



# FOCUS<sup>1</sup>

July-August

## CHALLENGES AND OPPORTUNITIES FOR ASIA FOOD SAFETY



### IN THIS ISSUE:

- ❖ A note from the Chairman
- ❖ Food safety regulations:  
E-produce/e-commerce in China
- ❖ Food safety and US farmers markets
- ❖ Belt and Road: What it means for  
food safety regulations in China
- ❖ Food Safety Liability Insurance in China
- ❖ Connect with us!
- ❖ GFSF Calendar of Events

Contact: Anne Sansbury,  
Administrator/ USA, GFSF/GIC Group  
4328 Montgomery Ave  
Bethesda, MD 20814

Phone: 301-799-0840  
Email: [asansbury@gicgroup.com](mailto:asansbury@gicgroup.com)

Web: [globalfoodsafetyforum.org](http://globalfoodsafetyforum.org)

# Content

❖ A note from the Chairman -----	3
❖ Food safety regulation of e-produce food in China-----	4
❖ Food Safety and the US Farmers Market -----	8
❖ Belt and Road: What it means for China’s food safety standards -----	12
❖ Food Safety Liability Insurance in China: What’s next -----	18
❖ GSFS Calendar of Events -----	22
❖ Connect with GFSF! -----	27
❖ About GFSF -----	28

# A note from the Chairman

To our faithful subscribers,

I want to apologize for the lapse in time since our last newsletter. We haven't forgotten you, nor the critical issues surfacing in sync with the global trade turmoil. The new issue of FOCUS targets key changes in the global market place which present challenges to food safety worldwide.

You'll find the articles spotlight:

- 1/ the advances attributable to new technologies;
- 2/ challenges to food safety regulation, compliance and global supply chains; and,
- 3/ innovative risk mitigation and farm-to-fork marketing strategies.

I hope you agree it was worth the wait. We can't wait to hear from you.

Rick Gilmore  
GFSF Chair

## FOOD SAFETY REGULATION OF E-PRODUCE FOOD IN CHINA

*Haozheyi Guan*

Rapidly growing e-produce platforms have brought significant changes to the farm-to-fork food supply chain in China. In 2014, the domestic online food market was 80 billion yuan, and it increased to 105 billion yuan in 2015. In 2016, it exceeded 220 billion yuan, with a year-on-year increase of 109.52 percent. The most popular online food items were imported foods, with orders accounting for 12.95 percent of total sales volume, followed by grains and oilseeds, accounting for 12.63 percent; the third was for snack foods, with orders accounting for 11.27 percent and fresh food accounts for about 6.73 percent. In 2018, the market size of China's fresh e-commerce industry market reached 210.32 billion yuan, an increase of 49.93 percent compared with 2017 (140.28 billion yuan). It is expected that in 2019, the total market transaction volume of China's fresh e-commerce industry will exceed 300 billion yuan.

Despite the rapid growth, the booming e-produce food sector in China has introduced new food safety risks to regulators. The first one is the illegal and irresponsible behaviors of e-commerce vendors. Due to the distinct characteristics of online food, information asymmetry problems will exist. Consumers can only judge the product by means of the information provided by sellers. Consumers would find it hard to access product information regarding the true quality, manufacturing process, sanitary condition, and transportation status of the product—all of which can lead to potential misconducts by producers. In the food sampling inspection announcement by the State Food and Drug Administration from January to November 2016, there were 86 batches of unqualified foods with food safety risks, involving well-known e-commerce vendors such as Taobao, Tmall, Jingdong and No. 1 stores. Among all 86 unqualified cases, illegal additive problems stand out. There were eight batches that involved the illegal addition of sulfur dioxide, which is the most frequently occurring item on the list, specifically related to sugar, candied fruit and roasted nuts. Furthermore, unlicensed operations, fake products and unsanitary production conditions are other frequent issues.

Additionally, administrative supervision is not overly efficient for online food safety. Since 2015, some cities and counties have merged the newly established food and drug supervision departments with the departments of industry, commerce and price, to become the “all-in-one” market supervision bureau, which weakened the functions of food safety supervision. Given the administrative structure, there are uncoordinated situations between the superiors and the lower

levels, which is illustrated in the inconsistency of law enforcement procedures, legal documents and regulatory basis.

New regulations and technologies have been implemented, which can help solve some of the issues above. The newly revised Food Safety Law (2018) strengthens the regulation of food additives, food-related products, and online food transactions. In particular, a food safety traceability system has been established. It encourages online food vendors to collect all the information about production, operation, marketing and delivery, in order to trace food safety liability and realize the all-round and full-chain supervision from field to table.

Given the new regulations, there are strict requirements for e-produce sellers when certificates are issued. According to the verification standard of JD, the largest retailer in China, basic documents are needed, including an operating license, identification for the legal representative of the company, a bank account and general taxpayer qualifications. Plus, brand qualifications are required, including a Trademark Registration Certificate and Sales Authorization. A Trademark Registration Certificate (R) or a trademark registration application acceptance notice (TM) issued by the State Administration of Trademarks shall be provided. The import brand must provide a domestic trademark registration certificate. Besides, the quality inspection report (including CMA certification or CNAS certification) issued by the third-party quality inspection agency within one year, should be submitted. Brand name, product name, production unit name and Trademark Registration Certificate should be presented in the report.

The current techniques for food safety testing are food toxin tests, biological pollution detection tests, and drug residue detection technology. Toxins in food can be natural, such as toxins in animal liver and alkaloid glycosides in plant-based foods. There are also toxins caused by biological pollution and chemical pollution, such as aflatoxins, heavy metals, and toxins formed in food processing, such as nitrosamines. Development for food toxin testing technology is now relatively mature and can deal with the pre-mentioned toxins in food, excluding tetrodotoxin detection. The biological pollution detection technology is mainly used to detect whether the food contains pathogenic microorganisms. With simple features and high levels of accuracy, this technique is broadly applied in food safety detection. Drug residue detection technology is mainly used to detect the presence of pesticides in foods. Commonly used methods include spectroscopy, enzyme inhibition, chromatography and rapid monitoring technology. Chromatography separates analytes according to the difference of the partition coefficient between the stationary phase and

the mobile phase and converts the concentration of the analyte into an electrical signal that is easily measured, and then sends it to the recorder for recording. Rapid monitoring technology is faster, more advanced, more efficient and lower in cost when compared to traditional residue detection technology such as GC/MS. It requires less reagents in the first place, and it is simpler for operators to treat sample product. It is expected that the demand for rapid food safety detection technology will remain above 15 percent growth in the next few years. Development in food safety testing technology plays an important role in expanding the food safety testing industry. It is estimated that by 2022, the market size of the domestic food safety testing industry will exceed 100 billion yuan.

Moreover, self-regulatory measures are implemented to double-check network food safety. Blockchain technology is a new technology that has emerged in recent years. It can be used in the field of food traceability to effectively improve the transparency of the food supply chain and improve the ability of food safety management. In April 2018, large retailers in China, such as Alibaba, JD, Suning and others, proposed the “Food Traceability System” which imposes stricter inspection on network food with the help of blockchain technology. For example, in the past, most of the fresh food traceability system can only cover a certain stage of the fresh food supply chain, such as the origin to the cold chain warehouse, or the cold chain warehouse to the consumer. There are also problems such as lack of dynamic information, inefficient logistics and tampering with information. Based on its own business model, Yiguo, the first fresh food e-producer in China, has created an “end-to-end” traceability system in the industrial chain, which solves the problem of retrospective disconnection caused by the segmentation. The traceability system is based on the minimum sales unit of consumer orders. Each node is signed by a certain director, and the information loops are connected and uploaded to the traceability system at the key nodes to ensure that the information cannot be tampered with.

Despite all the new guidelines and technologies, there are still gaps in the system that allow for abuse. According to the government, one problem is that the current costs for food safety violations are too low. Vendors and producers may not pay enough attention to food safety, leading to failure of regulation implementation. For example, The State Administration of Markets and Regulations organizes food safety inspections randomly and announces the results every month. As of May 13, 2019, the 15<sup>th</sup> unsafe food information report was made public. To the many e-commerce producers that have been found to sell unqualified foods, the punishment is only to

“stop selling, check the flow of products, recall unqualified products, and analyze the reasons for rectification.” No further severe administrative penalties could be found in the announcement. The other problem is that many food safety incidents that have caused widespread concern in the past few years have been discovered by the media, not the regulatory authorities—showing inefficient and insufficient executive ability.

Hence, it’s still a long battle for e-produce food safety in China. The Chinese government is trying to impose more stringent regulations that largely raise the costs for noncompliant vendors and strengthen the link between administrative power and law enforcement. Specifically, the “punishment to person” requirement should be implemented and the person in charge of the illegal enterprise, the legal representative, the actual controller or other directly responsible personnel should be severely punished. Moreover, the “Internet + food” regulation needs to be actively promoted, including the application of big data, cloud computing, artificial intelligence, blockchain and other technologies in the field of food safety supervision, to identify problems in a timely manner and enhance the regulation enforcement. With the implementation of new regulations, development of food safety testing technology and the closure of regulation gaps that allow for abuse, a brighter future for e-produce food can be expected.

# FOOD SAFETY AND US FARMERS MARKETS

*Rachel Prevost and Kexing Zhu*

Farmers markets have become an increasingly popular option for people to get fresh produce and other farm-to-table products. The number of farmers markets in the U.S. increased from 2,000 in 1994 to more than 8,600 in 2019.<sup>1</sup> According to the United States Department of Agriculture (USDA) National Agricultural Statistics Service's 2015 Local Food Marketing Practices Survey, direct-to-consumers sales generated \$3 billion.<sup>2</sup> Out of that, \$2 billion of those sales came from farmers markets and on-farm stores, making up roughly 67 percent of the direct-to-consumers sales market.<sup>3</sup> According to the survey, farmers markets alone generated \$711 million in sales from a total of 41,156 farms.<sup>4</sup> While gaining popularity, farmers markets face a problem when it comes to food safety: the absence of uniform regulations.

There were eight incidents of foodborne outbreaks and two recalls traced to farmers markets since 2008, causing 91 known reported illnesses.<sup>5</sup> In the past decades, most of the products sold in farmers markets were exempt from food safety regulations. With the growing scale and influence of farmers market, more states have moved from relying on traditional cottage food laws to enacting modern food safety regulations addressing farmers markets.<sup>6</sup> In 2015, 26 states and the District of Columbia have passed legislation addressing farmers market food safety regulations.<sup>7</sup> In 2018, according to the National Conference of State Legislatures, 23 states enacted food safety legislation, some of which controls "state food safety requirements, or providing direction for food safety officials"<sup>8</sup> which likely impacts farmers market food safety regulations.

In addition, different farmers markets also have a big gap in determining the eligibility and selection of vendors. Some markets ask for a mandatory food safety training certification to be an

---

<sup>1</sup> <https://www.npr.org/sections/thesalt/2019/03/17/700715793/why-are-so-many-farmers-markets-failing-because-the-market-is-saturated>

<sup>2</sup> [https://www.nass.usda.gov/Publications/Highlights/2016/LocalFoodsMarketingPractices\\_Highlights.pdf](https://www.nass.usda.gov/Publications/Highlights/2016/LocalFoodsMarketingPractices_Highlights.pdf)

<sup>3</sup> [https://www.nass.usda.gov/Publications/Highlights/2016/LocalFoodsMarketingPractices\\_Highlights.pdf](https://www.nass.usda.gov/Publications/Highlights/2016/LocalFoodsMarketingPractices_Highlights.pdf)

<sup>4</sup> [https://www.nass.usda.gov/Publications/Highlights/2016/LocalFoodsMarketingPractices\\_Highlights.pdf](https://www.nass.usda.gov/Publications/Highlights/2016/LocalFoodsMarketingPractices_Highlights.pdf)

<sup>5</sup> Scheinberg, J. A., Radhakrishna, R., Campbell, J. A., & Cutter, C. N. (2018). A comprehensive needs assessment of food safety practices of farmers' market vendors in Pennsylvania using direct concealed observations, self-reported surveys, and state sanitarian surveys. *Food Protection Trends*, 38(6), 421-439.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> <http://www.ncsl.org/research/agriculture-and-rural-development/food-safety-legislation-2018.aspx#/>

eligible vendor, while some may only ask producers to fill out a questionnaire. This further highlights the need to improve food safety practices and vendors' education.

Produce is one of the most common items sold at farmers markets, while meat, seafood, dairy, and processed goods are becoming more popular at the markets.<sup>9</sup> Local products and organic products can be found at farmers markets. The items that are popular at farmers markets are determined by the region where the produce is grown and the season, therefore making it useful to reference seasonal farmers market guides to determine what will be in season.<sup>10</sup> According to the USDA Economic Research Services Organic Market Overview, the Organic Trade Association estimates that about “7 percent of U.S. organic food sales occur through farmers markets, foodservice, and marketing channels other than retail stores.”<sup>11</sup> A farm or business that has less than \$5,000 gross annual organic sales is exempt from certifying as organic.<sup>12</sup> However, vendors at farmers markets who want to sell organic products must comply with all USDA organic regulations regardless if they are certified producers or not.<sup>13</sup>

A farmer's market sells food products directly to consumers and according to the Food and Drug Administration (FDA), as long as the establishment has an “annual monetary value of sales of food products directly to consumers (or qualified end-users) that is greater than the annual monetary value of sales of food products to other buyers” (such as businesses), they qualify as a Retail Food Establishment (RFE) and is then exempt from having to register with the FDA.<sup>14</sup> Furthermore, the scale of the producer's operation has a lot to do with how the producer must comply with the Food Safety Modernization Act (FSMA) food safety standards, specifically Preventative Controls of Hazard Analysis and Risk-Based Preventative Controls (HARPC).<sup>15</sup> This exemption from FDA registration saves small agricultural producers from extensive paperwork and recordkeeping, giving them the opportunity to market their local produce to consumers.

However, with being exempt from certain FSMA regulations and food safety regulation falling to the state jurisdiction for farmers markets, there are no uniform regulations in the federal

---

<sup>9</sup> Scheinberg, J. A., Radhakrishna, R., Campbell, J. A., & Cutter, C. N. (2018). A comprehensive needs assessment of food safety practices of farmers' market vendors in Pennsylvania using direct concealed observations, self-reported surveys, and state sanitarian surveys. *Food Protection Trends*, 38(6), 421-439.

<sup>10</sup> <https://snaped.fns.usda.gov/seasonal-produce-guide>

<sup>11</sup> <https://www.ers.usda.gov/topics/natural-resources-environment/organic-agriculture/organic-market-overview.aspx>

<sup>12</sup> <https://www.ams.usda.gov/sites/default/files/media/2%20Exempt%20Producers%20FINAL%20RGK%20V2.pdf>

<sup>13</sup> <https://www.usda.gov/media/blog/2015/06/05/farmers-markets-important-sales-outlets-organic-farmers>

<sup>14</sup> <https://www.fda.gov/media/112967/download>

<sup>15</sup> <https://www.fda.gov/food/food-safety-modernization-act-fsma/full-text-food-safety-modernization-act-fsma#SEC111>

level other than recommended guidelines. Essentially, farmers markets will follow those guidelines if it is required by the market manager, the state, or governing jurisdiction of that market. Possible recommended guides could be the Food Code, Good Agricultural Practices (GAP) and Good Handling Practices (GHP), or recommendations from state or county health departments. Some states have no current progress in relative legislation yet.

Market managers may have their own set of rules regarding inspections, allowed products, and the correct type of permits for their state and county when it comes to farmers markets. Participants in the market are expected to comply with the market manager's set rules, as well as any other food safety laws that apply to the food they are bringing to the market. For example, vendors supplying foods that require temperature control must follow state and county health department recommendations for temperature that the food must be held at, during transportation, preparation, display, and removal. There are many factors that are controlled by the state, the county or market manager, and the knowledge of compliance falls on the producer. If you are selling at a farmers market, the scale of operation and amount of sales your operation has annually, determines how, if, and where producers need to comply with FSMA.<sup>16</sup>

Some farmers markets have distance restrictions, while others do not. For example, The USDA Farmers Market features vendors who produce and sell agricultural items that are from the Chesapeake Bay area and preferring that the products are produced within a 200-mile radius of the Washington D.C. market.<sup>17</sup> However, if coming from another state, the supplier needs to understand and comply with all the appropriate food safety rules and regulations applicable to the state of farmers market they participate in.

Regardless of state, county, or market manager's rules for farmers market food safety regulations, foodborne illnesses are still connected to food and product that are bought by consumers at farmers markets. The risk of foodborne illness has increased proportionately as the variety of products increased and market size expanded. However, though the number of farmers markets in the U.S. has increased, resources for food safety inspections have not increased with market growth. Public health budgets decreased in 40 states from 2009 to 2010, with 30 of these

---

<sup>16</sup> <https://www.fda.gov/food/food-safety-modernization-act-fsma/full-text-food-safety-modernization-act-fsma#SEC105>

<sup>17</sup> <https://www.usda.gov/our-agency/initiatives/usda-farmers-market>

states decreasing budgets for two consecutive years and 15 decreasing budgets for three years in a row.<sup>18</sup>

The USDA and the 2018 Farm Bill have created programs to assist low-income consumers in having greater accessibility to fresh and local produce. Thanks to programs like the Supplemental Nutrition Assistance Program (SNAP) and the Gus Schumacher Nutrition Incentive Program (GusNIP) purchasing fresh and local food products is more accessible than ever to low-income consumers. GusNIP is a grant program that funds opportunities and projects that “aim to increase the purchase of fruits and vegetables by low-income consumers participating in SNAP by providing incentives at the point of purchase,” as well as operating through registered SNAP facilities.<sup>19</sup> These programs are becoming more important as more farmers markets accept SNAP benefits, helping to increase the accessibility of fresh produce.

However, as these programs develop, and more people take advantage of programs like SNAP, food safety issues related to farmers markets and foodborne illness need to be addressed to further mitigate foodborne illness and product contamination that can be found in farmers markets. Without uniform food safety regulations across farmers markets, low-income consumers may be at a higher risk of foodborne illnesses.

---

<sup>18</sup> Behnke, C., Gaulke, C., & Almanza, B. (2016). State health department directors' insights into farmers' markets inspection practices and resources. *Food Protection Trends*, 36(3), 183-193.

<sup>19</sup> <https://nifa.usda.gov/sites/default/files/rfa/fy-2019-gus-schumacher-incentive-program-rfa-revised-20190509.pdf>

# BELT AND ROAD: WHAT IT MEANS FOR CHINA'S FOOD SAFETY STANDARDS

*Buli Xing*

In late 2013, China launched the Belt and Road Initiative (BRI) across Africa, Asia, and Europe with Chinese financing. In 2018, according to China's Ministry of Commerce (MOFCOM), the total trade value of goods between China and the BRI economies exceed \$1.3 trillion representing an annual growth rate of 16.3 percent.<sup>1</sup> Agricultural products account for over one-third of the total value of traded goods.<sup>2</sup> The high growth trend of BRI trade volumes present new challenges for the application of internationally recognized food safety standards and compliance.



Source: State Information Center<sup>3</sup>

The key to solving these new challenges lies in food safety standards, specifically, the reconciliation with international food safety standards such as the International Codex Alimentarius (Codex). The discrepancies between national regulatory systems in China and other BRI economies, especially in the process of certification and

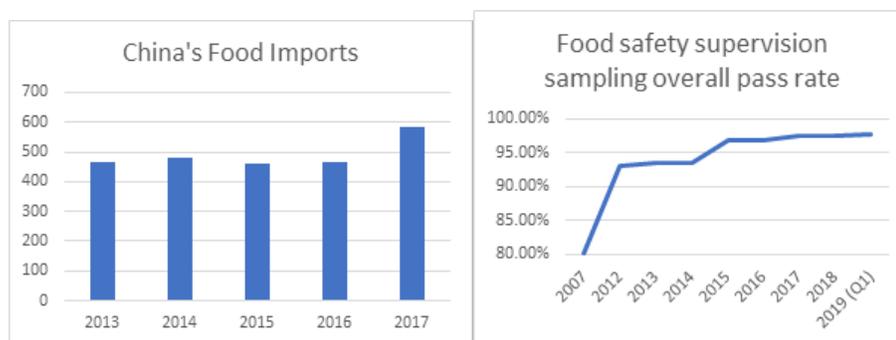
<sup>1</sup> <http://www.mofcom.gov.cn/article/ae/ah/diaocd/201901/20190102830048.shtml>

<sup>2</sup> <http://www.haagri.gov.cn/portal/news/viewContent.html?id=21995>

<sup>3</sup> <https://www.yidaiyilu.gov.cn/wcm.files/upload/CMSydlgw/201703/201703241243039.pdf>

verification, have been both time-consuming and costly. According to an estimation of the World Bank Group, the costs generated by inefficient trade processes and procedures make up a significant share of overall trade costs within BRI with an estimated impact greater than tariffs.<sup>4</sup> The role of uniform food safety standards, hence, is not only to protect consumers but also to further reduce trade costs; therefore, maximizing the impact of the BRI.

China has witnessed the expansion of its trade volume in food products as its food safety improves. In 2017, China became the largest importer of food in the world, as the overall pass rate of food products in national inspections reached a record-high 96 percent



Source: WTO and China's National Food Quality Supervision and Inspection Center

However, this effect is not maximized because of the two-track food safety standards between China and other BRI countries. The trade of food with BRI countries is currently governed by the Chinese compulsory national standards (abbreviated as GB) on food safety. Like others, food import and export with BRI countries is generally governed by China's Food Safety Law<sup>5</sup>, its implementing regulations<sup>6</sup>, and relevant PRC General Administration of Quality Supervision<sup>7</sup>, and Inspection and Quarantine (AQSIQ)<sup>8</sup> regulations.<sup>9</sup> Imported food products are subject to compulsory inspection by local Entry-Exit Inspection and Quarantine Bureau (CIQ) at the port of entry. Nonetheless, different food safety standards caused problems during this process. For example, take the imports of

<sup>4</sup> <http://documents.worldbank.org/curated/en/219761536948259167/pdf/Trade-Facilitation-Challenges-and-Reform-Priorities-for-Maximizing-the-Impact-of-the-Belt-and-Road-Initiative.pdf>

<sup>5</sup> [http://www.npc.gov.cn/npc/cwhhy/12jcw/2015-04/25/content\\_1934591.htm](http://www.npc.gov.cn/npc/cwhhy/12jcw/2015-04/25/content_1934591.htm)

<sup>6</sup> [http://www.cirs-reach.com/Uploads/file/20180428/1524879527\\_39696.pdf](http://www.cirs-reach.com/Uploads/file/20180428/1524879527_39696.pdf)

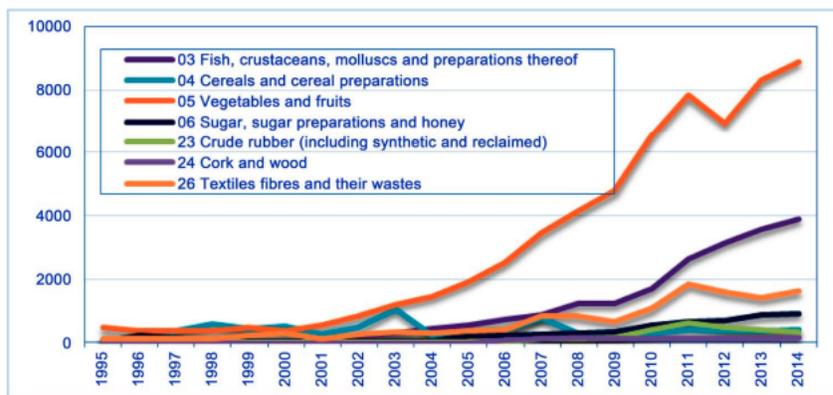
<sup>7</sup> <http://extwprlegs1.fao.org/docs/pdf/chn140514.pdf>

<sup>8</sup> AQSIQ is currently under revamping, with its divisions for cross-border quality supervisions being merged into the General Administration for Customs.

<sup>9</sup> <http://www.customs.gov.cn/customs/zsgk93/jgz95/jgz95/2011743/index.html>

vegetable and animal oils and fats which are the third largest chapters of agricultural products that China imports from the BRI countries. Imported vegetable and animal oils and fats should comply with Chinese compulsory national standards, namely GB2716-2005, GB2763-2005, and GB7718-2004. Based on those standards, a number of imported vegetable and animal oils and fats were found to be unqualified and rejected by CIQ. For example, 6590.3 kg of olive oil from Turkey was found that the “bean decadiene content” exceeded the standard and another two batches of palm oil from Malaysia had “acid levels” which exceeded China’s standards. On the export side, the agricultural products that China exported to the BRI countries are mainly vegetables and fruits. Though in compliance with the GB system, Chinese vegetables and fruits were found “substandard with invalid certifications” and were rejected in Russia—a BRI country.<sup>10</sup> A uniform food safety standard within the BRI will reduce cargo rejections due to different standards used in the certification and verification process.

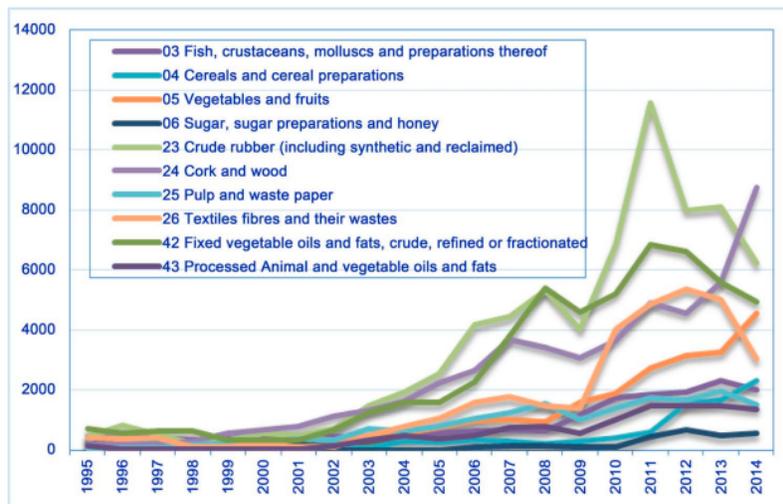
Figure 1 Figure 1 Top 7 Food and Agricultural Products that China Exports to the BRI Countries



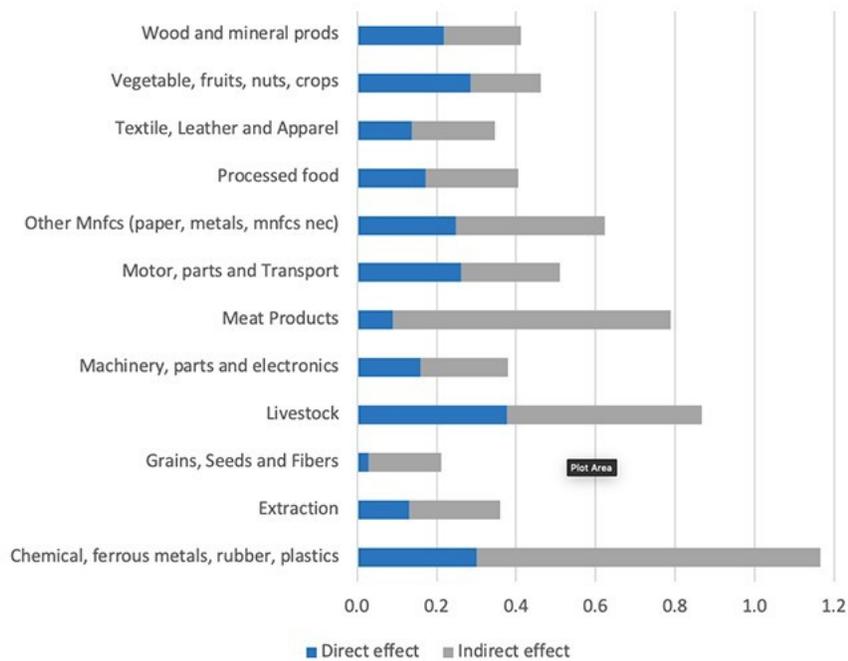
Data source: UNCTAD. Million Dollar.

<sup>10</sup> <http://www.bestchinanews.com/International/3140.html>

Figure 2 Top 7 Food and Agricultural Products that China imports from the BRI Countries



Data source: UNCTAD. Million Dollar.



Source: Baniya, Rocha and Ruta (2019).

Also, a study by the World Bank shows that a uniform standard can help reduce trading times and boost trade volume. The benefits come from improvement in the ability to provide final

products on time to the consumers (direct effect) and the improvement in access to the intermediate inputs on time (indirect effect).<sup>11</sup>

Table 1 Changes in trade among BRI economies (CGE model)

Sector	Central Asia	East Asia and Pacific	Europe	Middle East and North Africa	South Asia	Sub-Saharan Africa
Agriculture	8.55	0.64	3.08	2.38	-2.96	2.59
Minerals n.e.s.	0.09	-1.18	-0.72	-0.28	-0.29	-1.33
Coal	2.57	1.56	5.55	38.52	1.64	13.32
Oil	-1.30	-8.35	0.80	-0.25	-4.95	
Gas	2.73	-2.35	1.48	0.94	6.53	
Textiles	5.34	1.83	1.30	0.06	2.35	0.76
Wearing apparel	13.58	0.66	1.52	-2.29	4.52	2.20
Leather goods	38.64	2.05	-0.57	-2.95	0.51	8.78
Processed foods	17.39	1.47	2.00	0.92	8.42	-0.95
Wood products	16.23	2.76	2.03	-3.33	-3.39	3.63
Paper products, publishing	5.39	2.94	0.84	-2.49	2.09	-6.63
Petroleum, coal products	3.69	1.83	2.59	8.88	4.01	5.62
Chemicals, rubber, and plastics	4.02	1.27	0.72	7.25	8.27	-4.33
Energy intensive manufacturing	2.13	1.09	0.10	0.48	3.39	4.47
Metal products	15.79	4.58	0.66	-3.66	6.43	-1.52
Electronics	-11.85	8.33	-6.05	-3.00	11.75	6.44
Machinery and equipment	18.84	5.48	-0.94	-8.00	7.17	10.36
Transport equipment	50.14	5.49	2.59	-1.74	-0.88	21.25
Manufactures not elsewhere specified	9.81	2.34	1.30	-0.80	10.99	-2.90
Electricity	0.07	0.43	0.43	0.90	0.95	1.16
Construction	16.02	2.71	2.27	6.01	3.17	2.06
Trade services	13.35	0.40	1.60	7.16	9.36	-2.20
Other transport	8.37	1.79	3.55	3.16	6.12	10.13
Water transport	6.82	2.10	2.23	5.54	2.05	9.02
Air transport	7.78	5.83	4.12	8.80	-0.57	5.81
Hospitality services	-2.64	-5.33	-1.33	1.01	1.21	-8.44
Other business services	-1.25	-4.22	-0.04	0.18	-0.93	-12.68
Other services	-0.20	-1.69	-0.18	0.00	-0.78	-3.01
Agriculture	8.55	0.64	3.08	2.38	-2.96	2.59
Manufacturing	7.01	4.44	0.68	3.56	5.40	1.60
Services	3.97	-0.91	1.43	2.53	0.25	-2.21
Other	-0.90	-2.19	1.19	-0.14	0.59	-1.28
<b>Total</b>	<b>1.89</b>	<b>3.75</b>	<b>0.95</b>	<b>1.45</b>	<b>3.67</b>	<b>1.18</b>

Source: Maliszewska and van der Mensbrugge 2019.

Hence, China's efforts in adopting and adapting international food safety standards domestically and within the BRI will not stop. The sectoral results from the computable general equilibrium CGE model point to sizable increases in trade of food and related products in the BRI economies (Table 1). With 1,260 national food safety standards in place (including MRL standards), and the recently established target of 10,000 standards (MRL standards included—which essentially is in line with Codex) by 2020,<sup>12</sup> China will continue adopting and adapting international food safety standards to facilitate trade and maximize the impact of the BRI.

<sup>11</sup> <https://blogs.worldbank.org/trade/hurry-how-belt-and-road-initiative-changes-trade-times-and-trade>

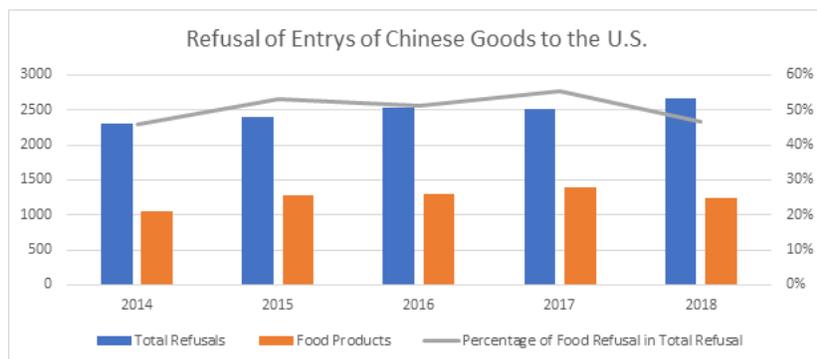
<sup>12</sup> [http://www.xinhuanet.com/food/2019-05/21/c\\_1124524386.htm](http://www.xinhuanet.com/food/2019-05/21/c_1124524386.htm), Article 122-131

*GFSF has been closely monitoring BRI from the beginning and has made joint efforts with global partners to help improve food safety within and beyond BRI. On January 19, 2019, GFSF, along with Good Agricultural Practices and Intertek (Tianxiang) launched the “Belt and Road International Trade Standards for Food Trade.”*

## FOOD SAFETY LIABILITY INSURANCE IN CHINA: WHAT'S NEXT

*Buli Xing*

From toothpaste poisoned with antifreeze to pet food laced with dangerous chemicals to toys decorated with toxic lead paint, there has been an alarming outpouring of news stories concerning the importation of defective or unsafe products from China into the United States and Europe. According to the U.S. Food and Drug Administration (FDA) data in the chart below, from 2014 to 2018, more than one thousand shipments of food products from China are refused due to various reasons, mainly failing to meet FDA food safety standards. The costs of the refused exports are significant for food producers. Based on a survey sponsored by the Grocery Manufacturers Association (GMA), 77 percent of respondents estimated the financial impact of such refusal to be up to \$30 million.<sup>1</sup> A study by Allianz Global Corporate & Specialty shows the average claim value by product recall in the food/beverage sector is \$1.5 million, which builds up to at least \$1.5 billion for Chinese food producers annually.<sup>2</sup>



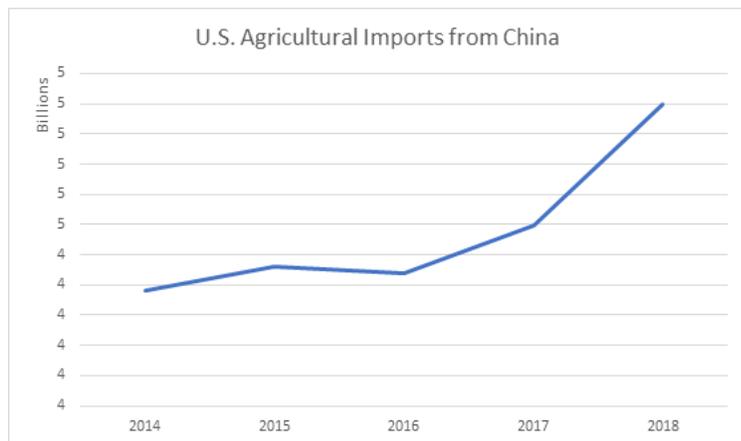
Source: The Food and Drug Administration, <https://www.accessdata.fda.gov/scripts/ImportRefusals/index.cfm>

Nonetheless, there may be a silver lining behind the cloud of refusal rates for cargo originating in China. Notwithstanding the cutbacks in Sino-US trade due to the trade war, there has been a declining rate of cargo rejections which suggests more effective regulatory enforcement in China, higher quality certified product originating in China, and greater compliance. As shown in the chart below, agricultural imports from China reached over \$4 billion in 2014 and grew to over \$5 billion in 2018. China was the United States' fourth-largest supplier of agricultural imports in

<sup>1</sup> [https://cdn2.hubspot.net/hub/288450/file-606071909-pdf/Capturing\\_recall\\_costs.pdf](https://cdn2.hubspot.net/hub/288450/file-606071909-pdf/Capturing_recall_costs.pdf)

<sup>2</sup> <https://www.agcs.allianz.com/content/dam/onemarketing/agcs/agcs/reports/AGCS-Product-Recall-Report.pdf>

2018. Growth trends in US import volumes and value of China origin ingredients and value-added products and declining cargo rejection rates in US and European ports reflect the upgrades in China’s food safety regulatory infrastructure and verification and certification enforcement.



Source: U.S. Department of Agriculture, “GATS Home”, <https://apps.fas.usda.gov/gats/default.aspx>

One of the most relevant improvements in China’s food safety standards is the introduction of food safety liability insurance. Food safety liability insurance was first introduced in the 2015 Food Safety Law: “The state encourages food production and operation enterprises to participate in food safety liability insurance.”<sup>33</sup> Although the insurance coverage rate for China's food and beverage insurance is less than 10 percent, far lower than the foreign average rate of more than 50 percent, almost all the coverage is bought for exports of food products, according to data from the Banking and Insurance Regulatory Commission.<sup>4</sup>

Food safety liability insurance products are an important component of product liability insurance in China and major insurance companies have designed various food liability insurance products since 2009. The insurance companies involved in product liability insurance are very prominent. Although the industry is highly concentrated, with 69 percent of the market controlled by the three largest product liability insurance providers, there has been a general improvement in competition over time and more mature insurance products being introduced.

<sup>33</sup> [http://www.npc.gov.cn/npc/cwhhy/12jcw/2015-04/25/content\\_1934591.htm](http://www.npc.gov.cn/npc/cwhhy/12jcw/2015-04/25/content_1934591.htm)

<sup>4</sup> [http://finance.ce.cn/insurance1/scroll-news/201903/19/t20190319\\_31702405.shtml](http://finance.ce.cn/insurance1/scroll-news/201903/19/t20190319_31702405.shtml)

Taking one PICC product for example, a large food/beverage enterprise with a business area between 500 m<sup>2</sup> and 3,000 m<sup>2</sup> has a premium of 3,000 yuan for the first year, a total compensation limit of 9 million yuan, and a compensation limit of 3 million yuan per accident. The compensation limit for people is 300,000 yuan, the medical expenses per person per accident is 30,000 yuan, and the cumulative/per-legal fee limit is 200,000 yuan.<sup>5</sup>

Top 10 of China's Liability Insurance Companies in 2018<sup>6</sup>

Company	Revenues (RMB Billions)
PICC Property and Casualty Insurance Co	163
Ping An Insurance (Group) Company of China, Ltd	122.74
China Pacific Insurance Co Ltd	34.84
China United Insurance Holding Co., Ltd	11.31
Sunshine Insurance Group Corporation Limited	10.57
Yingda Taihe Property Insurance Co., Ltd	6.04
Dinghe Insurance Co., Ltd	4.14
Yong An Property Insurance Co., Ltd	2.96
China Taiping Insurance Holdings Company	2.9
China Railway Captive Insurance Co., Ltd	2.47

China's food safety liability insurance has shown potential to grow to a larger size at a faster pace as legislation is issued to make it compulsory just like compulsory vehicle insurance in China. Consequently, multiple pilot projects have been installed across the country.<sup>7</sup> China Pacific Insurance lead the pilot project in Shanghai and provided over 2,200 food producers with a 90.68 billion yuan protection in 2016.<sup>8</sup> Ningbo city government subsidized 3 million yuan to PICC to provide food safety liability insurance.<sup>9</sup> China United Insurance in Henan province formulated

<sup>5</sup> <http://ningborejiefenshaolu.chinajieshida.com/1077008/>

<sup>6</sup> <http://www.baoxianguancha.com/content-40-6445-1.html>

<sup>7</sup> <https://urbachina.hypotheses.org/8874>

<sup>8</sup> <http://www.zgrsjiangcy.com/index.php?m=content&c=index&a=show&catid=7&id=47>

<sup>9</sup> <http://ningborejiefenshaolu.chinajieshida.com/1077008/>

a low-cost (3 yuan per student per year), high coverage (maximum compensation per person per accident per year 200,000 yuan, maximum compensation of 1 million yuan per accident) policy in 2016.<sup>10</sup>

The latest executive effort is a directive issued by the Party’s Central Committee and State Council on May 9, 2019, which urges food suppliers to “actively enroll in food safety liability insurance” and encourages state owned food producers to purchase compulsory food safety liability insurance.<sup>11</sup> This initiative suggests the State Council is one step away from introducing mandatory food safety product liability insurance for traded product.

However, legislation is only part of the key to the multi-level puzzle of food safety liability insurance in China. One possible barrier for this influx in the food safety liability insurance industry stems from the complexity of current food supply chains, which require fail safe detection and verification technologies that argue in favor of the introduction of blockchain as a primary means of ensuring compliance. With compulsory blockchain for verification purposes, provenance verification is assured for suppliers and buyers, thereby providing insurers with accountability. The greater the level of transparency, the lower the subscription rates for coverage the insurance companies can offer.

GFSF has been a prominent facilitator in making food supply chains more transparent and secure since 2013. As the food liability insurance market continues to grow in China, we are excited to expand our existing operations and provide our members with further support to maximize their coverage.

---

<sup>10</sup> [http://newspaper.dahe.cn/dhb/html/2017-07/21/content\\_169094.htm](http://newspaper.dahe.cn/dhb/html/2017-07/21/content_169094.htm)

<sup>11</sup> [http://www.xinhuanet.com/politics/2019-05/20/c\\_1124519551.htm](http://www.xinhuanet.com/politics/2019-05/20/c_1124519551.htm)

## July-August 2019 Food Safety Calendar

Conference	Date	Location	Description	Web Link
IAFP 2019	July 21-24, 2019	Louisville, Kentucky	<p>This is an annual meeting hosted by the International Association for Food Protection, providing attendees with information on current and emerging food safety issues, the latest science, innovative solutions to new and recurring problems, and the opportunity to network with professionals from industry, academia and government around the globe.</p>	<a href="https://www.foodprotection.org/annualmeeting/">https://www.foodprotection.org/annualmeeting/</a>
5 <sup>th</sup> ARoFIN Roundtable	August 1, 2019	Bangkok, Thailand	<p>Themed “A World Free of Hidden Hunger.” This roundtable aims to catalyze stakeholder relationships by bringing together regional experts to create and execute a collective global effort to transform diets and food production and to ensure accessible and affordable for everyone.</p>	<a href="http://www.arofin.org/Events/ARoFIIN-Roundtable/5th-ARoFIIN-Roundtable?mc_cid=4f499c7716&amp;mc_eid=9ce4be9473">http://www.arofin.org/Events/ARoFIIN-Roundtable/5th-ARoFIIN-Roundtable?mc_cid=4f499c7716&amp;mc_eid=9ce4be9473</a>

<p>The Science of Food Safety— What’s our Future? (FSAI)</p>	<p>August 21-22, 2019</p>	<p>Dublin, Ireland</p>	<p>This event will focus on the microbiological safety chemical safety. Keynote speakers include Dr. Bernhard Url, Prof. Séamus Fanning, Dr. Diane Benford, Prof. Albert Flynn, Dr. John Bell and Prof. Colin Hill.</p>	<p><a href="http://foodsafety2019.com/">http://foodsafety2019.com/</a></p>
<p>AFMASS FoodTech Conference and Expo</p>	<p>August 22-23, 2019</p>	<p>Kigali, Rwanda (Kigali Serena Hotel)</p>	<p>AFMASS FoodTech Rwanda edition works to bring together the most critical change makers in Rwanda’s food and agriculture value chain to define the future sector as the demand for processed and packaged food rises in Rwanda, the region and internationally — and the need to ensure food safety, food security, quality, nutrition and sustainability is secured.</p>	<p><a href="http://www.afmass.com/afmass-foodtech-conference-rwanda-edition/">http://www.afmass.com/afmass-foodtech-conference-rwanda-edition/</a></p>
<p>Preventative Controls for Human Foods Certification Workshop</p>	<p>August 27-29, 2019</p>	<p>University Park, Pennsylvania (Penn State University)</p>	<p>This workshop provides instruction into the development of a Food Safety Plan as required by the FDA as part of FSMA. Participants will learn the key elements of a food safety plan, how to conduct a hazard analysis for biological, chemical and physical hazards, how to develop and implement risk based preventative controls (process, sanitation, allergen, and supplier along with the appropriate verification and validation procedures, and understand the requirements of a recall plan.</p>	<p><a href="https://extension.psu.edu/preventive-controls-for-human-foods-certification">https://extension.psu.edu/preventive-controls-for-human-foods-certification</a></p>

<p>11<sup>th</sup> International Conference on Predictive Modelling in Food</p>	<p>September 17-20, 2019</p>	<p>Bragança, Portugal</p>	<p>This event focuses on presenting recent developments and trends in modelling approaches for food quality, safety and sustainability.</p>	<p><a href="http://esa.ipb.pt/icpmf11/">http://esa.ipb.pt/icpmf11/</a></p>
<p>FIA Asia Reformulation Conference</p>	<p>September 19, 2019</p>	<p>Singapore</p>	<p>At the inaugural Asia Reformulation Conference, FIA will be sharing the findings of the multi-country study and explore new ingredient and product innovations that has enabled the industry to provide consumers with the gold standard—a tasty product that is of high nutritional quality.</p>	<p><a href="http://foodindustry.asia/fia-arc-19sep19?mc_cid=4f499c7716&amp;mc_eid=9ce4be9473">http://foodindustry.asia/fia-arc-19sep19?mc_cid=4f499c7716&amp;mc_eid=9ce4be9473</a></p>
<p>Vitafoods Asia</p>	<p>September 25-26, 2019</p>	<p>Singapore</p>	<p>Asia's No. 1 Nutraceutical Event connects over 350 international suppliers and 6,000+ business leaders who are looking to source the most innovative and highest quality nutraceutical ingredients, dietary supplements and services.</p>	<p><a href="https://www.vitafoodsasia.com/en/welcome.html?utm_source=MP&amp;utm_medium=WEL&amp;utm_campaign=HAN19VFA-VISPRM-FIA&amp;mc_cid=4f499c7716&amp;mc_eid=9ce4be9473">https://www.vitafoodsasia.com/en/welcome.html?utm_source=MP&amp;utm_medium=WEL&amp;utm_campaign=HAN19VFA-VISPRM-FIA&amp;mc_cid=4f499c7716&amp;mc_eid=9ce4be9473</a></p>

<p>FoodSafety Consortium Conference and Expo</p>	<p>October 1-3, 2019</p>	<p>Schaumburg, Illinois</p>	<p>The 2019 Food Safety Consortium Conference and Expo is the industry’s leading food safety event for networking and educational opportunities. This year’s conference is featuring three main tracks; Cleaning and Sanitation, Food Safety Testing, and Food Safety Management. The keynote speaker for the event is Frank Yiannas, FDA’s Deputy Commissioner for Food Policy and Response</p>	<p><a href="https://foodsafetyconsortium.org/">https://foodsafetyconsortium.org/</a></p>
<p>GFSI Focus Day China</p>	<p>October 16, 2019</p>	<p>Chengdu, China</p>	<p>Now in its 8<sup>th</sup> edition, the GFSI China Focus Day has proven a valuable tool for regional stakeholder from private and public sector alike, who convene to explore the benefits of GFSI, share knowledge and strengthen their local and global food safety networks.</p>	<p><a href="https://www.mygfsi.com/events/gfsi-focus-days.html">https://www.mygfsi.com/events/gfsi-focus-days.html</a></p>
<p>3<sup>rd</sup> International Conference on Environmental and Food Safety (EFS)</p>	<p>October 16-17, 2019</p>	<p>Singapore</p>	<p>Organized alongside LABASIA 2019, this conference will discuss the recent trends in environmental and food research, and address WHO’s one Health Objectives through Nexus approach.</p>	<p><a href="http://www.efs2019.com/?mc_cid=4f499c7716&amp;mc_eid=9ce4be9473">http://www.efs2019.com/?mc_cid=4f499c7716&amp;mc_eid=9ce4be9473</a></p>

<p>NIST Food Safety Workshop</p>	<p>October 29-30, 2019</p>	<p>Gaithersburg, Maryland</p>	<p>This workshop will include experts from the food industry, government, academia, and support organizations together with metrology experts to discuss challenges and possible solutions facing laboratories charged with ensuring the safety of the US and global food supply. Bert Popping, managing director of strategic food consulting company FOCOS, will participate as presenter on Oct. 29 with the title: Overview of international regulations of protein allergens in food.</p>	<p><a href="https://www.focos-food.com/event/nist-food-safety-workshop/">https://www.focos-food.com/event/nist-food-safety-workshop/</a></p>
<p>China International Food Safety and Quality Conference</p>	<p>October 30-31, 2019</p>	<p>Beijing, China</p>	<p>This conference will bring together global experts to address issues and identify recent advances in science, management, legislation, safety standards, innovative technologies—all geared toward enhancing food safety.</p>	<p><a href="http://www.chinafoodsafety.com/index.htm">http://www.chinafoodsafety.com/index.htm</a></p>
<p>2019 SQF International Conference</p>	<p>November 5-7, 2019</p>	<p>San Antonio, Texas</p>	<p>This conference will introduce attendees to new technology tools and potential partners to enhance their food safety and food quality assurance and further increase their ability to protect their customers, branding and bottom line.</p>	<p><a href="https://www.sqfi.com/2019-conference/">https://www.sqfi.com/2019-conference/</a></p>
<p>RAFA 2019: 9<sup>th</sup> International Symposium on Recent Advance in Food Analysis</p>	<p>November 5-8, 2019</p>	<p>Prague, Czech Republic</p>	<p>RAFA 2019 will focus on a wide variety of trends in analytical and bioanalytical strategies when it comes to food quality and safety control. A few of the topics include industrial contaminants, processing contaminants, authenticity and food fraud, allergens, antinutrients, pesticide and veterinary drug residues and many other topics.</p>	<p><a href="http://www.rafa2019.eu/index.html">http://www.rafa2019.eu/index.html</a></p>

# Connect with GFSF!

Safe food is our business! Food safety truly affects each and every one of us and along with food safety comes health, nutrition and food security. Let's do everything we can to enhance and improve food safety around the world!

Want more information and updates? Connect with us to learn more about our mission and goals.

Go check out our website or find us on Twitter, Facebook and LinkedIn!

- Website: <http://globalfoodsafetyforum.org/>
- Follow us on Twitter! @foodsafetyforum (follow #GFSF and #foodsafety so you don't miss any of our tweets!)
- Find us on Facebook! Global Food Safety Forum
- Are you a food safety professional? Connect with us on LinkedIn!



## About GFSF

GFSF is a not-for-profit organization, founded and managed worldwide by GIC Group, with a diverse but interrelated industry membership: producers, processors, merchandisers/shippers/distributors, and retailers.

GFSF/China is jointly managed by the GIC Group in Bethesda, Maryland, and Beijing.



### **CONTACT**

#### **GIC GROUP**

**GFSF/ GIC Group**  
**4328 Montgomery Avenue**  
**Bethesda, Maryland 20814**  
**Phone: 301-799-0840**  
**Email: [asansbury@gicgroup.com](mailto:asansbury@gicgroup.com)**