



TAKING NEW ZEALAND PET FOOD EXPORTS TO A BILLION

Attracting the investment needed to create a step change in pet food exports

FINAL REPORT

July 2021

v1.0c

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GENERAL

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STEERING & GUIDANCE

This project would not have been possible without the strong guidance of our Steering Committee. In particular, we would like to thank Andrew McCallum of MBIE for his tireless energy in keeping this project on track, while at the same time pushing us forward.

We are grateful for all of the input we have received, but the report is ours and any errors are our own.

Finally, we acknowledge the support of the Ministry of Business, Innovation and Employment (MBIE), New Zealand Trade and Enterprise (NZTE) and the Ministry for Primary Industries (MPI). It is their funding that has made this report

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All cross-country international trade data analysed in this report is calculated and displayed in US\$. This is done for a range of

- It is the currency most used in international trade
- It allows for cross country comparisons (e.g. vs. Denmark)
- It removes the impact of NZD exchange rate
- It is more comprehensible to non-NZ audiences (e.g. foreign investors)
- It is the currency in which the United Nations collects and tabulates global trade data

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If at any point you are unclear where a number came from or how a conclusion was derived, please contact the authors directly. We are always happy to discuss our work with interested parties.

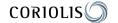
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EXECUTIVE SUMMARY

This report "Taking New Zealand Pet Food Exports to a Billion" was commissioned by MBIE as part of the Food and Beverage Information Project. pet food was identified as a growth sector in previous "Emerging Growth Opportunities" research and also emerged from a multi-stage screen designed to identify products New Zealand could send to Britain post-Brexit.

This report is part of a wider suite of work profiling and supporting the New Zealand food and beverage industry. This report is the latest in a series of reports supporting investment into growth sectors of the New Zealand food and beverage industry. Other sectors profiled have included honey, salmon, chocolate, cherries, alcoholic spirits, blueberries, non-alcoholic beverages and ice cream.

WHY PET FOOD? GLOBAL DEMAND

Dog and cat numbers are growing consistently in developed countries, with animal numbers growing at around 1-2% per year. At the same time, pet numbers have skyrocketed in China, showing a 13% CAGR over the past five years. China (188m) now has more dogs and cats than the United States (163m).

Demand for pet food is growing globally. The increasing number of pet-owners are treating their pets as part of the family, demanding better quality and spending more on their companions. This "pet

humanisation" trend has been growing for a while, but has been supercharged by the events surrounding COVID. Pet owners spent lockdown in close contact with their animals for extended periods of time, building stronger bonds.

Key markets for pet food are richer
Western markets with high pet penetration
and numbers, in particular USA, Australia
and Western Europe. But strong growth is
occurring in key Asian markets —
particularly China - driven by growing
ownership.

Historically grain based dry foods have dominated the pet food market, as they were seen as (1) more convenient, (2) cheaper to produce and (3) logistically easier. Large multinational corporations such as Nestle and Mars take the lion share of this market. Their large factories are located close to major markets (USA, Europe) or in developing countries, such as Thailand.

However, there is a clear shift to premium pet food underway in the market. Global interest in premium pet food is growing as shown by consumer interest and sales growth. At the same time, growing pet health issues such as obesity, intestinal issues, joints and mobility have put the spotlight on pet food, with many consumers seeking healthy, natural products.

Retail pet food can be split into three

broad segments: dog food, cat food and other smaller pets (birds, small mammals and reptiles). This research focuses on retail dog and cat foods.

Both dog and cat food are large segments that are predicted to continue growing. Dog food was a US\$54b category globally in 2020, growing at 4% CAGR, projected to reach \$80b by 2030. Cat food was a US\$34b category globally in 2020, growing at 4.3% CAGR, projected to reach \$50b by 2030.

Growing demand has driven growing global cross-border trade in pet food and ingredients. Global cross-border trade in pet food has shown a 7% CAGR across the last twenty years. Global cross-border trade in pet food and ingredients is being drawn in primarily by rich, developed, western countries (Europe, North America and Australasia). However, China and other East and South East Asian countries have shown strong growth in demand for imported pet food.

NEW ZEALAND

New Zealand's comparative advantage in meat and protein is driving growth in its pet food industry, particularly due to the availability and reliability of meat based ingredients (in particular lamb and beef) and innovation around retail ready products.

New Zealand's success in pet food has three key drivers: (1) low meat production costs, (2) efficient people and systems and (3) a location close to the growth markets of Asia. New Zealand has a strong position in the global meat industry that is translating into growing pet food exports.

On land, New Zealand meat production is stable long term, with beef and chicken arowing and lamb stable-to-down. New Zealand – the size of Japan with the population of Singapore – produces a significant meat surplus for export (particularly beef and sheep). Turning to the sea, wild capture seafood volumes are stable-to-declining long term, while aquaculture production is achieving modest growth. New Zealand pet food firms are also leveraging a wide range of ingredients beyond meat and seafood, such as manuka honey, kelp, blueberries and flaxseed oils. Manuka honey in particular stands out as a potential "standout" ingredient, with proven global awareness.

The New Zealand pet food industry has been a long term growth story. Firms numbers have grown from 36 in 1955 to 139 in 2020. Growth in the New Zealand pet food industry is coming from new entrants; average scale per unit is relatively flat. The industry is spread across the country, with long term growth occurring across most regions.

EXECUTIVE SUMMARY

New Zealand produces four broad types of retail pet food products: (1) dry kibble/biscuit, (2) wet canned/roll, (3) dehydrated/freeze-dried and (4) supplements/treats. In particular, New Zealand pioneered the use of freeze-drying for pet foods and this has been a standout area for export growth.

New Zealand firms are succeeding in pet food through "on trend" innovation against slow moving multinationals. Four global consumer mega-trends are driving growth and new product development in both pet food and the wider food & beverage industry.

First, New Zealand pet food firms are ontrend by making things easy and convenient for customers.

Second, New Zealand pet food firms are on-trend for lifestyle and wellness by pushing grain-free as well as high meat and "free from" products.

Third, New Zealand firms are on trend for being authentic and responsible by playing directly on historic "Brand New Zealand" hallmarks and even driving for named regional NZ ingredients. At the same time, New Zealand firms are calling out sustainable production systems.

Finally, New Zealand pet food manufacturers are on-trend for producing rich, sensory and indulgent products, particularly in the treats space.

Growth in the New Zealand retail pet food industry is being driven by exports. New Zealand export growth is coming from retail pet food; key meat-based pet food ingredients have plateaued since 2008. New Zealand exports pet food to a wide range of countries and regions.

China (34%), Australia (27%) and the US (18%) currently account for most (80%) of New Zealand's retail dog/cat pet food exports. Australia, the United States and now China have been the engines of growth for pet food exports.

The pet food industry needs to maintain and grow the Australian market, while developing opportunities in high value Asian and Western markets.

First, there are continued opportunities for growth in the regional markets of Australia and the Pacific Islands. Australian retail dog/cat pet food imports have growing volumes across growing prices leading to growing value. Thailand, Europe and the US are winning in Australia, while New Zealand is relatively flat.

Second, there are further opportunities for growth into Asian markets. Chinese retail dog/cat pet food imports have exploded in the last five years, with growing volumes, growing prices and growing value.

Finally, there are opportunities for growth across the developed Anglo-European markets, particularly the UK with Brexit.

British retail dog/cat pet food imports have growing volumes and growing prices, leading to growing overall import value. In addition, American retail dog/cat pet food imports have growing volumes, growing prices, and growing overall import value.

A wide range of countries suggest that New Zealand could export significantly more retail dog/cat pet food. For example, France exports nine times as much pet food as New Zealand by value. Pet food accounts for only about 6% of total meat and seafood exports.

Significant investment in new capacity is being made by export focused retailready manufacturers and New Zealand pet food firms are expanding their range.

New Zealand pet food firms are well positioned for continued success with premium pet food. This project proposes the following strategic vision for the industry: "Building on existing strengths in ingredient meat, New Zealand creates a differentiated position in premium pet food with unique New Zealand characteristics, targeting the premium end of the market leading to a billion dollar industry focused on exports."

To deliver on this vision, New Zealand pet food firms need to: (1) Double-down and focus on winning where New Zealand is strong; (2) Build go-to-market execution capabilities; (3) Keep running hard and fast to stay ahead of the big guys; and (4) Fish where the fish are; focus on the US, UK, and Europe, while having a solid China strategy.

At a higher level, our recommendation is that the "NZ Inc" national strategy should be to concentrate on retail-ready pet food. In terms of "size of the prize", converting some pet ingredient exports to retail would add a minimum US\$1b in export value. To achieve this, at a national level, New Zealand needs to maintain raw materials exports and limit reinvestment. while focusing on the fast growing premium segment that plays to New Zealand's strengths. In particular, resources need to be focused on staying ahead and leading trends, intensifying R&D leading to product innovation and focusing on New Zealand's unique and defensible ingredients.

In terms of "size of the prize", converting some pet ingredient exports to retail would add a minimum US\$1b in export value. Were this scenario to come true, New Zealand would still only represent 1% of the world retail cat/dog food market with a low risk of value dilution.

DOCUMENT STRUCTURE

INTRO Context & Strategy & The World New Key Conclusions of Pet Food Zealand Markets Investment Pages 13-19 Pages 20-28 Pages 29-50 Pages 51-67 Pages 4-12 - Situation - Strategic direction - Drivers of growth - Production - Market Strategy - Objective - Delivering product - Global situation - Supply chain - Growth - Key Firms Profiled innovation - Wider Project - Key markets - Regional activity - Market Mix - Expanding market penetration - Methodology - Key competitors - Operations - Market Share - Developing new - Drivers of Success - Megatrends - Opportunities channels - SWOT - Reducing supply chain costs - Supply Chain

06 Appendices

05

Pages 68+

- Firm Activity

Firm Activity & Profiles

Why did the New Zealand government undertake the Food and Beverage Information Project?

WHAT IS THE PURPOSE OF THE FOOD AND BEVERAGE INFORMATION PROJECT?

The project pulls together the available information on the food and beverage industry into one place, in a form which is familiar and useful to business. The reports contain analysis and interpretation of trends and opportunities to materially assist with business strategy and government policy.

The information will be of vital use to businesses, investors, government, and research institutions as the industry expands and diversifies. This industry view will be very useful to government, enabling better dialogue and the opportunity to address issues collectively.

WHAT BENEFIT WILL THIS BRING TO BUSINESSES?

The Project will have many uses for businesses. These include:

- As a base of market intelligence to enable business to be much more targeted in their own market research
- Reviewing and informing offshore market development (including export and investment) strategies
- Assisting in identifying areas of innovation and R&D for the future
- Identifying strategic partners and collaborators

- Enabling a company to benchmark performance with that of its competitors
- Monitoring industry activity
- Gaining a better understanding of their own industry sector
- Identifying internal capability needs or external inputs

HOW WILL GOVERNMENT USE THE REPORTS?

This information will provide much greater insight into the industry, which is useful for a range of policy developments, from regulatory frameworks to investment in science and skills and facilitating access to international markets. In particular, a single source of factual information will enable government agencies to better coordinate their efforts across the system and be more responsive to addressing industry issues. The government can now understand what's what, and also, who's who.

This report is part of a wider suite of work profiling and supporting the New Zealand food and beverage industry

BIG PICTURE



UNDERSTANDING KEY SECTORS













FINDING GROWTH





This report is the latest in a series of reports delivering investment into growth sectors of the New Zealand food and beverage industry

2011-12 2013-14 2017-18 2019-20 2020-21















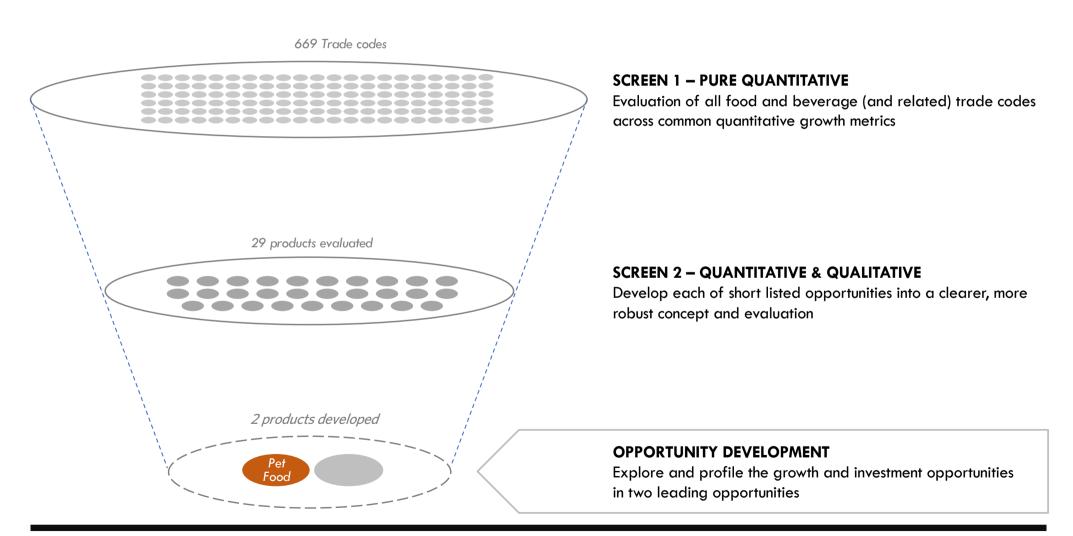






These four reports alone have supported over half a billion of investment in New Zealand WE ARE HERE

Pet Food emerged from a multi-stage screen designed to identify products New Zealand could send to Britain in a post-Brexit environment



New Zealand's success in pet food has three key drivers



GREAT PLACE TO PRODUCE FOOD

Low production cost

- Temperate climate similar to Italy and France
- Temperature extremes moderated by surrounding ocean
- Isolated location protected by natural barriers
- Significant surplus of raw material ingredients



EFFICIENT PEOPLE & SYSTEMS

Trusted by consumers

- High productivity farmers and farming systems
- Long history of meat processing
- Strong focus on food safety across meat industry and wider food industry
- Pool of skilled factory operators and managers
- Strong systems and support networks
- Advanced capabilities in processing systems



LOCATION CLOSE TO GROWTH MARKETS

Well positioned for success

- Free trade agreement with Australia (CER*)
- Close proximity to Australia and Asia
- Excellent market access across Asia
- NZ was the first developed country to sign a free trade deal with China (2008)

New Zealand has a strong position in the global meat industry that is translating into growing pet food exports

STRENGTHS	WEAKNESSES
- Natural environment favourable to pastoral agriculture	- Not a major grain/pulse producer
- Low cost, grass fed beef and sheep production systems	 Limited in-market knowledge, few firms close to customer/consumer, especially in growth markets of Asia
 Strong biosecurity rules and systems leading to low presence of key diseases One of few countries able to export blood products to Asia, North America and Europe Market access to China driving private label manufacturing from domestic and overseas High standards of food safety and animal welfare International recognition of high quality New Zealand meat industry regulations 135+ years experience exporting meat long distances Strong position in global lamb trade in counter-seasonal window to Northern Hemisphere Successful dairy industry generating large numbers of surplus stock NZ reputation for quality products and trusted supplier 	 Lack of in-market co-ordination Inefficient use of meat plants (declining stock numbers) and inefficient procurement of stock (competitive, not coordinated) Labour shortages both on farm and in processing Animal welfare issues around dairy calves Domestic and imported grain prices higher than competitors, which restricts competitiveness of pork, poultry, and other feed-dependent production systems such as dry pet food High cost of inputs and production costs vs competitor countries Increasing pressure on price of animal inputs (likely to rise further when new planned capacity comes online)
OPPORTUNITIES	ISSUES/THREATS/RISKS
- Further negotiation of high quality Free Trade Agreements with key markets (UK, USA)	- Continued conversion of beef and sheep land into dairy and trees
- Scientific research showing superior health properties of free-range, grass-fed animals	- Continued decline in consumption of lamb in developed markets
- Genomics research to optimise output quality, animal productivity, growth rates etc.	- On-going move from pet food ingredient to human consumption ingredients for export
 Genomics research to optimise output quality, animal productivity, growth rates etc. High and growing levels of foodservice penetration across most key markets 	 On-going move from pet food ingredient to human consumption ingredients for export Disease outbreak affecting stock numbers and or trade access
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 High and growing levels of foodservice penetration across most key markets Ability to extend shelf life of chilled product (extend season window) 	 Disease outbreak affecting stock numbers and or trade access ETS, climate change legislation affecting cost of business and stock numbers
 High and growing levels of foodservice penetration across most key markets Ability to extend shelf life of chilled product (extend season window) Divert low value exports to high value retail pet food 	 Disease outbreak affecting stock numbers and or trade access ETS, climate change legislation affecting cost of business and stock numbers Increasing pork imports threatening the viability of New Zealand pork industry

Strategy & Investment Themes

- + Strategic direction
- + Delivering product innovation
- + Expanding market penetration
- + Developing new channels
- + Reducing supply chain costs

01

New Zealand pet food firms are well positioned for continued success with premium pet food

STRATEGIC VISION

Building on existing strengths in ingredient meat, New Zealand creates a differentiated position in premium pet food with unique New Zealand characteristics, targeting the premium end of the market leading to a billion dollar industry focused on exports

Double-down and focus on winning where New Zealand is strong

- Grain-free (NZ not a major grain producer)
- High meat (NZ has huge meat surplus)
- Unique ingredients (King salmon, brushtail possum, green lipped mussels, lamb, venison, manuka honey)
- Raw (NZ has strong food safety and lacks many diseases)
- "Complete and balanced" and "prey diet" (NZ has strengths across a range of proteins)
- Supplements to support pet health

Build go-tomarket execution capabilities

- Increase production capabilities to drive higher throughput at lower costs (e.g. freeze drying)
- Invest in processing production to keep ahead of demand
- Improve sales and marketing capabilities deeper into key markets (e.g. USA, China)
- Drive down logistics costs through pre-competitive/pre-market collaboration

Keep running hard and fast to stay ahead of the big guys

- Win through rapid new product launch
- Move and change faster than slow moving multinational competitors
- Continue to bring innovation and new thinking to the pet food industry
- Leverage strong New Zealand capabilities in meat science

Fish where the fish are; focus on the US, UK, and Europe, while having a solid China strategy

- Initially the Anglo-Saxon Five: Australia, United Kingdom, Ireland, Canada, United States
- Understand and address underperformance in Europe
- Focused, targeted and profitable China strategy; avoid overexposure

New Zealand firms are succeeding in pet food through "on trend" innovation against slow moving multinationals

HISTORICAL GLOBAL LEADERS EMERGING NEW ZEALAND LEADERS Unique, signature Using air/freeze Fast moving NZ ingredients drying for pet Grain based Highly processed (e.g. King salmon, startups food brushtail) Adding NZ Pushing "complete Premium, high nutraceuticals & balanced" and Slower moving **Multinationals** meat formulations (e.a. green-lipped "prey diet" mussel, manuka honey) Grass-fed, free-Online and Lamb as a **Traditional** Cheap, lowest cost headline alternative range and sales channels formulations ingredient sustainable channels

On-trend
Changing the rules of the game
Embracing the "humanisation" of animals
Playing to New Zealand's strengths

Playing catch-up
The same old playbook
Struggling in a changing world
Not embracing New Zealand's strengths

At a higher level, our recommendation is that the "NZ Inc" national strategy should be to concentrate on retail-ready pet food

FOCUS ON FAST GROWING PREMIUM & PLAY TO OUR STRENGTHS

1

DO NOT REINVEST IN RAW MATERIALS EXPORTS

2

STAY AHEAD AND LEAD TRENDS 3

INTENSIFY R&D LEADING TO PRODUCT INNOVATION 4

FOCUS ON UNIQUE & DEFENSIBLE INGREDIENTS

- Relatively low value per kg
- NZ "export competitive" meat volumes flat at best
- Export sales not growing for 12+ years
- Target converting as much as possible to high value retail ready products
- Double down on "paleo diet for dogs: "complete and balanced", "prey diet", "raw"
- Plays to NZ high meat/low grain situation
- Need to continue to move quickly and adapt rapidly
- Ensure we are not marketing to China as if it was a "state of America"
- Double down on sustainable and planet-friendly

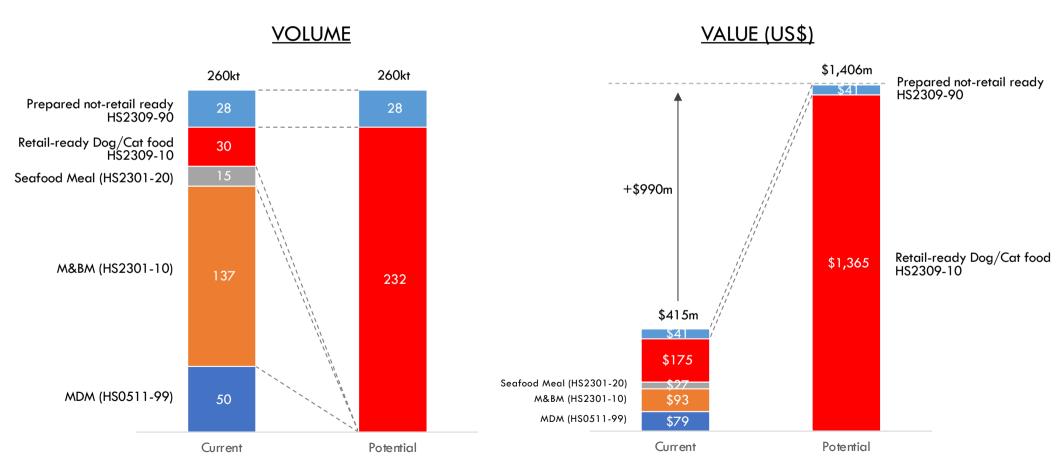
- A significant part of the success of the last decade is a result of NZ global leadership in air-drying (Ziwi) and freeze drying (e.g. Cuddon Engineering, FDF, Waikato Biosciences)
- Need to maintain leadership and explore new technologies
- Pet Nutrition uses HPP* to produce "raw freeze-dried pet food" meeting Global Standards for Raw Petfood standards"

- NZ cannot win in chicken, pork (except for free-range) or wheat, but can win elsewhere
- New Zealand has a strong set of ingredients either unavailable elsewhere or where NZ dominates global supply
- Embrace strong synergies between unique ingredients and "Brand New Zealand"

In terms of "size of the prize", converting some pet ingredient exports to retail would add a minimum US\$1b in export value

MODEL: WHAT IS THE VALUE OF CONVERTING ALL

MEAT & MEALS EXPORT VOLUME TO RETAIL READY *?

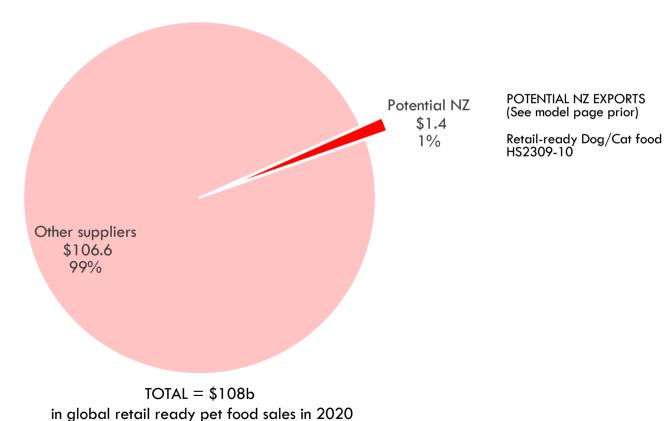


^{*} Offal, veges, etc. will add more value in finished volume; MDM = Mechanically Deboned Meat; M&BM = Meat and Bone Meal; Source: UN Comtrade; Coriolis classification and analysis

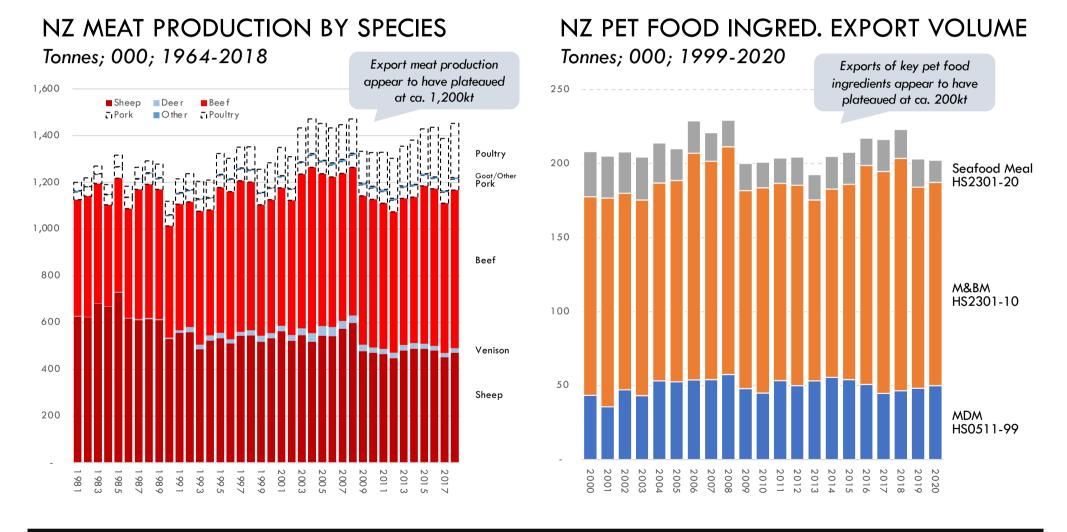
Were this scenario to come true, New Zealand would still only represent 1% of the world retail cat/dog food market with a low risk of value dilution

MODEL: NZ SHARE OF GLOBAL RETAIL-READY PET FOOD UNDER SCENARIO

US\$; b; 2020 vs. model (presented earlier)



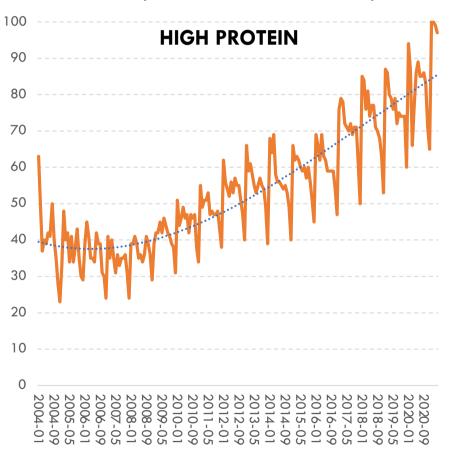
1. Maintain raw materials exports but do not reinvest

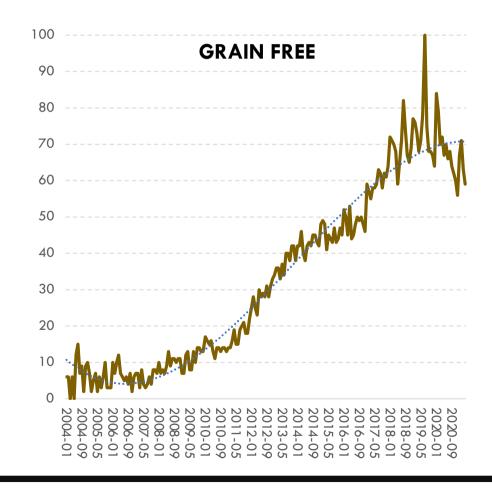


2. Stay ahead and lead trends

RELATIVE INDEX OF GOOGLE WORLDWIDE TREND SEARCH INTEREST

Peak interest in period=100; Jan 2004-April 2021





3. Intensify R&D leading to product innovation

EXAMPLE: FIRMS OFFERING CONTRACT MANUF. FOR PET FOODS WITH FREEZE DRYING



4. Focus on unique & defensible ingredients

		nz defensible Or unique	NZ MAJOR PRODUCER	NZ MINOR PRODUCER (BIOSECURITY LIMITS FRESH IMPORTS)	GLOBAL INGREDIENT NO POINT OF DIFFERENCE
	HIGH	Lamb King Salmon NZ Green lipped Mussel Manuka Honey	Beef Hoki	Chicken Eggs (fresh)	
Relative Importance (% of volume)	MEDIUM	Venison	Flaxseed Flakes Flaxseed Oil Hoki Oil	Dried Kelp Brown Kelp	Sunflower Oil Salt Fish Oil
	LOW	Goat Wallaby Possum Kawakawa Manuka honey (petcare) Other botanicals	Apples Pears	Broccoli (fresh) Pumpkin (fresh) Cauliflower (fresh) Cabbage (fresh)	Calcium Carbonate, Dipotassium Phosphate, Taurine, Vitamin E & D3, Magnesium Oxide Proteinate (Zinc, Copper, Manganese, Iron), Thiamine Mononitrate, Potassium Sulphate, Folic Acid, Selenium Yeast, Beta Carotene etc.

The World of Pet Food

- + Drivers of growth
- + Global situation
- + Key markets
- + Key competitors

02

Why is pet food growing?

"The global pet food industry is expanding rapidly on account of the rising empathy towards pets which is leading to their increased adoption... The increasing rate of pet ownership worldwide, especially across the developing regions is anticipated to be one of the primary drivers of the market. The rising urbanization and pet humanization is encouraging the pet owners to opt for nutritious and quality food for their pets, which is further boosting the growth of the market. Rising per capita income of the consumer is motivating them to spend on healthy and organic food products for pet animals to aid their health."

"Globally, pet humanization has received a lot of attention in mainstream media over the recent past. The shift from pet ownership to pet parenting has been a very crucial and defining trend in the pet food market, more so in the developed countries... As a part of this pet humanization trend, nowadays, pets are considered a part of the family. The growing bond between pet owners and their pets shapes consumers' willingness to spend more on pet food."



"On account of rapid urbanization and increasing disposable incomes in [developing] regions, there has been a rise in dog ownership rates. This factor has provided an impetus to the growth of the market."



Mordor Intelligence

"Pet refinement/humanization influencing the purchasing decisions, changing consumers' perception towards pet health, changing demographics, and increasing product differentiation are the key drivers for the market growth. Over the years' pet owners have shown a growing trend to imbue their pets with human characteristics and have become more concerned about their pet's health and safety. A survey conducted by the American Veterinary Medical Association found that expenditure towards veterinary care and pet health care has seen a 40% rise in recent years. This is due to the growing human-animal bond, which defines consumers' willingness to spend for their pets."





There is a shift to premium pet food underway in the market

"Pet owners are becoming more aware of the dietary requirements of their dogs, owing to which the demand for better quality dog food products has escalated. In addition, numerous cases of diabetes, high blood pressure and arthritis have been reported in dogs across the globe. As a result, veterinarians have started recommending low-calorie dog food to the owners, thereby prompting manufacturers to expand their product offerings."

"The global dog food market is currently being driven by increasing awareness among dog owners about the need to feed their pet with quality nutritional food and concern for the health of their pets. Increasing consumer awareness of natural and organic pet food products has forced manufacturers to shift their focus from synthetic products to natural products, which has been one of the major forces affecting the global dog food market."



"Due to the rising pet humanization trend worldwide, there is a growing interest of pet owners over their pet health and nutrition, which in turn is expected to boost the sales of organic, premium, and custom-made products... Consumers are now becoming aware of their pet's health and are buying pet food rich in nutritional value for the betterment of their beloved pets.

Nowadays, pet owners are not just looking for basic food products but also for pet consumables that are... natural or have specific health benefits..."



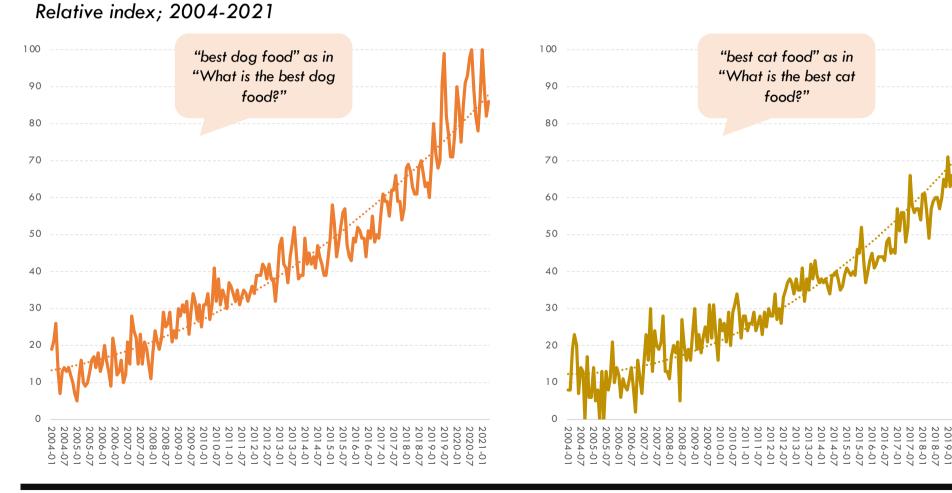
"Premiumized and natural pet food is becoming increasingly popular as they are mainly formulated by using high quality and natural ingredients and are also free from preservative ingredients. The demand for pet food with proactive and functional ingredients is on the rise as they offer several health benefits."





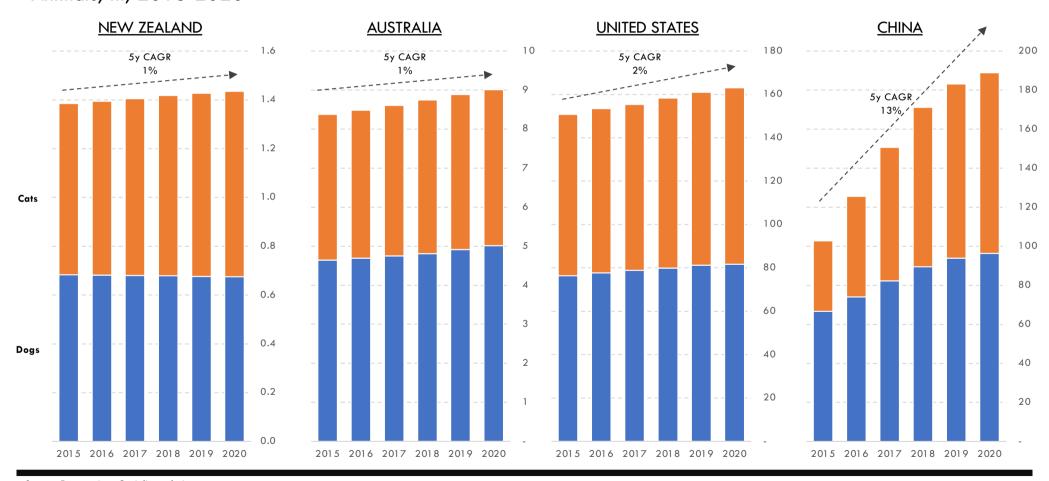
Global interest in premium pet food ("the best") is growing

17Y WORLDWIDE GOOGLE TRENDS SEARCH INTEREST INDEX OVER TIME*



Dog and cat numbers are growing consistently in developed countries and skyrocketing in China

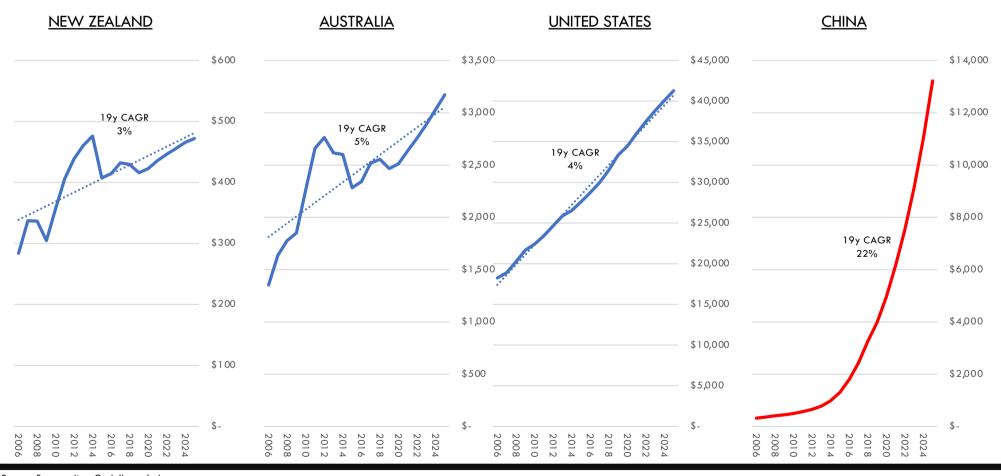
NUMBER OF DOGS & CATS AS PETS IN HOUSEHOLDS: SELECT COUNTRIES Animals; m; 2015-2020



Source: Euromonitor; Coriolis analysis

Total spending on dogs and cats continues to grow, particularly in China

DOG & CAT FOOD MARKET VALUE: SELECT COUNTRIES US\$; m; 2006-2025f



China – in particular – has a rapidly growing pet food market

"The growth in the middle-class section, rapidly growing urbanization, growing numbers of elderly, and people getting married and having children later than before are factors transforming China into a pet-owning and loving society.

Pet humanization is on the rise in China, owing to the changes in people's lifestyles. The increasing pet ownership among younger generations, in particular, is influenced by social media and the adoption of the western lifestyle."

"Chinese Millennials are the driving force behind this booming market...

[Y]oung Millennials under 30 accounted for 45.2% of total pet owners in China in 2019... Different from their older-generation counterparts who seek simple companionship, Millennials consider themselves caring parents to their pets. In fact, this emerging young segment sees animal welfare as a top priority.. Not only do these "young parents" devote a significant amount of time to their pets, they are also willing to spend money on products to ensure that they are well fed and healthy."



"Firstly, there is a new change in the concept of keeping pets. Indeed, with the increasing disposable income, city residents are more likely to spend money on their pets. Secondly, more pet owners have to work so that they don't have time to take care of their pets and cook for them as was usual in China's customs. Pet food is a very excellent choice for them because of the advantage of convenience and safety. Thirdly, the increasingly intense market competition makes the price of pet food more affordable. Last but not the least, Government regulation of keeping pets has kind of relaxed. As a result, the number of families that have a pet has steadily increased."



"Nearly 90 percent of the dog and cat owners are women, and half have a bachelor's degree or above. The majority of Chinese pet owners belong to the post-1980 or post-1990 generations, who are now in their 20s or 30s...

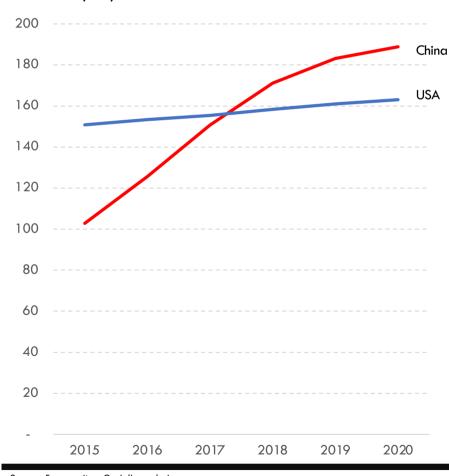
Nearly 60 percent of owners treat their pets as their kids... Many also say that pets are child, friend and family member all rolled into one."



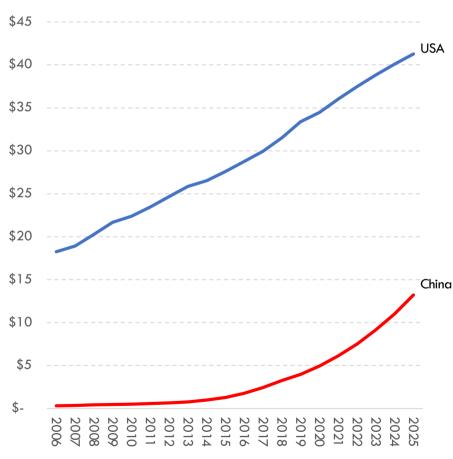


Comparing the United States with China suggests additional growth in China is likely





DOG & CAT FOOD MARKET VALUE US\$; b; 2006-2025f



Source: Euromonitor; Coriolis analysis

Retail pet food can be split into three broad segments

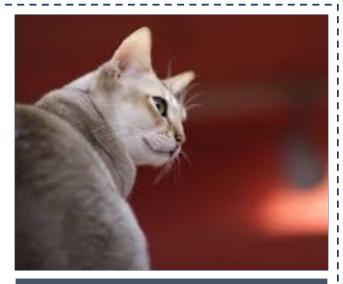
FOCUS OF THIS RESEARCH



DOG FOOD

Range of sizes

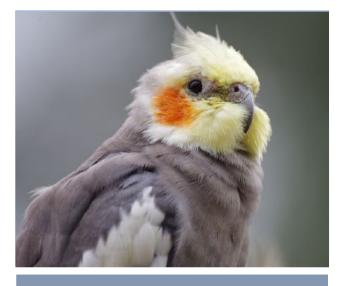
- Wide range of animal sizes
- Food needs vary dramatically by breed and lifestyle (apartment vs. working farm dog)
- Segmentation is typically by breed/size



CAT FOOD

Relatively constant size

- Narrow range of animal sizes
- Relatively uniform food needs
- Segmentation is typically life stage (e.g. kitten)



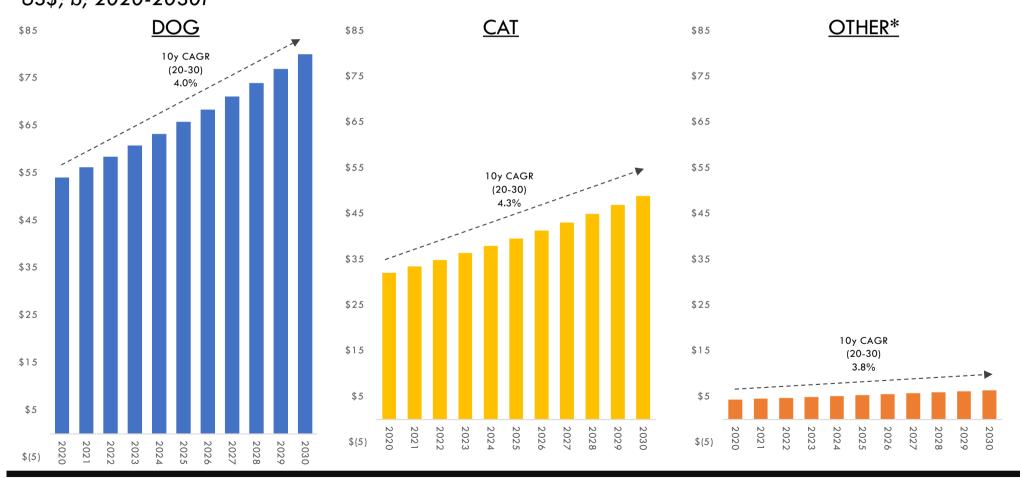
OTHER PET FOOD

Smaller pets Typically caged

- Primarily birds, small mammals and small reptiles; excludes horses and other livestock
- Small body size limits overall food needs or food consumption
- Segmentation is by species

Both dog and cat food are large segments that are predicted to continue growing

GLOBAL PET FOOD MARKET SIZE BY SEGMENT US\$; b; 2020-2030f

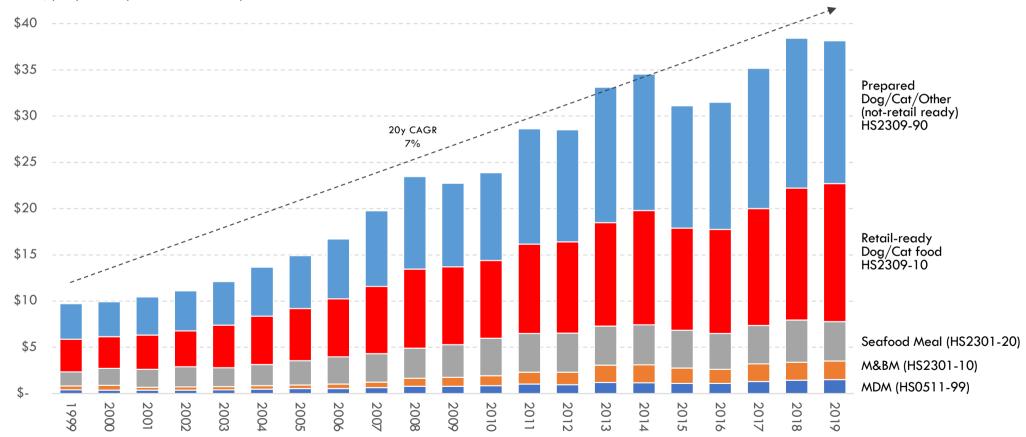


^{*} Primarily birds, small mammals and small reptiles; excludes horses and other livestock; Source: EMR; Mordor; iMarc; Coriolis analysis and estimates

Growing demand has driven growing global cross-border trade in pet food and ingredients

GLOBAL PET FOOD & KEY INGREDIENTS EXPORT VALUE BY PRODUCT

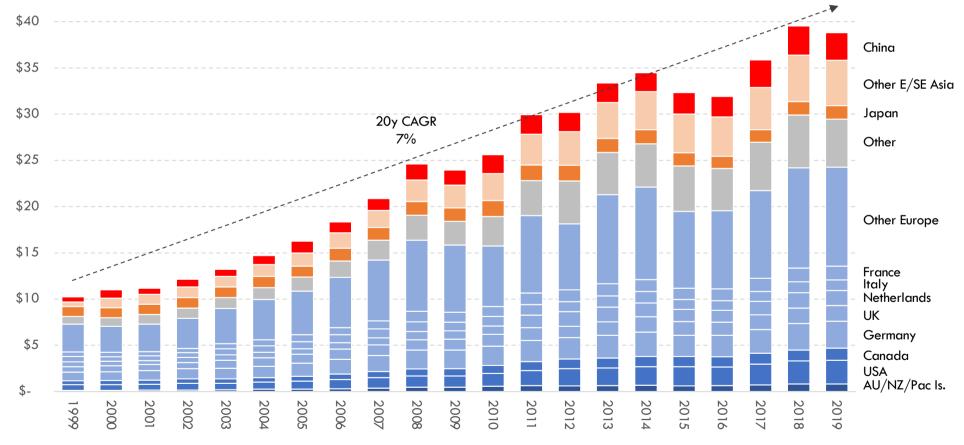
US\$; b; FOB; trade codes;1999-2019



Global cross-border trade in pet food and ingredients is being drawn in primarily by rich, developed, western countries

GLOBAL IMPORT VALUE BY RECEIVING COUNTRY/REGION

US\$; b; CIF; 1999-2019



New Zealand Pet Food Industry

+ Production

+ Supply chain

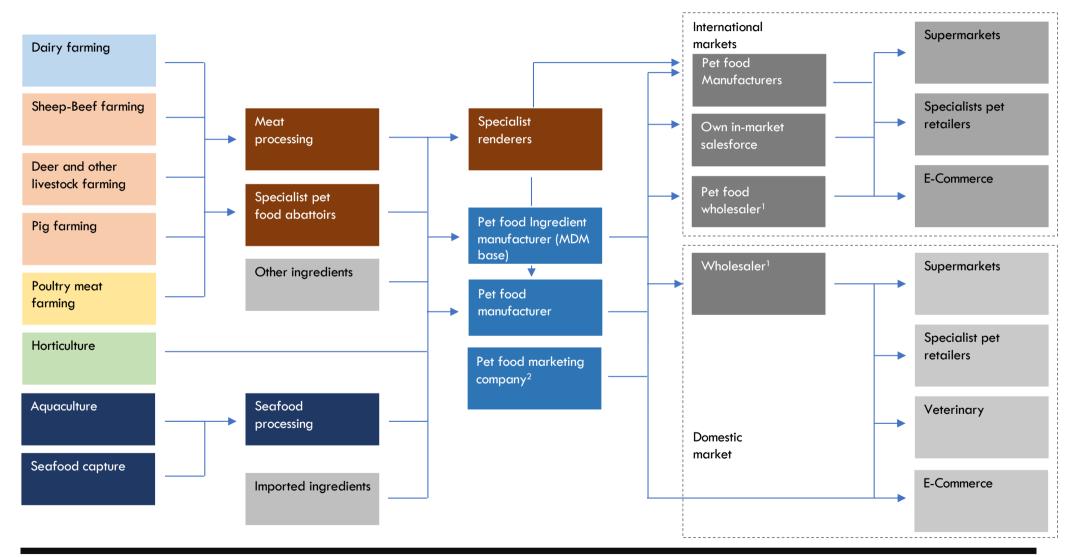
+ Regional activity

+ Operations

+ Megatrends

03

The New Zealand pet food industry has a relatively straight forward supply chain that delivers to consumers worldwide



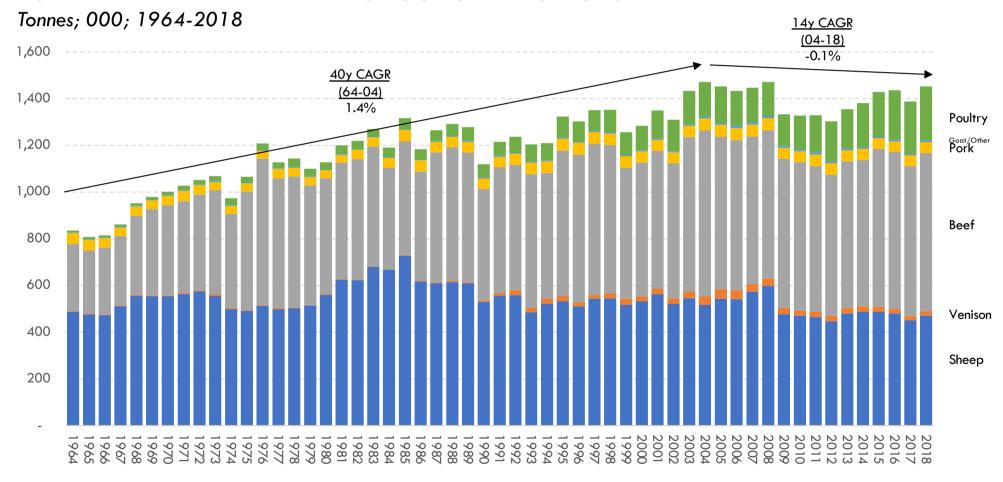
^{1.} There may be one or more layers of wholesaling, depending on product or market; some wholesale functions may be captive inside retailers or foodservice operators; 2. Brand and sales company using third party manufacturing and distribution; Source: Coriolis

A large number of firms participate across the pet food supply chain



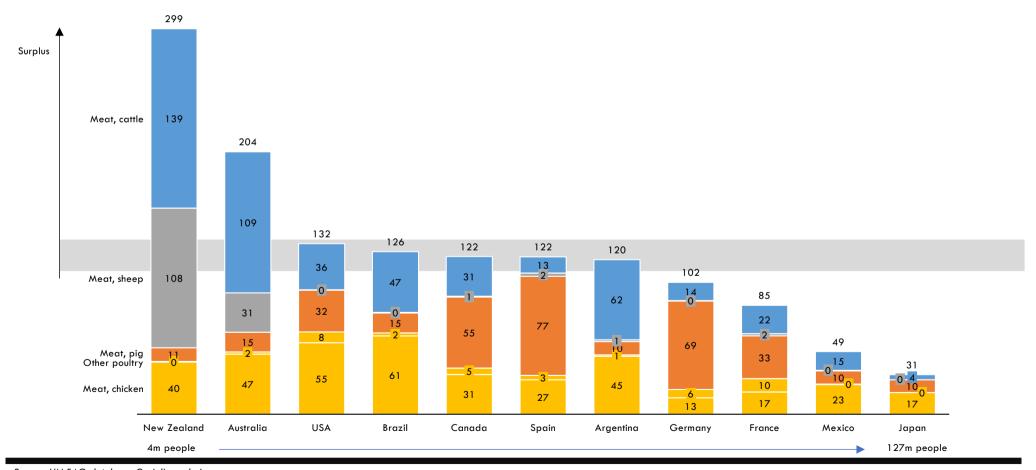
New Zealand meat production is stable long term, with beef and chicken growing and lamb stable-to-down

TOTAL NEW ZEALAD MEAT PRODUCTION BY SPECIES



New Zealand – the size of Japan with the population of Singapore – produces a significant meat surplus for export (particularly beef and sheep)

MEAT PRODUCTION PER PERSON (BEFORE TRADE): NZ VS. SELECT PEER GROUP Kilograms/person; 2014

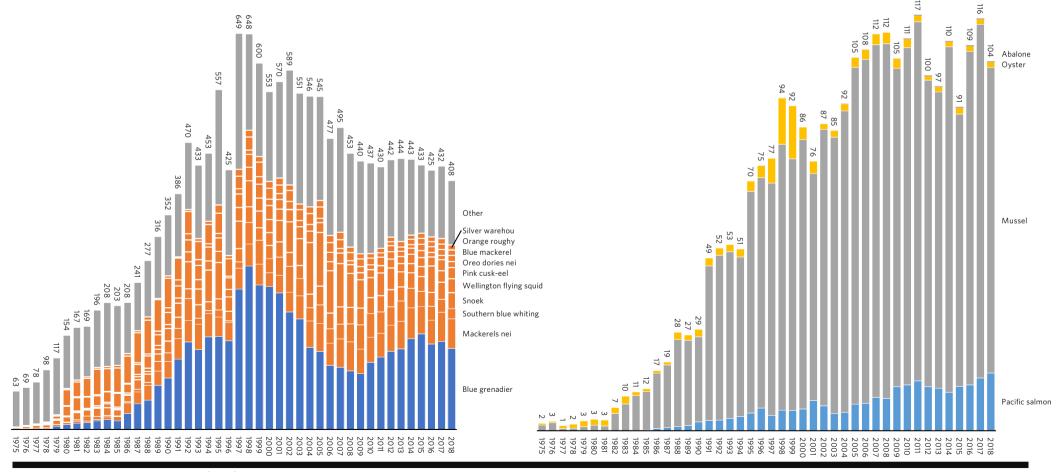


Source: UN FAO database; Coriolis analysis

SEA: New Zealand Wild capture seafood volumes are stable-to-declining long term, while aquaculture production is achieving modest growth depending on time frame

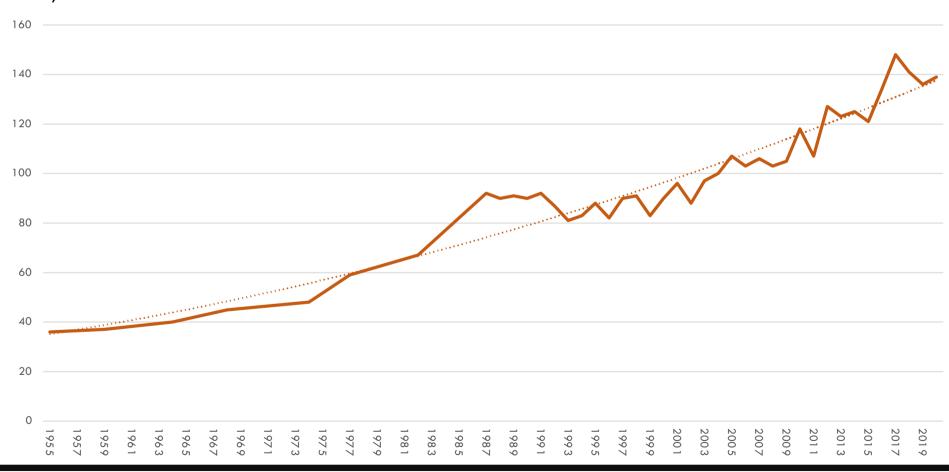
TOTAL WILD CAPTURE BY SPECIES/GROUP NZ; Tonnes; 000; 1975-2018

TOTAL AQUACULTURE PROD. BY SPECIES NZ; Tonnes; 000; 1975-2018



The New Zealand pet food industry has been a long term growth story

NUMBER OF PET FOOD/ANIMAL FEED MANUFACTURERS IN NEW ZEALAND Firms; 1955-2020



The number of firms entering the market significantly has increased over the last few years

	SELECT EXAMPLES —	
	<u> </u>	Gourmate Pet Treat Co
		Genius Pet Food
		Real Pet Food Company
		Dairy Nutraceuticals
		Tuakau Pet Foods
		Bark Bag
		Animal Instinct/Feed My Furbaby
		Arcadian New Zealand
		Best Mates Petfood Co
		BHJ New Zealand
	Azure Group	Brodie's Dogcare
	Newflands	Pet-Nutrients NZ
	Biophive	Pure Petfoods NZ
	Wilbur Ellis NZ	KiwiPetProducts
	Sunday Pets	Hungry Pet New Zealand
Natural Pet Food Group	•	New Origin NZ
Addiction Foods NZ	Otago Petfoods	Waikato Petfoods
	Earthz Pet	Olive's Kitchen
Merit Meats (Huntaway)	Forde's Petfood	The NZ Natural Pet Food Company
Fond Foods (2007)	NRG Plus	Animals Like Us
AC Petfoods (2007) Ltd	The Pet Brands Co	Bowls & Bowls
Milk Kitchen	GoodNozePet Cuisine	KC Pet
FourFlax	Pest Pro NZ (Out of the Wild)	King Country Pet Food NZ
Zealandia	Pet Nutrition New Zealand	Contract Freeze Dry NZ
Raw Pawz	Pasture Petfoods	The Raw Dog Food Company
000/ 0010	2011 2015	0017 0000
2006-2010	2011-2015	2016-2020

Increasing demand for pet food has seen traditional protein companies enter the market, adding additional value to by-product

MAJOR FIRMS INVESTING



- Progressive Meat Co-owned by group of meat companies (joint ownership)
- Formed Pasture Petfoods 2011
- Source protein from Co-owned meat companies and other large NZ firms
- Bespoke and integrated production services to pet food industry – export licenses to USA and China





- Alliance forms JV with Scales Corp 2019 and acquires 50% of Meator Foods pet food business for \$15m
- Provides direct access to attractive and growing global pet food market (plants in Whakatu and Dunedin)
- 100,000 MT sold each year
- Meateor Foods founded 1995
- Alliance founded 1948



- NZKS launch pet food range in FY16
- Source salmon from their Marlborough farms



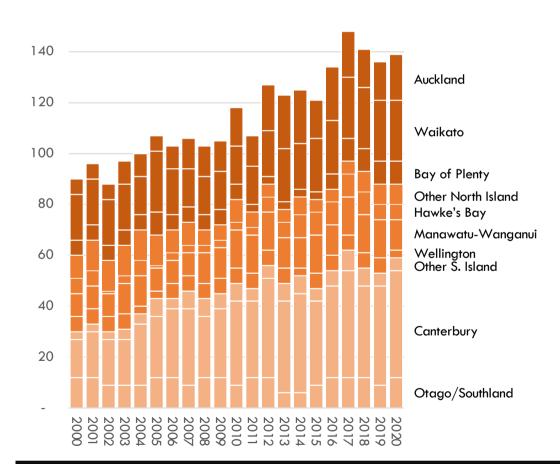


Firms participating in the New Zealand pet food manufacturing industry can be broadly segmented into five groups

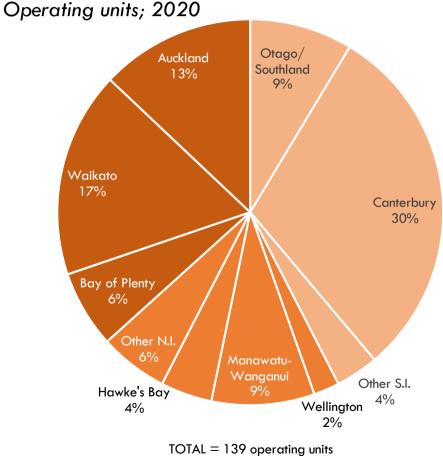


The industry is spread across the country, with long term growth occurring across most regions

OF PET FOOD MNFR. BY REGION Operating units; 2000-2020



OF PET FOOD MNFR. BY REGION

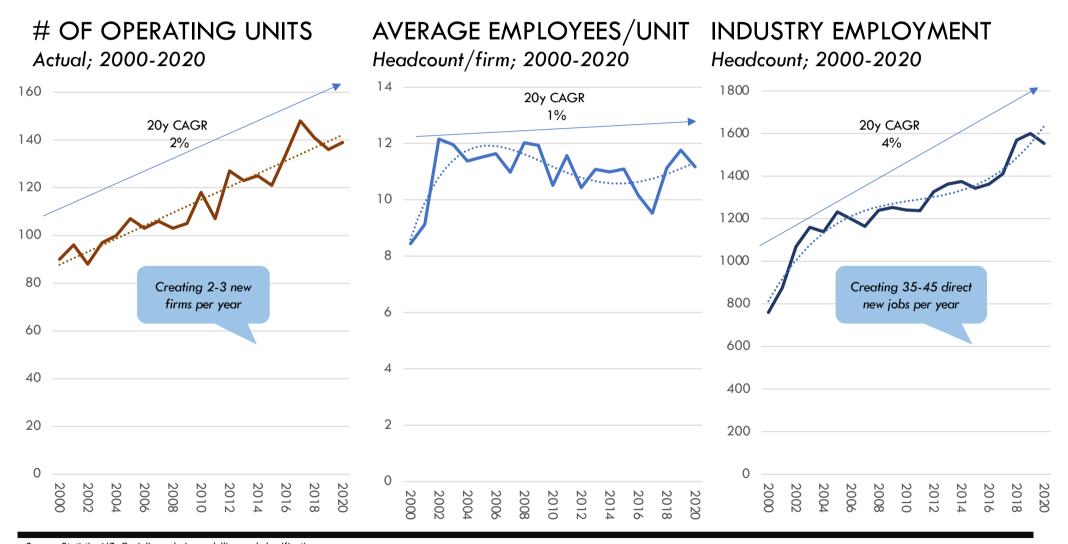


TOTAL = 139 operating units (aka. "front doors" or geographic units)

New Zealand's pet food companies are spread across the country



Growth in the New Zealand pet food industry is coming from new entrants; average scale per unit is relatively flat



New Zealand produces four broad types of retail pet food products



1. DRY KIBBLE/BISCUIT

Bulk bags of dry, shelf stable food

- Long New Zealand history in category (e.g. TUX)
- Segment traditionally high grain; new products focus on grain free
- Convenient for pet owners due to long shelf life and low/no smell



2. WET CANNED/ROLL

Roll or can of moist, ready-to-serve food

- Canned typically preferred by pets
- Canned traditionally the premium product; now displaced by new innovations
- Roll ("chub") product form/category pioneered by New Zealand



3. AIR-DRY/FREEZE-DRIED

Premium, high value pet food with water removed

- Freeze/air dried product form/category pioneered by New Zealand
- Builds on New Zealand freeze drying technology (e.g. Cuddons)
- Plays to New Zealand strengths in meats and weaknesses in grains
- Air-dried popular for treats



4. SUPPLEMENTS/TREATS

Wide range of additions to pet diet as a health measure or reward

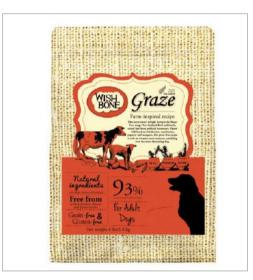
- High margin
- High innovation
- Leveraging New Zealand products
- Functional benefits
- Fewer rules and regulations on claims that for humans

1. DRY KIBBLE/BISCUIT New Zealand makes a range of dry kibble or biscuit pet foods (high meat content)















2. WET CANNED New Zealand makes a range of wet canned pet food...

















... and pioneered wet "rolls" and "pottle"-type pet food products...

















... and now has a number of emerging innovators in the meat block segment

















3. AIR-DRIED/FREEZE-DRIED New Zealand pioneered raw air-dried, and is significantly growing the use of freeze-drying for pet foods

















4. TREATS New Zealand makes a range of pet treats

















4. SUPPLEMENTS ... and supplements and boosters

















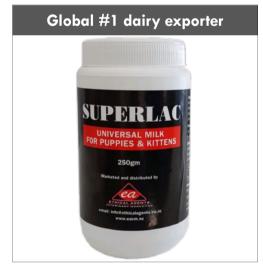
...including a number of products that leverage strong existing categories into pet versions









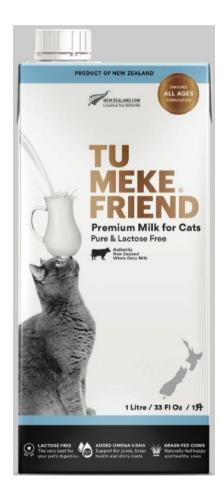








Firms are leveraging New Zealand's strong reputation in dairy by adding "New Zealand Milk" products to their range









Manuka honey in particular is a potential "standout" ingredient, with proven global awareness with multiple firms now using it





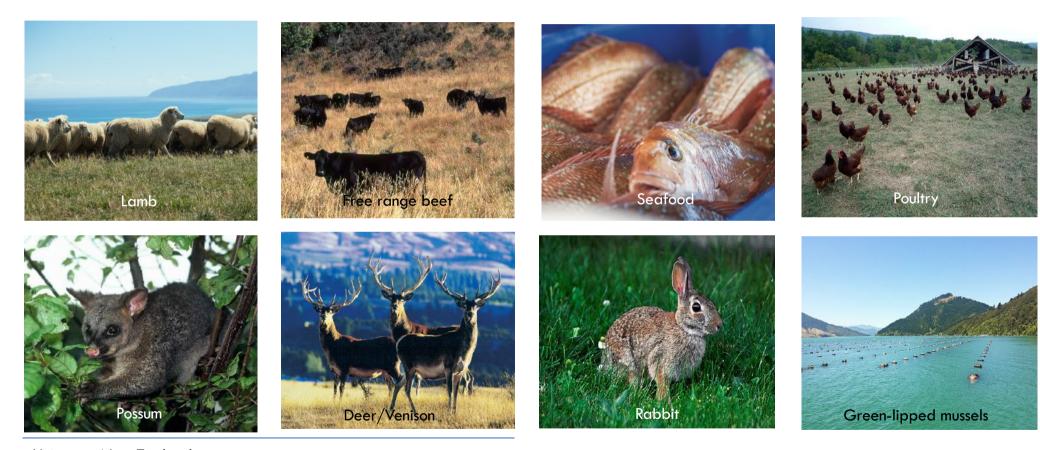


CORE INGREDIENT



INGREDIENT

New Zealand has an excellent range of sustainable meats and products available to pet food manufacturers – some are unique to New Zealand



Unique to New Zealand

New Zealand pet food firms are leveraging a wide range of ingredients beyond meat and seafood



Brushtail with ground bone, Lamb Green Tripe, Lamb Heart, Lamb Liver, Lamb Kidney, Kelp, New Zealand Green Mussel, Honey, Rosemary, Coconut Oil, Hoki Oil, Taurine, Choline Chloride, Zinc Amino Acid Complex, Iron Amino Acid Complex, Copper Amino Acid Complex, Vitamin B1 (Thiamine Mononitrate), Manganese Amino Acid Complex, Salt



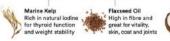
Lamb, Chicken, Fish, Lamb Liver, Lamb Heart,
Lamb Kidney, Dried Blueberries, Dried
Cranberries, Dried Papaya, Dried Kelp, Peas,
Tapioca, Potato, Flaxseed, Fish Oil, Turmeric,
Chamomile, Green Tea Extract, Rosemary
Extract, Spearmint Extract, Peppermint, Wild
Honey, Probiotics, Taurine, Brewers Dried Yeast,
Vitamins and Minerals and Natural Antioxidant.



NutraRich"

A Superfood Diet by Tu Meke Friend from New Zealand, Oceania

An enriched blend of NZ & Oceania superfoods. We add a unique blend of nutrients, antioxidants, vitamins, minerals to our premium food to assist with your pet's health and well-being.







Ovine Tripe Natural source of collagen, supports immunity and gut health

New Zealand pet food firms are leveraging New Zealand's position as a leading producer of deer



- No antibiotics, gluten, grain or added hormones
- 100% New Zealand venison
- Sustainably sourced















New Zealand firms are extending strengths in both unique-NZ ingredients and nutraceuticals to pet nutraceuticals and petcare products













PET-FLEX

Freeze-Dried Green Lipped Mussel, Bio-Active Deer Velvet, Calcium and Stag Blood. **SUPERFLEX**

Bio-Active **Deer Velvet** & Freeze-Dried Red
Ginseng

SUPERFLEX V

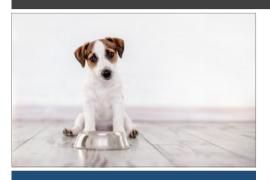
Bio-Active Deer Velvet, Freeze-Dried Green Lipped Mussel, Shark Cartilage & Red Ginseng SUPERFLEX VS

Formulated with processed Freeze-Dried Bio-Active Deer Velvet, Freeze-Dried Green Lipped Mussel, Eel & Red Ginseng. **DENTALFLEX**

Bio-Active Deer Velvet, Manuka Hydrosol, NZ Propolis, Manuka Honey

Four global consumer mega-trends are driving growth and new product development in both pet food and the wider food & beverage industry

FOUR CONSUMER FOOD & BEVERAGE MEGA-TRENDS



EASY & CONVENIENT

I am trying to achieve work-life balance and need quick-and-easy meal solutions

- Dramatic increase in female participation in the workforce globally
- Consumers working longer hours to maintain relative income
- Work hours no longer just "9 to 5"; food needs at all times (e.g. night shift)
- Significant rise in e-commerce
- May represent a need for an immediate solution (e.g. thirst, hunger)
- May represent an easy solution to a future challenge (e.g. single serves for pets snack)



LIFESTYLE & WELLNESS

I am concerned about my pets wellness and am
trying to live a positive lifestyle

- Mid-high income countries experiencing an aging population
- Spread of Western lifestyle and Western diseases of affluence (e.g. diabetes in pets)
- Ongoing waves of media hype around fad diets and new "superfoods"
- Food presented and viewed as both the problem and the solution
- COVID amplifying and accelerating existing trends
- May be addressing specific conditions (e.g. oats to lower cholesterol)
- May target a specific pet member (e.g. older doa)
- May reflect wider worldview
- Pets as member of the family



AUTHENTIC & RESPONSIBLE

I am mindful of where my food comes from and how it is produced

- Dramatic global shift to city living;
 1800=3%, 1900=14%, 2015=50%;
 developed nations 75%+; 400 cities 1m+
- Loss of attachment to the land and food production – growth of artisan and craft
- Ongoing "rights revolution", fair trade to direct trade
- Ongoing waves of food scares around food quality, contamination, additives



SENSORY & INDULGENT

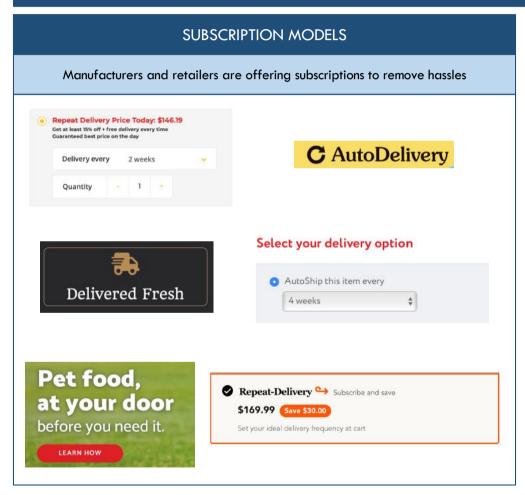
I like to include in rich and sumptuous living beyond the bare necessities

- Growing income polarisation into "haves and have-nots"
- Strong emerging trend to premium (and discount) at the expense of the mid-market
- Emerging middle class across developing world driving consumption growth
- Incredible power of food and beverages in many social settings
- May target specific foods perceived as high risk, unethical or visible (e.g. palm oil)
- May target a specific family member (e.g. mother dog)
- May range from "everyday luxury" to an occasional "treat"
- May be used to demonstrate social status, taste or style
- Gifting culture in Asia around premium, luxury items



First, New Zealand pet food firms are on-trend for making things easy and convenient for customers

EASY & CONVENIENT







Premium customised food boxes are delivered direct to your door

EASY & CONVENIENT

BOX DELIVERY MODELS

Manufacturers and retailers are offering box delivery subscriptions to remove hassles







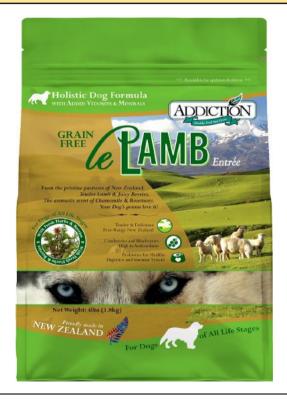
Second, New Zealand pet food firms are on-trend for pushing grain-free...

LIFESTYLE & WELLNESS

GRAIN FREE

Firms are focusing on selling grain free pet foods









Addiction, in particular, are producing natural, high meat, grain-free complete meals with function benefits

LIFESTYLE & WELLNESS

FUNCTIONAL FOODS

Focus on functional benefits targeting a health condition





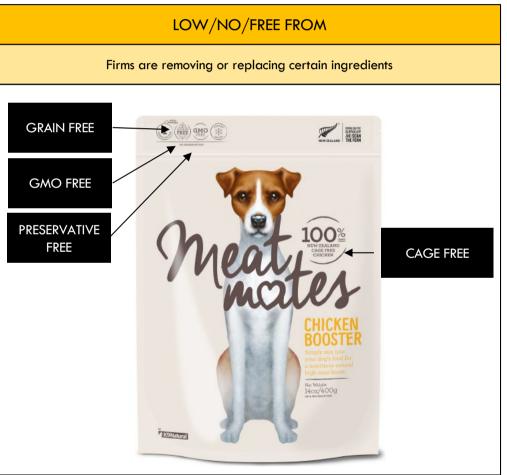




... as well as high meat and "free from" products

LIFESTYLE & WELLNESS







... "Humanisation" is on trend where pet food takes on human healthy food characteristics e.g. Olive's Kitchen range

LIFESTYLE & WELLNESS

BISCUIT BAKING MIX

Firms are focusing on high product engagement with functional benefits



HEALTHY

Firms are using a healthy human food format with functional benefits



SUPPLEMENT

Firms are focusing on healthy pet supplement





Third, New Zealand firms are playing directly on historic "Brand New Zealand" hallmarks (cows, mountains)...

AUTHENTIC & RESPONSIBLE

NEW ZEALAND MADE

Firms are positioning with classic New Zealand hallmarks









"Just replace the cow with a dog for us and we're done"





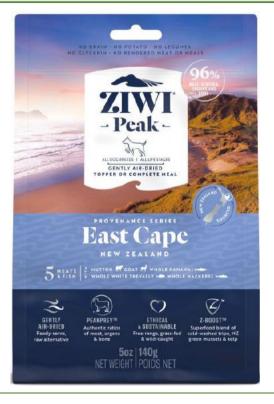
AUTHENTIC & RESPONSIBLE

PROVENANCE/SPECIFIC REGIONS OF NEW ZEALAND

Firms are highlighting ingredients from specific New Zealand regions









At the same time, New Zealand firms are calling out sustainable production systems

AUTHENTIC & RESPONSIBLE

SUSTAINABLE PRODUCTION SYSTEMS

Firms are highlighting the sustainable nature of the product and production process





Free-range, grass-fed and sustainable seafood are prominent call-outs on pack

AUTHENTIC & RESPONSIBLE

SUSTAINABLE PRODUCTION SYSTEMS

Firms are highlighting the sustainable nature of the product and production process



We are proud to bring NZ's finest to your dog with FREE RANGE, GRASS FED NZ BEEF.

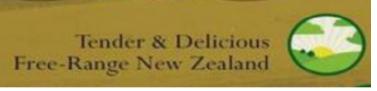
Our ingredients are PURE, NATURAL and SIMPLE (WITH ADDED MINERALS).

Ethically Sourced Ingredients: Lamb | Lamb Green Tripe | Lamb Breast | Lamb Liver | Lamb Heart | Broccoli | Carrot | Apple | Kale | NZ Green Lipped Mussels | Organic Virgin Coconut Oil | NZ Manuka Honey | Chia Seeds | Vitamins & Organic Chelated Minerals | Kelp | Hoki Liver Oil | Rosemary



New Zealand
Cage-Free Chicken

King Salmon



Free-range

New Zealand grass-fed meat



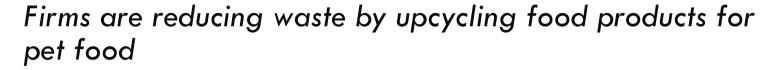






No grains, sugars or glycerin added No antibiotics or growth promotants

No added hormones or growth promotants





AUTHENTIC & RESPONSIBLE

UPCYLCED INPUTS

Firms are reducing food waste by upcycling







"PERFECT Deli Fresh dog rolls are helping to reduce food waste by upcycling unwanted deli and butchery meats collected from our local New Zealand supermarkets, and turning them into healthy, quality, safe dog rolls. Nutritious pet food helping fight food waste through sustainable upcycling."





déjà wouldn't be possible without our amazing supermarket partners helping us rescue good food from landfill. At the end of each day, they place unsold meat into déjà compostable bags and safely freeze it ...we take it to a human-grade facility in Auckland (FOODBOWL) where it's made it into grain free, pure meat pet treats. All packed in home **compostable**, resealable bags to keep them delish for your Dalmatian. Bon-a-pet-treat.



A number of New Zealand firms provide sustainable, low impact, responsible packaging

AUTHENTIC & RESPONSIBLE

SUSTAINABLE PACKAGING SYSTEMS

Firms are highlighting the sustainable nature of their packaging







Finally, New Zealand pet food manufacturers are on-trend for producing rich, sensory and indulgent products...

SENSORY & INDULGENT PRODUCTS

SUPERIOR CUTS

Pets eating higher priced food than their owners



\$107.46/kg

Butchers Superior Cuts Pork Ears Dog Treats 1.5kg

\$161.20

HIGHEST QUALITY/FRESHEST/BEST

High quality raw pure protein from multiple species





... particularly in the treats space, where foods are becoming more humanised

SENSORY & INDULGENT PRODUCTS

HUMAN TREATS NOW FOR ANIMALS

Pets eating the same type of treats as their owners









New Zealand pet food marketers are delivering on products delivering all four mega-trends in a package



"Freeze dried" "500g"



"100% Complete and balanced"

"Our recipes are made without Grain, Wheat, Gluten, GMO Ingredients, Corn, Soy, Cereals, Dairy, Rice, Potato and all other fillers"

"No artificial preservative or flavours"

"Omega 3 fatty acids, EPA & DHA from King Salmon are important nutrients supporting healthy brain and eye development"

"provide the the rich and nourishing proteins and fats need to give your dog a natural source of energy to

"... assist a dog's natural antiinflammatory responses and support healthy skin, coat & joints







AUTHENTIC & RESPONSIBLE

"New Zealand wholesome ingredients"

"Made in New Zealand – the freshest place on earth"

"... our grass fed meat"

"made from grass fed free range meats, cage free chicken or sustainably caught fish"



ori to o it i a ii i b

"Feast"

"Tasty topper"

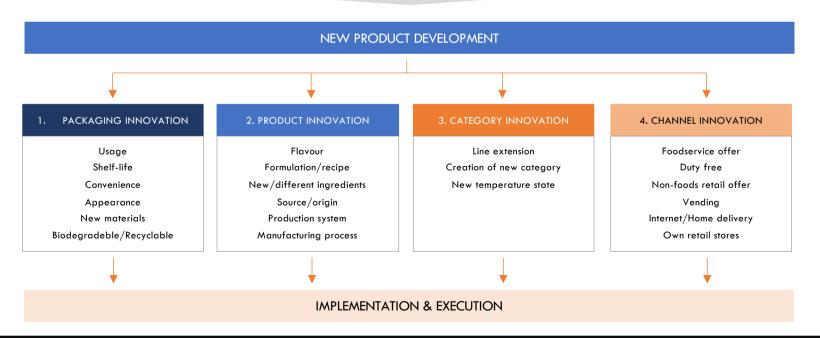
"Rich"

"Meal boost"

"High meat diet"

These trends drive new product development, through (1) packaging, (2) product, (3) category and (4) channel innovation





New Zealand pet food firms are well positioned to execute on and continue to deliver many key food and beverage trends to pet food customers

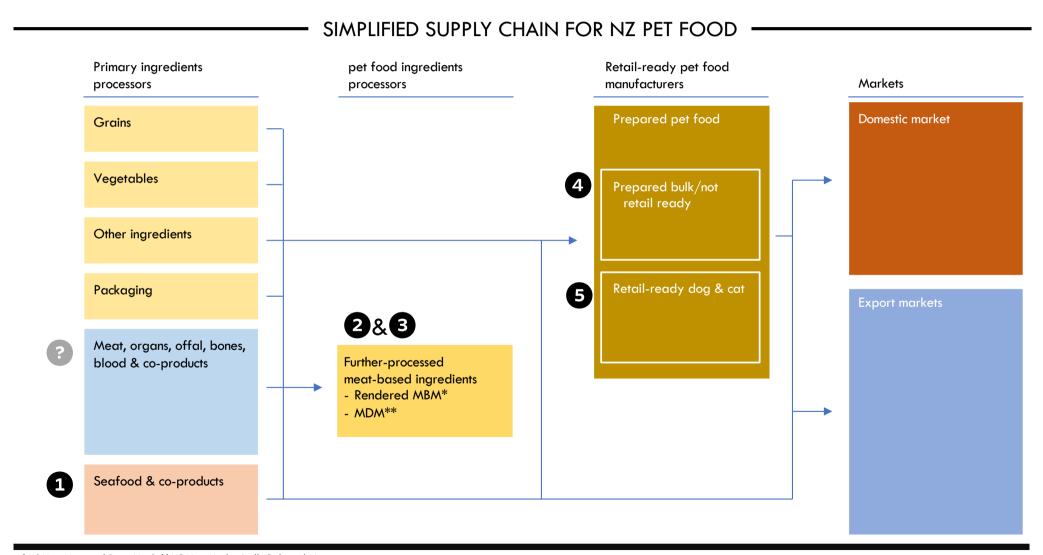
CORIOLIS FOOD & BEVERAGE TRENDSCOPE SM								
TIME SAVING	FAST	EASY OPEN	SOCIAL	insta ready	PICTURESQUE			
HASSLE FREE	SIMPLIFIES	EASY	REWARDS	FARM TOUR	FUN			
LOW EFFORT	CONVENIENCE	range	CONNECTIONS	INVOLVEMENT	ARTISAN			
SOLUTIONS	READY TO COOK	READY TO EAT/USE	HAND CRAFTED	SMALL BATCH	SENSORY			
MICROWAVE	REUSABLE	STORY TELLING	AUTHENTIC	CELLAR DOOR	AGED			
SUPERIOR	RICH FLAVOUR	SPECIAL EDITION	TRADITIONAL	RESPONSIBLE	FAMILY OWNED			
DISTINCT	PROMOTED	Sponsor	CERTIFIED	HEIRLOOM	FAIR TRADE			
ENDORSED	PREMIUM	ADVERTISED	PROTECTED	STEWARDSHIP	TRADE AID			
FAMOUS	AWARD WINNING	"ESTATE" GROWN	LIFE CYCLE	TRACEABLE	ETHICAL			
QUALITY	EXPENSIVE	rare/unique	SOCIALLY AWARE	INDIGENOUS	FREE RANGE			
LOW FAT	LOW CARB	TRUSTED	LOCAL	NATIVE CROPS	GRASS FED			
PROTEIN	FREE FROM	NO HORMONES	LOW INPUT	CARBON ZERO	EARTH FRIENDLY			
NUTRACEUTICAL	HEALTH	NATURAL	ECOLOGICAL	SUSTAINABLE	LOW WATER USE			
THERAPEUTIC	CHEMICAL FREE	PLANT BASED	BEE FRIENDLY	NITROGEN FIXING	ORGANIC			
MEDICINAL	WELLNESS	PALEO/KETO	RENEWABLE	BIODYNAMIC	REGENERATIVE			

Key Markets for NZ Pet Food

- + Market strategy
- + Growth
- + Market mix
- + Market share
- + Opportunities

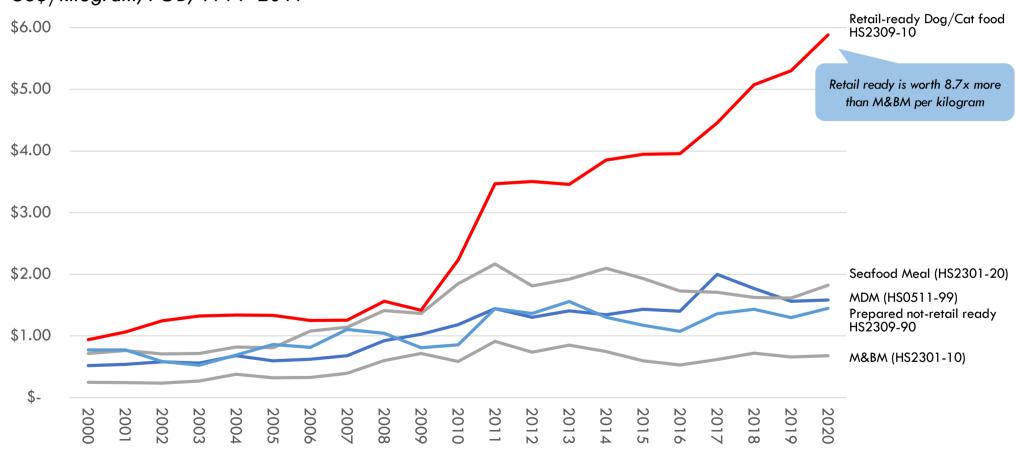
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NZ exports five classes of pet food product; some unmeasured amount of meat and offal exports will also end up in pet food

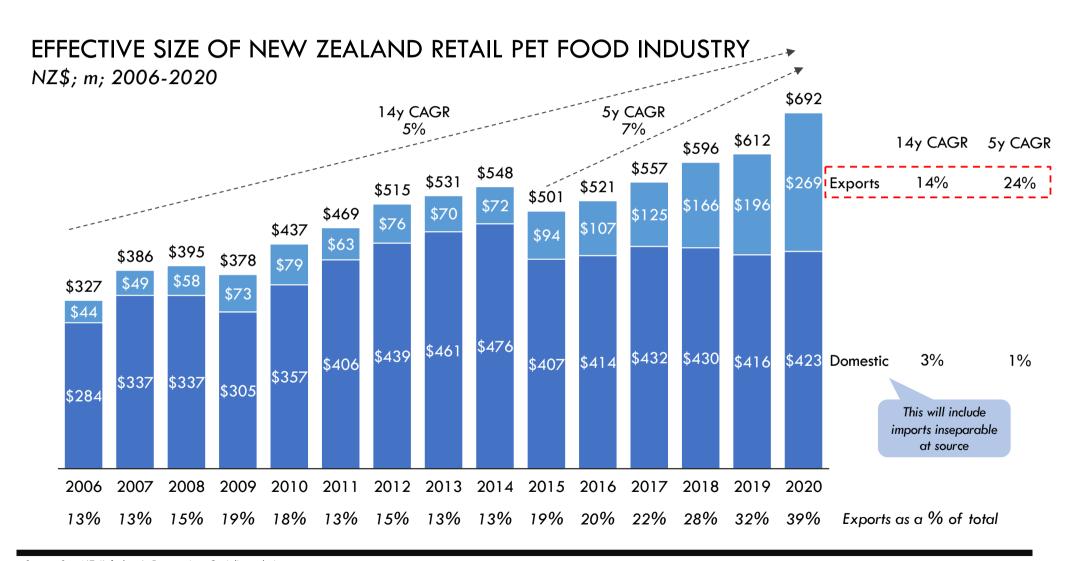


Only retail-ready dog/cat food is achieving significant and material price increases through adding value

NEW ZEALAND PET FOOD & KEY INGREDIENTS AVERAGE EXPORT VALUE BY PRODUCT US\$/kilogram; FOB; 1999-2019



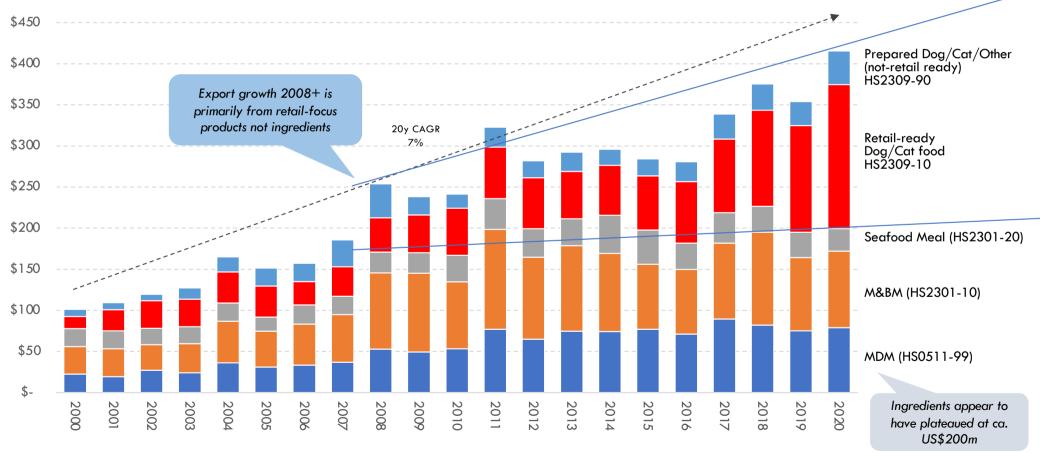
Growth in the New Zealand retail pet food industry is being driven by exports



New Zealand export growth is coming from retail pet food; key meat-based pet food ingredients have plateaued since 08

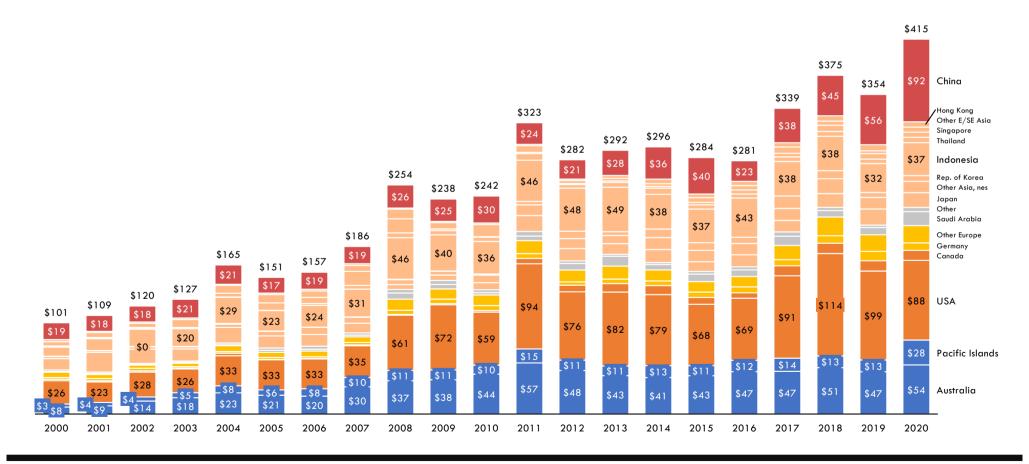
NEW ZEALAND PET FOOD & KEY INGREDIENTS EXPORT VALUE BY PRODUCT

US\$; m; FOB; 1999-2019



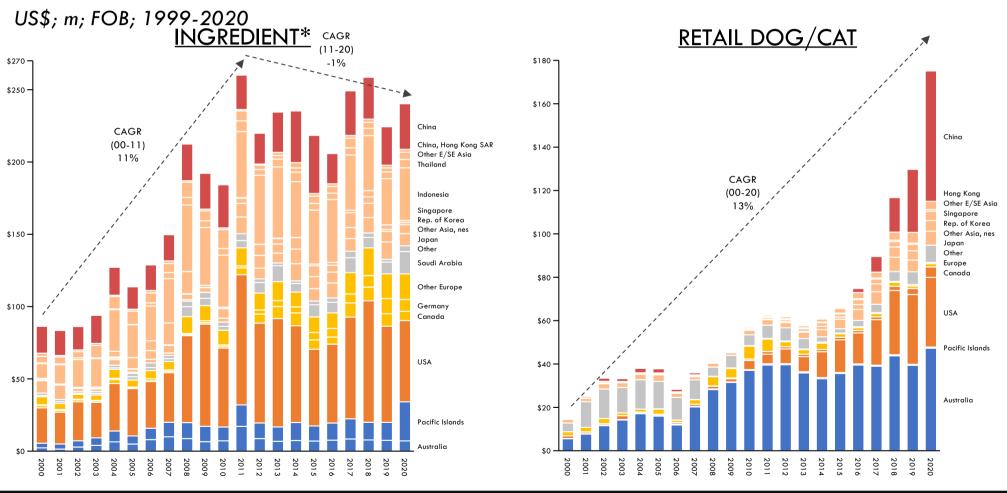
New Zealand exports pet food and key pet food ingredients to a wide range of countries and regions

NEW ZEALAND PET FOOD & KEY INGREDIENTS EXPORT VALUE BY PRODUCT US\$; m; FOB; 2000-2020



Pulling apart ingredients and retail-ready pet food shows retail exports growing strongly and ingredient plateauing

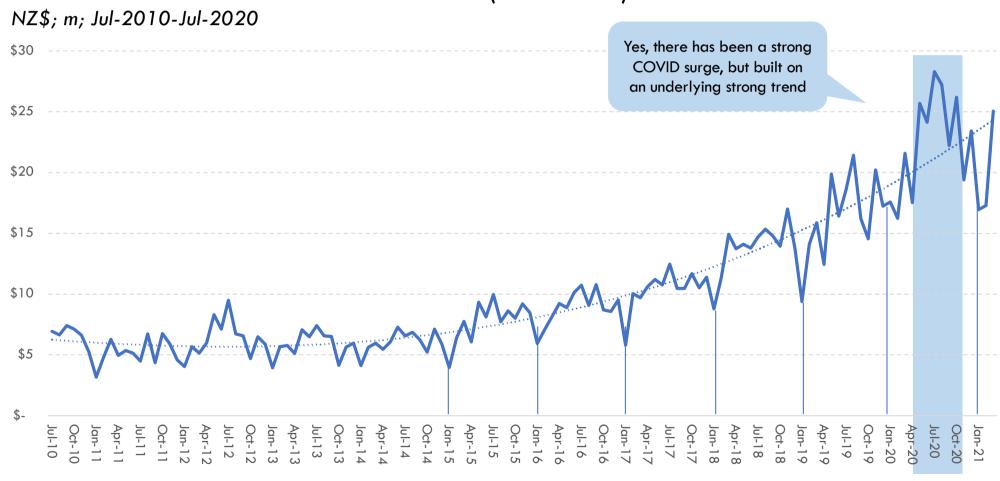
NEW ZEALAND PET FOOD & KEY INGREDIENTS EXPORT VALUE BY PRODUCT



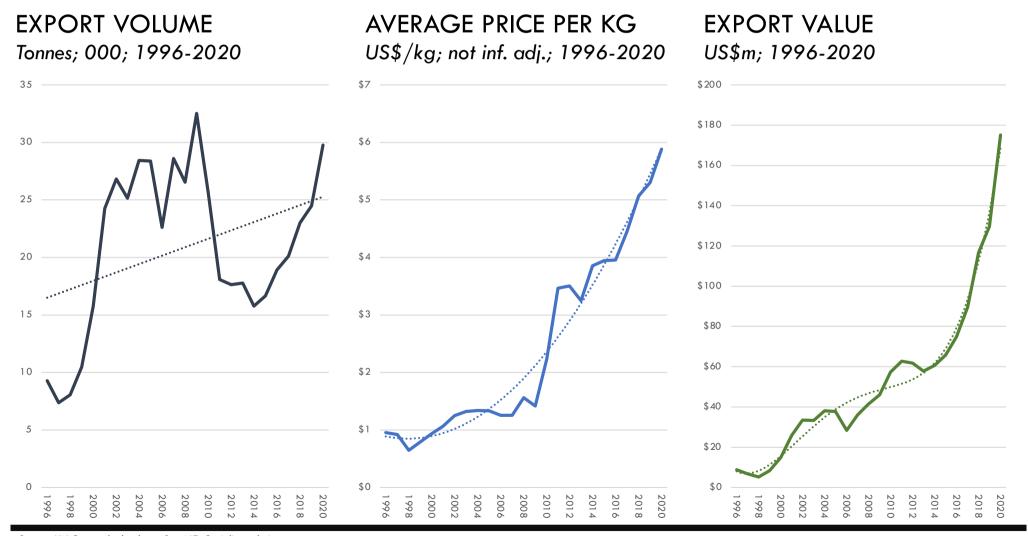
^{*} Includes Prepared not-retail ready (HS2309-90); Source: UN Comtrade; Coriolis classification and analysis

Monthly retail dog and cat pet food exports continue to grow

MONTHLY RETAIL DOG & CAT PET FOOD (HS230910) EXPORT VALUE

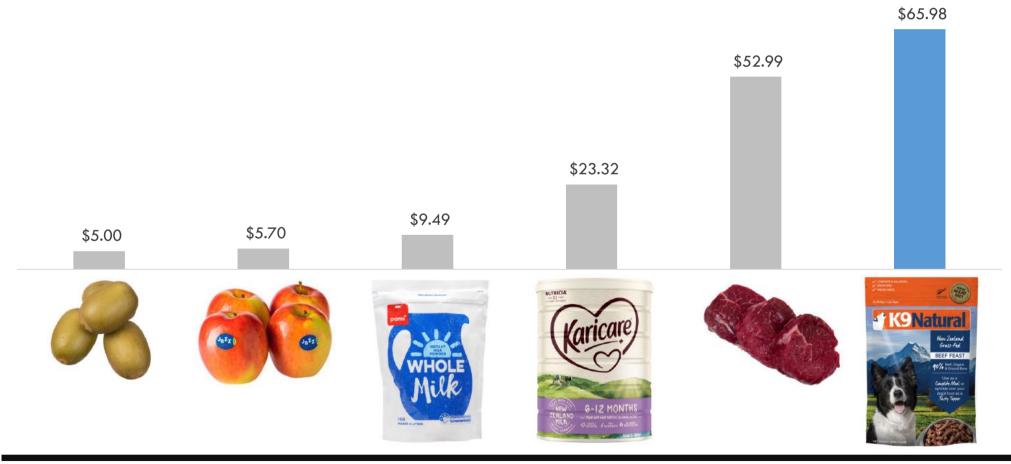


Retail pet food exports are again growing volumes, with strong price increases from the shift to premium, leading to growing value



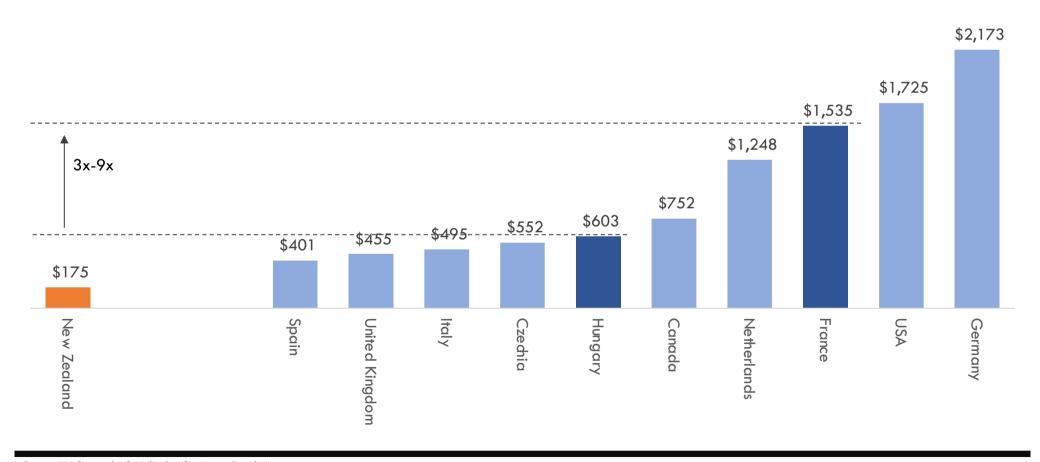
New Zealand premium pet food products demand premium prices relative to many traditional export products

CURRENT SHELF PRICE IN NEW ZEALAND: SELECT ITEMS NZ\$/kg; 2021



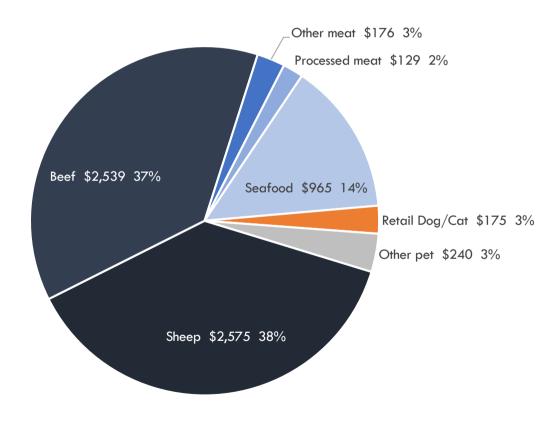
A wide range of countries suggest that New Zealand could export significantly more retail dog/cat pet food

RETAIL DOG/CAT PET FOOD EXPORT VALUE: NEW ZEALAND VS. SELECT PEERS US\$; m; 2020 or as available



Pet food accounts for only about 6% of New Zealand's total meat and seafood exports

VALUE OF NEW ZEALAND EXPORTS ACROSS WIDER MEAT PLATFORM US\$m; 2020

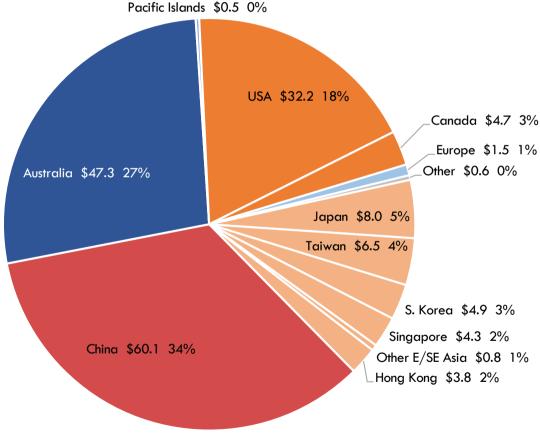


TOTAL = US\$11,224m in exports in 2020

China (34%), Australia (27%) and the US (18%) account for most (80%) of New Zealand's retail dog/cat pet food exports

VALUE OF NEW ZEALAND RETAIL DOG/CAT PET FOOD EXPORTS BY MARKET

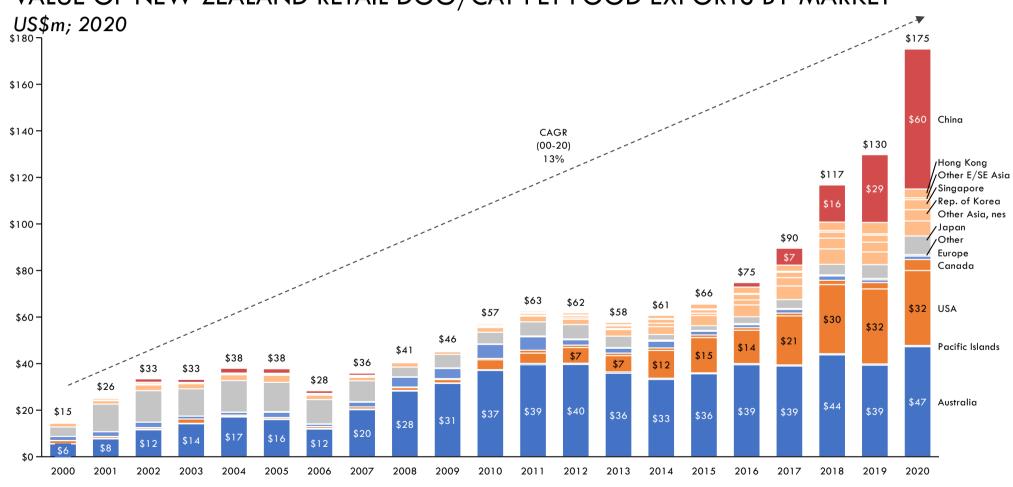
US\$m; 2020



TOTAL = US\$175m in exports in 2020

Australia, the United States and now China have been the engines of growth for New Zealand retail dog/cat pet food exports

VALUE OF NEW ZEALAND RETAIL DOG/CAT PET FOOD EXPORTS BY MARKET



The pet food industry needs to maintain and grow the Australian market, while developing opportunities in high value Asian and Western markets





Expand channel penetration
Gain share

- Improve shelf presence at retail, particularly in specialty and online
- Gain share across growing premium segment
- Focus in key population centres



CHINA & OTHER E/SE ASIA MARKETS

Leverage country image Position as premium

- Increase awareness of NZ as a source of pet food (not just "meat and dairy")
- Focus on trusted quality messaging
- Adapt products for market
- Position NZ as premium



UK/EUROPE/NORTH AMERICAN MARKETS

Fix dramatic underperformance Recreate wine & honey success

- Unique UK opportunity with Brexit
- Unique New Zealand ingredients give a clear point-of-difference
- Develop a plan to succeed in the UK market; lessons from wine and honey
- Expand model to Europe and North America

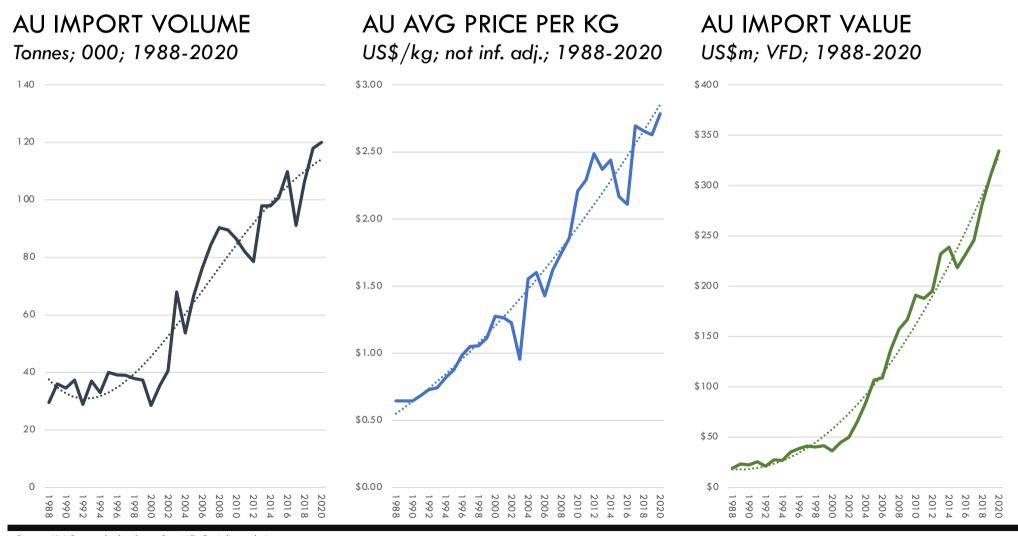
First, there are continued opportunities for growth in the regional markets of Australia and the Pacific Islands







Australian retail dog/cat pet food imports have growing volumes across growing prices leading to growing value



Thailand, Europe and the US are winning in Australia, while New Zealand is relatively flat

AUSTRALIAN RETAIL DOG/CAT PET FOOD IMPORT VALUE BY SUPPLIER \$334 US\$m; VFD; 1998-2020 \$6 China \$309 \$5 \$282 \$4 \$96 Thailand \$95 \$245 \$232 Other E/SE Asia \$218 **\$4** Other \$3 Other Europe \$191 \$188 \$195 \$1 France \$106 \$109 \$38 \$109 USA \$83 \$0 \$82 \$83 New Zealand \$33 994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Second, there are further opportunities for growth into Asian markets







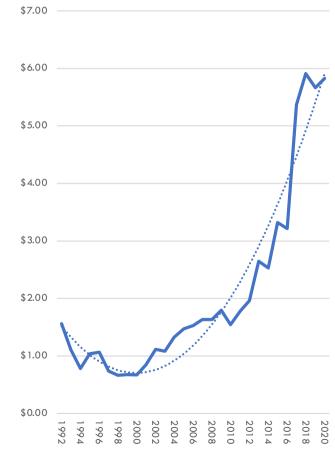
Chinese retail dog/cat pet food imports have exploded in the last five years, with growing volumes, growing prices and growing value

CHINA IMPORT VOLUME

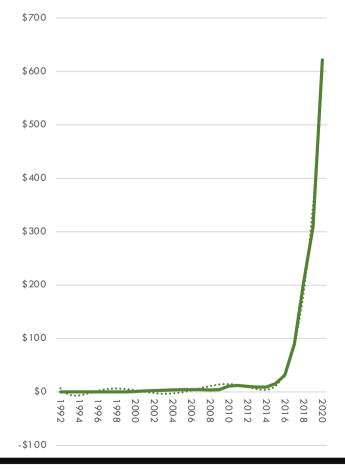
Tonnes; 000; 2000-2020

2002 2006

CHINA AVG PRICE PER KG US\$/kg; not inf. adj.; 2000-2020



CHINA IMPORT VALUE US\$m; VFD; 2000-2020



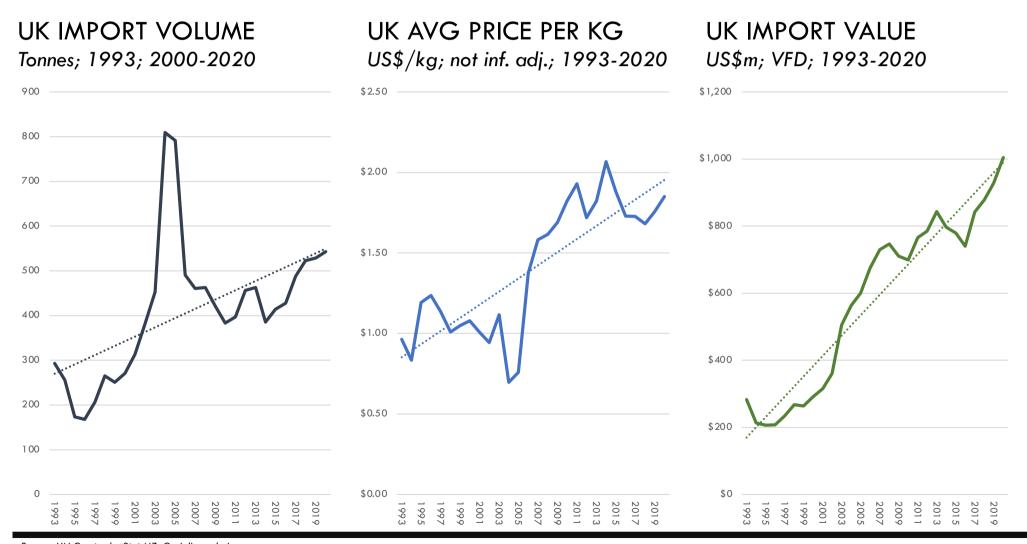
Finally, there are opportunities for growth across the developed Anglo-European markets, particularly the UK with Brexit



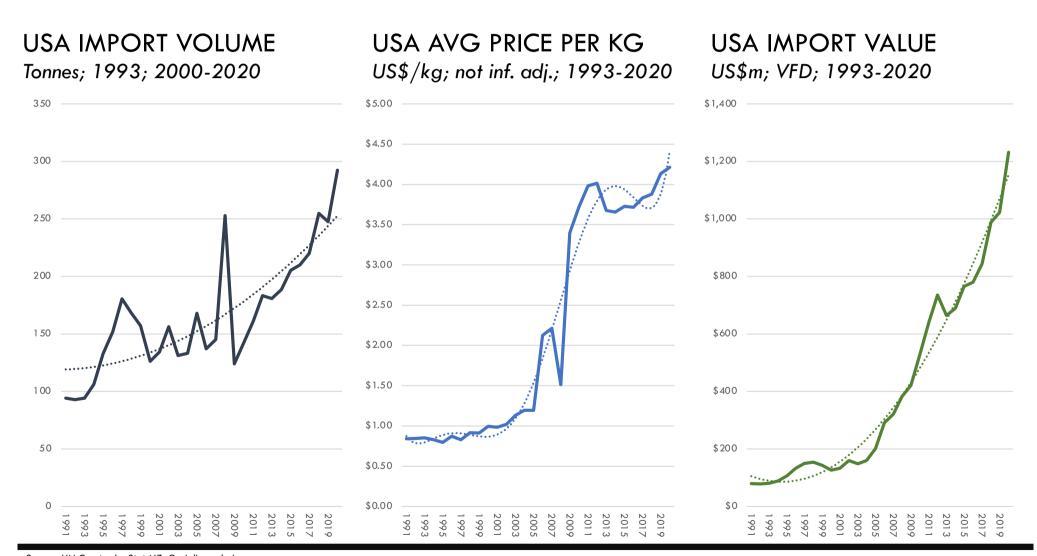




British retail dog/cat pet food imports have growing volumes and growing prices, leading to growing overall import value



American retail dog/cat pet food imports have growing volumes, growing prices, and growing overall import value



Key NZ Pet Food Firms

- + Firm Activity
- + Key Firms Profiled

Significant investment in new capacity and brands is being made by export focused retail-ready manufacturers









Recent investment \$85m

Recent investment \$50m+

Recent investment \$50-80m+

Recent sale \$220m+ (estimate*)

Investment is occurring across the sector upgrading facilities and increasing capacity

FIRM	INVESTMENT	 Ziwi building new state-of-the-art facility, Awatoto Kitchen, when operational in 2022 will close other three factories in Tauranga; will increase air-drying capacity by 40%, and allow NPD Investment in a new facility in Christchurch 		
ZIWI	\$85m \$8m			
Kraft <i>Heinz</i>	\$20m	 Upgrade in Hawkes Bay pet food manufacturing facility over four years New canning and retort capability designed to increase reliability and productivity; also contract manufacturing Motivated by increasing pet ownership Domestic supply, export to Asia, USA and Middle East 		
Ralphs Pet Foods	In Progress	 Hana Deavoll Founder CEO Ralph (alternative protein pet food) is currently under development; developed from sources of plant based and cultured proteins available, including oats, algae, pea protein and nutritional yeast. Our products are protein-rich, animal-free, clean & sustainable 		
PharmaZen Good Health Healthy Future	\$35m	 \$35m investment which will increase freeze drying capacity in 2021 by 1,800mt per annum 2021 Additional 5,000mt per annum coming on stream 2022 taking total to 6,000mt per annum Spray drying and additional extraction facilities for complimentary proteins and blood products 2022 2 hectare Greenfield site Rolleston to accommodate additional expansion 2023/24 		
ADDICTION WE GO FURTHER FOR PETS	tens of millions	- Investing in new premium kibble facility to increase capacity by 600%		
WIX.	Millions	- Recently completed a full rebuild of frozen concentrate facility and added a high capacity dog biscuit bakery		
Noze	\$3m	- Capital raising to increase production capacity in freeze-drying in new greenfields operation		
a Carris	\$4-5m	- Investing in new air-dry facilities		

Acquisitions and investments are occurring from firms outside NZ, reflecting the global appetite for investing in the NZ pet food sector

KKR

ACQUIRER





DETAILS

- KKR acquires 100% of Christchurch based Natural Pet Food Group (K9 Natural), 2021; \$220m+
- NZ pioneer brand in Freeze-dry pet food and treats
- KKR NY based PE with US\$349b under management acquires from Pioneer Capital





TARGET

- Petpal Pet Nutrition Technology Co., (China) establishes Petpal Pet Nutrition NZ in NZ in 2016
- Established King Country Pet Food in 2019
- Invests \$50-\$80m in processing capacity (meat based kibble, canning); 50,000t annual capacity





- Petpal Pet Nutrition Technology Co., (China) establishes Petpal Pet Nutrition NZ in NZ in 2016
- Acquires Alpine Exports in 2018 (specialises in air-dried co-products)





- Yantai China Pet Foods Co (Wanpy) from China acquires The Natural Pet Treat Company in 2018
- Manufacture and Sell "Zeal" brand of canned and dry pet food, pet milk, pet treats, pet supplements





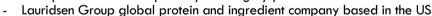
- Real Pet Foods (V.I.P; AU) owned by Temasek Holdings, New Hope Group and Hosen Capital acquires Bombay Petfoods (Jimbo's) from South Auckland in 2017
- Manufacture fresh chilled meats and treats



ന BHI



- BHJ New Zealand Ltd (6565092) acquires a coolstore in Whanganui for \$4.4m in 2018 aiming to increase pet food production and exports by sourcing by products



- BHJ (one of their companies) sources pet food, treats, ingredients globally - https://bhj.com





- Yantai China Pet Foods (Wanpy brand) acquires majority shares from Singapore based VLR Global, and from Taylor, for US\$24m increasing Yantai's ownership to 70%
- Yantai announce new 20,000t canning investment





- Cibus Fund (ADM Capital) (Private Equity) acquired 14% of PharmaZen, 2020; https://www.cibusfund.com
- Capital raising in 2020 required to increase production capacity with high demand for premium nutritional products, including pet food ingredients
- Increasing freeze-dry capacity to 25,000kg/day across multiple locations

Acquisitions are also occurring internally with firms looking to secure supply and processing capacity

ACQUIRER

TARGET

DETAILS





- Ziwi acquires 20% of PetfoodNZ (from Mould); securing production and canning capacity

FOND FOODS



- Fond Foods acquires Ranchmans in 2016, moved operation to Fond Foods existing location in 2019





- Best Mates Petfood acquires Farm Meats pet food operation in Waihi

MOIR FAMILY



- Alan Forde sells abattoir and pet food processing facility to Moir's of Dipton





- Scales acquires 60% Shelby (JV based in the USA); adding 80,000 T in product sales; US\$23.2m; end of 2018
- Shelby enters into a new third party warehousing agreement with a toll processor; brings the number of processing facilities at Shelby to 8 (7 toll processing facilities through USA)





- Pet Nutrition New Zealand acquires Vital Petfoods from Silver Fern Farms, in 2017; Turnover \$7m+ in 2020.
- Produces ingredients for Pet Nutrition NZ brands. Early pioneer in dog rolls in NZ.

New Zealand pet food firms are also investing in expanding their range...



COMPLETE MEAL TREATS SUPPLEMENT















...as this example also shows

AIR DRIED TREATS (DOG)





DAIRY PRODUCTS (DOG & CAT)























Source: photo credit (fair use/fair dealing; low resolution; co





Key Firms Profiled

05

Appendices

- + Industry organisations and events
- + Glossary of terms



A broad range of organisations support the New Zealand pet food industry





NewZealand Food Innovation Network





- Represents manufacturers of pet food
- Funding via membership fees

- www.petfoodnz.co.nz

Petfood Industry Support & Advocacy

- Represents the manufacturers and suppliers behind New Zealand's food, beverage and grocery brands
- Funding via membership fees

Wider FMCG

Manufacturer Support

& Advocacy

www.fgc.org.nz

- **Business development** advice and access to science and research facilities across five locations
- Funding government and user pays
- www.foodinnovationnetwork.co. nz
- Science, Product Development and Advisory

- Represent meat processors
- Funding via membership fees
- Cluster of food scientists and facilities for research and product development
- Fees for service

www.foodhg.com

www.mia.co.nz

Primary processor Support & Advocacy

Company product development support and facilities

GLOSSARY OF TERMS

A\$/AUD	Australian dollar	n/a	Not available/not applicable
ABS	Absolute change	N. America	North America (USA, Canada)
ANZSIC	AU/NZ Standard Industry Classification	Nec/nes	Not elsewhere classified/not elsewhere specified
AU	Australia	NZ	New Zealand
Australasia	Australia and New Zealand	NZ\$/NZD	New Zealand dollar
b	Billion	Pac Isl or PI	Pacific Islands
CAGR	Compound Annual Growth Rate	R&D	Research and Development
CN	China	S Asia	South Asia (Indian Subcontinent)
CRI	Crown Research Institute	SE Asia	South East Asia
E Asia	East Asia	S.H	Southern Hemisphere
FAO	Food and Agriculture Organisation of the United Nations	T or t	Tonne
FY	Financial year (of firm in question)	US/USA	United States of America
НК	Hong Kong	US\$/USD	United States dollar
JV	Joint venture		
m	Million		



