Document

Global Markets Program

THE GLOBAL FOOD SAFETY INITIATIVE
The GFSI Approach

Suppliers Certified against any GFSI recognized scheme Certificate accepted by buying companies Shared benefits for industries

Recognized Schemes

Manufacturers...

Primary producers...

Buying Companies
Recognition of food safety management schemes to defined requirements in the Guidance Document

- Sets the requirements for food safety management schemes and key elements for the production of food and feed
- Defines the requirements for the effective management and control of conforming schemes
- Puts in place transparent procedures for the GFSI benchmarking process
New GFSI Auditor Competence Model

• Effectiveness of food safety systems relies on a robust audit
• Strengthens credibility of audit against GFSI-recognized schemes

GFSI Auditor Credentialing

Knowledge exam
Skills Assessment

Competency framework
• Manufacturing (published 2014)
• Other scopes in progress
Global Markets Program

Roadmap to Safer Food and Market Access

- Voluntary tool for development of supplier food safety management systems
- Targets less developed companies in primary production and manufacturing
- Guidance toward certification against GFSI recognized food safety schemes
Global Markets Program

Matching Level

- 12 Months
- 12 Months
- 12 Months

Basic Level
Basic Level + Intermediate Level

GFSI Recognized Schemes

Time
Global Uptake of the Global Markets Programme
Benefits of the GFSI Approach

Supply chain
• Improved product integrity
• Better access to market
• Reduces duplication

Public Health
• Increased confidence
• Reduced foodborne diseases
• Less product recalls
Food Fraud Mitigation
Food Fraud in the Context of GFSI

Economically driven
Motivation is ‘GAIN’

Intentional adulteration

Ideologically driven
Motivation is ‘HARM’

Unintentional adulteration

Accidental
Food borne illness

Food Quality

Food Fraud

Food Defence

Food Safety

THE GLOBAL
Terminology

FOOD FRAUD

- Sunflower oil partially substituted with mineral oil
- Hydrolyzed leather protein in milk

SUBSTITUTION

- Watered down products using non-potable / unsafe water
- Olive oil diluted with potentially toxic tea tree oil

DILUTION

- Copies of popular foods - not produced with acceptable safety assurances.

COUNTERFEITING

- Melamine added to enhance protein value
- Use of unauthorized additives (Sudan dyes in spices)

UNAPPROVED ENHANCEMENTS

- Poultry injected with hormones to conceal disease
- Harmful food colouring applied to fresh fruit to cover defects

CONCEALMENT

- Expiry, provenance (unsafe origin)
- Toxic Japanese star anise labeled as Chinese star anise
- Mislabeled recycled cooking oil

MISLABELLING

- Sale of excess unreported product

GREY MARKET PRODUCTION/ THEFT/ DIVERSION

THE GLOBAL FOOD SAFETY INITIATIVE
Why is Food Fraud increasing?

- Complex food supply chains
- Challenging economic times
- Increasing pressure for unscrupulous suppliers to commit food fraud

Food supply is becoming more global
Top Foods & Ingredients for Fraud

Fish

Olive Oil

Milk

Honey

70% of milk in Delhi, country is adulterated

NEW DELHI: Beware, your daily glass of good health could actually be doing you harm. As much as 70% of milk samples picked up from the capital by a government agency failed to conform to standards.

Of the 71 samples randomly taken from Delhi for testing by the Food Safety Standards Authority of India (FSSAI), 50 were found to be contaminated with glucose and skim milk powder (SNP), which is usually added to milk in the lean season to enhance volume.

Honey Laundering Conspiracy Is Largest Food Fraud In U.S. History
Some Numbers on Food Fraud

- Over 2,100 records

Level of fraud est. 10%
- source: UK FSA

Cost to global food industry est. $30-40 billion
- source: J. Spink, MSU

Cost of one incident between 2% to 15% of ann. rev.
- source: GMA

• source: GMA
The Impact of Food Fraud

Impact on business

- Consumer trust
- Lost sales
- Crisis management

Impact on consumer

- Most cases of food fraud not harmful
- But there are some notable exceptions
GFSI: FF Mitigation as Integral Part of FSMS

Mitigation of intentional adulteration
- Economically motivated

Mitigation of unintentional adulteration
- Accidental
- Science based

Mitigation of intentional adulteration
- Ideologically motivated

Mitigation of intentional adulteration
- Economically motivated
## Key Elements for FF Mitigation

<table>
<thead>
<tr>
<th>Clause Name</th>
<th>Requirement</th>
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<tbody>
<tr>
<td><strong>Food Fraud Vulnerability Assessment</strong></td>
<td>The standard shall require that the organisation have a documented food fraud vulnerability assessment procedure in place to identify potential vulnerability and prioritise food fraud mitigation measures.</td>
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<tr>
<td><strong>Food Fraud Mitigation Plan</strong></td>
<td>The standard shall require that the organisation have a documented plan in place that specifies the measures the organisation has implemented to mitigate the public health risks from the identified food fraud vulnerabilities. This plan shall cover the relevant GFSI scope and shall be supported by the organisation’s Food Safety Management System.</td>
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Integration of Food Fraud Mitigation in FSMS

Incorporation in GFSI Guidance Document Vs. 7 (2016)

Incorporation in Food Safety Management Schemes

Implementation and execution in companies’ FS Management System

Certification via third party audits
Food Fraud Vulnerability Assessment Tool

- **Practical Tool**
- Help companies undertake a vulnerability assessment
- Help companies prepare a plan to mitigate the identified vulnerabilities

![Logos of VU University, Wageningen UR, and SSafe](image)
Fraud in Contemporary Criminology:

Motivations

Opportunities

Fraud control measures

Fraud Vulnerability
Scope of the SSAFE Tool

What the tool does

• Areas of vulnerability
• Links to sources for info gathering
• Basis to establish mitigation actions
• Links to other tools for further assessment where needed
• Platform for structured assessment on a regular basis
• Report that forms part of the FSMS

What the tool does not

• Predict food fraud
• Detailed instructions on how to mitigate specific risks

Scope

• Any food business across the entire food supply chain
• Ingredient, product, brand, site/location, country, etc
• Completed by a multifunctional team
Thank you!