

Defining Food Fraud & The Chemistry of the Crime

FDA Economically Motivated Adulteration
Public Meeting; Request for Comment
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The Food Continuum

Food Quality <> Food Safety <> Food Fraud <> Food Defense

Food Quality	Food Fraud	Economic Threat
Food Safety	Food Defense	Public Health Threat
Un-Intentional	Intentional	

Source: Adapted from: Spink (2006), The Counterfeit Food and Beverage Threat, Association of Food and Drug Officials (AFDO), Annual Meeting 2006

Extremely Interdisciplinary

Criminal Justice

Political Science

Social Anthropology

Pharmacy

IPR Law

Engineering

Pharmacology

Consumer Behavior

Nursing

Counterfeit

Packaging

Food Safety/
Health Risk

Retailing

Food Science

IT

Medicine

DO, DVM, MD

Public Health

Marketing

Forensic Science

International Trade

Supply Chain

Types of Counterfeiting

- Adulterator
- Tamperer
- Over-runs
 - Licensee-Fraud
 - Re-Manufacturing
 - Unauthorized Refill
- Thief
- Diversion
 - Smuggling
 - Parallel Trade
 - Origin Laundering
- Simulations
- Counterfeiter

Anti-Counterfeit Strategy

Why Products are Counterfeited

- Profit
- Cheap to Copy
- Easy to Copy
- Unsatisfied Market Demands
- Difficulties in Detection and Proof
- Non-Deterrent Laws or Enforcement

(Sopido 1997)

Anti-Counterfeit Strategy

Reasons for Growth

- Availability and Growth of Technology
- Increased Globalization
- Low Legal Penalties
- Influence and Prevalence of Organized Crime

“The Business Case Analysis for Anti-Counterfeit Food Research” Food Safety Policy Center, MSU, 2007

- counterfeit food is a public health threat;
- as is done in Food Safety and Food Defense, the most efficient and effective implementation is incorporating anti-counterfeit strategic steps into current “Standard Operating Procedures” (HACCP, GMP, Six Sigma, QA, etc.);
- current anti-counterfeit strategies and procedures from elsewhere in industry will be efficient and effective for the food industry; and
- the range of criminals and the range of actions will continue to be more aggressive, bolder, and more effective at infiltrating the legitimate food supply chain.

The Chemistry of the Crime

The Chemistry for a Crime

- The Crime Triangle
 - Likely Offender (Criminal)
 - Suitable Target (Victim)
 - Opportunity

(Source: Felson, 1998)

Define the Objectives

- Supply Chain Optimization
- Track, Trace, and Authentication
 - Prove Genuine or Prove Fake
 - Detect, Deter, or Both
 - Human and/or Machine Readable
- Integrate Systems Across all Products

A Strategic Solution

- Monitoring all imported product is not practical.
- Monitoring all international food manufacturing is not practical.
- Focus on the root of the risk and actions...
 - *The chemistry of the crime:* Criminal, Victim, and Opportunity
- The Strategy
 - Intelligence Gathering
 - Create a Public Forum
 - Create Awareness & Harmonization

(Source: Spink, 2009, AAAS Conference)

Discussion

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