

Food Ingredient and Dietary Supplement Fraud Prevention and the Global Food Safety Initiative

US Pharmacopeia Workshop on Economically Motivated Adulteration of Food Ingredients and Dietary Supplements

USP Headquarters – September 27, 2013 – 2:00 to 2:30pm

John Spink, PhD

Director, Food Fraud Initiative

WWW.FoodFraud.MSU.edu -- Twitter @FoodFraud and #FoodFraud



Curriculum

Graduate Courses (Online, Three Credits)

- Anti-Counterfeit & Product Protection (Food Fraud)
- Quantifying Food Risk (including Food Fraud)
- Food Protection and Defense (Packaging Module)
- Packaging for Food Safety

Certificate (Online, Four Courses Each)

- Certificate in Food Fraud Prevention (Food Safety)

Graduate Degree (Online)

- Master of Science in Food Safety

MOOC – Food Fraud Overview – **Nov 12 & 19**

Executive Education – Food Fraud – **Oct 22 & 23**

WARNING

Counterfeiters attend
Anti-Counterfeiting
Conferences

- Food Safety Magazine, October 2013
- “The time to act on EMA is now. As I’ve heard at conferences and events ‘if not now, then when; if not us; then who.’”
- “Who will draw a line in the sand?” Daniel Fabricant, PhD, Division of Dietary Supplements Program, CFSAN, FDA at USP EMA Workshop, 9/26/13

Economically
Motivated
Adulteration:

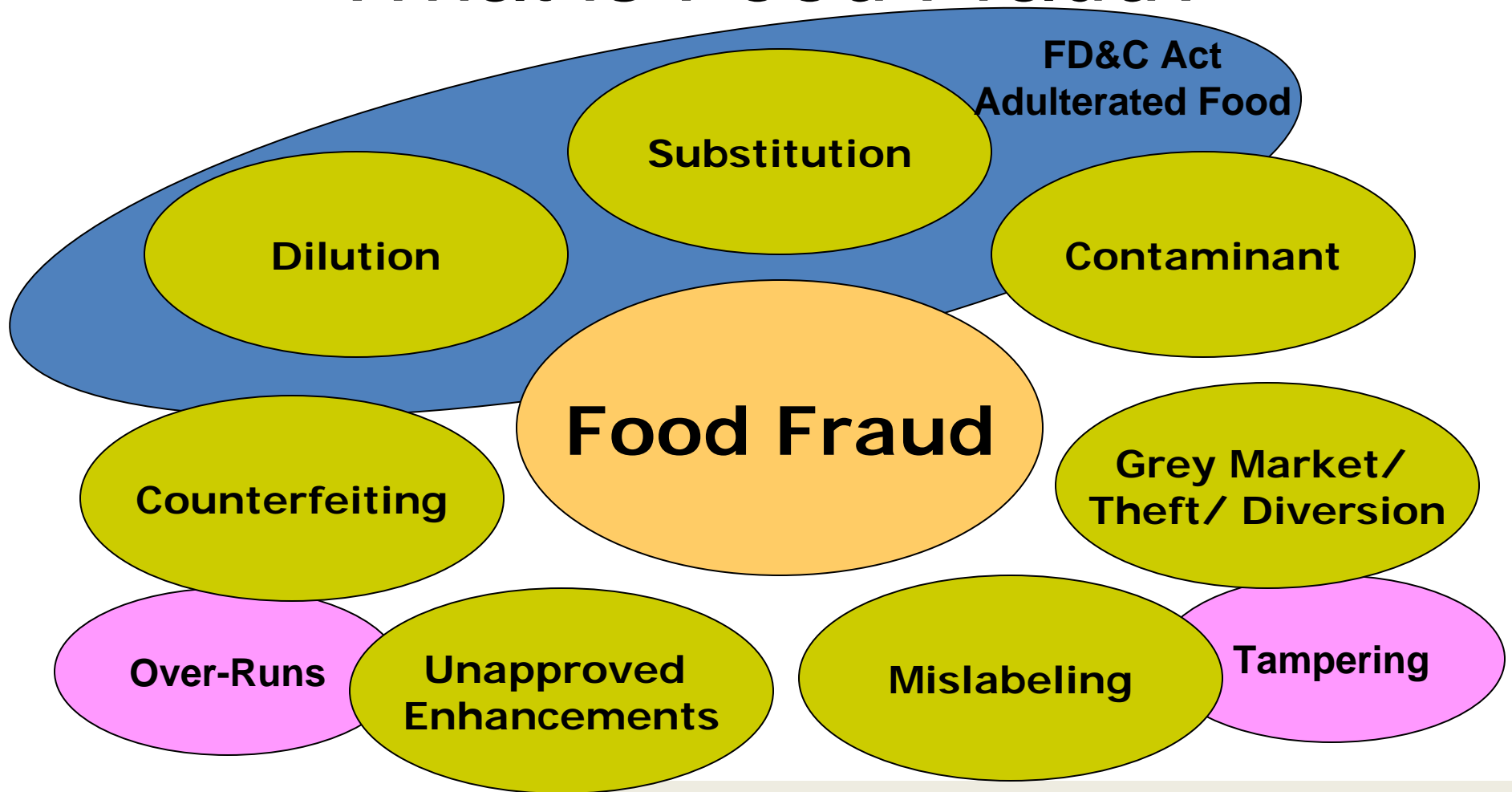
Another Dimension of the
“Expanding Umbrella of Food Defense”

By John Spink, Ph.D.

Defining Food Fraud

- Action: Deception Using Food for Economic Gain
 - Including “Intentional Adulteration”
- Motivation: Economic Gain
 - Food Defense motivation is traditionally harm or terror
- Effect:
 - Economic *Threat*
 - Public Health *Vulnerability or Threat*
- Examples
 - Horsemeat in ground beef
 - Peanut Corporation selling known contaminated product
 - Diluted or extra virgin olive oil
 - Melamine in pet food and infant formula
 - Over-icing with unsanitary water
 - Unauthorized unsanitary repackaging (up-labeling or origin-laundering)
 - Cargo Theft reintroduced into commerce

What is Food Fraud?



Source: Food Fraud Think Tank Presentation, GFSI, 10/2012

The Food Risk Matrix

The **Cause** leading to the **Effect** of Adulteration

Food Quality	Food Fraud ⁽¹⁾	Motivation Gain: Economic
Food Safety	Food Defense	Harm: Public Health, Economic, or Terror
Unintentional	Intentional	
Action		

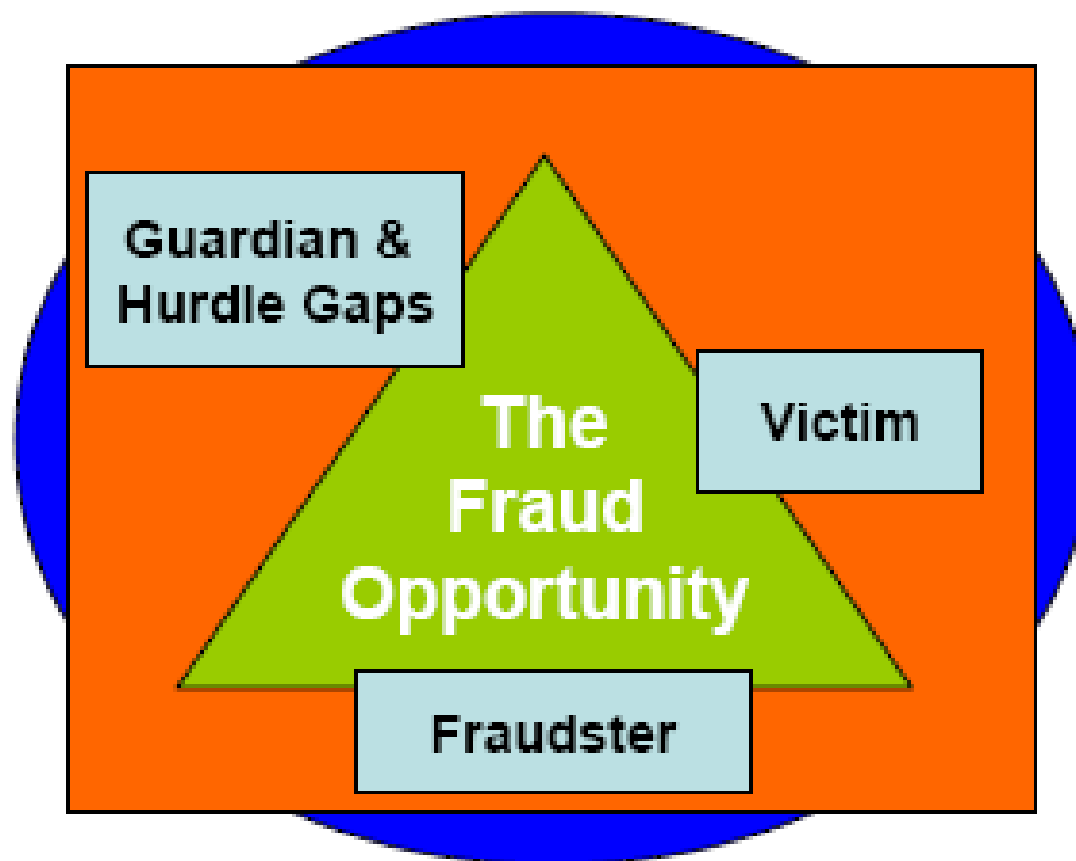
Source: Adapted from: Spink (2006), The Counterfeit Food and Beverage Threat, Association of Food and Drug Officials (AFDO), Annual Meeting 2007; Spink, J. & Moyer, DC (2011) Defining the Public Health Threat of Food Fraud, Journal of Food Science, November 2011

The Chemistry of the Crime


Detect


Deter


Prevent



Are we disrupting the Chemistry of the Crime?




INTERPOL
TRAFFICKING IN ILLICIT GOODS PROGRAMME


EUROPOL
FOCAL POINT COPY

**OPERATION
OPSON II**

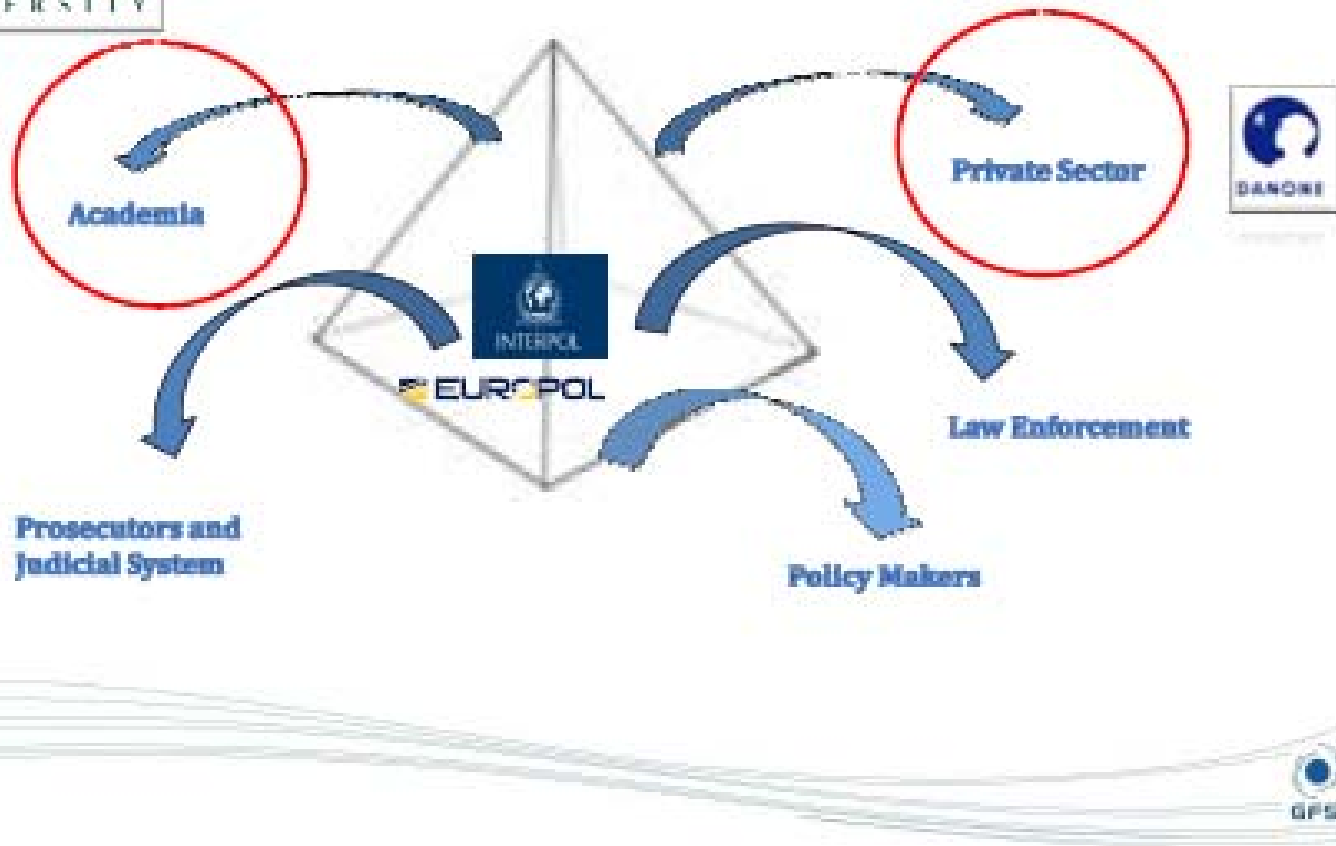
**INTERNATIONAL WEEK
OF ACTION (IWA)**
TARGETING COUNTERFEIT
AND SUBSTANDARD
FOODSTUFF

WWW.INTERPOL.NET
WWW.EUROPOL.JRC.PA.UJ

INTERPOL Programme to Combat Trafficking in Illicit Goods

Public Private Partnership and beyond

MICHIGAN STATE UNIVERSITY



Approaches to Prevent Food Fraud



A Strategic Solution to Food Fraud

- 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 Guardians/Hurdles
- Detection > Deterrence > PREVENTION
- Food Fraud IS our Food industry responsibility
- The Strategy
 - Intelligence Gathering
 - Create a Public Forum
 - Create Awareness & Harmonization
 - FSMA, GFSI, ISO, USP
 - Food, Dietary Supplements, Drug, Medical Device, Cosmetics, Tobacco, etc

MSU Engagement 2013

	Outcome	Benefit	Commitment
Graduate Course	Share your knowledge and set direction of research	Develop the internal talent to support initiatives in the AC space	14 Weeks, online, May to August, ~\$1500
Executive Education	Share your knowledge and set direction of research	Develop the internal talent to support initiatives in the AC space, meet other thought leaders (“invitation only” sessions for brand owners)	2 Days on-campus (\$1950) June 19-20 September 10-11/12-13
Multi-Client Studies	Research the why’s of AC/D, understand underlying drivers	Uncovering the drivers may lead to new strategies to combat Counterfeiting	Teleconference Meetings with option for on-campus meeting, \$varies
MOOC	Engage global network of Food Fraud thinkers..	Two, 2-hour on-line webinar format with assessment. Students earn an MSU “credential”.	May 10 & 17, 2013 Nov 12 & 19, 2013

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Food Fraud Concepts

- [Does Traceability Really Help Fight Fraudsters?](#)
- [Food Fraud Criminal Cases...Keep your Boss Out of Handcuffs!](#)
- [Beware the Black Swans of Food Fraud!](#)
- [Rats! More Food Fraud. \(No Really, Rat Meat!\)](#)
- [Food Fraud Prevention is More Like Fighting Purse Counterfeiters than Controlling Microbes](#)
- [The Impact of the Horse Meat Scandal on the Food Industry](#)

Discussion

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