

# FUNCTIONAL AND LUXURY FOODS OPPORTUNITIES FOR SOUTH AUSTRALIA IN JAPAN

Aged care products are a key functional food growth area, as Japan's ageing population will most likely drive most food-related decisions in the coming years.



# 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 Japan.

## Country context

The Japanese Government is actively attracting foreign direct investment and the Japan-Australia Economic Partnership Agreement has entered into force as of January 2015. There is a large ageing population in Japan, with more than 25% of its citizens over 65 years of age. Ten percent of Japan's GDP is spent on treating diseases, resulting in rising health care costs.

There is a strong local market for fortified foods and beverages in Japan. Aged care products are a key functional food growth area, as Japan's ageing population will most likely drive most food-related decisions in the coming years. There will likely be a shift towards 'gentle foods' that are easier for older persons to chew and swallow, and which are sympathetically presented for older consumers, mindful of serving size and easy-open packaging.

Japanese consumers also have a much higher average disposable income per capita than most Asian countries, and can more easily afford luxury food items. In 2014, Japan had 2.4 million High Net Worth Individuals, about half the total number in the Asia Pacific.

Japanese buy luxury food as a seasonal treat, or more commonly as gifts for friends and family. They value high-level craftsmanship and the taste, quality, brand name and packaging are particularly crucial elements that impact their choice of luxury food purchases. In addition, marketing and endorsement by celebrities is an indicator of a product's premium and luxury products.

## Functional food opportunities in Japan

### ALOE VERA

Australia's aloe vera market is largely an export one, 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.

Over 60% of Japanese aloe vera products are yoghurts. Successful aloe vera production in Japan has resulted in large-scale capacity to produce locally. Aloe vera products could be considered a commoditised market due to the abundant supply of local products.

### 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.

Japan's ageing population is particularly focused on the benefits of antioxidants and their potential health benefits, which is driving consumer interest in carotenoids. However, there is limited local production of carotenoids due to the competitive international market.

### 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.

In Japan, there are generally low levels of public awareness of gluten-free products. Consumers in the Japanese gluten-free market are mainly western expatriates and Chinese High Net Worth Individuals. The limited domestic market means that there is no significant local production in Japan, with the majority of gluten-free products imported.



## 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 widely spread among the Japanese population, and continued development of digestive-related product options, beyond dairy and into confectionery and baked goods, will drive consumer demand in this market.

In Japan, there is an established lactose-free industry, which is witnessing growing demand mainly from consumer choice as well as from the lactose-intolerant population. There is considerable choice for dairy substitutes in traditional Japanese cuisine and a growing demand for dairy alternatives.

## OTHER 'FREE FROM' FOODS

In Japan, there is limited public awareness around the need for and availability of anti-allergenic foods. Current demand is predominantly focused on child nutrition ingredients and products.

## 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.

Phytosterol demand in Japan is mainly based on its presence in soy ingredients, and the focus of Japanese companies on producing soy-based functional food products from soy milks to cooking oils. The growing awareness of the benefits of these products has helped move phytosterols into the mainstream food sectors in Japan, further driving demand. The entry into fortified oils will emerge as a key growth opportunity, and future demand is also expected to increase from processed goods, as opposed to traditional options such as miso pastes.

## 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.

Polyphenols in Japan are a key ingredient aimed at combating the effects of ageing, and are consumed in large quantities from fruits, vegetables and extracts such as coffee and tea. There is significant domestic polyphenol production in Japan, which has created a highly competitive marketplace, very tight intellectual property protection, and low prices.

## 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.

Japan's traditional diet high in fish predisposes the population to accepting the taste and benefit of omega-3 rich products. The PUFA industry in Japan is mainly focused on fish oil extraction and concentration. There are some local concerns about unsustainable fishing and inefficient extraction of fish oil.

## 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.



Japan was the birthplace of probiotics and certain prebiotics within the functional foods industry. Japan boasts a mature and sophisticated probiotics and prebiotics industry which enjoys a strong level of intellectual property protection. Japanese consumers, particularly older persons, are well-educated on the benefits of these products.

## **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.

The Japanese proteins and peptides market is largely driven by the nutrition needs of the country's ageing population. Protein products are witnessing particular growth, driven by growing interest in protein drinks for weight loss and muscle management, as well as snack foods, which are particularly aimed at the children's market. The beauty drink segment is driving demand from collagen peptides in the premium category.

## **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.

Vitamin D is a particular concern in Japan, given its role in bone health maintenance. The Japanese incidence of osteoporosis and bone disease amongst its elderly population is one of the highest in the world, but it is important to note that Japanese consumers tend to prefer vitamin supplements over fortified foods. The market for children's vitamins is also expected to grow, particularly in fortified beverages that are easy for infants and toddlers to consume. The use of vitamins in the cosmetics sector will drive interest in fortified products, which will also push product differentiation into the baked goods sector.

## **Luxury food opportunities in Japan**

### **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 should also explore e-commerce opportunities.

In Japan, there is a domestic industry for abalone, however it is unable to meet demand. This has resulted in an increase in the demand for imported abalone. There are current efforts in the domestic industry to improve yield through embryonic manipulation in farmed abalone. There is an increased presence of disease in Japanese abalone which has been attributed to overfishing practices. Japan has introduced fishing limits to improve the management of the local fisheries.

### **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.

In Japan, Bluefin tuna is a highly popular product consumed as part of sushi and sashimi preparations. There is an established local industry which is unable to meet the current local demand. There are further supply pressures from regulations limiting the fishing of Japanese and Chinese fisheries. The Japanese Government is undertaking efforts to decrease the amount of Bluefin tuna consumed in Japan to ease over-fishing.

### **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.



In Japan, luxury alcohol consumption is part of the country's culture. There is a large domestic distilled spirits industry which is receiving growing international recognition. This industry is mainly limited to the production of whisky and sake. All imports must abide with Japanese alcohol regulatory guidelines.

### **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.

In Japan, there is aggressive demand for caviar by high-end restaurants and hotels. Japanese companies have also invested heavily in international suppliers to gain control of market share and supply. There are concerns in the market about overharvesting, pollution and the illegal market trade.

### **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.

In Japan, an established retail and importer presence for high-end local and imported chocolate services a highly discerning consumer base. There is a small domestic market in the country, however demand is greatest for premium products with exclusive backstory and packaging.

### **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 Japan, matsutake mushrooms are prized for their rarity, taste and nutrition. They grow on Japan's forest floor under red pine trees and can only be harvested in the wild. Japanese consumers have strong loyalty to local produce, so local mushrooms are much more valuable in the Japanese market.

### **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.

During the last 20 years, olive oil consumption in Japan has grown due to dietary and health concerns. Due to the small-sized kitchens in Japan, consumers favour smaller bottles, mostly 250-500mls. Traditional olive oil producer and exporter countries such as Italian and Spain have increased their sales in the Japanese market, and many premium bottles are available at USD30-45 for 250ml.

### **RED WINE**

Driven by the growth of an aspirational middle class across Asia, 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 due 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.

Japan's main target market for red wine is older, affluent consumers who seek premium products in small quantities. More Japanese women are entering the workforce and earning greater disposable incomes, driving the popularity of red wine. There is no domestic industry for wine production in Japan, and the demand for imported products is strongest for red wines with strong copyright and intellectual property protection.



## 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.

In Japan, there has been a growing demand for rock lobster. There is a limited domestic industry, with the bulk of produce being imported. There is also significant interest from Japanese suppliers to partner with international companies for supply and research and development needs.

## 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.

Japan has the second highest demand for truffles globally, driven by the restaurant trade. There is a high emphasis on quality accreditation for the produce. There is no significant domestic production in Japan.

## WAGYU BEEF

Australia has the largest population of full-blood genetic Wagyu outside of Japan, and 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.

In Japan, over 60% of the population consumes Wagyu beef on a regular basis. Wagyu is considered a particular delicacy and is highly prized by Japanese diners. The large local industry is unable to meet the current domestic demand.