



Trends Update and the Emerging Science of Food Fraud Prevention

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17th annual China International Food
Safety & Quality (CIFSQ) Conference,
November 2/ Friday, 2023, Beijing
(10:10 to 10:30 am. Central China Time)
A FORESIGHT ON FOOD AUTHENTICITY,
TRACEABILITY AND SUSTAINABILITY (Session E)



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Engagement in China

- Co-author with Dr. Yongning WU and Dr. Junshi CHEN
- Foreign Subject Matter Expert for Chinese National Center for Food Safety Risk Assessment (CFSA – Dr. Yongning Wu)



Publication – Book on Food Safety in China: Past, Present, and Future - Chapter on Food Fraud [published in China in Chinese]

by John Spink • April 17, 2016 • Blog •

Dr. Spink with book editors Dr. Junshi Chen and Dr. Joseph Jwu-shan Jen



This book was created by two of the top handful of Chinese food safety government advisors. Editor Dr. Joseph Jwu-shan Jen stated that this is a landmark publication that will establish the foundation for the state-of-the-art-of-the science. They stated "It is the first comprehensive book that covers the many aspects of food safety... in China." Editor Junshi Chen has been referred to as the "father of



- Resource: Wu, Yongning, Bing, Shao, Hong, Miao, Jing, Zhang, & Spink, John. (2016). Chapter: Food Fraud, In Food Safety in China: Past, Present, and Future (in Chinese), Editors: Chen, J, and Jen, JJ., CSP Books, Beijing, ISBN 978-7-5046-7061-8, www.cspbooks.com.cn
- Spink, John, Fortin, Neal D, Moyer, Douglas C, Miao, Hong and Wu, Yongning. (2017) [Food Fraud Prevention: Policy, Strategy, and Decision-Making](#)–Implementation Steps for a Government Agency or Industry. CHIMIA **International Journal for Chemistry**, Volume 70, Number 5, Pages 320-328. (ISI: 3.259, SJR 1.620) (Originally published online 2016)
- Spink, J., Moyer, DC., Forsht, V., Park, HH., Wu, Y., Shao, B., Hong, M., Yeop Paek, C., and Edelev, D. (2015), [Introducing Food Fraud including Translation and Interpretation to Russian, Korean, and Chinese Languages](#), **Food Chemistry**, Volume 189, Page 102-107. (ISI 3.259; SJR 1.559)



Food Fraud Prevention Think Tank Resources

Textbook: Food Fraud Prevention (Spink, 2019)

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

- With a **Certificate of Completion** based on **assessments**
- On-demand, ten professional training hours
- 1. **Food Fraud Prevention Overview MOOC**
- 2. **Food Fraud Prevention Audit Guide MOOC**
- 3. **Food Defense Threat Audit Guide MOOC**
- 4. **Food Fraud Vulnerability Assessment & Prevention Strategy (VACCP)**
- 5. *Developing an Organic Fraud Prevention Plan (with OTA)*
- 6. *Food Fraud & Enterprise Risk Management (ERM)*
- 7. *Food Fraud Supply Chain Management & Procurement*
- 8. *Food Fraud - Advanced Criminology (for OPSON)*

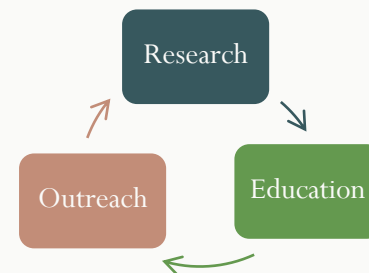
Also:

1. *USDA NOP - Organic Fraud and the Criminal Mind (See USDA.gov)*
2. *USDA NOP - Preventing Organic Product Fraud (See USDA.gov)*

Professional Education: In-Person

Professional Education: MOOC-Live

- (A return to the cycle of live versions of the presentations.)
- (Guest speakers during the discussion)
- (Four, 2-hour blocks)
- **Webinar A: Food Fraud Prevention Overview MOOC and VACCP MOOC**
 - November 6, 8, 13 & 15, 2023



Link to Textbook:

<http://www.anrdoezrs.net/links/9101220/type/dlg/https://www.springer.com/us/book/9781493996193>





The Goal of a Food Fraud Prevention Strategy

The goal is not to catch food fraud but to prevent it from occurring:

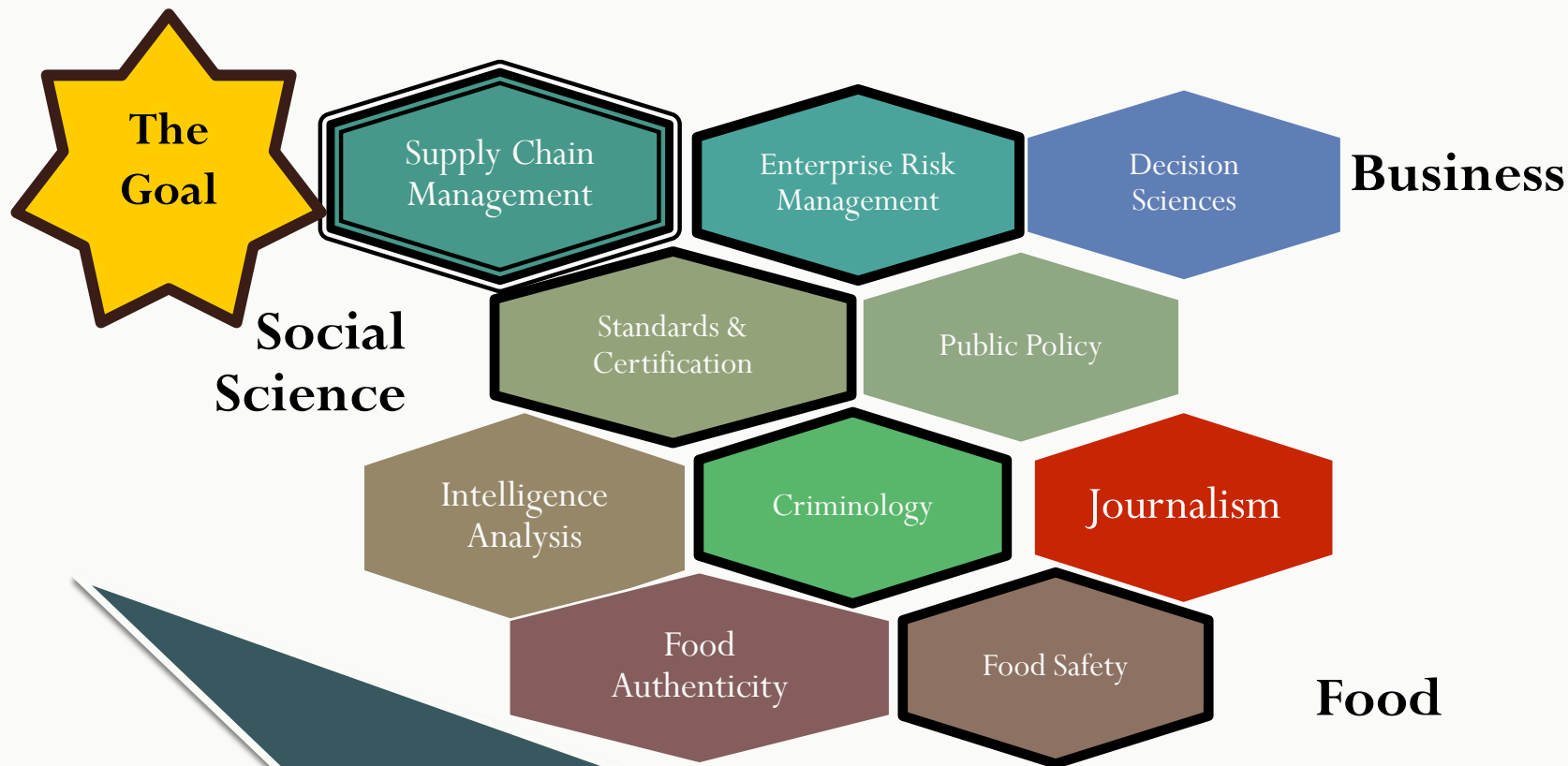
first, by considering all potential fraud acts and, second, by reducing overall vulnerability or system weaknesses.

Food fraud is an enterprise-risk.

A bottom-up approach – to assessment and management – often misses the strategic, black swan events that are the biggest problems.



The Science and Sciences of Food Fraud Prevention



Standard Operating Procedures
 All activities focusing on prevention



Trends: Chronology

- 2004-2007: Sudan Red, Melamine
- 2013-2017: Horsemeat incident and GFSI examination
- 2018: New FFP compliance requirements (“just get started”)
- 2020: Year two, process improvement and audit maturity
- 2020: COVID = assurance of supply, etc.
- 2022: Inflation, Ukraine-Russia, etc.
- 2023: Increased focus on Supply Chain Disruptions and related risks
 - Expanded focus on reducing uncertainty.
 - Enterprise Risk Management/ COSO into the front-line operations.
 - ***New risks but the same vulnerabilities (Incidents from fraudsters).***
 - ***The same basic procedures apply (Root causes of vulnerabilities).***
 - ***It's time to get more formal with policies and a holistic approach.***



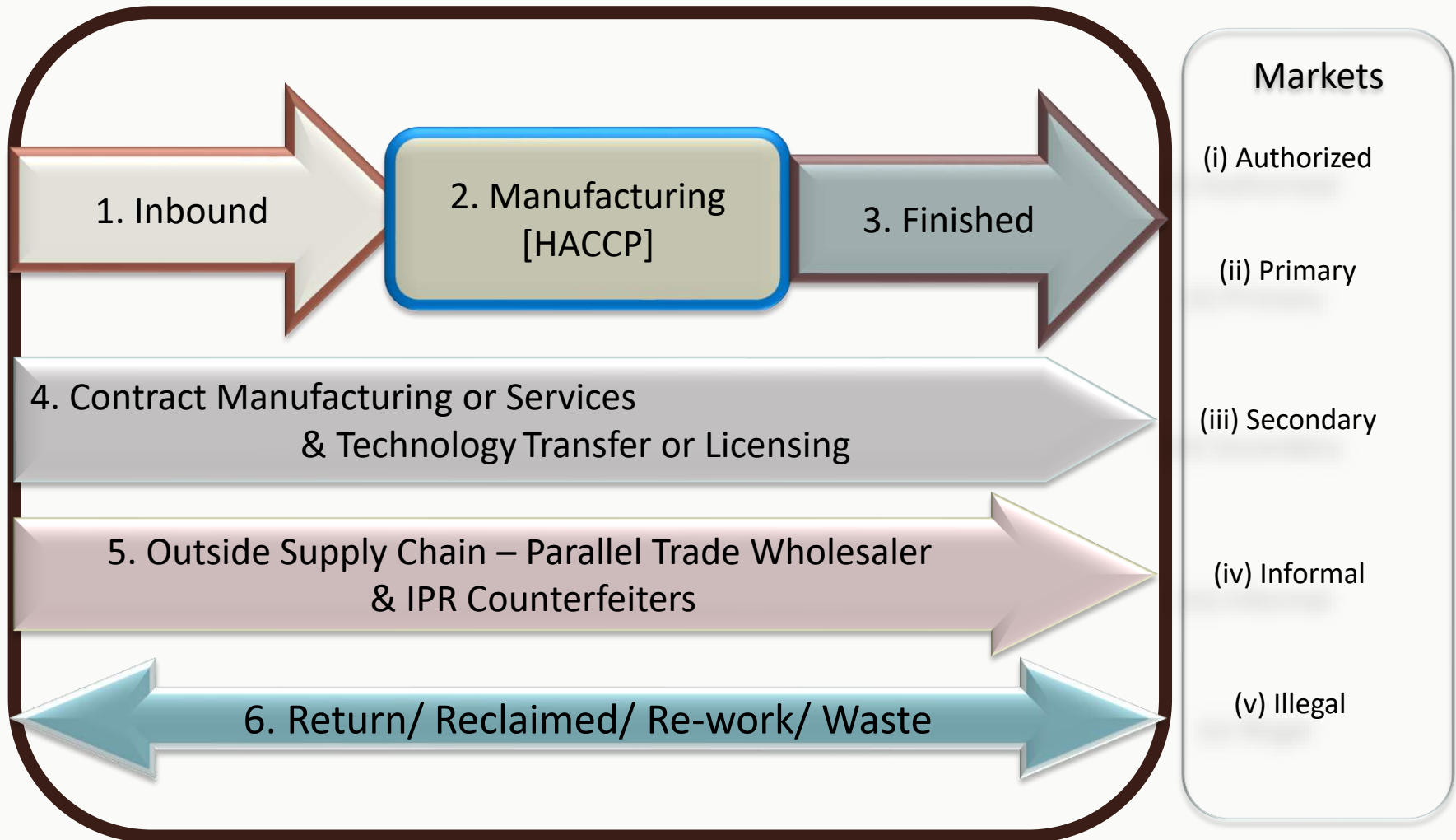
Trends: Focus on the Supply Chains

- Different parts of the supply chain
 - Raw materials
 - Incoming goods
 - Manufacturing
 - Outgoing goods
 - Finished Goods
 - Retail Sales
- Different markets
 - Authorized/ Formal
 - Informal
 - Illegal/ Illicit Trade
- By joining these two ideas, we have a clearer focus area:
 - Genuine product in Genuine Markets
 - Illegal product slipping into Genuine Markets
 - Genuine product diverting to illegal markets
 - Illegal products in illegal markets



More Detail: Food Supply Chain Vulnerability Mapping

(WTO, by Spink, Under Review)





Takeaway Points

- Don't let food fraud be a problem (especially since there are so many resources and standard operating procedures).
 - ***Forward the training summary to your team.***
- Apply and share the current guidance and resources (AND emphasize or require confirmation from suppliers).
 - ***Forward the training summary to your suppliers.***
- Food fraud is still a concern, and the implementation of prevention strategies are still mid-stream (There is still ways to go until there is a TQM, Six Sigma, or HACCP-type universal adoption).
 - ***Start with your own review and extend to suppliers.***



Discussion

John Spink, PhD

Twitter: [Food Fraud](#) and [#FoodFraud](#)

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