

Food Fraud: Why? What? and Now What?

November 2018



© Copyright AIB International
May not be reproduced without written permission.

Food Fraud

Why is it an issue now?

What exactly is food fraud?

What are my **next steps**?



Food Fraud – Why?

Melamine in milk powder*

Melamine in pet food*

Sudan dye in spices*

Horsemeat in burgers

Corn syrup in honey

Non-organic foods labeled as organic

Fish species misrepresented



*Caused death/ illness



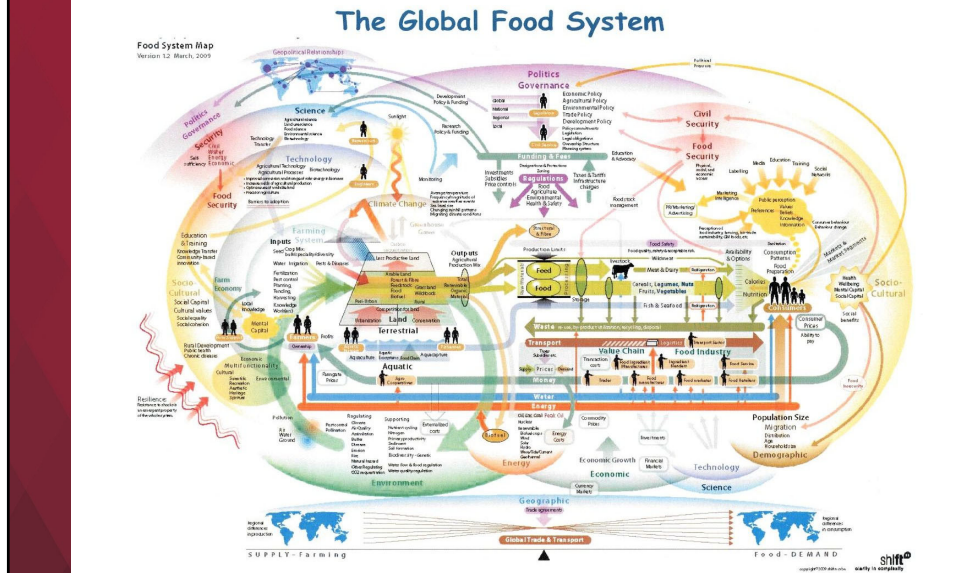
Food Fraud – Why?

Increases in Food Fraud

- Easier to hide
 - Complex food supply chains
 - Global food supply
- Hard financial times
 - Crops impacted by weather or disease
 - Tariffs or other regulations



Food Fraud – Easy to Hide!



Food Fraud – Why?

Perpetrators

- Do not want to be caught
- Do not intentionally cause harm
 - But lack of knowledge may result in harm
- Criminals



Food Fraud – Why?

- 72% of consumers believe food fraud is widespread
- 27% believe they have been exposed to food fraud
- 35% of consumers are least trusting of processed foods
- 18% of consumers are least trusting of red meat
- 15% of consumers are least trusting of supplements



Food Fraud – What?

	Source	Intended Outcome
Food Fraud Prevention	Intentional Adulteration	Economic Gain
Food Defense	Intentional Adulteration	Do Harm
Food Safety	Unintentional Adulteration	Naturally Occurring Hazards



Food Fraud – What?

Substitution

- Ground peanut shells in cumin
- Melamine in milk powder
- Corn syrup in honey

Dilution

- Increased levels of water in a juice product

Misbranding

- Haddock sold as tilapia
- Non-organic sold as organic



Food Fraud – What?

Related terms:

- Economically motivated adulteration (EMA)
- Food crimes
- Vulnerability
- Horizon-scanning



Food Fraud – Next Steps?

Factors that increase ingredient susceptibility/
vulnerability

- Buying it below market price
- Value added claims (organic, free range, etc.)
- Powdered forms
- Long supply chain
- History: spices, olive oil, honey, fish



Food Fraud – Next Steps?

FDA Requirements

- Preventive Controls Plan (HARPC)
 - Potential hazards from economically motivated adulteration

AIB International GMP Audit Requirements

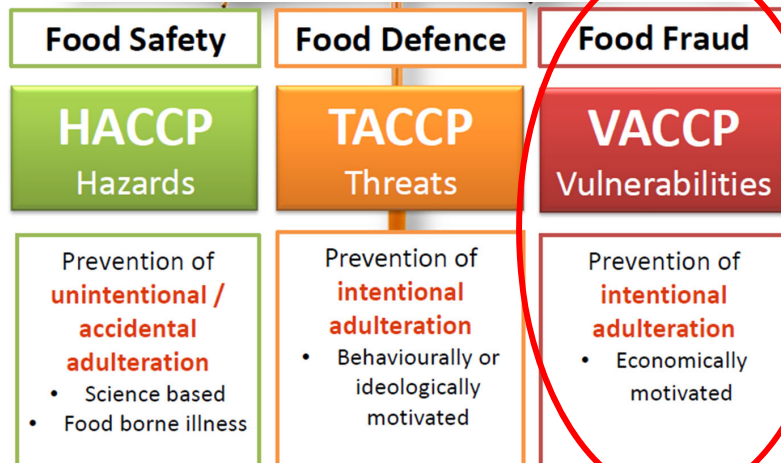
- Suppliers assessed based on food fraud risk

GFSI (BRC, FSSC 22000, IFS, SQF) Requirements

- Food Fraud Vulnerability Assessment
- Mitigation Plan



Food Fraud – Next Steps?



Vulnerability Assessment and Critical Control Points



Food Fraud – Next Steps?

1. Establish a food fraud team
2. Conduct a vulnerability assessment for all ingredients
 - Supply chain mapping
 - Communication with suppliers
3. Establish mitigation measures for vulnerable ingredients
4. Ongoing monitoring



Food Fraud – Next Steps?

Establish a Food Fraud Team

- Food fraud team coordinator
- Plant or facility manager
- Procurement
- Production manager
- Qualified auditor or external consultant
- Quality/technical/compliance manager
- Logistics representative
- Legal advisor or corporate counsel
- CEO/COO



Food Fraud – Next Steps?

Conduct a Vulnerability Assessment

Ingredients List	Country of Origin	Vulnerability and / or Opportunity for Crime	Mitigation to ensure Integrity	Risk Level
Whole or Flaked Almond	Syria			
Dried Banana	India			
Sunflower Seeds	Italy			



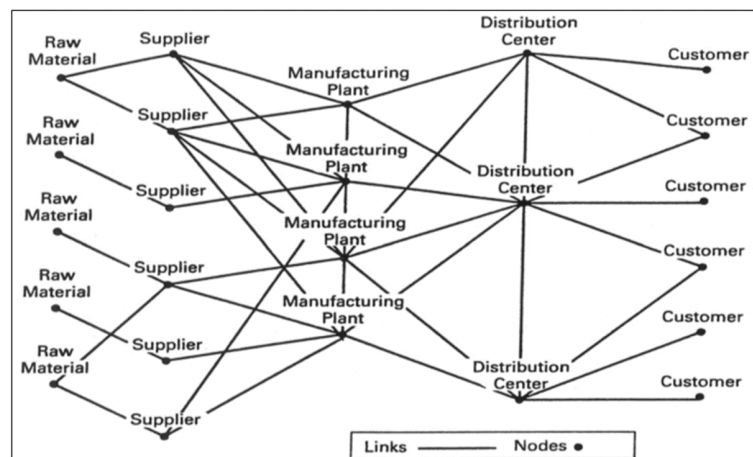
Food Fraud – Next Steps?

Supply Chain Mapping



Food Fraud – Next Steps?

Supply Chain Mapping



Food Fraud – Next Steps?

Most Common Fraudulent Foods

Olive oil	Vanilla extract	Strawberry puree
Milk	Rice	Beeswax
Honey	Cheese	Star anise
Saffron	Turmeric	Durum wheat pasta
Orange juice	Vegetable oil	Guar gum
Apple juice	Chili powder	Palm Oil
Grape wine	Sesame oil	Paprika
Maple syrup	Cocoa powder	

www.foodfraud.org



Food Fraud – Next Steps?

Country	Political Risk Score	Political Risk Category	World Ranking Political Risk
Somalia	1.15	extreme	1
Syria	1.18	extreme	2
Central African Republic	1.4	extreme	3
South Sudan	1.76	extreme	4
Iraq	1.86	extreme	5
Libya	1.87	extreme	6
Afghanistan	1.99	extreme	7
DR Congo	2.05	extreme	8
Sudan	2.07	extreme	9
Yemen	2.35	extreme	10

Food Fraud – Next Steps?

Establish Mitigation Measures

- Fraud specific audits
- Ingredient testing
- Approved supplier program
- Communication with suppliers



Food Fraud – Next Steps?

Resources

www.foodfraud.org

www.foodshield.org

www.horizonscan.fera.co.uk

www.ssafe-food.org

info@aibonline.org



Questions

