

# FUNCTIONAL AND LUXURY FOODS OPPORTUNITIES FOR SOUTH AUSTRALIA IN CHINA

The Chinese functional food market is the second largest in the Asia Pacific.

# FOODS



# FUNCTIONAL & LUXURY

**PREMIUM**  
FOOD AND WINE FROM OUR  
**CLEAN**  
ENVIRONMENT





This fact sheet presents a high level summary of the opportunities for South Australia to supply luxury and functional foods to China.

## Country context

The Chinese functional food market is the second largest in the Asia Pacific, after Japan; however, Chinese consumers, particularly those in rural areas, have limited awareness of modern functional food ingredients. Educating consumers and verifying health claims on products will need further efforts. The functional food industry in China will continue to acknowledge the role and opportunities that Traditional Chinese Medicine has in China. The Traditional Chinese Medicine market accounts for around 40% of health care treatments in mainland China.

Digestive health conditions affect over 22% of China's population, and the country spends 6% of its gross domestic product on treating diseases, driving rising expenditure on healthcare costs.

Consumers in the Chinese market prize quality and craftsmanship in addition to the price and rarity of luxury food and wines. There is a large focus on gift-giving in Chinese culture and demonstrating wealth and social standing. Consumers are particularly concerned with product packaging, with both the quality of the product and its packaging having a direct correlation with the perceived luxury of the product.

Traceability and authentication are becoming more important due to concerns over fraudulent luxury foods and wines on the market, with consumers paying more attention to the country of origin and the credibility of distributors. There are intellectual property protection concerns which could be a risk to the authenticity of local and imported products.

## Functional food opportunities in China

### ALOE VERA

Australia's aloe vera market is largely export focused, catering to cosmetics and functional beverages containing aloe vera extracts. Demand is driven by interest in the plant's native medicinal and antioxidant properties. The fact that aloe vera is locally-sourced contributes much of its product appeal in the domestic market. South Australia currently produces a minor crop of aloe vera, but could expand operations to capitalise on the growing demand.

Although aloe vera is of African origin, the Chinese consider it indigenous to China and it is popular in traditional medicine. China has a strong capacity to produce aloe vera extracts locally, and a potential lack of product differentiation may result in price competitions.

### CAROTENOIDS

Carotenoids are naturally-produced pigments found in plants, algae, bacteria, yeasts and moulds and are used in fruit and vegetable juices and as a natural food colouring. Although industry growth will be confined to beverages in the short-term, the dairy and baked-good sectors will also see market interest in the coming period. South Australia does have a variety of agricultural sources of carotenoids, as well as a growing algal carotenoid production industry.

China's increased focus on antioxidants is driving interest in carotenoid products, but there have been no approved health claims published in China, resulting in limited perceived value for these products. This is a highly competitive global market, and China has capacity to rapidly duplicate technology used in other countries.

### GLUTEN-FREE FOOD

Australia is the largest established gluten-free market in the Asia Pacific region. As gluten-free awareness continues to grow there is a trend towards cutting gluten out of consumer diets, and heightened customer awareness is driving IT-based packaging innovations on gluten-free products.



Chinese consumer awareness of gluten-free products is relatively low, with the majority of products being consumed by the expatriate population and by Chinese High Net Worth Individuals. Rates of coeliac disease in China are low. There is no significant demand for gluten-free products in the Chinese market currently.

### **LACTOSE-FREE FOOD**

Still largely restricted to liquid milk and baby milk powder, lactose-free products are generally perceived to be less-fattening and easier for people to digest. Lactose-intolerance is more widely spread among non-European populations, and continued development of digestive-related product options, beyond dairy and into confectionery and baked goods, will drive consumer demand in this market.

Alternatives to lactose are highly sought-after in China, where up to 90% of consumers are lactose intolerant. Dairy substitutes do exist in the traditional sector, but there is growing demand for dairy alternatives. There are no widely publicised health claims for lactose-free products in China.

### **OTHER 'FREE FROM' FOODS**

There is little or no demand for anti-allergenic foods in China, and no current technical capacity to support their production. As with other products, there are currently no widely-publicised health claims for non-allergenic products in China.

### **PHYTOSTEROL**

The Australian market for phytosterol tends to revolve around oils, seeds and nut products, used as heart health ingredients and for their potential to lower cholesterol. South Australia could explore how to use its canola industry to develop phytosterol extraction capabilities.

The Chinese phytosterol market is a key growth area, given the country's traditional focus on soy-based foods and the rising incidence of heart health disease. China is leading the way in phytosterol fortification, attracting interest from a number of global players. China is also a large exporter of phytosterols to Europe, as concerns around genetically-modified soy drives demand for Asian-sourced products.

### **POLYPHENOLS**

Australia has a wide raw materials base for polyphenol development, but the industry is largely import dependent and focused on the beverage sector. As more Australian manufacturers begin to promote the antioxidant benefits of polyphenols, demand will grow beyond wine, apples, and tea, and there will be a shift to explore use of polyphenols in a broader range of functional foods. Waste products from South Australia's large wine industry is a key source of raw materials for polyphenols, as well as other fruits and vegetables grown across the State.

There are no approved health claims for these products in China, but consumers believe green tea antioxidants are responsible for lowering cancer rates, in spite of a high number of smokers. There is a large domestic production industry for polyphenols in China. However a lack of product differentiation will result in price competition.

### **POLYUNSATURATED FATTY ACIDS**

Polyunsaturated fatty acids (PUFA) are one of the most well-established classes of functional products in Australia. South Australia's large aquaculture industry is a prime sourcing point to provide marine-based fish oil to the industry, and flax used in the development of vegetarian omega-3 products.

China's large, traditional fish-consuming market finds it easy to accept the taste of omega-3 products. The Chinese PUFA market is primarily based on fish oil concentration and extraction. Omega-3 ingredients have been approved as novel food ingredients in food, beverages and infant formula, and there is a national standard in place for ingredient labelling. In 2014, China launched omega-3 recommended dietary intakes for adults. Most international manufacturers co-brand their PUFA products in China, to increase ingredient knowledge and prevent duplication.

### **PREBIOTICS AND PROBIOTICS**

Prebiotics support beneficial bacteria in the gut and are most commonly combined with probiotics. Future growth will be driven by innovations in pro and prebiotic formulations, and increased consumer awareness of the relationship between their digestive health, immunity, and overall wellness. South Australia's large grain industry is a key source for dietary fibre, while fruit and berry processing side streams are sources of soluble fibre, which could also provide opportunities in this space.



Growing dairy consumption in China is driving demand for value-added dairy products. China's dependence on imported dairy reduces its capacity to develop its own processes, and therefore tends to duplicate technologies developed in Japan. China possesses a large inulin source (a prebiotic fat replacer and texture modifier). Intellectual property protection for these products needs to be considered as many imitator products are known to exist. The health benefits of prebiotics and probiotics in China is currently not widely known, so sales are typically driven by word of mouth.

## **PROTEINS AND PEPTIDES**

Australia is a key producer of mainly dairy-based proteins and peptides, and also manufactures fish, egg, gelatin and soy protein products. The growth of the sports nutrition sector has also driven consumer interest in these products, particularly in protein-rich beverages. Downstream processing of South Australia's dairy exports provides a large market opportunity for proteins and peptides as functional ingredients.

China's growing affluence, increasing incidence of bone health disease and the general trend towards dairy products has driven demand for animal proteins, including dairy and meat. Chinese consumers are becoming more aware of the benefits that dairy products can bring, and milk and yoghurt are becoming more popular in the Chinese diet. Indeed, China is now one of the world's largest dairy importers, suggesting the market for protein products in China will continue to be driven by dairy protein. Greater consumer awareness may increase the potential for protein-based snack bars in the Chinese market, however protein powders are still seen as a more viable weight management option.

## **VITAMIN D**

Products rich in vitamin D are particularly important for older persons, to address bone and joint health issues such as osteoporosis. Post-menopausal women are also target customers in this sector, and the primary market for dairy products and beverages fortified with vitamin D. Beverages and baked goods with added vitamin D are also proving popular with younger consumers.

The majority of China's population does not get adequate sunlight through natural exposure, and vitamin D supplements do exist in the market. However, there are currently no domestic suppliers of functional fortified vitamin D foods in China, creating an opportunity for international companies.

## **Luxury food opportunities in China**

### **ABALONE**

Abalone is one of the most valued seafood products globally, especially in Asia. Opportunities for South Australian abalone exist in product differentiation and marketing. A later harvest would allow abalone to grow to an optimal size and therefore demand a higher price per kilogram. Greater uptake of nitrogen freezing is another opportunity for South Australia, as well as better marketing of our clean and green, sustainable credentials, including through product certification. Producers could also explore e-commerce opportunities.

China's abalone market continues to grow, keeping pace with the country's economic prosperity and consumer wealth. There is a nascent local abalone industry which is unable to meet current domestic demand. China has witnessed increasing incidence of disease among abalone species due to intensive farming and overfishing.

### **BLUEFIN TUNA**

The rise of the sushi and sashimi markets in Japan and in other parts of the world has created a strong and growing demand for Bluefin tuna. Opportunities exist in differentiating how South Australia captures and farms Bluefin tuna and developing an industry-wide marketing program in export markets beyond Japan.

Bluefin tuna continues to command strong demand with the emerging affluence of individuals in China. The Taiwanese industry dominates the market with a smaller industry on mainland China. Currently there are imposed restrictions relating to fisheries in Japanese and Chinese waters in an attempt to stabilise fish stocks. There are official efforts in place to minimise the consumption of Bluefin tuna in China.

### **BRANDY, COGNAC AND DISTILLED SPIRITS**

The Asian luxury market for brandy is currently dominated by products from major French cognac houses. While St Agnes distillery has recently launched some luxury products, overall exports of brandy from Australia are negligible. Opportunities exist for South Australian producers to invest in an 'origin' story for our niche distilled spirits, potentially modelled on Tasmania's success in the export whisky market.



The increasing focus in China on entertaining, particularly in the business sector will continue to drive demand for premium distilled spirits. There are local producers in China, however not in spirits such as cognac and single malt whiskies.

### **CAVIAR**

Sturgeon is a prohibited (noxious) species in Australia so there is currently no sturgeon farming undertaken in Australia and establishment of aquaculture operations would require licensing. Opportunities exist in pursuing exemption permits, considered on a case-by-case basis, to enable a sturgeon fish production facility in South Australia. This would be subject to stringent environmental assessment and evaluation.

Caviar is becoming increasingly popular in China, largely among young and wealthy millennials. The market for Caviar infused cosmetic and nutraceutical products is also gaining popularity among young Chinese consumers, due to their promotion of anti-ageing and nutritional benefits. There is no significant domestic industry to service the demand, leading to a current reliance on imports.

### **CHOCOLATE**

It is feasible for South Australian companies to produce, export and enter the luxury chocolate market, leveraging Australia's reputation in Asia as a reliable manufacturer of high-quality product. Opportunities exist in specifically marketing luxury product to affluent local and international tourists at exclusive airport boutiques, and in high-end and flagship stores.

China's strong gift giving culture has led to a growth in demand for luxury chocolates, particularly those with premium packaging. Whilst there are currently no significant domestic producers of luxury chocolates, many premium chocolatiers are already present in the Chinese market.

### **MATSUTAKE MUSHROOMS**

Matsutake mushrooms require a specific, symbiotic relationship with host trees, commonly pine trees. Due to their limited production, matsutake mushrooms can achieve prices around USD2,000 per kilogram. Matsutake mushrooms are not currently produced in Australia. Research will be needed to determine the viability of matsutake mushroom production in South Australia, as well as the planting of suitable host trees.

In China, matsutake mushrooms are known as Song Rong mushrooms. They have earned a protected status in China for future sustainability of the industry. Japan is China's largest export market for the mushroom, and Chinese-produced mushrooms are 5-10 times cheaper than Japanese ones. However, there have recently been concerns over the quality and safety of Chinese mushrooms from other international markets. Matsutake are a delicacy in China and the perceived natural anti-cancer and nutrition benefits are widely-regarded among consumers. They are often given as gifts to wish people a long, healthy life.

### **OLIVE OIL**

South Australia has a relatively small and niche olive oil industry. However, markets for olive oil are developing strongly in Asia, where the health benefits are increasingly recognised. The opportunity for South Australia lies in the luxury olive oil market, leveraging the purity and reliability of our product, relying on a heritage narrative and appropriate luxury packaging and branding.

China produces some domestic olive oil (20-30 tonnes per year) however currently there is no significant domestic mass production. China has seen significant growth in imports of olive oil in recent years.

### **RED WINE**

Driven by the growth of an aspirational middle class across the Asian Pacific Region, red wine consumption has experienced a renaissance in those markets. The perceived sole origin for luxury wines in the market has traditionally been in the Bordeaux region of France; however, this conception is shifting thanks to growing customer sophistication. Ensuring traceability across the value chain will be important for South Australian wines, requiring enhanced consideration of processing and packaging technologies.

Chinese consumers show a strong preference for red wine, and were the global market leader for red wine consumption in 2013. About 80% of wines consumed in China are produced domestically. Red wine not only pairs well with Chinese cuisine but is perceived to have health benefits. French wines, particularly those from Bordeaux are synonymous with luxury in the Chinese market; however, there is growing interest in luxury wine from other countries such as Australia and Spain.



## ROCK LOBSTER

Rock lobster is Australia's largest seafood export by value, and South Australia's southern rock lobster accounts for 19% of total Australian production value. South Australia's high environmental standards should sustain the State's competitive advantage going forward, but the main challenge will be the relatively higher product price compared with other exporters. South Australian producers could also consider value-added luxury product opportunities for rock lobster, including lobster portions, ravioli, and pizza.

China has become the world's largest importer of rock lobsters over the years with rock lobsters considered symbols of prestige in China due to their rarity. Rock lobsters are largely sourced from Australia and are in high demand, particularly over the Chinese New Year period. Consumers prefer to purchase rock lobster live and favour hard-shell over soft-shell. There is no domestic rock lobster industry in China.

## TRUFFLES

Australia is the world's fifth largest producer of truffles, with production occurring across the cooler climates of southern Australia. Producers in South Australia are small-scale in comparison with counterparts in other states and tend to rely on local distribution channels such as farmers' markets. South Australian producers should consider growing white truffles, which are more highly valued in Asia and would offer product differentiation against other Australian and Chinese producers. Luxury packaging will also need to be developed to complement the product.

There exists in China a significant population of people geared towards 'aspirational living' which is driving the demand for truffles and other luxury foods. There is an emerging domestic truffle industry which should continue to drive the demand for the product.

## WAGYU BEEF

Australia has the largest population of full-blood genetic Wagyu cattle outside of Japan, and it is a key value-added niche sector in our cattle industry. There is Wagyu production already occurring in south-eastern regions around Adelaide, and South Australia's product is prized for our effective food safety regulations, traceability, and a focus on animal husbandry, farm management and welfare.

Wagyu beef is a prized delicacy in China, despite a recent ban on imports from Japan. There are no significant local producers of Wagyu beef in China. In early 2016, Chinese health officials urged the country's 1.3 billion residents to cut their meat consumption in half, for health reasons and to support environmental protection. It remains to be seen what impact this might have on Wagyu beef imports.