

Food Fraud

what it is, why it is important, why now

Food Protection Forum

Ministry for Primary Industries, NZ

Monday, October 12, 2015

Session 3 – Food Defense – 11:40 to 1:10

Auckland, New Zealand

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



Food Fraud Curriculum

Massive Open Online Course (MOOC – free, open, online)

- November 2 & 6 **Bi-Lingual English-Mandarin**, May 2016
 - Free, open, online, open to everyone, includes a 'certificate of completion'
- www.FoodFraud.msu.edu

Executive Education (Short-Course)

- Food Fraud, Quantifying Food Risk
- September 21-22/ 23-24; Feb 1-2/ 3-4, 2016

Graduate Courses (Online, Three Credits)

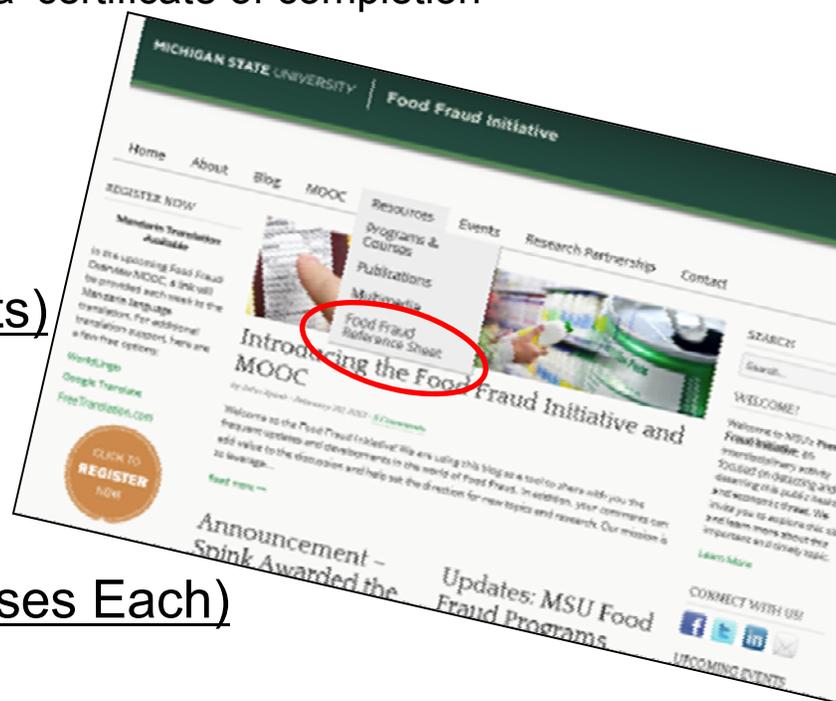
- Anti-Counterfeit & Product Protection (Food Fraud)
- Quantifying Food Risk (including Food Fraud)
- Food Protection and Defense (Packaging Module)
- Packaging for Food Safety

Graduate Certificate (Online, Four Courses Each)

- Certificate in Food Fraud Prevention (Food Safety)

Master of Science in Food Safety (Online)

- www.online.FoodSafety.msu.edu



Introducing Food Fraud including translation and interpretation to Russian, Korean, and Chinese languages 食品欺诈介绍, 翻译成俄语、韩语和中文

- Translation by local scholars and food safety experts
- 由各国食品安全专家和学者翻译
- Reference in their language (country)
- 为不同语言的国家提供参考信息
- Future translations planned
- 计划下一篇文章翻译



题目:食品欺诈概述及俄语、韩语和中文的译文

Original article published in:

Food Chemistry, Volume 189, 15 December 2015, Pages 102-107.

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摘要

本文引入食品欺诈概念, 并附有俄语、韩语和中文的译文。该概念全面系统地阐述食品欺诈预防, 其目标不是检测食品欺诈, 而是调整整个食品供应链, 降低食品欺诈发生的机会。作为食品保护的一部分, 食品欺诈是一个近期才界定的领域, 介于食品安全(例如沙门氏菌, 或农药残留)和食品防御(恶意伤害, 如恐怖主义)之间。食品欺诈是为获得经济收益而无恶意伤害意图的故意行为。正如加强食品安全、食品防御一样, 防止

Defining Food Fraud

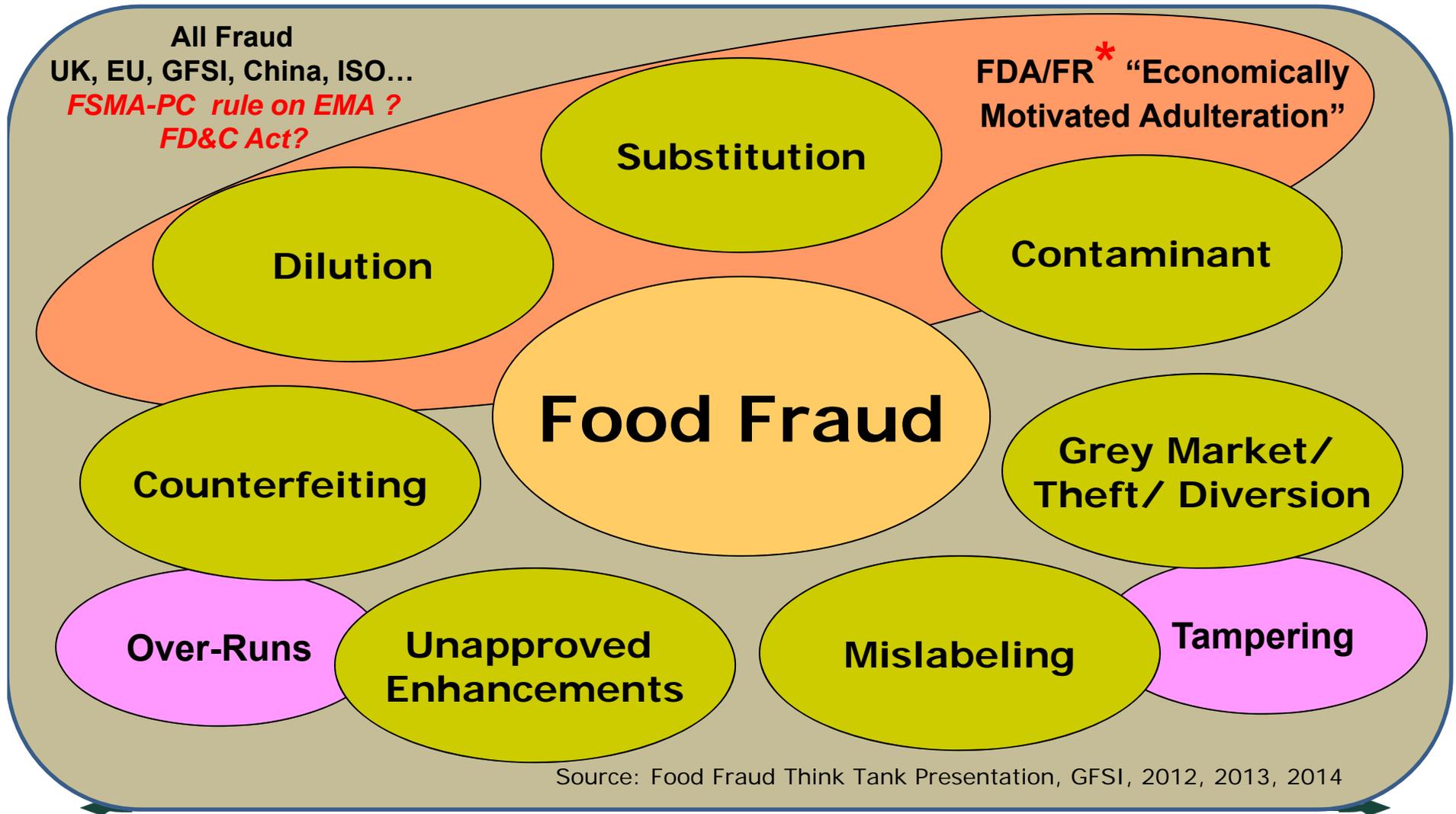
- **Action: Deception Using Food for Economic Gain**
 - Including the sub-category of “Economically Motivated Adulteration” or EMA
 - Note: FDA currently defines EMA as a “substance” for “economic gain”
 - Consistent with GFSI, EC/EU, UK, ISO, and others...
- **Motivation: Economic Gain**
 - “Food Defense” motivation is traditionally harm or terror
- **Effect:**
 - Economic **Threat** – **Consumers and Governments expect Food Agency Controls**
 - 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/ Stolen products
- Expired product date code tampering or “refreshing”

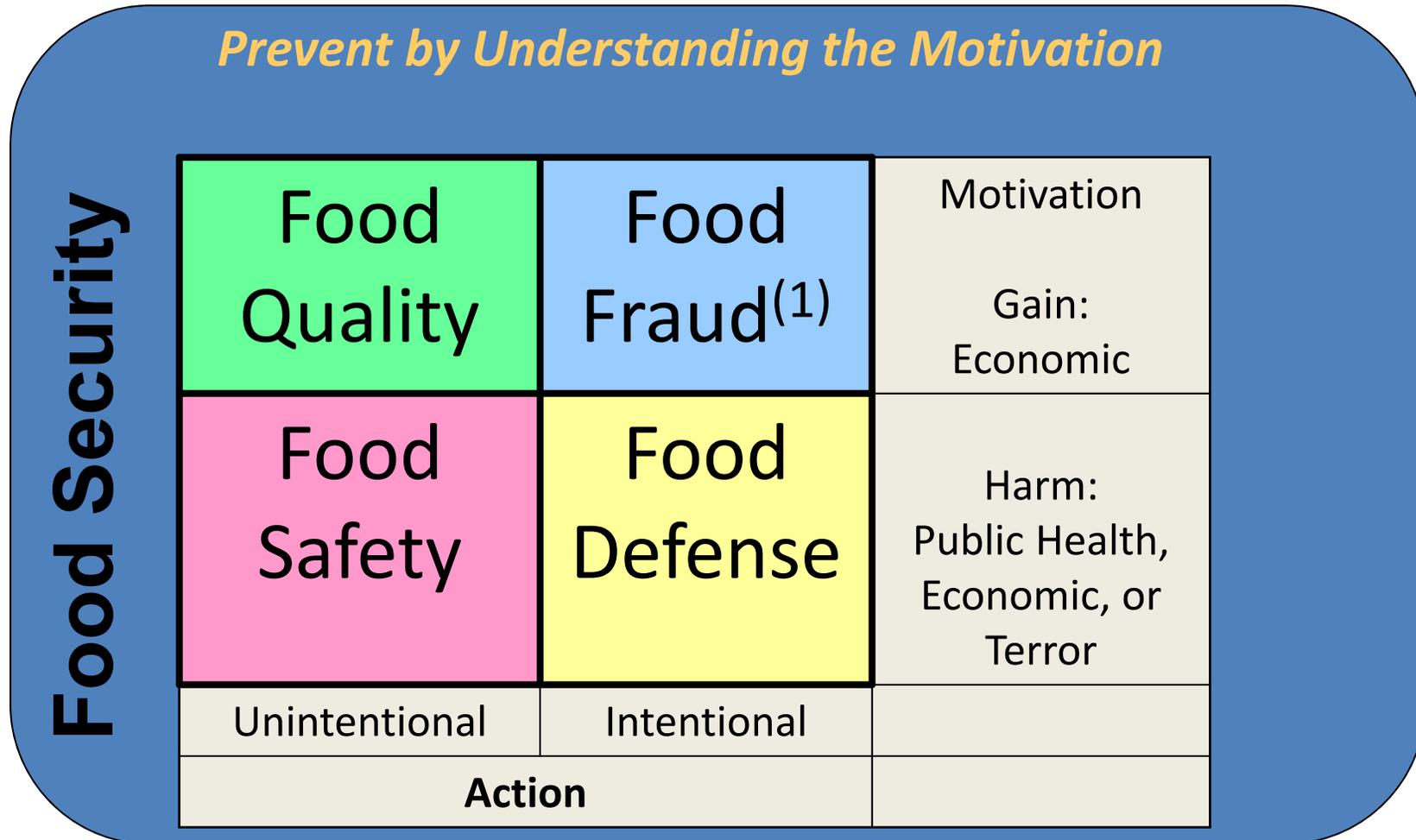
Reference: Spink & Moyer (2011). Defining the Public Health Threat of Food Fraud, Journal of Food Science

What is Food Fraud?

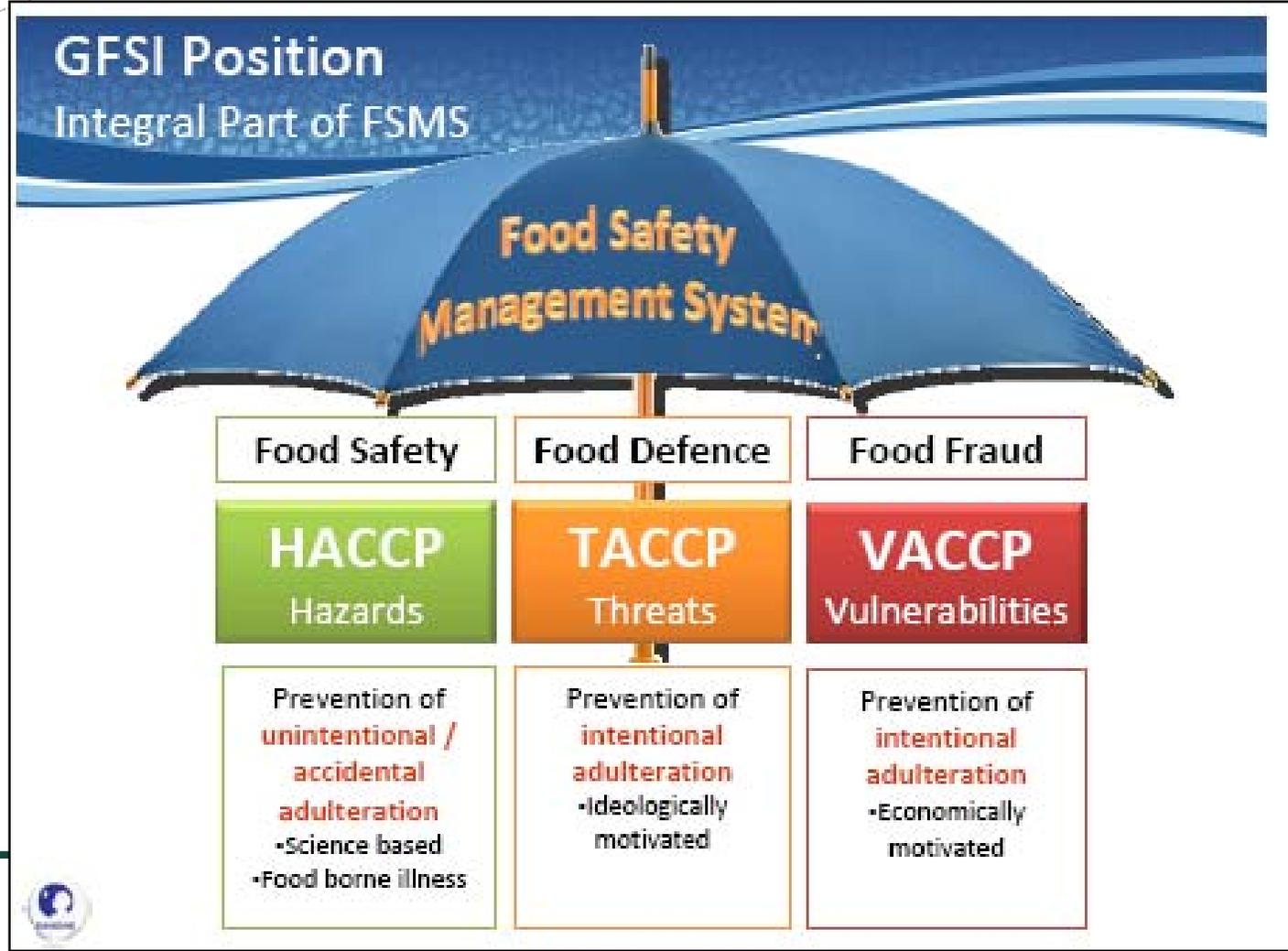


The Food Risk Matrix

Prevent by Understanding the Motivation

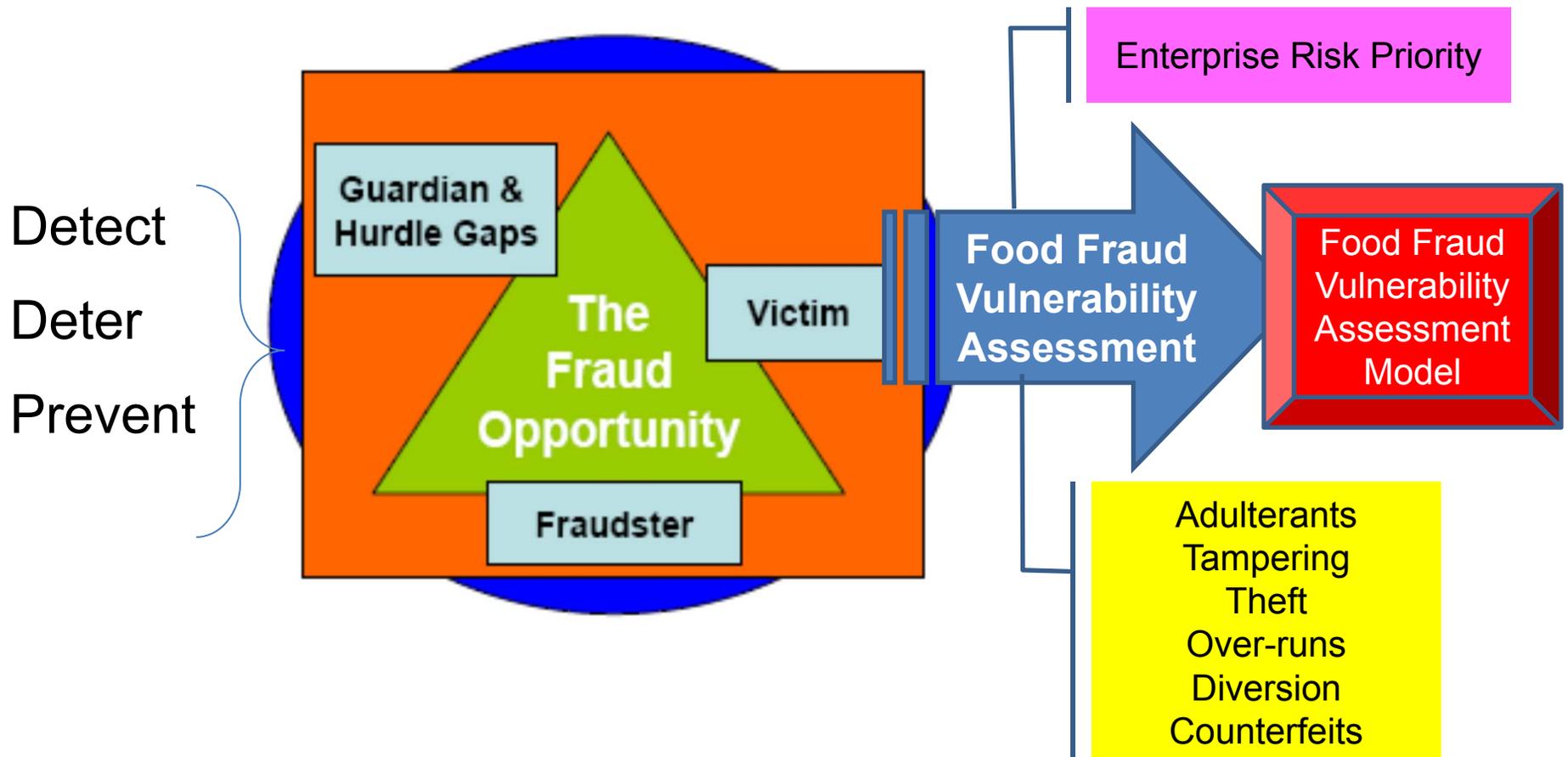


Source: Adapted from: Spink (2006), The Counterfeit Food and Beverage Threat, Association of Food and Drug Officials (AFDO), Annual Meeting 2006; Spink, J. & Moyer, DC (2011) Defining the Public Health Threat of Food Fraud, Journal of Food Science, November 2011



The Chemistry of the Crime

The Vulnerability Assessment Foundation



China: Food Safety Law 中华人民共和国食品安全法 (Baltimore, USA)



www.FoodFraud.msu.edu

Food Fraud Incident Type

- **Adulteration:** A component in finished product is fraudulent
- **Tampering:** product and packaging are used in a fraudulent way
- **Over-run:** Legitimate product is made in excess of production agreements
- **Theft:** Legitimate product is stolen and passed off as legitimately procured
- **Diversion:** The sale or distribution of legitimate products outside of intended markets
- **Simulation:** Illegitimate product is designed to look like but not exactly copy the legitimate product
- **Counterfeit:** All aspects of the fraudulent product and packaging are fully replicated

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