

Watermelon *(Citrullus lanatus)*



1. Offer Analysis

1.1 General Description: Production, end-use, and market

Watermelon (*Citrullus lanatus*) is widely consumed for its high water content, refreshing taste, and nutritional benefits. Believed to have originated in Africa, watermelon has become a global staple, particularly in warm climates where it thrives. The fruit is predominantly consumed fresh, but it also has applications in beverages, desserts, and functional food products.

Watermelon cultivation requires well-drained, sandy or loamy soil, ample sunlight, and consistent moisture. It is typically grown in warm, temperate, and tropical regions. In the Pacific, countries such as Fiji and Tonga produce watermelons, primarily for domestic consumption and small-scale exports. While global leaders in watermelon production include China, Turkey, and Iran, the Pacific region benefits from year-round warm temperatures, allowing for continuous production and fresh supply.

In New Zealand, the watermelon market is supported by both local production and imports. Domestically, watermelon is cultivated in regions with warm summers, such as Northland, Hawke's Bay, and parts of the Waikato. However, production is relatively limited due to climate constraints, and supply is supplemented by imports, particularly from Australia, which has an established commercial watermelon industry. New Zealand also imports watermelons from the United States and Pacific Island nations, particularly during off-season periods when local production is insufficient to meet demand.

Watermelon harvesting is a labour-intensive process, typically conducted manually to ensure the fruit is picked at optimal ripeness. Timing is critical, as overripe watermelons lose their crisp texture and flavour, while underripe fruits lack sweetness. The fruit's perishability requires efficient handling, refrigeration, and distribution to maintain quality throughout the supply chain. Different watermelon varieties are cultivated to suit market preferences, varying in size, rind colour, and sweetness. The most common types include:

- **Sugar Baby Watermelon:** A small, round variety with dark green skin and deep red flesh, known for its high sugar content and suitability for home refrigeration.
- **Jubilee Watermelon:** A large, oblong variety with light green stripes, featuring firm, sweet flesh, making it popular in commercial markets.
- **Seedless Watermelon:** A popular variety due to its convenience and high sugar content, making it ideal for fresh consumption.
- **Traditional Seeded Watermelon:** Often larger in size, with firm flesh and a robust flavour, still preferred in some traditional markets.

WATERMELON NUTRITIONAL CONTENT	
Nutrient	Amount (per 100g)
Calories	30 kcal
Water	91.45g
Protein	0.61 g
Carbohydrates	7.55g
Sugars	6.2g
Fibre	0.4g
Fat	0.15g
Vitamin C	8.1mg
Vitamin A	28mcg
Vitamin B6	0.045mg
Folate (B9)	3mcg
Niacin (B3)	0.178mg
Riboflavin (B2)	0.021mg
Thiamin (B1)	0.033mg
Potassium	112mg
Magnesium	10mg
Calcium	7mg
Iron	0.24mg
Phosphorus	11mg
Manganese	0.038mg

Table 1: Watermelon nutritional content (Source: U.S. Department of Agriculture. FoodData Central. Published 2019)



Watermelon is increasingly recognised for its health benefits, being rich in hydration-promoting electrolytes, antioxidants such as lycopene, and essential vitamins like A and C. As consumer trends shift toward functional foods and natural hydration solutions, watermelon's nutritional attributes enhance its market appeal.

1.2 Uses & Benefits

Watermelon's applications extend beyond fresh consumption, creating opportunities for both domestic and Pacific exporters to supply a variety of processed and value-added products. Below is an overview of high-potential watermelon-based products:

Convenience and Ready-to-Consume Options

- **Fresh-Cut Watermelon:** Pre-packaged and ready-to-eat watermelon chunks or slices, commonly found in supermarkets, convenience stores, and food service outlets. This product caters to busy consumers seeking healthy, convenient snacks.
- **Watermelon Juice:** A natural, hydrating beverage rich in electrolytes and antioxidants. Often marketed as a refreshing sports drink alternative, watermelon juice is positioned in the health and wellness category.
- **Watermelon-Flavoured Beverages:** Used as a base for smoothies, sports drinks, cocktails, and kombucha, capitalising on its naturally sweet and hydrating properties.
- **Watermelon Sorbet & Ice Cream:** Dairy-free and fruit-based frozen desserts made from pureed watermelon, appealing to vegan and lactose-intolerant consumers.
- **Dried Watermelon Slices:** A chewy, naturally sweet snack positioned as a healthy alternative to artificial fruit candies and high-sugar dried fruits.

- **Watermelon Seeds:** Roasted and salted watermelon seeds serve as a protein-rich snack, similar to sunflower or pumpkin seeds, offering high nutritional value.

Functional and Specialty Products

- **Watermelon Rind Pickles:** A zero-waste innovation, where the rind is pickled with vinegar, sugar, and spices, creating a crunchy and tangy side dish popular in gourmet and sustainable food markets.
- **Watermelon-Based Sports Drinks:** Processed into electrolyte-rich hydration solutions, leveraging its natural potassium and hydration benefits.
- **Watermelon-Infused Beauty Products:** Extracts from watermelon are used in skincare products for hydration and antioxidant properties, appearing in face masks, moisturisers, and serums.
- **Watermelon Powder:** Dehydrated and powdered watermelon is used in smoothies, supplements, and food colouring, offering a natural source of sweetness and nutrients.

As consumer demand for natural, functional, and sustainable products grows, watermelon's versatility in fresh and processed forms creates opportunities for innovative product development. Expanding its use in beverages, snacks, and health-conscious foods aligns with trends in hydration, plant-based nutrition, and sustainable food solutions.

1.3 Overall Market Insights

Table 2: Imports of fresh watermelon in value to New Zealand

(The grand total includes all countries importing to New Zealand. *Some countries may not have an IHS, and small quantities may appear in this table. This represents sample size commodities recorded at the border.)

	2021		2022		2023		2024	
	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total
Australia	\$2,270,146	78.92%	\$1,857,413	93.57%	\$4,914,078	98.09%	\$8,204,294	97.17%
Tonga	\$606,532	21.08%	\$127,737	6.43%	\$95,500	1.91%	\$239,316	2.83%
Grand Total	\$2,876,678	100.00%	\$1,985,150	100.00%	\$5,009,578	100.00%	\$8,443,610	100.00%

Figure 1: Imports of fresh watermelon in value to New Zealand

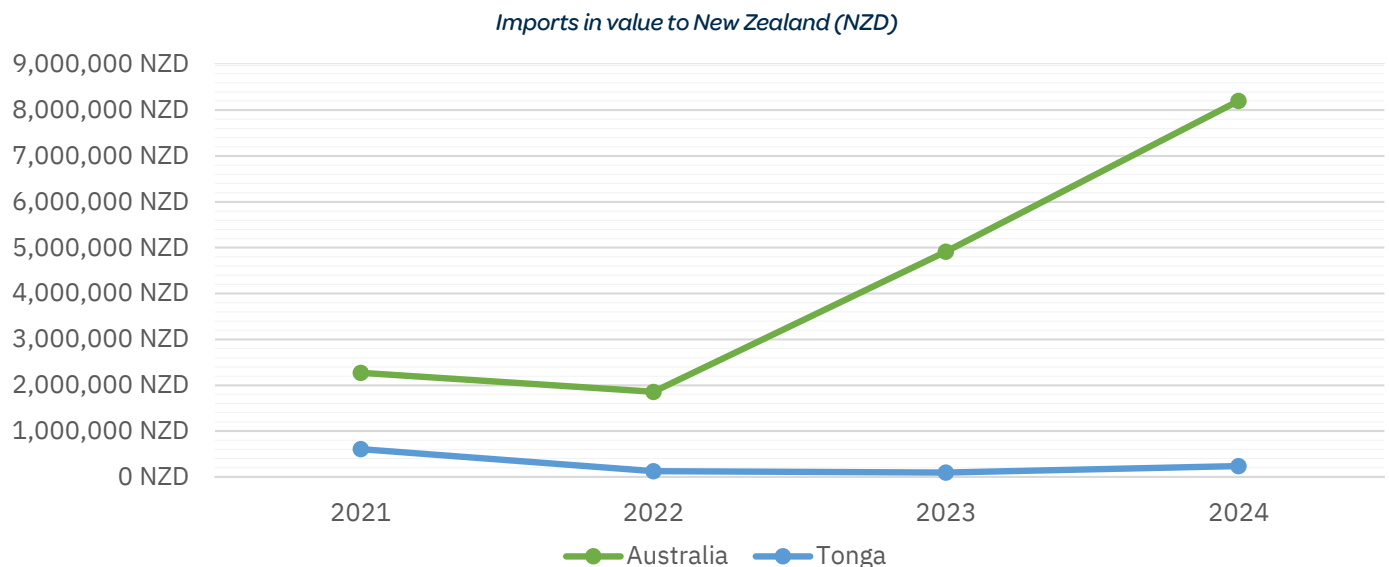


Table 3: Imports of fresh watermelon in volume to New Zealand

(The grand total includes all countries importing to New Zealand. *Some countries may not have an IHS, and small quantities may appear in this table. This represents sample size commodities recorded at the border.)

	2021		2022		2023		2024	
	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total
Australia	966,233	75.6%	676,631	91.8%	1,876,962	97.8%	3,555,893	97.6%
Tonga	312,525	24.4%	60,326	8.2%	42,077	2.2%	85,974	2.4%
Grand Total	1,278,758	100.0%	736,957	100.0%	1,919,039	100.0%	3,641,867	100.0%

Figure 2: Imports of fresh watermelon in volume to New Zealand

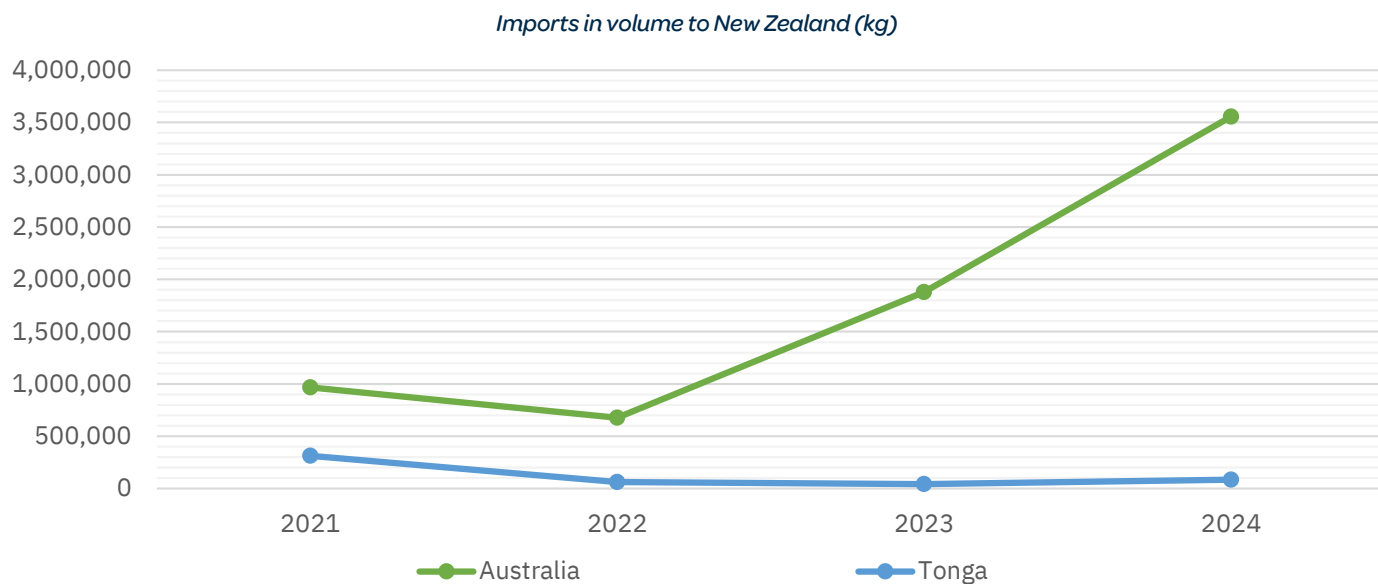


Table 4: Average price per kg of fresh watermelon as declared at New Zealand's border

	2021	2022	2023	2024
Australia	2.35 NZD	2.75 NZD	2.62 NZD	2.31 NZD
Tonga	1.94 NZD	2.12 NZD	2.27 NZD	2.78 NZD

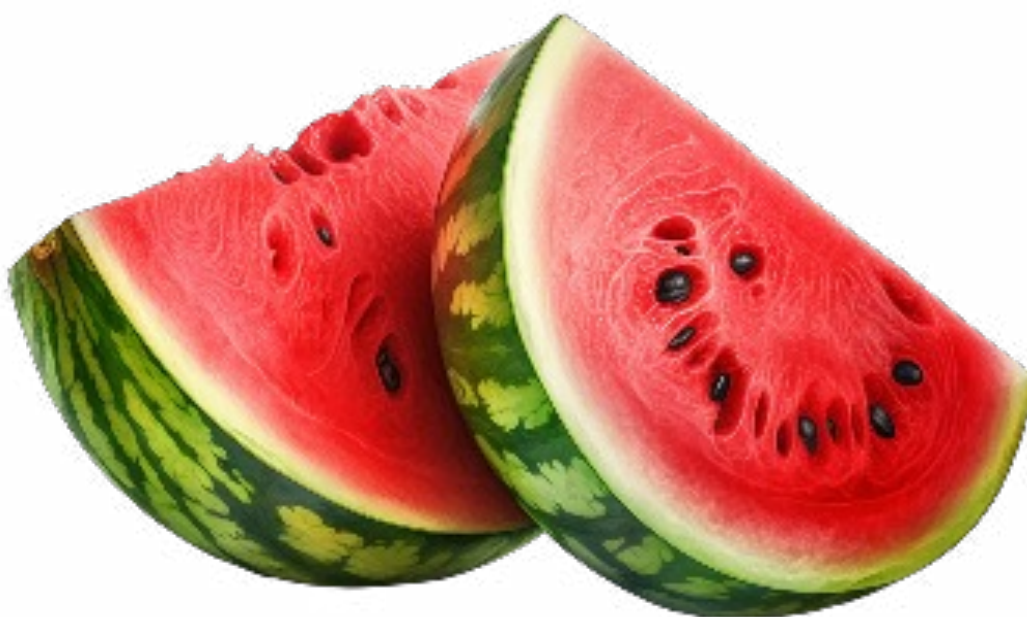


Figure 3: Average price per kg of fresh watermelon as declared at New Zealand's border

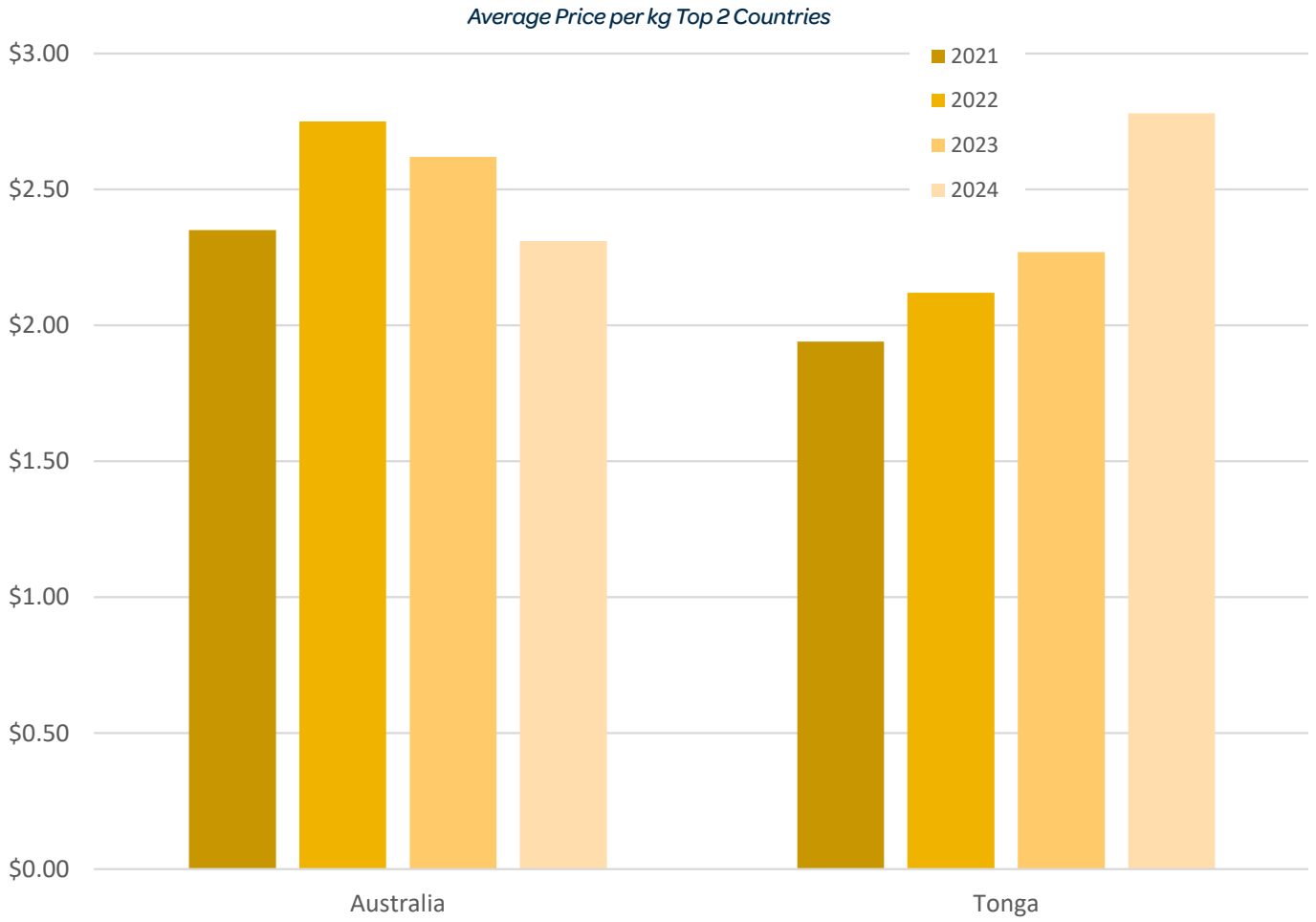


Table 5: Imports of fresh melon (except watermelon) in value to New Zealand

(The grand total includes all countries importing to New Zealand. *Some countries may not have an IHS, and small quantities may appear in this table. This represents sample size commodities recorded at the border.)

	2021		2022		2023		2024	
	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total
Australia	\$1,063,742	99.89%	\$1,414,847	100.00%	\$4,447,429	100.00%	\$5,485,130	100.00%
Taiwan	\$1,138	0.11%		0.00%		0.00%		0.00%
Grand Total	\$1,064,880	100.00%	\$1,414,847	100.00%	\$4,447,429	100.00%	\$5,485,130	100.00%

Figure 4: Imports of fresh melon (except watermelon) in value to New Zealand

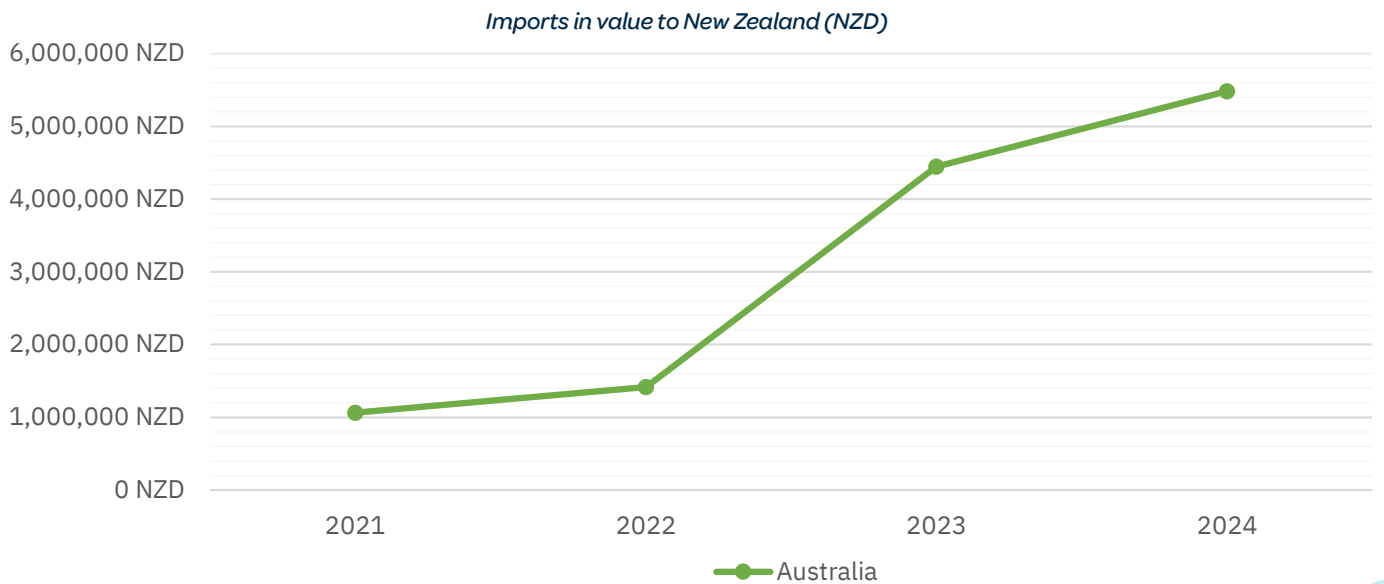


Table 6: Imports of fresh melon (except watermelon) in volume to New Zealand

(The grand total includes all countries importing to New Zealand. *Some countries may not have an IHS, and small quantities may appear in this table. This represents sample size commodities recorded at the border.)

	2021		2022		2023		2024	
	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total
Australia	502,472	100.0%	482,056	100.0%	1,541,505	100.0%	1,800,263	100.0%
Taiwan	36	0.0%		0.0%		0.0%		0.0%
Grand Total	502,508	100.0%	482,056	100.0%	1,541,505	100.0%	1,800,263	100.0%

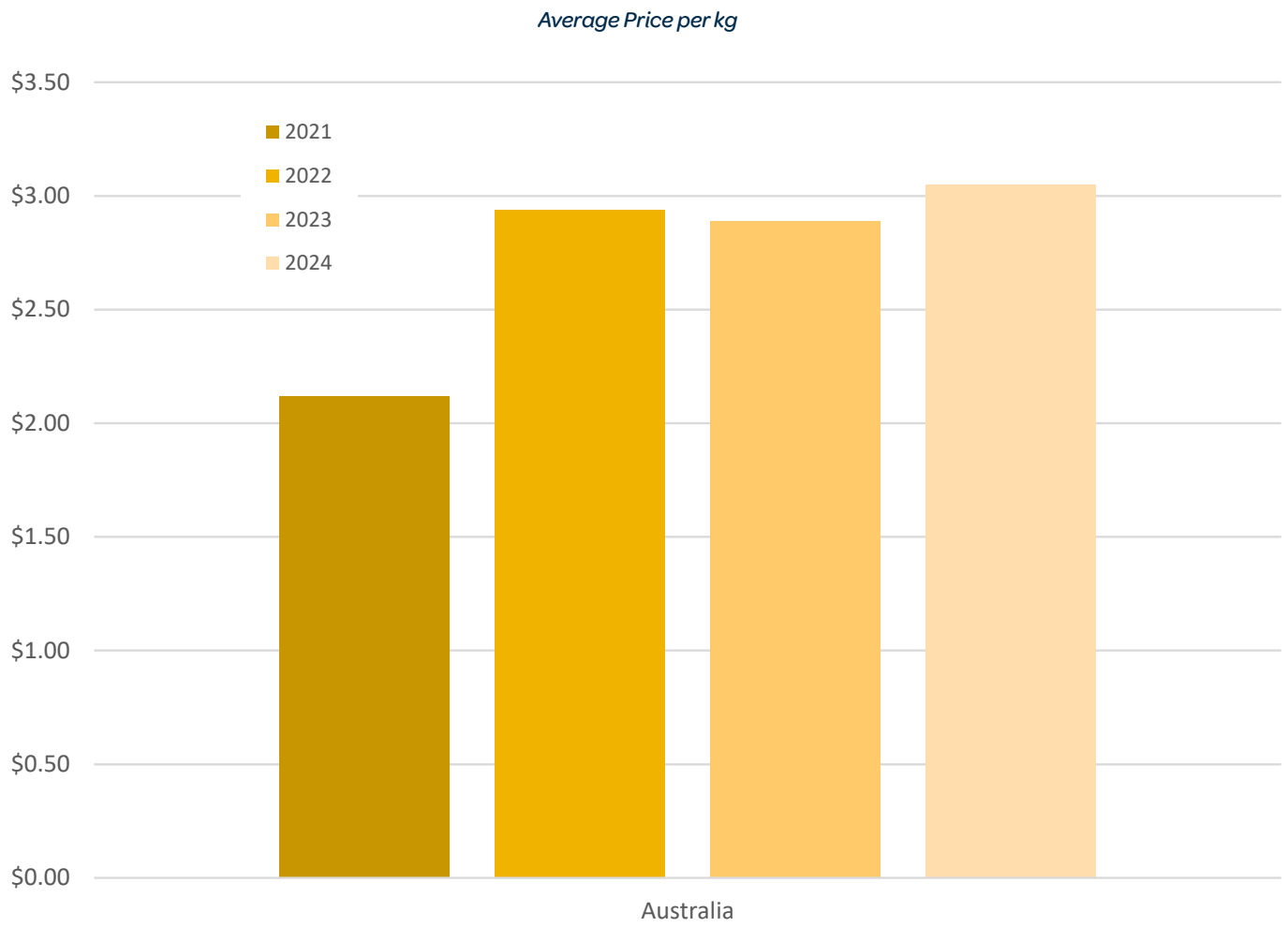
Figure 5: Imports of fresh melon (except watermelon) in volume to New Zealand



Table 7: Average price per kg of fresh melon (except watermelon) as declared at New Zealand's border

	2021	2022	2023	2024
Australia	2.12 NZD	2.94 NZD	2.89 NZD	3.05 NZD

Figure 6: Average price per kg of fresh melon (except watermelon) as declared at New Zealand's border



2. Market Access

2.1 Biosecurity Requirements and Advice

Fresh watermelon imported into New Zealand from any country must comply with the [Import Health Standard \(IHS\)](#). The IHS outlines the specific conditions that must be met before a product can enter the country. The complete list of authorised fresh fruits, herbs, and vegetables for import into New Zealand is available via this link: [Importation and Clearance of Fresh Fruit and Vegetables 152 02](#).

When watermelon is authorised for import into New Zealand from Pacific Island countries, exporters must adhere to particular quarantine requirements, including:

- ✓ Watermelon must be grown according to commercial production standards specified by the New Zealand Ministry for Primary Industries (MPI).
- ✓ Control measures must target pests of economic importance regulated in New Zealand.
- ✓ Watermelon must be inspected following official procedures to ensure they are free of visually detectable quarantine pests, as specified by MPI.
- ✓ A valid phytosanitary certificate, issued by the exporting country's National Plant Protection Organisation (NPPO), must accompany the consignment.
- ✓ Watermelon must be packed in clean, pest-free packaging materials, free of soil or other contaminants.
- ✓ All plant parts other than the watermelon fruit, such as leaves, stems, and flowers, must be excluded.

Failure to comply with these requirements can result in the consignment being rejected at the New Zealand border, additional treatment costs, or financial penalties for the exporter. Consistent non-compliance may reduce the willingness of New Zealand importers to source from Pacific countries.

2.2 Biosecurity Clearance in New Zealand for imported Watermelon

Countries approved to export fresh watermelons to New Zealand can be found via the [PIER Search tool](#).

Step 1: Provision of Documents

- ✓ Importers must submit detailed information to MPI before goods arrive.
- ✓ Electronically issued phytosanitary certificates are sent to MPI.
- ✓ MPI reviews all accompanying documents for compliance with Import Health Standards (IHS).

Step 2: Non-compliant Documentation

- ✓ Clearance is refused for consignments without valid phytosanitary certificates and those detected with regulated pests.

- ✓ Correct documentation must be provided within 48 hours if missing.
- ✓ Consignments detected with regulated pests are treated before they are released.
- ✓ A consignment may fail clearance if:
 - the number of goods exceeds those stated on the phytosanitary certificate (within reason)
 - the consignment contains unmanifested goods

Step 3: Transit Requirements

- ✓ Consignments that are shipped in phases (short-shipped) must comply with the IHS.
- ✓ Transit consignments must meet requirements for importing or transit countries.

Step 4: Transport to the Approved Inspection Facility

- ✓ Consignments are transported to an approved transitional facility under an MPI inspector's direction, using pest-proof containers for inspection.

Step 5: Phytosanitary Security Before and After Inspection

- ✓ Consignments not inspected within 4-6 hours are securely stored.
 - Non-compliant consignments are securely stored until biosecurity requirements have been satisfied.

Step 6: Inspection

- ✓ MPI conducts risk profiling activities before or upon arrival.
- ✓ Visual inspections verify the absence of pests or contaminants and compliance to the IHS.
- ✓ Sampling plans determine inspection quantity based on lot size.
- ✓ Biosecurity clearance is granted when all IHS requirements are met.

Step 7: Reconciliation

- ✓ Compliance checks validate phytosanitary certificates, frequency varies based on importer history.

2.3 Food Safety Requirements

In New Zealand, food safety regulations are primarily governed by the Food Act 2014 ([Available here](#)), the Food Regulations 2015, and the Australia New Zealand Food Standards Code. These regulations apply to all foods sold in New Zealand, including imported foods like Watermelon.

General Requirements

- **Traceability:** Businesses must be able to trace where their food products came from and where they are going to ensure that any products that are found to be unsafe can be quickly removed from sale.
- **Hygiene:** All aspects of food handling, from production to harvesting, processing, storage, and sale, must adhere to strict hygiene standards.
- **Labelling:** Food items must be correctly labelled, including ingredients and allergens, and may need to have nutritional information displayed.

Please note this information may be subject to change; it is crucial to consult New Zealand's [Ministry for Primary Industries | NZ Government \(mpi.govt.nz\)](http://www.mpi.govt.nz) or similar authorities for the most current guidelines. They are country-specific and product-specific. **failure to adhere to these regulations can result in rejection at the New Zealand border, additional treatment costs, fines, or other penalties.*

2.4 Overview of the export process from the Pacific Islands to New Zealand



3. Market Specification

3.1 Quality

Quality requirements can differ among importers, so growers and exporters should confirm exact specifications (e.g., size, color, quality) with each buyer. ([See Foodstuff North Island full requirements](#)). Always follow relevant biosecurity and food safety regulations.

General Quality Criteria for Watermelons and Melons

- **Watermelons:**
 - Mid-to-dark green skin, with red to pink flesh.
 - **Seeded varieties:** black seeds; seedless: occasional black/white seeds.
 - **Shape:** round to slightly oval; skin should be smooth, firm, and free from off-odors or tastes.
 - **Cleanliness:** fruit must be dry and free of excessive dirt, skin blemishes, insect stains, and other foreign matter.
 - Defects such as fungal or bacterial rots render the fruit unsaleable.
- **Other Melon Varieties (*Piel De Sapo, Honeydew, Rockmelon, etc.*):**
 - **Piel De Sapo:** Mid-green skin with light green stripes or speckling; oval shape; firm pale green to creamy white flesh.
 - **Honeydew:** Skin and flesh color true to variety, with a slightly waxy texture.
 - **Rockmelon:** Netted skin, sweet and crisp flesh, firm texture, and good color.
 - **Cleanliness:** All varieties must be dry and free from excessive dirt, insect stains, residues, or foreign matter.

Quality Defects and Tolerances

- **Unsaleable Defects (0% tolerance)**
 - Live insects or foreign matter (e.g., glass, metal, hard plastics).
- **Major Defects (<5% tolerance)**
 - **Watermelons:** fungal/bacterial rots, splits in skin, severe sunburn, pitting >20% of surface, blossom-end rot, hollow heart, mealy flesh.
 - **Melons:** rot or soft spots from bruising, severe scarring, internal browning (grey wall/vascular browning), decomposition, and chilling injuries.
- **Minor Defects (<10% tolerance)**
 - **Watermelons:** healed skin punctures >3 mm wide, superficial bruising >8 cm², ground marks >20% of surface.
 - **Melons:** healed scuff marks >2 cm², minor blemishes, healed scratches >5 mm deep, insect damage affecting >2 cm².

Size Consistency: Weight ranges must remain within ±5% of the specified category.

3.2 Size Specifications

Watermelons must fit these local or import size categories:

- **Local (Crates)**
 - 6ct L60: 3 – 4 kg
 - 7ct L60: 2 – 3 kg
 - 8ct L60: 2 – 2.5 kg
 - 20 kg L60: 2 – 4 kg
- **Local (Bins)**
 - 60ct: 3.5 – 4 kg
 - 80ct: 3 – 3.5 kg
 - 100ct: 2.5 – 3 kg
 - 120ct: 2 – 2.5 kg
 - 300 kg: 2.5 – 6 kg
- **Imported (Bins): 5 – 7 kg**

Other melon varieties typically use counts based on diameter or weight ranges, also with a $\pm 5\%$ tolerance.

3.3 Shelf Life and Transport

All melons, including watermelons, require a minimum shelf life of 5 days upon arrival at the distribution center or store. Packaging must be food-grade and adhere to Foodstuffs North Island Produce Packaging Guidelines. Transport must use refrigerated vans with airbag suspension (unless otherwise approved).

3.4 Certifications

Growers and suppliers must meet standards such as NZGAP or GLOBALG.A.P, including any additional modules (e.g., GRASP). Organic watermelons require BioGro or equivalent certification.

- **HACCP:** A systematic approach to food safety, identifying and controlling potential hazards in production.
- **NZ GAP/Global GAP:** Voluntary standards ensuring food safety, sustainability, and environmental responsibility in production.

3.5 Volume

New Zealand buyers expect consistent supply volumes ranging from small orders of a few kilograms to large orders of several metric tons. Ensuring stable availability of watermelons and other melons is crucial.

3.6 Packaging and Labelling

All melons must be packaged in new food-grade materials or sanitized returnable crates, preventing bruising and moisture loss. Use strong, high-quality, moisture-resistant, and ventilated crates or bins that can withstand stacking and transport. This ensures melons reach stores in sale-ready condition without the need for repacking. Provide adequate cushioning to minimize bruising during handling and transit.

Labels must include:

- Product name and country of origin
- Count or weight
- Supplier and grower/packer's name
- Product grade
- SKU number (in large font)
- Delivery date

For pre-packaged items: include the grower's name, packed-on date, and best-before or use-by date (batch code is optional). Pallets must be stabilised and stacked to Ti Hi specifications.

Storage: On arrival, watermelons should be kept at 12–20 °C, while other melons (e.g., honeydew, rockmelon) often require cooler conditions. All deliveries must comply with Foodstuffs North Island Receiving and Carrier Guidelines (covering pallet size, stacking standards, and crate labelling).

3.7 Transport Recommendations and Precautions

Importing fresh melons from the Pacific to New Zealand requires careful temperature management and logistical planning. Maintain recommended storage temperatures (e.g., 12–20 °C for watermelons), and use refrigerated transport with proper airbag suspension to minimize shock and spoilage. Comply with all biosecurity regulations and guidelines.

3.8 Mixed-Loaded Consignments

When shipping melons alongside other products, ensure the correct documentation, loading, and transport conditions to prevent cross-contamination or damage.

4. Types Buyers/Distributors

Fresh Wholesalers:

Turners & Growers (T&G Global), MG Marketing, and Fresh Direct are key wholesalers of fresh watermelons and melons in New Zealand. These companies supply supermarkets, food service providers, and independent retailers nationwide.

Processed Food Industry:

Although watermelon is mainly sold fresh, it does appear in small but innovative processed forms. For instance, Barker's of Geraldine occasionally experiments with fruit-based condiments, while smaller boutique producers have introduced pickled or fermented watermelon products. This highlights the potential for watermelons and other melons to be adapted into relishes, sauces, or specialty condiments.



Specialty Shops and Independent Retailers:

Stores such as Mediterranean Foods and Huckleberry stock an array of gourmet or organic produce, which may include specialty melons and related niche items. These offerings cater to consumers seeking premium quality, unique flavour profiles, and health-conscious options.

5. Key Success Factors



Acknowledgments

We would like to extend our sincere appreciation to the representatives of T&G and MG Marketing Ltd for generously sharing their valuable insights on the New Zealand market. Their contributions were instrumental in the preparation of this report.