



New consumption trends in China offer opportunities for animal protein

RaboResearch

Food & Agribusiness
far.rabobank.com

Contents

| | | | |
|--|---|--|---|
| A new era for China's animal protein consumption | 1 | Four trends stand out in shaping future animal protein consumption | 3 |
| Demographic changes impact consumer lifestyle | 2 | Implications for animal protein supply chains | 7 |

Chenjun Pan

Senior Analyst – Animal Protein

Rena Ma

Analyst – Consumer Foods and Beverages

Summary

China's animal protein market has been changing quickly over recent decades. The current and emerging consumption trends offer animal protein companies new areas of opportunity and risk. Both cyclical factors, such as overcapacity and economic slowdown, and structural factors, including changes in demographics and consumer values/perceptions, have been driving this rapid market change.

For over a year now, the animal protein market has been oversupplied, resulting in sluggish prices and a supply chain that is struggling to manage supply. While we expect decreasing production to balance supply and demand and support prices in the coming year, we believe it's more important to look beyond the current cycle and redesign business strategies to address longer-term changes in the consumer market.

The era of supplying homogenous products to meet basic needs is over. China's animal protein consumer market has entered a new stage where demand is becoming more sophisticated and a product's value proposition must go beyond the product itself to include service and even a valued experience for customers.

Of all the changes in the consumer market, four stand out: consumers seeking value for money, more emphasis on the "experience economy," rising spending on nutrition and health, and the continuous evolution of distribution channels.

Animal protein companies that respond effectively and efficiently to these trends will be well placed to capitalize on the opportunities presented. We set out the four main implications of these consumer trends for animal protein companies.

A new era for China's animal protein consumption

China's rapid economic growth, the opening of its markets, and digitalization trends have triggered the fast evolution of the country's consumer market. Consumers doubled consumption of meat (terrestrial species) in less than 30 years, from 35kg per capita in the mid-1990s to 72kg in 2023, demonstrating a growth story that has attracted a lot of investment.

In recent years, China's economy has changed gears, with GDP slowing from 6% to 10% growth before 2020 to a challenging goal of 5% for 2024. In parallel, middle-class wealth has increased substantially, supporting a resilient spending power, albeit with income growth slowing. In general, China's animal protein consumption remains resilient. Statistics show that consumers have lowered spending in other categories but maintained spending on food. Taking a deeper look, however, we observe that China's animal protein consumption is developing new patterns. Consumers are adopting a more rational and practical value proposition and focusing more on

value for money and the fundamental value of products and services. At the same time, they are willing to pay for high-value products that offer fulfilment and allow them to experience new things, as long as they think the price is reasonable. Moreover, health issues, such as obesity, are already challenging specific consumer groups and triggering some to seek a balanced diet and focus on health and nutrition.

China’s total animal protein consumption is actually quite high: On a per capita basis, consumption in 2023 was 72kg meat, 25.3kg eggs, and 22.8kg seafood, a level comparable to some countries with a higher GDP per capita. How to eat well instead of how to eat more has now become the focus of many Chinese consumers.

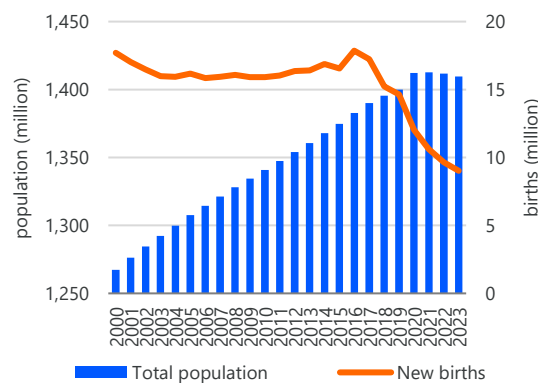
Demographic changes impact consumer lifestyle

In recent years, China has witnessed demographic shifts toward an aged society with a smaller household size. This, along with the slowdown in disposable income growth, has led to structural changes in consumption behavior and preferences.

China’s total population reached an inflection point in 2021, with reductions following in 2022 and 2023, and the birth rate has been in decline since 2017 (see figure 1). The proportion of the population aged 65 and above reached 14.2% in 2021 and climbed to 15.4% in 2023 (see figure 2), indicating that China is transforming from an “aging society” (2000-2020) to an “aged society.” Forecasts indicate that the population will decline from the current 1.4 billion to 1.3 billion by 2050, and experts estimate that the population aged 65 and above may exceed 20%.

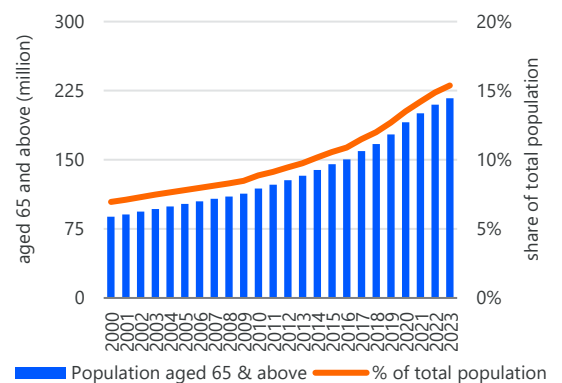
The impact of an aging society on animal protein consumption is complex. The inevitable demographic shift will impact the total volume growth of animal protein consumption, but current and emerging trends indicate it will also shift consumer focus to nutrition and dietary health, which will diversify the protein mix and shift it away from pork’s dominance toward poultry, which is perceived as being more digestible, and toward beef and seafood, which are perceived as more nutritious. Moreover, the aging population’s consumption behavior will differ from previous generations’, as they have already embraced e-commerce, new retailing, food delivery, and convenience foods, and are more open to various cuisines that older generations generally do not favor.

Figure 1: China’s population and birth rates show declining trends



Source: National Bureau of Statistics (NBS), RaboResearch 2024

Figure 2: The 65-and-above segment is growing its share of the total population

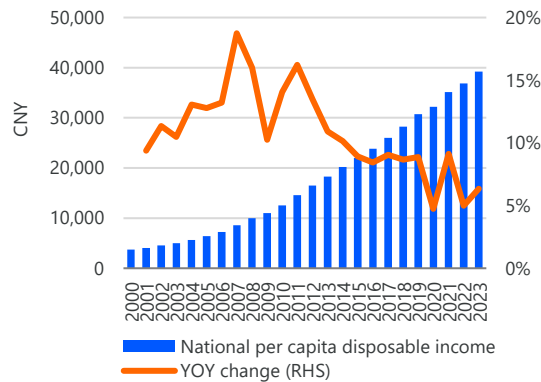


Source: NBS, RaboResearch 2024

China is also experiencing a continuous reduction in the average household size as a result of young people’s low willingness to get married and/or have kids and the population’s increasing mobility. Although households consisting of three people remains mainstream, the proportion of households with only one or two people has been rising. The downsizing of Chinese households will not necessarily lead to lower consumption, but it does point to consumption behavior change.

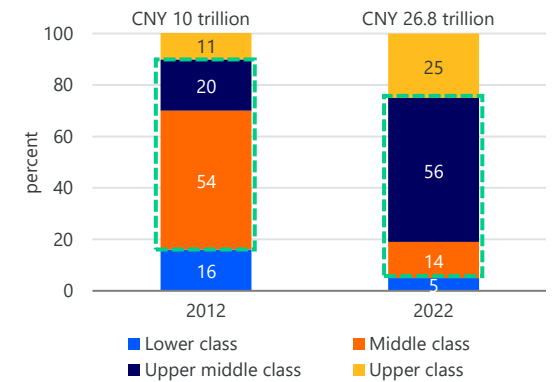
While traditional three-person households tend to cook food for kids and focus on food safety, the smaller, one/two-person household proactively looks for time and cost efficiency. As a result, online shopping, convenience stores, dining out, food delivery, and convenience food (from instant noodles to newly developed ready-to-eat/cook products) developed fast in recent years to cater to this rising demand for convenience.

Figure 3: Disposable income growth is slowing in China



Source: NBS, RaboResearch 2024

Figure 4: The upper middle class dominates urban household expenditure in China



Source: McKinsey, RaboResearch 2024

Changes in consumer behavior also result from the rapid growth in national disposable income witnessed in China since the early 2000s (see figure 3). From 2001 to 2019, the compound annual growth rate (CAGR) of per capita disposable income ranged from the high single digits to double digits. This growth slowed to mid-single digits between 2020 and 2023. Meanwhile, household savings rates increased from 42.4% in 2019-2021 to 47.2% in 2023. Slower income growth and rising savings rates reflect weak consumer sentiment and cautious spending patterns. We believe this slowdown, seemingly driven by the economic downturn, is also due to a rising base effect after two decades of rapid growth. According to independent research, middle-class and upper-middle-class households (with an annual household income of CNY 60,000 to CNY 229,000) accounted for 76% of China’s urban households in 2022, up from only 4% in 2000. More significantly, the upper middle class (with an annual household income of CNY 106,000 to CNY 229,000) increased its share of urban household expenditure from 20% in 2012 to 56% in 2022 (see figure 4), demonstrating the rapid growth in consumers’ wealth.

Four trends stand out in shaping future animal protein consumption

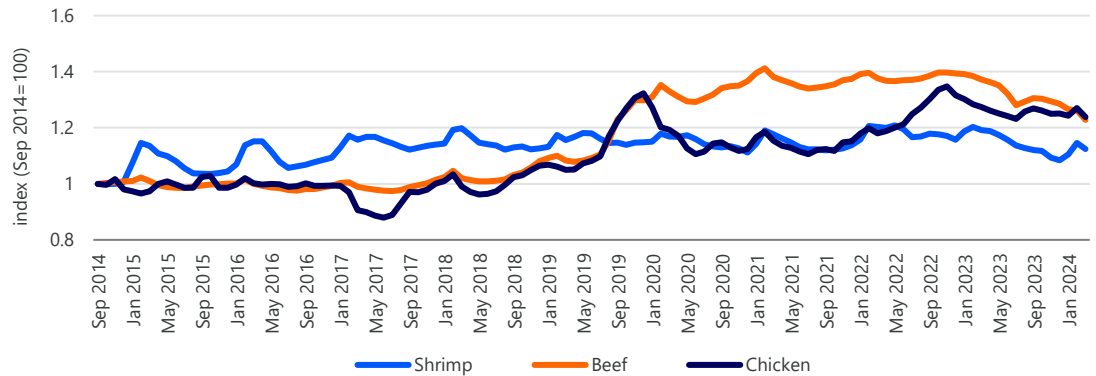
Among all the changes, we see four major trends in the new consumption patterns emerging from the demographic trends: value for money, the “experience economy,” a focus on nutrition and health, and a changing channel mix for purchases. For animal protein producers, this new stage requires suppliers to shift from a volume-driven mindset to a more consumer-centric mindset.

Key trend 1: Consumers seeking value for money

In the current context, consumers’ product choices show a clear trend of pursuing value for money. Retail prices of beef, chicken, and shrimp were depressed in 2023 and 1H 2024 (see figure 5). Among them, beef prices strongly increased during 2019 to 2022, then dropped in mid-2023. Although current prices are still 15% higher than a decade ago, beef producers have been making losses for over half a year due to elevated input costs. Shrimp prices started an upward trend earlier than the other species but dropped recently as well. In comparison, chicken prices have been relatively stable, with a slower price decline in the last two years.

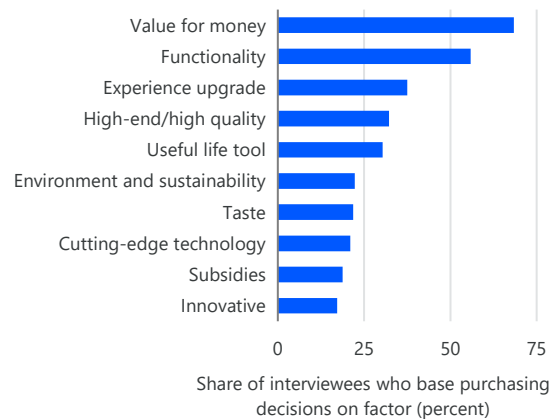
Price performance alone cannot reflect consumption trends. While lower prices suggest a trading-down trend in the market, a deeper look may indicate a hybrid consumption pattern rather than a simple trend. While pork and seafood are the two most important protein groups in China, the growth rates of their consumption volumes have varied significantly. From 2013 to 2023, beef and seafood consumption volumes increased at the fastest pace, with CAGRs of 3.2% and 4.4%, respectively, followed by poultry at 3% and pork at a distant 0.3% (see figures 7 and 8). The rising consumption of beef and seafood despite slower income growth shows consumers continue to seek higher value but at reasonable or appealing prices. On the supply side, surging imports and rising local supply enabled this hybrid demand for higher value and attractive prices.

Figure 5: Retail prices of animal proteins were depressed in 2023 and 1H 2024



Source: MARA, Boyar, RaboResearch 2024

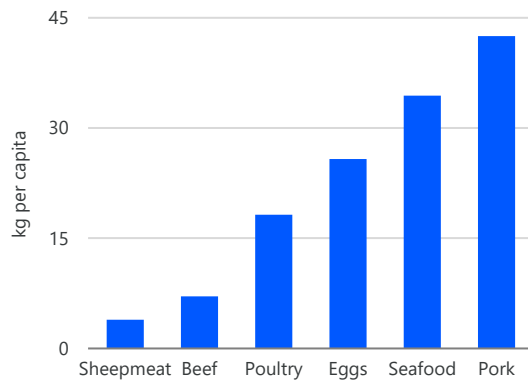
Figure 6: Value for money topped middle-class priorities in purchasing decisions in 2023



Source: Channel Xiaobo Wu's "New Middle Class White Paper," 2023, RaboResearch 2024

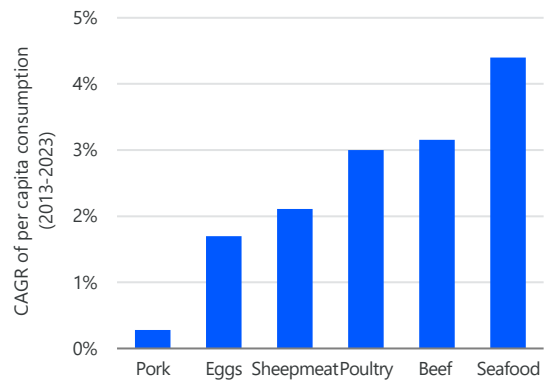
The "New Middle Class White Paper" survey in 2023 confirms this trend and shows that the top consideration in consumption decisions is value for money, followed by functionality and experience upgrade (see figure 6). In our view, consumers' perception of value includes not only the product value but also services, such as convenience and time saved. Ready-to-eat/cook products are fast-growing product categories, as they enable consumers to shorten the time spent preparing food and make home cooking more convenient.

Figure 7: Pork and seafood are the main animal proteins consumed in China



Source: NBS, MARA, RaboResearch 2024

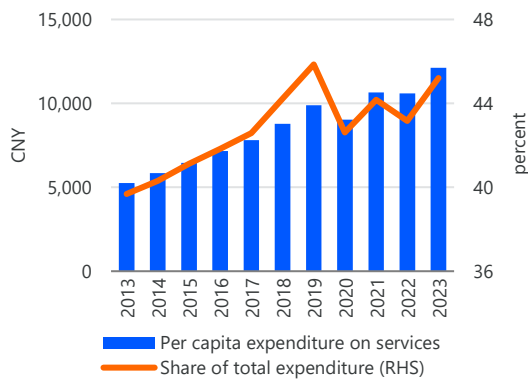
Figure 8: Seafood and beef consumption grew faster than other proteins from 2013 to 2023



Source: NBS, MARA, RaboResearch 2024

Key trend 2: More emphasis on the experience economy

Figure 9: Expenditure on services shows signs of recovery and growth



Source: NBS, RaboResearch 2024

Another feature of the current and emerging market demand is the experience economy. Expenditure on services has grown faster than overall expenditure on goods and increased its share from 39.7% in 2013 to 45.2% in 2023 (see figure 9). However, this is still lower than spending on experiences in more developed economies, where around 70% to 75% of consumer expenditure is on services. As China's per capita GDP exceeded USD 10,000 in 2019 and is expected to continue rising, we expect Chinese consumers' expenditure on services will also continue to rise in the coming years. Even though Chinese consumers are

spending more cautiously amid the economic downturn, they remain attracted to various services and high-quality experiences.

China's total foodservice sales have delivered a steady recovery upon reopening post-pandemic. In the first five months of 2024, foodservice registered 8.4% growth YOY (compared to a high comparable base). The extent of the recovery varied between different segments, with mass market and premium restaurants performing better than medium-end restaurants, though promotions supported all categories. Many listed restaurants indicated that per capita spending declined due to deep promotions. Despite this, total foodservice revenue has surpassed pre-pandemic revenues, suggesting that consumers are eating out more frequently.

In addition, the steeply rising use of live streaming in social media sales and marketing for all kinds of consumer goods proves that consumers value interactive experiences and are eager to learn new ways of consuming and to try different cuisines. Between 2019 and 2023, sales through live streaming increased at a CAGR of 85%, with live streaming sales' share of total online sales rising from 4.3% in 2019 to 32% in 2023.

Key trend 3: Rising spending on nutrition and health

With consumers increasingly aware of health and nutrition post-pandemic, their perceptions of various proteins have evolved, and these changing perceptions are influencing the market acceptance of each protein. Fresh pork continues to dominate, but small packaged and branded products have increased share at the expense of unpackaged fresh pork. Pork remains the staple protein for Chinese consumers, but its share is down from 85% in the 1990s to 58% in 2023, with poultry and beef gaining share. An aging population might further reinforce this trend as older people turn to proteins perceived as lower in fat, more digestible, and higher in nutrition, like poultry and seafood.

Compared with pork, more white feather broiler is sold as processed. White broiler is not a traditional protein in China, as it was only introduced in the 1980s. Since then, white feather broiler has achieved rapid growth, mainly driven by demand in business-to-business channels for further processing or for Western-style quick-service restaurants. In recent years, retail demand for white broiler has emerged as more people, particularly young consumers, perceive white broiler meat as a good, low-fat protein that has functional value for weight management or fitness purposes. The emergence of concept products (e.g., organic, antibiotic-free) also partially changed the stereotypes that white broiler production is linked with growth hormones. With younger generations becoming the main consumer groups, acceptance of white broiler in the retail market will increase further in the coming years.

Like white broiler, beef is not a traditional meat in China, as cattle were mainly used for draft purposes like plowing. Since the removal of consumption restrictions in the 1980s, China has become the fourth-largest beef cattle-producing country and the largest beef importer in the world in just four decades. Different from white broiler, beef is widely perceived as a nutritious protein in China. Its well-established image will continue to offer growth opportunities in both retail and foodservice markets.

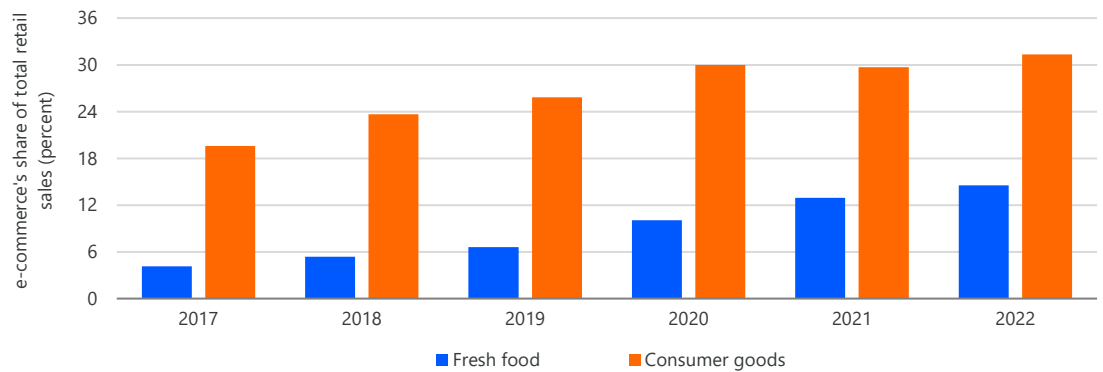
Consumers also have a positive perception of seafood. Demand for premium products increased the consumption of higher-value seafood, including shrimp, wild-caught fish, and deep sea fish, over traditionally consumed carps. China's seafood imports increased rapidly between 2010 and 2023 at a CAGR of 11%, driven by rising local demand for good-quality seafood. Shrimp, the largest item in terms of value, has seen a sixfold increase in the past 13 years. We expect seafood imports to maintain an upward trend in the coming years, despite the slowing economy.

Key trend 4: Distribution channels continue evolving

Distribution channels have experienced great changes in recent decades, with the rapid growth of e-commerce, the restructuring of traditional wet markets, the ups and downs of supermarkets and hypermarkets, and the emergence of convenience stores.

In China, offline distribution channels (including traditional wet markets, supermarkets, hypermarkets, and community shops) remain the major retail channel for fresh food, accounting for 85.5% of retail sales in 2022, according to industry views. However, the online channel has grown rapidly in China's fresh food market in recent years, increasing its share from 4.1% of total fresh food sales in 2017 to 14.5% in 2022 (see figure 10). Online channel penetration in the fresh food category is still lower than that for overall consumer goods. This indicates the potential for online sales to grow further in fresh food markets, underpinned by strengthened cold chains.

Figure 10: E-commerce's lower penetration of fresh food vs. overall goods suggests growth potential



Source: Huaon, RaboResearch 2024

In addition, animal protein consumption is rising in on-premise channels (including restaurants and bars). The rising popularity of foodservice stems from different causes in both the short and long term. In the short term, price competition prevails, with restaurant operators offering various promotional discounts to generate foot traffic, which makes foodservice affordable and appealing to consumers. At the same time, it is a sign of market consolidation. Once the market becomes more consolidated, leading restaurant operators will be able to enjoy economies of scale (in procurement, leases, and labor utilization) and ensure the high value of their products on a more sustainable basis.

The latest emerging distribution channel is live streaming. For example, Pinduoduo, ByteDance, and WeChat are rapidly growing their sales through live streaming. Consumers learn how to cook, for example, a piece of steak online, and can then order the products on the streaming platform at a cheaper price than those offered by supermarkets. Some food companies were reluctant to sell through this channel two years ago, but now almost all companies have developed live-streaming distribution. Some work with influencers and some without.

Implications for animal protein supply chains

In recent years, China's animal protein supply chains focused on scale and productivity, as the consumer market kept growing every year. Production capacity continued to rise even during Covid, driven by the mindset that the market would constantly expand. Now, as animal protein prices have been depressed for longer than expected, the mindset of permanent market expansion needs to change.

The new consumer trends have four main implications for animal protein supply chains.

Focus will shift from volume growth to value growth

Traditional animal proteins are facing the challenge of slow growth. Of the various species, poultry, beef, and high-value seafood will see the most volume growth, while pork and low-value seafood will see flat or negative growth. China's pork market should shift focus from expansion to consolidation, upgrade capacity, and adopt new technologies. Fresh meat will likely remain the major product category, but a rising share will be processed, such as for fine cuts or better packaging, or prepared with other ingredients for ready-to-cook meals before going to the market. For both fresh and processed meat, more services are already embedded in some products to serve different consumption occasions, such as hot pot at home. To cater to the rising demand for convenient and time-saving solutions, the supply chain will deliver more prepared or processed products.

Downstream extension and being closer to consumers will secure margins

Supply chains will become more vertically integrated and cooperate more closely with foodservice and new retailers. Animal protein is shifting from a supply-driven approach to a demand-driven one. In the past, consumers would buy what was available, and, in many cases, supply was sufficient but some products for specific needs weren't available. Consumers are now more proactive in obtaining information and more sophisticated in spending. This requires suppliers to react quickly and proactively spot unmet market needs. Downstream integration can establish an effective consumer-feedback system, which can help suppliers to launch products that target consumers' unmet needs.

Sustainability in the downstream part of the chain will have to be addressed

Consumers are increasingly aware of sustainability issues. Social media companies have launched apps and platforms to encourage individuals to reduce their carbon footprint and record their carbon reduction, for example, by using shared bikes, buying certified carbon reductions, and the like. Retailers and foodservice players are similarly taking various initiatives, such as launching straw-free milk tea, reducing plastic bags, changing to sustainable packaging, and using renewable electricity in stores. Some retailers seek more sophisticated sustainability actions, such as sourcing certified sustainably farmed seafood. Foodservice companies, particularly global players, are calling for responsible sourcing of raw materials, including the cross-border sourcing of soybeans and palm oil. Animal protein supply chains in China will have an opportunity to strengthen partnerships with retailers and foodservice companies by stepping up sustainability actions.

Standardizing food processing and preparation will create new supply needs and opportunities

In recent decades, Western values have influenced Chinese consumers' perceptions and dietary values. The introduction of chain restaurants, particularly quick-service restaurants, has led many Chinese consumers to value homogenization and standardization. These consumers expect the same presentation and flavors when entering a chain restaurant. The need to standardize is reshaping the supply chain, especially food processing and preparation. Restaurant chain kitchens have shrunk and are being incorporated into suppliers' kitchens or chain-owned central kitchens. Suppliers that become part of these supply chains are becoming more industrialized as they take advantage of standardized production and economies of scale. The trend of centralizing food preparation and distribution requires supply chains to focus on lower costs, higher efficiency, and more innovation. These changes bring opportunities for animal protein companies that can find a suitable model for working with expanding chains.

Imprint

RaboResearch

Food & Agribusiness

far.rabobank.com

Chenjun Pan

Rena Ma

Senior Analyst – Animal Protein

Analyst – Consumer Foods and
Beverages

chenjun.pan@rabobank.com

rena.ma@rabobank.com

© 2024 – All rights reserved

Disclaimer

This document is meant exclusively for you and does not carry any right of publication or disclosure other than to Coöperatieve Rabobank U.A. ("Rabobank"), registered in Amsterdam. Neither this document nor any of its contents may be distributed, reproduced, or used for any other purpose without the prior written consent of Rabobank. The information in this document reflects prevailing market conditions and our judgement as of this date, all of which may be subject to change. This document is based on public information. The information and opinions contained in this document have been compiled or derived from sources believed to be reliable; however, Rabobank does not guarantee the correctness or completeness of this document, and does not accept any liability in this respect. The information and opinions contained in this document are indicative and for discussion purposes only. No rights may be derived from any potential offers, transactions, commercial ideas, et cetera contained in this document. This document does not constitute an offer, invitation, or recommendation. This document shall not form the basis of, or cannot be relied upon in connection with, any contract or commitment whatsoever. The information in this document is not intended, and may not be understood, as an advice (including, without limitation, an advice within the meaning of article 1:1 and article 4:23 of the Dutch Financial Supervision Act). This document is governed by Dutch law. The competent court in Amsterdam, the Netherlands has exclusive jurisdiction to settle any dispute which may arise out of, or in connection with, this document and/or any discussions or negotiations based on it. This report has been published in line with Rabobank's long-term commitment to international food and agribusiness. It is one of a series of publications undertaken by the global department of RaboResearch Food & Agribusiness.