



Department of
Primary Industries and
Regional Development

*We're working for
Western Australia.*

Western Australian natural health supplements

Business opportunity outline



Consumers around the world are seeking **natural solutions for restoring and maintaining their health.**

Global demand for natural health supplements is growing rapidly and Western Australia (WA) has a wide range of raw materials for processing into natural health supplements.

Being an isolated state on an island continent, WA has an incredible variety of unique native plants bursting with distinct health properties.

Clear opportunity for **growth**

WA is uniquely positioned for growth in natural health products. We have all the elements required for success, including large supplies of raw materials, a wide range of unique ingredients, a highly productive workforce, efficient production systems, proven logistics and a world-class science and research sector.

A unique example is the Australian National Phenome Centre, led by Murdoch University and based at Fiona Stanley Hospital's Harry Perkins Institute of Medical Research in WA. The centre is part of a global network of research facilities and houses the Southern Hemisphere's largest collection of mass spectrometers, which can identify unique compounds within local food products that aid nutrition.

Demand for WA natural health supplements exceeds supply and further investment is needed to develop this exciting and growing industry. Investors have the opportunity to participate in a strongly growing industry with solid margins and numerous, unconsolidated sales channels across domestic and export markets.

What are they?

Natural health supplements are substances extracted directly from plants and animal products or produced from foods. They are sold in powder, tablet and other medicinal forms and provide health benefits, including the prevention and treatment of disease.

Most natural health supplements have historically been sold in tablet form, however new forms of delivery, including powdered and ready-to-drink beverages, health tonics, snack bars and other functional foods, are driving category growth.



#2

Agricultural area of any state in Australia.

Solid drivers

Consumer attitudes towards health are changing, especially since the onset of COVID-19. Other drivers include the aging population, a shift to healthy and sustainable lifestyles, increasing prevalence of lifestyle diseases, an increase in self-treatment and a shift to natural, plant-based foods and health supplements.

Consumers are seeking to avoid diseases caused by diet and poor nutrition, such as type-2 diabetes, stroke, coronary heart disease, hypertension and osteoporosis.

Consumers globally are turning to natural plant-based health supplements from trusted sources to restore and maintain health for themselves and their families. Global penetration, frequency and spend on natural health supplements are growing strongly across all markets.

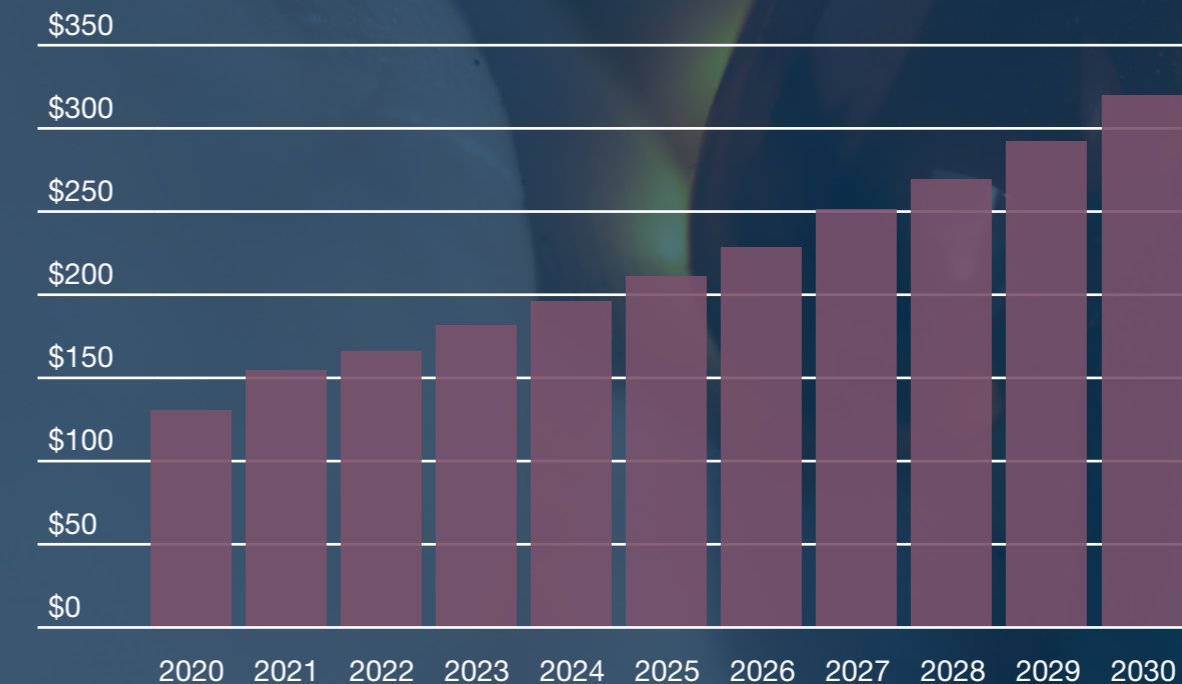
Supplements are being used to treat:

- Allergies and sinus problems
 - Bone and joint pain
 - Brain function and mood
 - Coughs, colds and flu
 - Diet and weight management
 - Digestive and detox routines
 - Energy support
 - Eye health
 - General wellness
 - Hair, skin and nails
 - Heart health
 - Hormone support
 - Immune health
 - Pain relief
 - Pregnancy/maternity
 - Sexual health
 - Skin ailments
 - Sleep support
 - Sports nutrition
 - Stress support
- Other uses continue to emerge as new science develops.

Rapidly growing demand

Natural health supplements are a truly global market, with key active ingredients flowing from production regions to major centres for processing and packaging. Global demand for natural health supplements is showing robust, healthy growth. Natural health supplements, a US\$140 billion market in 2020, is forecast to grow to US\$320 billion by 2030, driven by an 8.6% compound annual growth rate (CAGR).

Forecast global natural health supplements market (US\$; billion; 2020 to 2030).



8.6% CAGR ↑
Forecast global growth rate over the next decade

+ US \$13 billion ↑
In forecast category value growth in 2021

Exports

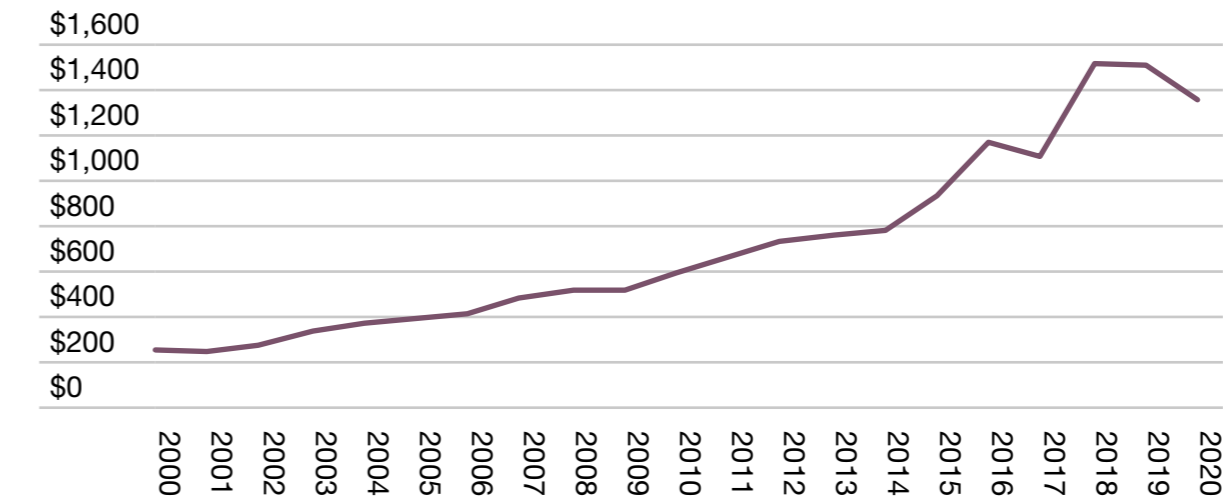


Export markets

Australian supplement exports totalled US\$1,376 million in 2020 and are showing strong growth, with 9% CAGR between 2000 and 2020.

Australia exports natural health supplements to more than 130 countries in an average year, with all major high-income markets buying our natural health supplements. Key markets include China (US\$516 million), Europe (US\$161 million), Singapore (US\$165 million), New Zealand (US\$160 million), North America (US\$92 million) and Hong Kong (US\$82 million).

Australian supplements export value
(US\$; million; 2000 to 2020)

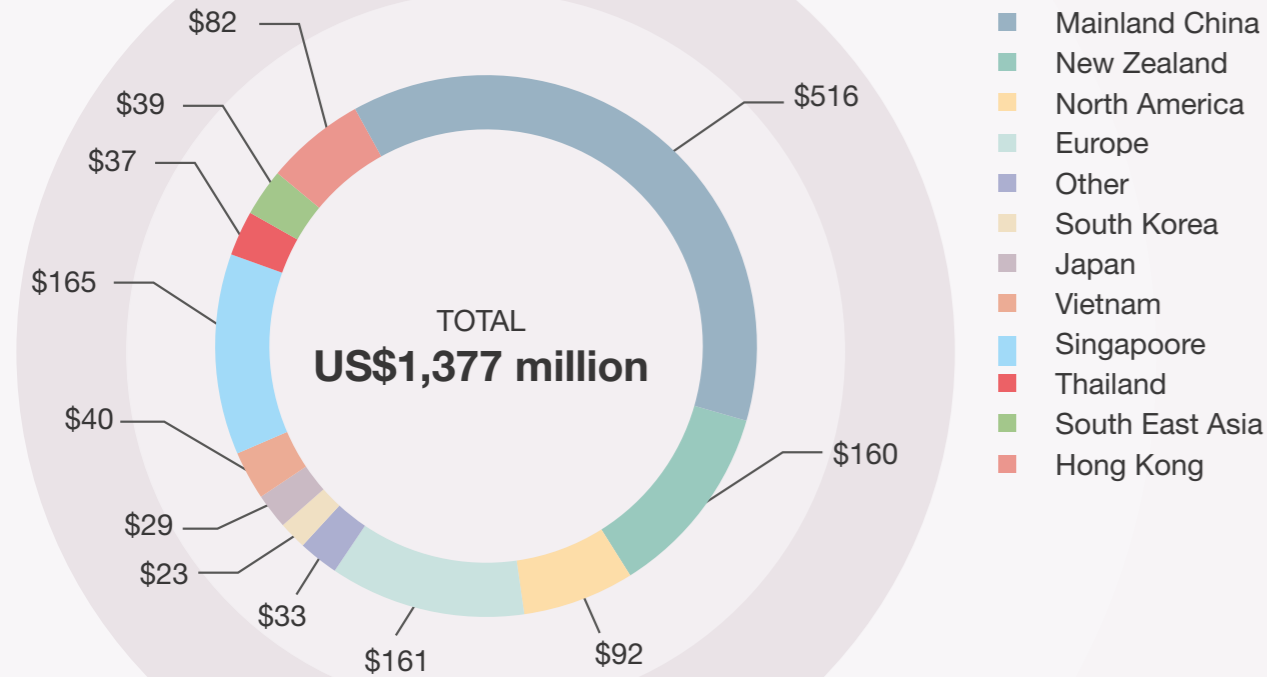


Key markets

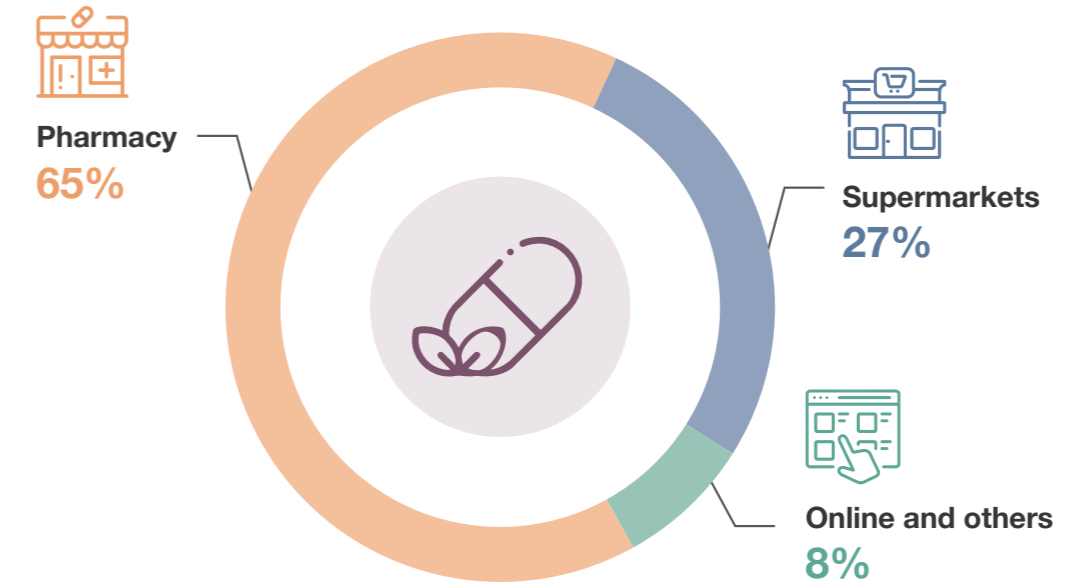
Australia's domestic natural health supplements market is large (more than A\$3.4 billion in 2020) and growing strongly (at 7.5% CAGR). Almost half of Australian women and a third of Australian men regularly purchase vitamins, minerals and supplements.

Australia has a robust market, with more than 8,000 pharmaceutical, cosmetic and toiletry goods retail outlets and more than 6,400 supermarkets and grocers selling natural health supplements. Pharmacies account for 65% of shopping trips, supermarkets 27% and direct and other channels 8%. A significant proportion of Australian dietary supplements were sold to consumers in China via cross-border professional shoppers and daigou.

Australian supplements export value
(US\$; million; 2020)

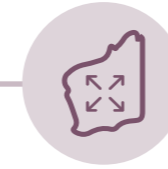


Australian supplements channel share
(per cent of shopping trips; 2019)



Distinct advantage

WA is uniquely positioned to service the global rise in demand natural health supplements, which is evident on multiple fronts.



High quality raw materials

WA crops and native plants grow in one of the world's cleanest environments making us a leader in delivering clean and trusted foods, beverages and related products. We are a trusted source for numerous ingredients for all major global producers.

Safe and secure

WA's isolated climate is relatively free of pests and disease and we can demonstrate we are free from many common diseases and pests. Nationally, Australia has strong biosecurity protocols and systems, ensuring our production environment remains healthy and safe making WA well-suited to nutraceutical and functional food ingredients.

Available capacity

Being the size of western Europe with a population equalling Jamaica, WA has a very large land mass with a relatively small population. We have huge areas of land available for collection of wild plants and large areas suitable for agriculture.

Plants containing health-giving properties occur across large regions of WA. Existing supplements processing facilities are primarily located in WA's highly populated southwest or close to large supplies of wild plants. There are numerous potential locations for further processing and packaging operations, including near Perth, Bunbury and Albany.

Efficient infrastructure

WA is one of the world's most advanced and productive regions with efficient supply chains and world-class quality control and quality assurance systems.



Wide range of opportunities

WA's agri-food system produces a wide range of products. The processing of many of these products creates a wide range of by-products suitable for processing into natural health products. Key standout opportunities are evident.



Carrots

WA is Australia's largest carrot producer with around 90% of exports and 40% of total volume. Our carrots, which are grown in the southwest primarily around Gingin and Preston, attract premium prices in Asian and Middle Eastern export markets. Carrot production is consolidated into 12 large scale growers. Typically, 6%+ of the crop or around 8,000 tonnes goes to processing, highlighting a value-adding opportunity.

Carrot root extract, derived from the orange edible part or 'root' of the carrot, is used for antioxidant and conditioning properties. The taproots are rich in alpha and beta-carotenes (which can be converted by the body into vitamin A), vitamin K, vitamin B6 and contains several antioxidant compounds including vitamin C and vitamin E.

These compounds can be used in formulations for a large variety of health, personal care and cosmetic products, including tinctures, powders, skincare, makeup and hair care products.



Grapes

WA has a large and successful grape growing industry supplying wine (88%) and table (12%) markets. We are Australia's fourth largest wine producing state with more than 350 grape growers on around 9,000 hectares. While production occurs across large areas of WA, Margaret River (approximately 55%) and the Great Southern region (approximately 20%) are the key regions. WA crushes more than 40,000 tonnes of grapes annually, creating a significant amount of by-product and further value-adding potential.

Grapes are a reliable source of polyphenolic compounds that have been extracted through various methods, including solid-liquid extraction, ultrasound-assisted extraction, microwave-assisted extraction, enzyme-assisted extraction to recover polyphenolic compounds. This includes resveratrol (found in grape skin and seeds), which has high antioxidant potential and antitumor activity shown in vitro and in vivo studies.

Additionally, grape seed extract is a popular dietary supplement made from grape seeds. It's rich in antioxidants, including phenolic acids, anthocyanins, flavonoids, and oligomeric proanthocyanin complexes, which can reduce blood pressure, improve blood flow and has shown several other health benefits.



Olives

WA has the ideal climate for olive production from processing and orchard management. The Moore River region in the Shire of Gingin accounts for more than 70% of WA's olive trees and production. Large groves are also established at Frankland and West Beverley. Smaller groves have been planted in Geraldton, Margaret River, Peel, Warren and York. We have more than 50 growers and 1.7 million olive trees with 99% of production going to olive oil production, creating a significant amount of by-product

Olives are very high in vitamin E and other powerful antioxidants, which have shown to be good for the heart and may help protect against osteoporosis.

Additionally, olive leaf extracts are a potent source of antioxidants, mainly derived from polyphenols. These beneficial properties may help lower risk of diabetes, improve immunities and cardiovascular health.



Berries

WA has a successful berry growing industry supplying domestic and export markets. We are Australia's fourth largest berry producer with more than 40 berry growers on around 400 hectares. Berry production occurs across the southwest of WA, including northern areas of Perth and the Great Southern region. We produce more than 9,000 tonnes of berries annually, with 11% going to processing or by-product.



Citrus

WA has a well-respected and successful citrus industry with more than 50 growers, primarily large operations at significant scale. We produce more than 20,000 tonnes of citrus annually, with around a third of this going to processing.



Apples

WA has a world-class apple industry that has achieved incredible success in apple breeding with locally developed varieties including Pink Lady™, Sundowner™ and Bravo™.

The Department of Primary Industries and Regional Development and The University of Western Australia are now leading research into breeding new flavonoid-rich apples. Flavonoids are natural compounds concentrated in apples. There are over 3000 naturally-occurring flavonoids, and the dietary effect of each is different.

Flavonoids tend to be higher in the peel rather than the flesh of apples and are higher still in the peel of darker, redder apples like Bravo™. Typically, 25 to 30% of WA's apple crop goes to processing, or around 9,000 tonnes. Additional crop is left in the orchard and could also be processed for supplements.

Other fruit and vegetables

As well as these big six target crops for natural health supplement extraction, WA has a large and varied horticulture sector. Fruit, vegetables and plant nursery industries occupy 32,225 hectares with 1,512 businesses involved in production.

Unique native plants

WA is part of an island continent with desert separating it from other states. We have a unique endowment of native trees and shrubs that grow wild nowhere else. Our unique ecosystem, combined with the dry, desert environment of large parts of the state, has led to the emergence of numerous high health plants. Knowledge and awareness of these plants is still limited to WA's Aboriginal population, researchers and some industry participants.

Indigenous Ecological Knowledge (IEK) refers to Aboriginal and Torres Strait Islander peoples' knowledge of Country, including the native plants and animals that co-exist with them, and associated stories, songs, language, techniques and knowledge. There are cultural sensitivities that businesses using native flora should be aware of and risks to the business if the use of these species is not approached in a culturally appropriate way. Visit the Department's Protection of [Indigenous Ecological Knowledge for bushfood businesses guide](#) to ensure you are following best practice guidelines around the use of IEK.

Kakadu Plum

Considered "a gift of the Dreamtime", Kakadu Plum (*Terminalia ferdinandiana*) is WA's star superfood. Kakadu Plum has exceptional nutritional and antiseptic properties and has been an important food and medicine in northern Australia for millennia. In addition to its superior antioxidant qualities, Kakadu Plum contains the highest recorded level of vitamin C content globally.

Harlequin Fuchsia Bush

Harlequin Fuchsia (*Eremophila duttonii*) is a small tree that grows in inland WA. It has extremely strong antibacterial qualities due to major active compounds including serrulatane diterpenes and a novel furanosesquiterpene. In broad based screening programs examining native medicinal plants, extracts of Harlequin Fuchsia have consistently produced high levels of antibacterial properties. In research it reduced the number of viable cells of methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant enterococci (VRE) to undetectable levels within one hour.



Digestive and gut health

WA has several native plants traditionally associated with digestive and gut health. Key species include Western Bloodwood (*Eucalyptus terminalis*) and the Australian Boab (*Adansonia gregorii*).



Eye health

There are several native plants in WA traditionally associated with eye health. Species include Silkgrass (*Cymbopogon bombycinus*), Desert Plum (*Owenia acidula*), the North Coast Wattle (*Acacia leptocarpa*) and Kakadu plum.



Lung and throat health

WA also has native plants traditionally associated with lung and throat health. Species include Pinyuru (*Eremophila cuneifolia*), Gum-Topped Bloodwood (*Eucalyptus dichromophloia*), Blue Fan Flower (*Goodenia scaevolina*), and Australian Sandalwood (*Santalum spicatum*).



Skin health

WA also has a number of native plants traditionally associated with skin health. Key species include Desert Walnut (*Owenia reticulata*), Dampier Pea (*Swainsona pterostylis*), Prickly Wattle, (*Acacia tetragonophylla*), Grun Grun (*Solanum lasiophyllum*), Gyro Damson (*Gyrocarpus americanus*) and Poverty Bush (*Acacia translucens*).

Others

The above are just a small sample of the hundreds of WA native plants that have been used as part of traditional remedies for thousands of years.



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Forbes
'Best Countries for
Business 2019'
(Australia)

#3

Heritage Foundation
'Index of Economic
Freedom 2021'
(Australia)

Close to key markets

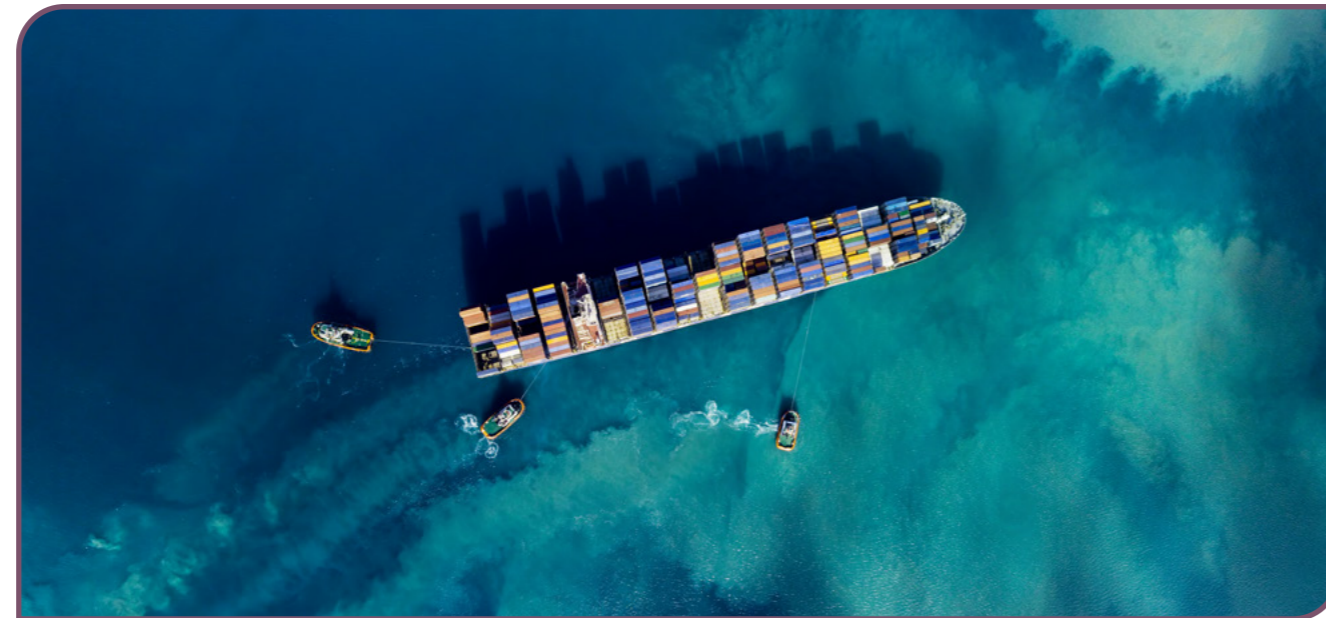
WA is close to Asia, particularly the large and growing markets East Asia and South East Asia. We are the natural and logical supplier of unique native species and a wide range of traditional natural health supplements to East Asia, South East Asia and to the Middle East.

Ease of doing business

Australia is politically and economically stable and a safe country in which to do business. Our businesses have sound governance and represent low sovereign risk to investors and customers.

Fast time to market-free trade agreements

WA is geographically and strategically well placed to supply Asia's rapidly expanding markets. We are in the same time zone as much of South Asia and within five days can ship to Indonesia, six days to Singapore and eight days to Southern China. Australia has free trade agreements in place or under negotiation with more than 25 countries and regions and our combination of location and access means we are uniquely positioned as a competitive supplier of premium products to the greater Asia-Pacific region.



Attracting investment

Producing natural health supplements in WA is an attractive proposition. Multiple firms have already invested in processing facilities here and there are still significant opportunities for further growth.

WA's strong reputation in agrifood products and comparative advantage in unique products offers a strong platform for growth into branded, consumer-facing natural health supplements, particularly in the business to consumer category.

Our natural health supplements industry has significant opportunities further investment in large scale processing operations. Investment in natural health supplements processing would suit a wide range of investors, including global multinationals looking to add Australian botanicals to their range, large Australian firms looking for growth, investors with access to new markets, leading Asian integrated food processors and start-ups.

**\$10-20
million**

Potential investment for natural health supplements processing plant

- Fully automated centralised facility
- Receiving, processing, extraction, packing, lab testing
- Full humidity and temperature controlled
- Inward/outward goods

Existing WA industry examples

WA has a large and well-developed agri-food processing industry. A number of firms stand out as potential partners for any nutritional supplements venture.



Supporting investment

The WA government is committed to working closely with investors to develop WA's natural health supplements industry. The Department of Primary Industries and Regional Development's Investment Services team offers a range of investment concierge services to de-risk and support investment.

The team is made up of experienced industry professionals, who operate with a commercial focus, bringing together businesses, government departments and agencies to support industry investment initiatives.



How we can help

Information to support investment decisions

As a central point of contact for information and advice on investing in WA's agriculture, fisheries, and food and beverage sectors, we provide:

- Information on conducting business in WA.
- Various data and market intelligence.
- Background on relevant regulatory requirements and approval processes.

Investment facilitation

Drawing on in-depth knowledge of the agribusiness, food and beverage industry, and extensive business networks in Australia and overseas, our team can provide guidance and introductions to help secure the investment or opportunity you are looking for. We can:

- Provide introductions to WA agribusiness, food and beverage businesses.
- Identify investment and research partnership opportunities.
- Help plan and conduct site visits to assess opportunities.
- Identify access to available natural resources and infrastructure.
- Identify suitable investor and investment opportunities.

Regulatory approval support

Understanding and securing the required regulatory approvals for your project can be a roadblock to investment. We can provide assistance to streamline processes and simplify your dealings with relevant government departments and agencies by:

- Providing information and guidance on WA's regulatory environment.
- Helping obtain regulatory approvals.
- Coordinating with other government departments and agencies.

Investment-ready project support

Our team is available to provide support to identify and develop your project or business' potential, including guidance on raising capital and getting your project investment-ready.

We can also work with you to provide information on the different types of investment available and investment partners.

By understanding your goals and requirements, we can assist you to identify and develop your project's potential.

Support available

A wide range of national and state-based agencies, industry bodies and research institutions are available to support research and development, commercialisation and investment.



We understand your project and investment requirements are unique.

To get started or expand on your Western Australian investment journey, contact us today.

Speak to our Investment Services team for support and guidance:

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p +61 (0)8 9368 3590

w agric.wa.gov.au/investment

Disclaimer

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Sources: DPIRD, Heritage Foundation, Forbes, UN Comtrade, UN FAO, Australian Bureau of Statistics, Roy Morgan, Grandview, Mordor Intelligence, IBIS, industry interviews, Coriolis and DPIRD analysis and estimates.

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