China Eats—Innovation, E-Commerce and Food Safety at the Hangzhou Food Forum

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Abstract: Since 2000, the driving force behind China's booming food industries has shifted from state planning to consumer demand. This shift has powered the growing importance of food branding, as consumers rely increasingly on known brands in the search for safe and wholesome food. While earlier eras of food branding strongly favored multinationals like Coca Cola and Nestlé, Chinese brands appear to be gradually regaining the trust of consumers, who increasingly rely on online ecosystems that seamlessly combine ecommerce, e-payment and home delivery into a self-contained purchasing environment. The 2019 Food and Beverage Innovation Forum suggests that future trends may include increasing reliance on data informatics, a domestic shift to focus on free spending GenZ consumers, and branded export of China's unique strength in logistics.

Keywords: China, food industry, branding, multinationals, consumption

While news headlines focused on the Shanghai Auto Show, something much tastier was taking place nearby just nearby.

Held in Hangzhou from April 23-25, the 2019 Food and Beverage Innovation Forum¹ (食品饮 料创新论坛) drew about 4,000 registered attendees, and combined three days of presentations with displays by about 200 exhibitors. Although small by Chinese standards (the 2018 International Import Expo[°] was nearly 40 times larger) the FBIF was also more focused specifically on the topic of innovation and emerging trends, and provides a unique opportunity to reflect on the past and future of China's rapidly changing food industries.

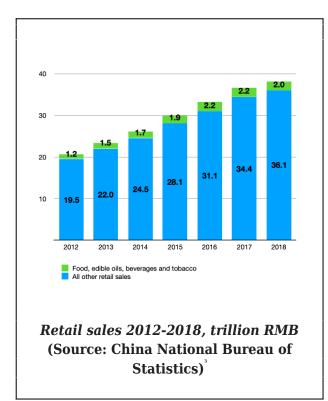


Scene before a breakout session at the FBIF speaker forums. Hangzhou, 2019

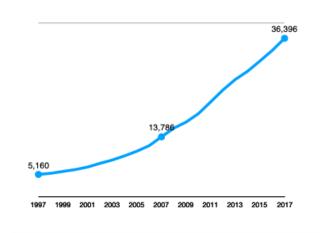
From state-planned to consumer-driven growth

China's food industries have grown significantly. Total retail sales of food, cooking oil and beverages exceeded 1581.6 billion RMB in 2018, roughly doubling in value between 2012 and 2017.





Two forces drive this steady growth. Decades of investment by national and local governments, and business entities, especially the officially favored "dragon head enterprises"⁴ (longtou qiye), laid the developmental foundation for a wide variety of new food production. At the same time, consumer spending on food has grown dramatically. Since 2000, food has held steady at around 20% of household spending, even as incomes have risen—growing by a factor of seven since 1997. Over time, the rise in household food spending has reshaped the industry, as producers compete to attract and retain consumer loyalty and attention.



Household disposable income, 1992-2017 (Source: China Statistical Yearbook)⁵

Urban diets, kg per capita,	1990 vs 2012
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Item (kg)	1990	2012
Grain	130.7	78.8
Oils	6.4	9.1
Vegetables	138.7	112.3
Fresh melons and fruits	41.1	56.1
Meat, dairy, eggs and seafood	44.7	75.4

Urban diets, kg per capita, 1990 vs 2012 (Source: China Statistical Yearbook)[°]

The growth of food spending has transformed what people eat and how they eat it. Since the early 1900s, Chinese diets have reduced significantly consumption of basic grains, favoring instead higher value foods such as meat, dairy and fresh fruit. Home cooks rely increasingly on ready-made meals, or semiprepared ingredients like bottled sauces, or frozen foods (a sector that was worth over 14 billion USD in 2016). Outside the home, traditional dining options such as work canteens and noodle stalls have been partially eclipsed by a new trend of mid-range franchises.



Brand logos for food and other shopping options, Hongqiao Train Station, Shanghai

Branding in China's Food Industry

With this shift to higher value foods, Chinese consumers have begun paying greater attention to food origins, and especially food brands.

Food brands serve numerous purposes. Once one leaves the intimate scale of the local farmer's market, a maker's mark is the only indication of a food's origin, production and wholesomeness. As food chains become longer, more complex and more anonymous, known brands increasingly stand in place of personal trust, especially in products such as dairy, where food origins are unclear, or where consumers perceive regulation to be lax. Along with safety, food brands can connote a range of associations, such as comfort, tradition, safety and prestige, that are especially meaningful to consumers of food.[®] Producers promote brands as a way to establish this sense of loyalty and personal relationship with a product.

Historically, China's food brands developed in waves, only recently emerging as real challengers to multinational enterprise (MNE) brands.

Chinese food makers (especially those of high value products like cured meats[']) have long found ways to identify their products, but it was the legal recognition of trademarks as intellectual property that produced the modern brand regime. China promulgated its first Trademark Protection Law in 1923," opening the door to a proliferation both of new foreign and Chinese brands, especially for everyday items like cosmetics, cigarettes and food." During this first phase, foreign brands enjoyed a certain glamor, but also had to contend with brand piracy, and a rising a wave of consumer nationalism that promoted native goods.¹² The 1923 law was revoked after 1949, but reinstated with a new Trademark Law in 1982,¹³ thus encouraging foreign brands, many of them newly connected to local joint ventures, to begin returning to the Chinese market.

Branding in the reform era (late 1970s to 1990s) strongly favored these multinationals. Early arrivals like Lee Kum Kee, Coca Cola and Nestlé enjoyed not only the inbuilt prestige of a foreign enterprise, but also significant advantages of expertise in market research, greater advertising budgets, and the ability to promote on a national scale. Even as Chinese food brands (both revived and newly created ones) made inroads to domestic and export markets, few could match the resources or sophistication that their international counterparts brought to marketing.

WTO and International Food Brands

China's 2001 WTO accession more fully opened the country to global food trade. One

immediate result was the expansion of imports of raw commodities like grain and oilseeds from land-rich countries like Australia, Brazil and the United States.¹⁴ Channeled through state agents such as COFCO, this commodity trade is largely invisible to end consumers, who see imports like soybeans and whey primarily in the form of stable pork prices.

But WTO membership also accelerated the growth in branded food imports. Alongside branded foods that are produced in the country, a growing range of food imports-high-end items like wine and distilled spirits, as well as such daily luxuries as teas, cakes, cereals, and nationally-branded infant formula-arrive already packaged for retail sale. Events like the Import Expo represent just a small fraction of the foreign consumer foods available on sites like tmall.com. Because these items arrive clearly labeled, sales depend directly on brand recognition, which include consumer perception of the maker's country of origin (COO). Imports from places associated with food safety (such as New Zealand, Germany or Japan) will often command a premium, regardless of the maker.

Entry into the WTO also presented new opportunities for Chinese food companies to seek markets overseas. Despite the recognition of Chinese brands like distiller Maotai or canned foods producer Maling by consumers outside of China, Chinese food exports are hampered by strong negative perceptions of China as a COO.¹⁵ Such perceptions bleed across producers-the 2008 revelation of widespread adulteration of melamine (a poisonous plastic additive that mimics protein in laboratory tests) in China's milk supply affected all Chinese food exports, not only dairy products, but also of unrelated ones like seafood.¹⁶ One result is that ten years later, Chinese food exports, especially those going to higher value markets, are often repackaged under a foreign brand. At the other end of the scale, ambitious producers like dairy giant Mengniu have spent prodigiously to promote their brands overseas, despite a relatively small export volume.

Recent Food Trends

But the real transformation of Chinese food brands is at home.

The 2008 melamine scandal was the key moment in the transformation of Chinese food industries. It prompted a massive regulatory reaction from the Chinese state, including the mandated concentration of the dairy industry into a small number of well-known companies (a group known as the "big 20 enterprises" or D20)", and the implementation of the farreaching Food Safety Law of 2015." Equally important was consumer change. For years, buyers boycotted domestically produced infant formula, aided in part by the constant flow of foreign formula imported tin-by-tin by friends and family returning from overseas. Seeking to recapture consumer confidence, major dairy companies like Yili and Feihe responded by offshoring production of premium lines. Chinese-branded milk thus comes to be sold with a flag of Australia, Canada or New Zealand.

At the same time, the online revolution has changed people's relationship with brands.

Over the past decade, Internet giants Alibaba and Tencent have built up entire ecosystems that seamlessly integrate e-commerce, epayment and home delivery. Within these selfcontained purchasing environments, individual food retailers provide consumers with a range of possibilities, from the purchase of raw ingredients or meal-based kits (JD.com, compare to Blue Apron, Hello Fresh), to 24/7 delivery service of restaurant orders (Ele.me, *Meituan dianping*, compare to Grubhub, Uber Eats).



The online frontier favors closely targeted interaction with consumers.¹⁹ When possible, producers try to cultivate loyalty and contain brand response (comments and ratings) within their own online events, phone apps, and WeChat groups. In contrast, buyers in more open environments such as the popular restaurant app *Dazhong dianping* are much harder to predict or control—because few customers will look past the top few ranked hits, even a small number of bad reviews can crater online sales.

E-commerce has also allowed the rise of a new wave of boutique and niche food products. Long gone are the days in which a handful of producers could effectively dominate an entire sector (e.g., the once ubiquitous gift sets of Nescafé and CoffeeMate creamer). While traditional food giants—both foreign ones like Coca Cola or Yum! foods, and domestic ones like Mengniu or water bottler Nongfu Spring—retain a strong retail presence, the combination of low overhead, cheap delivery, and integrated online purchasing all favor smaller producers, who can cater to specific needs and tastes.

New sectors such as organic produce delivery²⁰ rely on e-commerce to overcome barriers of both distance and trust. Based in the far north of Inner Mongolia, or Yuangu zhuangyuan uses its WeChat platform to connect to users, allowing them to buy organic produce, as well as a membership in a farm that they will likely never visit in person. Ecommerce also creates a national market for local producers like Beijing-based cheesemaker Fromager de Pékin, or local producers of fresh milk delicacies such as Mongolian nai dofu or Yunnan-style rushan. Without the need to maintain large inventories or deliver largescale orders to retailers, producers have greater freedom to innovate into new or seasonal recipes.



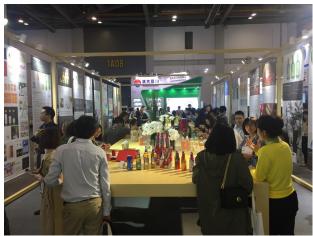
Screenshot of Yuangu zhuang organic farm catalogue. This order form is a miniprogram embedded in the WeChat phone app.





Owner of Handmade Rushan store in her Dali workshop. Most of the shop's sales are made online.

to potential investors, it didn't work). Unsurprisingly, the longest lines were at the two coffee franchises and two craft beer makers, each strategically placed at a different side of the massive exhibition hall.



Scenes of exhibits at the FBIF

TRENDS AT THE FOOD AND BEVERAGE INNOVATION FORUM

The FBIF provides a glimpse into where some of these trends may be headed.

Now in its sixth year, the FBIF is less a trade fair than a showcase of new ideas. Exhibitors at the 2019 event included makers of packaging and filtration systems, manufacturers of sauces, dyes and sweeteners, as well as emerging product categories like protein bars and probiotics, as well as occasional consumer oriented gimmicks such as a drinking straw that contains its own flavoring agent (heads up







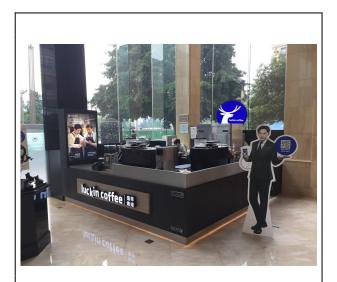


This focus on innovation extended to new trends in marketing such as the extensive use of data-driven informatics and targeted market research. Companies like Dutch Innova Market Insights²¹ and Singapore-based Trax²² create packages that tailor detailed consumer insight and product data to the specific needs of retailers. Data collection has expanded from big cities down to tier five and six locations, and increasingly looks beyond spending patterns and consumer trends to incorporate a new generation of services, such as facial recognition software and eye-tracking on advertisements. (This new frontier was discussed in the forum, but was not on display in the exhibition hall).

The entire event—both forum discussions and exhibits—was focused on the spending habits and curiosity of millennial and GenZ consumers. According to Kantar³, Chinese retail spending in the age group 15-32 has already reached 150 billion RMB. By 2020 GenZ, will account for 40% of the total retail spending. The same generations that are most accustomed to online retail are also the ones that are spending on daily items, and show a sense of adventure that allows them to quickly adapt to new food trends and habits. Just as in sectors like smart phones or computers, the space between generations in food tastes grows progressively shorter. Forum talks revolved around the problem of how to attract and keep



the attention of these new, but easily distracted consumers—not only constant invention of new products, but also increasing attention to an integrated strategy of movie product tie-ups, search engine optimization, and Internet "influencers."



Celebrity spokesperson cutout at a Chengdu retail location of Luckin Coffee. Despite posting massive losses ahead of its IPO, Luckin has bet heavily on a combination of online and traditional retail in its quest to surpass Starbucks in China.

Finally, the FBIF anticipate the multifaceted resurgence of China's own food brands. Even in dairy, the sector most devastated by food safety scandals, there are signs that confidence among consumers in domestic producers is returning, with Chinese makers recovering their share of a quickly expanding market. Even as major Chinese dairy brands invest overseas, the main market is for domestic milk. Despite lingering outrage at the 2008 poisonings, Chinese consumers are gradually returning to view the domestic product as an acceptable substitute. Even as dairy consumption continues to expand, Chinese milk powder in 2018 achieved just under 50% of national market share -a level that it had not seen for a decade.

The willingness of Chinese consumers to return to domestic dairy products no doubt has many specific causes, including the Food Safety Law and state-mandated reforms in milk production and processing, expansive advertising by the major companies, and a steady increase in demand for dairy in all forms. But it also speaks more broadly to the changing nature of consumption: the ability of online product reviews to act as a shadow regulatory apparatus, and changing perceptions among younger consumers, many of whom would not personally remember events like the 2008 melamine scandal. Beyond consumers, Chinese food brands are also selling services by leveraging their unique logistical capabilities as they continue to look overseas for tie-ups. Companies like Yili-listed by brand equity database BrandZ²⁵ as one of China's most recognizable-are increasingly selling their brand as providers of cutting-edge services, as much as food producers.

This final point brings us to the heart of innovation. Chinese food industries are developing at a blistering pace. While trends like the expansion of dairy and meat farming seem to go against the tide of ecological food production, others like plant-based dairy and urban-adjacent hydroponics represent a forward step to better sustainability, lower transport costs and better nutrition. Less than two years old, Beijing-based Luckin Coffee has already opened over 2,300 retail outlets, and has plans for 2,500 more this year alone. Despite never having earned a profit, Luckin Coffee has attracted investor attention because of its model of online and retail sales, and based its recent IPO[®] solely on the promise that selling coffee in a different way would allow the chain to eclipse Starbucks in China.

As trade relations between the US and China

continue to worsen, it is worth remembering that the frontier of value is not simply a matter of making more, better or cheaper products. Ultimately, China's next food export might not be what sits on the plate, but the logistical chain that got it there.

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Related articles

- Thomas David DuBois and Alisha Gao, Big Meat: The rise and impact of megafarming in China's beef, sheep and dairy industries
- Martin J.Frid, Food Safety in Japan: One Year After the Nuclear Disaster
- Vaclav Smil, On Meat, Fish and Statistics: The Global Food Regime and Animal Consumption in the United States and Japan
- Motegi Yoshinobu, China, Japan and World Food Insecurity

Thomas David DuBois is a historian of modern China, and was most recently a research fellow at the Fudan University Development Institute (FDDI) in Shanghai. He has written three books and over thirty articles on Chinese law and religion, and is currently researching China's beef and dairy industries. His article "Many Roads from Pasture to Plate: A Commodity Chain approach to China's Beef Trade, 1732-1931" appears in the latest issue of the *Journal of Global History*.

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Notes

- ¹ See here.
- ² See here.

³ The National Bureau of Statistics of China produces monthly reports on the total retail sales of consumer Goods Data from the NBS are used by all levels of government and are generally felt to be reliable. Before 2015, statistics for food, edible oils, beverages and tobacco combined into a single category. See here See here

⁴ On dragonhead enterprises, see Qian Forrest Zhang and John Andrew Donaldson. "The Rise of Agrarian Capitalism with Chinese Characteristics: Agricultural Modernization, Agribusiness and Collective Land Rights." *The China Journal* (2008) 60: 25-47, and Thomas



David DuBois and Alisha Gao, Big Meat: The rise and impact of mega-farming in China's beef, sheep and dairy industries [source]. DuBois is currently examining dragon head enterprises in local dairy development.

⁵ Twenty years of the *China Statistical Yearbook* (中国统计年鉴) are available online here. *China Statistical Yearbook* 2013: 11-2 Per Capita Annual Income and Engel's Coefficient of Urban and Rural Households; *China Statistical Yearbook* 2018: 6-6 Per Capita Income and Consumption Expenditure of Urban Households

⁶ *China Statistical Yearbook 2013,* 11-8 Per Capita Annual Purchases of Major Commodities of Urban Households. The drop in fresh vegetable consumption may derive from rising consumption of cooked meals, or decreased consumption of low value vegetables such as cabbage.

⁷ On safety perceptions in dairy, see Thomas David DuBois, "Borden and Nestlé in East Asia, 1870-1929: Branding and retail strategy in the condensed milk trade" forthcoming in *Business History*.

⁸ Teresa da Silva Lopes. *Global Brands: The Growth of Multinationals in the Alcoholic Drinks Industry* (New York: Cambridge University Press, 2007). Jones, G. (1994). Brands and Marketing. In Geoffrey G. Jones, G., & Nicholas J. Morgan, (Eds.). *Adding value: brands and marketing in food and drink*. London: Routledge. Wilkins, M. (1994). When and why brand names in food and drink? In Jones & Morgan, *Adding value*. Eva Fernandez, Unsuccessful responses to quality uncertainty: Brands in Spain's sherry industry, 1920–1990, *Business History*, 52:1, 100–119.

⁹ On the marketing of Jinhua cured ham, see Chung-Hao (Pio) Kuo, *Pigs, Pork, and Ham: From Farm to Table in Early Modern China*. Honolulu: University of Hawai'i Press, forthcoming. An earlier tradition of scholarship emphasized the unique social value of brands in late Imperial China. Gary Hamilton and C. Lai (1989), "Consumerism Without Capitalism: Consumption and Brand Names in Late Imperial China," in *The Social Economy of Consumption: Monographs in Economic Anthropology*, 6, Henry Rutz and Benjamin Orlove, eds. Lanham, MD: University Press of America, 253-79.

¹⁰ William C. Kirby. (1995). China Unincorporated: Company Law and Business Enterprise in Twentieth- Century China. *The Journal of Asian Studies*, 54:1, 43-63.

¹¹ On the effect of branding on product differentiation, see John Mercer, (2010). A mark of distinction: Branding and trade mark law in the UK from the 1860s. *Business History*, 52: 1, 17-42.

¹² Kazuko Furuta, K. (2017). Imitation, Counterfeiting, and the Market in Early Twentieth Century Japan and China: Intra-Asian Trade in Modern Small Sundry Goods. In Kazuko Furuta & Linda Grove, (Eds.) *Imitation, Counterfeiting and the Quality of Goods in Modern Asian History*. Singapore: Springer. Karl Gerth, (2003). China Made: Consumer Culture and the *Creation of the Nation*. Cambridge, MA: Harvard University Press; Frank Dikotter. Things *Modern: Material Culture and Everyday Life in China*. London: Hurst, 2006.

¹³ See here

¹⁴ Data available here

¹⁵ On the importance of COO, see Chung Koo Kim, Jay Young Chung, (1997). Brand popularity, country image and market share: An empirical study. *Journal of International Business Studies*, 28, 361-386. Francesca Checchinato, Marta Disegna & Tiziano Vescovi (2013): Does



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¹⁶ Changbai Xiu, K.K. Klein, "Melamine in milk products in China: Examining the factors that led to deliberate use of the contaminant? *Food Policy* 35 (2010) 463-470.

- ¹⁷ See here
- ¹⁸ See here

¹⁹ For the effect of an earlier retail revolution, see Fernando Collantes, (2016) Food chains and the retailing revolution: supermarkets, dairy processors and consumers in Spain (1960 to the present). *Business History*, 58: 7, 1055–1076

²⁰ List of 139 organic farms available here.

- ²¹ See here
- ²² See here
- ²³ See here
- ²⁴ See here
- ²⁵ See here
- ²⁶ See here