



Final report

Growing value and market share in North America for Australian goat meat producers

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Abstract

Goat meat with its low fat, low cholesterol and high protein content is regarded as a premium choice for the health-conscious consumer. Highly regarded as the first choice of meat for curries and stews due to the flavour and fat profile, how to grow value and volume of goat meat consumption in North America was addressed through this project. Opportunity exists to grow non-traditional goat consumers through ready to heat and serve meal options, particularly given the high % of meals consumed through quick service restaurants and fast-food outlets in the United States of America. Retail ready packs of frozen, cubed ready to cook Australian goat meat in 2lb bags (both bone-in and boneless) and ground Australian goat offers convenience for existing and new consumers. Desktop research, online consumer sentiment analysis and in country market analysis identified marketing materials are required for the sales and marketing teams of Australian goat to help potential customers including retailers and wholesalers understand key product attributes of goat meat. Increasing distribution channels will help grow sales and demand for Australian goat meat in Northern America.

Executive summary

Background

The question addressed through this work is how to grow market share and value of Australian goat meat in North America, with the view to move away from a commodity product? The research findings are applicable to Australian goat processors, exporters, importers and value adding facilities. The research will provide a direction and insight to inform sales and marketing teams, goat exporters, importers and key decision makers in processing plants.

Objectives

The project objectives demonstrate how to grow market share and value of Australian goat meat products in North America. The project developed a market development strategy and the capability, capacity and relationships required to develop and deliver value added goat meat products into retail and food service channels. The project objectives were achieved.

Methodology

Desktop research combined with in market interviews, store and wholesaler visits and product trials were undertaken to identify existing demand, test and validate product forms and the required distribution channels.

Results/key findings

Goat is a traditional dish for Mexican cuisine, with the quick service restaurants offering an opportunity to value-add goat meat from Australia. Goat is a traditionally consumed protein with consumption increased in the winter period. Goat legs are sought after as well as cubed and boneless products. Goat is frequently substituted for mutton in Indian based dishes and by some consumers, thus the price differential between mutton and goat influences demand for goat meat. Goat has in demand consumer attributes but requires a marketing message to raise the profile including high in protein, low cholesterol, low fat, free range (natural) product that is free from GMO's, HGP's, antibiotics, etc.

Benefits to industry

Growing value and volume of Australian goat meat sales into North America will enable market growth and increase in supply of Australian product. By identifying ways to grow value and margins, it will increase the ability of processors to pay sustainable prices to producers. An increased price of \$2/kg OTH on average 18 kilogram dressed weight animal for 1 million goats returns an additional \$36 Million per year to the producer.

Future research and recommendations

The food service and quick service restaurant market offers an opportunity to diversify, and value add through the sale of boneless products that can be used in sous vide preparation. Research is required to understand (1) the impact of raw material flavour profiles on finished product, (2) ensure raw and ready to heat and serve product flavour meets customer expectations.

Cubed product is in demand by food service and through retail outlets. Standardised claims, a minimum meat to bone ratio and flavour profiles are required to build a repeat customer base.

Ground goat provides culinary versatility for non-traditional consumers. Research is required to identify how to cost effectively produce ground goat meat as this requires adjustments to the standard goat processing modes.

Table of contents

Abstract	2
Executive summary	3
1. Background	8
2. Objectives.....	11
2.1 Project objectives	11
3. Methodology.....	12
3.1 Desktop Analysis:.....	12
3.2 In country analysis	12
3.2.1 In country USA Analysis	12
3.2.2 Australia	13
3.3 Analysis of feasibility and desirability of new market opportunities	
13	
3.4 Recipe, packaging and new product development.....	15
4. Results.....	17
4.1 Goat meat background.....	17
4.2 Macro trends and value drivers for the USA consumer	18
4.2.1 Trends in protein consumption	18
4.2.2 Protein consumption by species.....	21
4.2.3 USA Protein imports	22
4.2.4 USA Goat meat trade.....	24
4.3 Consumer analysis	26
4.3.1 USA and Canada population dynamics by ethnicity	29
4.3.2 What consumers value	33
4.3.3 Protein category retail (natural channel data)	35
4.3.4 Ready to heat and eat products	43
4.3.4.1 The target consumers for retail packs of ready to heat and eat Tex-Mex goat	
meat.....	45

4.4	Food service analysis.....	46
4.5	Market and product development strategy	49
4.5.1	Proposed retail market and product development strategy	49
4.5.2	Phase 2 & 3: New retail product development.....	51
4.5.2.1	Retail Phase 2 – chilled ground goat meat.....	51
4.5.2.2	Retail Phase 3 – Pre-cooked goat meat	52
4.5.3	Food Service marketing and product development strategies.....	52
4.5.4	Risk Management	53
5.	Conclusion	54
5.1	Key findings.....	54
5.2	Benefits to industry	56
6.	Future research and recommendations.....	57
6.1	Future Research.....	57
6.2	Recommendations.....	58
7.	References.....	60

List of Figures

Figure 1: Fluctuations in goat meat exports from Australia to North America 2015-April 2024.....	8
Figure 2: Goat products (t) exported from Australia to North America 2015-April 2024.....	9
Figure 3: Averaged monthly OTH prices goat c/kg.....	10
Figure 4: Goat product value stream opportunities.....	13
Figure 5: Retail goat cube packaging.....	15
Figure 6: Goat recipes on Thomas Farms website.....	15
Figure 7: New recipes developed and uploaded onto website.....	16
Figure 8: Purchase location of protein-based foods in USA.....	19
Figure 9: <i>Reasons for spending more than normal on meat</i>	19
Figure 10: Protein per capita available at USA retail level (kg/annum).....	21
Figure 11: Breakdown of other meat based proteins.....	21
Figure 12: Fish and meat imports (\$/annum) into USA.....	22
Figure 13: Import value into USA by HS Code 02.....	22
Figure 14: Sheep and goat meat imports into USA by country (\$/annum).....	23
Figure 15: Breakdown of sheep and goat meat category by import value (\$/annum).....	23
Figure 16: Goat meat exports (\$/annum).....	24
Figure 17: USA Domestic goat meat processors and processing capacity per State.....	24
Figure 18: Goat meat imports into the USA by country of origin (\$/annum).....	25
Figure 19: Export volumes (t) goat products by product type from Australia to USA.....	25
Figure 20: Goat meat consumption by country previous 7 days.....	26
Figure 21: Mutton and goat meat consumption by country 2020.....	26
Figure 22: Muslim population by state based on census data.....	28
Figure 23: Hispanic and Latino % and number by State 2020.....	30
Figure 24: Population identifying as Black and African by State.....	30
Figure 25: Population identifying as Asian by State.....	31
Figure 26: Consumers questioning Halal certification authenticity.....	34
Figure 27: Consumers questioning Halal certification status.....	34
Figure 28: Goat products available from a reputable warehouse club store in the USA.....	40
Figure 29: Number of Costco stores by state.....	41
Figure 30: Ready to heat and eat meat – USA in-store research.....	43
Figure 31: Range of Mexican ready to heat and eat proteins.....	44
Figure 32: Ready to heat and eat meat Beef Barbacoa.....	44
Figure 33: Chipotle stores in USA.....	47
Figure 34: Retail market and product development strategy.....	49
Figure 35: Goat pieces in a box.....	50
Figure 36: Food service marketing and product development.....	53

List of Tables

Table 1: Goat meat export volumes from Australia to USA and Canada by product (tons)	10
Table 2: Meat consumer segmentation.....	18
Table 3: Religious celebrations where goat meat is consumed	27
Table 4: Muslim population by State	28
Table 5: Total combined number of ethnic people per state – top 10 states.....	29
Table 6: Medium and average income per city	31
Table 7: Product claims on retail packaging of 200 proteins in USA supermarkets.....	33
Table 8: Top selling beef retail products	35
Table 9: Top selling pork cuts based on total retail sales	36
Table 10: Top selling lamb retail products	37
Table 11: Bison product sales	38
Table 12: Goat product retail sales in 2023.....	39
Table 13: Goat retail sales by city from all supermarkets sourced by Circana for 2023	42
Table 14: Bison product sales by city from all supermarkets sourced by Circana for 2023.....	42
Table 15: Retail shelf price of heat and serve proteins in the USA	43
Table 16: Most appealing cuisines by age for USA consumers	46
Table 17: Mexican chain store quick service restaurant chains by location	47
Table 18: Supply chain boneless goat yield and costs for hot boned goat meat from Australia to USA	51

1. Background

Goat is one of the most widely consumed proteins in the world. North America was the largest export market for Australian goat meat in 2023/4. The goat meat industry in Australia is predominately a frozen export industry. With improvements in genetics, research activities and farming practices there is an opportunity to create a higher value market for goat meat products. The high and low prices as well as large fluctuations in supply inhibit the development of retail product lines and the use of goat in manufactured products. Retailers, manufacturers and value-adders all require a consistent, reliable supply with limited price fluctuations. Collaboratively working in a value chain provides opportunities for long term gains for producers and processors alike. However, it also requires a mindset shift from opportunistic harvesting and selling, and development of associated capabilities required to support a more mature value chain. While work is being done by goat producers in some regions to build a sustainable raw material supply, the work in building a more reliable market pull is also required at the same time. Development of value-added goat products for retail and foodservice markets would help deliver more consistent market demand and flatten the variation in demand represented in Figure 1.

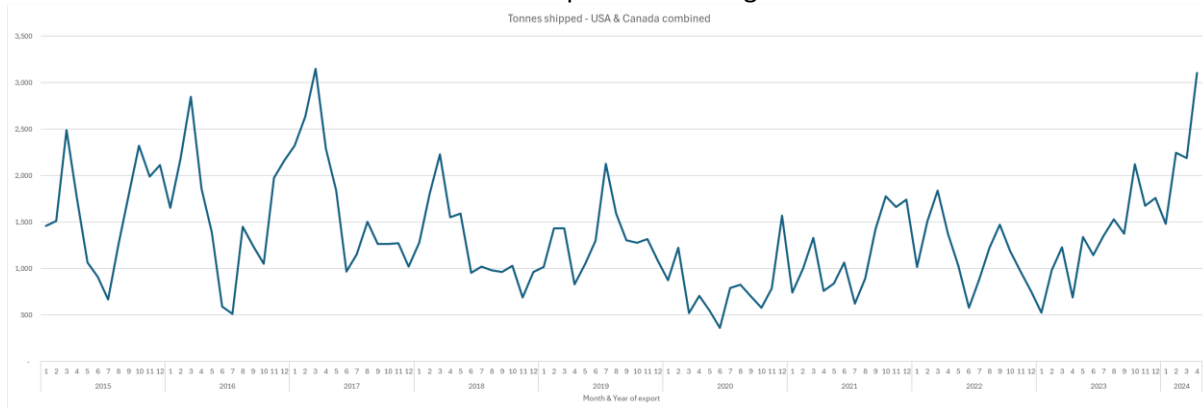


Figure 1: Fluctuations in goat meat exports from Australia to North America 2015-April 2024

Source: Export data from Meat & Livestock Australia (MLA) 2024

Development of value-added products and new market channels has the potential to support the transformation of the Australian goat industry from a commodity boom and bust industry to a market orientated, value-based industry where quality products demanded by consumers are delivered consistently across the entire year.

The longer-term project goal was to create a more stable market for Australian goat and to increase the overall demand for goat meat into North America. Increasing the capabilities of goat exporting companies is required which includes the development of value-added and pre-cooked goat products. This has the potential to increase customer reach, diversify product mix and potentially increase per capita consumption through convenience and communication of key consumer value propositions through branding and package labelling.

20% of non-goat USA consumers (n=2675) were willing to purchase goat if it was available in their local food stores (Liu, Nelson & Styles 2013). African Americans, Asians and Whites showed the same propensity to consume goat while Hispanics were 3 times more likely to consume goat. Beef and chicken consumers over the age of 55 with low or high incomes were more likely to purchase goat meat (Liu, Nelson & Styles 2013). Certified Halal (Ibrahim 2011), low fat, USDA inspected (implying safety assurance), price specials, provision of cooking instruction and methods were identified as drivers of goat consumption (Liu, Nelson & Styles 2013).

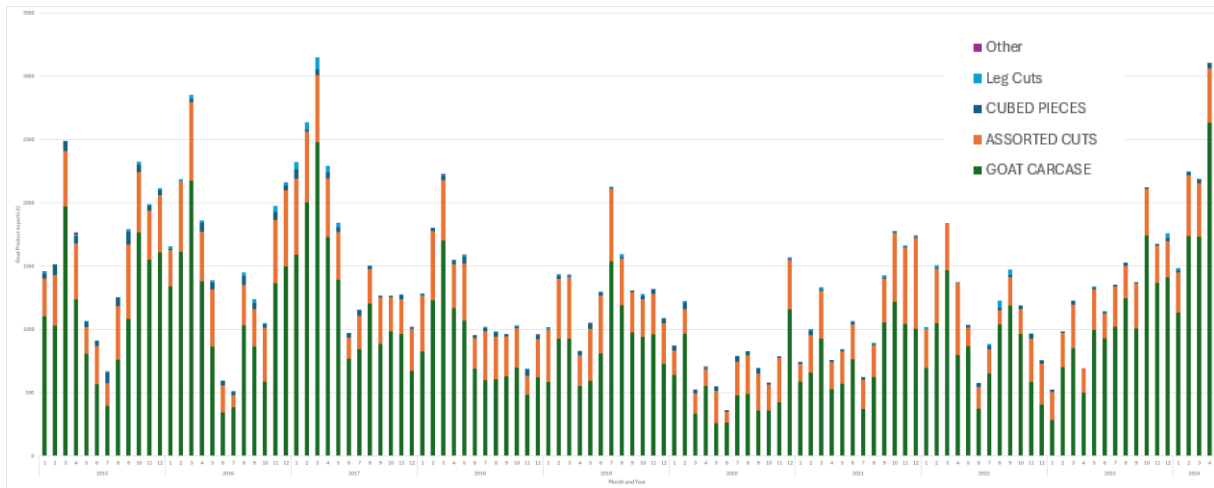


Figure 2: Goat products (t) exported from Australia to North America 2015-April 2024

Source: Export data from MLA 2024

To grow consumer demand, a detailed understanding of current and potential consumer demographics was required to ideate what new product formats could support increased per capita consumption. Additionally, market channels that could provide new goat offerings also needed to be understood. These market opportunities can then be prioritised in conjunction with value-adding processing capability to cost-effectively meet those market opportunities.

This project analysed market insights to identify and prioritise opportunities for new product formats aligned to specific market channels.

Value proposition and benefit to red meat industry

Over 12,000 ton of goat meat was exported from Australia to USA in 2021 and 2022 out of an averaged total of 20,000-ton total volume of exports with approximately 10% exported to Canada. The growth in exports in 2024 has been in carcase sales as shown in Figure 2. The sales of assorted cuts (assumed to be 6-way) and leg cuts hasn't changed significantly in the last three years. By better understanding the value propositions of consumers, additional value can be captured and retained in the value chain. The project identified goat meat products and distribution channels where higher margins can be attained to enable sustainable goat purchase pricing which can provide producers with suitable returns, so they have confidence to continue producing goats as a long-term income diversification and land management strategy.

Table 1: Goat meat export volumes from Australia to USA and Canada by product (tons)

Product Description	2021	2022	2023	2024 (Q1)	2024 (*est)
Goat Carcase	9,341.78	10,060.45	12,041.15	7,230.89	21,692.66
Assorted Cuts	4,257.61	3,390.80	3,428.32	1,653.59	4,960.78
Cubed Pieces	132.50	206.24	162.82	108.68	326.04
Leg Chump Off	129.32	177.06	74.81	30.97	92.91
Goat Telescoped Carcase	-	8.98	7.99	-	-
Rack Cap Off Frenched-8 Rib	-	-	2.36	-	-
Leg Chump Off-Aitch Bone	-	-	1.50	-	-
Carcase Meat	1.44	0.98	1.47	-	-
Sq Cut Shoulder-4 Rib	-	-	-	1.08	-
Tenderloin	5.30	-	-	-	-
Total exports to USA + Canada (t)	13,867.96	13,844.50	15,720.42	9,025.21	27,072.40

The goat supply base has grown with predator proof fencing combined with above average rainfall in Western NSW and Qld, as producers diversify away from sheep due to limited labour force. Good seasons have also seen the numbers of free-range goats in South Australia and New South Wales increase.

The average price of goat exported from Australia in 2022 was \$12.28 compared to average price for January to June in 2023 of \$7.38 per kilogram. By uplifting the export value from 2023 prices to 2022 prices there is a \$100 million dollar uplift for the Australian industry.

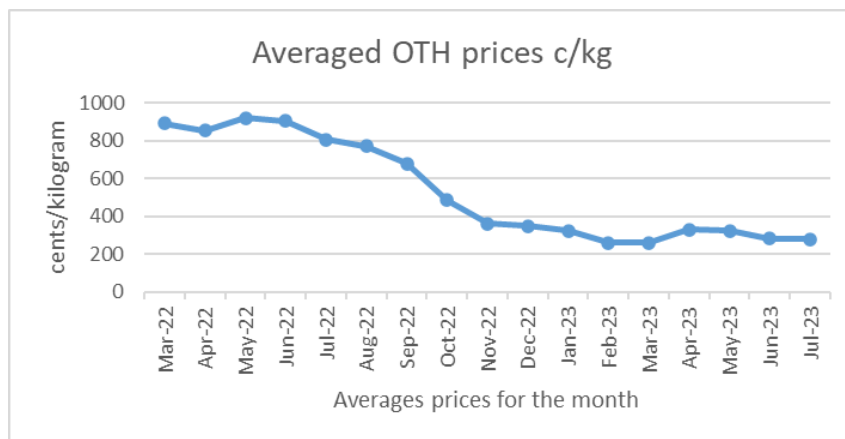


Figure 3: Averaged monthly OTH prices goat c/kg

Source: Over the hooks report, Meat & Livestock Australia, Accessed online 9 August 2023 <https://www.mla.com.au/prices-markets/oth/>

2. Objectives

2.1 Project objectives

The research problem addressed in this project was:

How to grow market share and value of Australian goat meat in North America?

Research questions addressed included:

1. Which consumer groups offer best opportunity to grow demand and value with existing products and what distribution channels, promotion and packaging is required for these consumers?
2. What potential growth areas exist where potential consumers have unmet needs, what new products will better meet their needs, and which new products is it financially and technically feasible to develop and distribute?

The project objectives were to:

1. **Grow market share and value of products for Australian goat meat in North America.**

The research identified:

1. Existing and potential demand for Australian goat meat in North America
 - a. Current trends in protein consumption
 - b. Current and future goat consumer's purchase and value drivers
 - c. What is goat meat competing against?
2. Tested the most attractive product form(s) for each consumer group?
 - a. Size and type of packaging
 - b. Product form: chilled/frozen/pre-cooked
 - c. Form by Cut type: bone in/bone out, cubed, primal segment
3. What are the distribution channels required to deliver products to target consumer groups?
4. What are the product margins and feasibility for aligning production, price, packaging and distribution?
5. What is required to influence consumers to try goat?

Using the market insights research:

2. **Develop a prioritised market development strategy including new products, packaging and distribution to grow consumption.**
3. **Understand the capability, capacity and relationships required to develop and deliver value-added goat meat products into retail and foodservice channels.**

The project successfully achieved these objectives and insights were developed into potential new product development for Australia goat sales into North America.

3. Methodology

3.1 Desktop Analysis:

A desktop analysis was undertaken to identify target consumer population bases including demographic, location, income and product attributes (Halal, grass-fed, rangeland, hormone and antibiotic free).

Data was sourced from the following organisations to undertake the analysis including:

- Food and Agriculture Organisation
- World Trade Organization
- Australian Department of Agriculture, Fisheries and Forestry
- United States Federal Department of Agriculture
- US Census Department
- SPINS
- Circana

Retail point of sales scan data was analysed including:

- individual prices per weight unit
- type of product
- claims (Halal, organic, grassfed)
- value per unit
- volume of sales
- location of sales (access to location data for 10 capital cities)

Indian and Mexican restaurant menus in major cities were analysed for goat meat and or mutton. Analysis of goat, mutton and lamb products and prices offered via online catalogues at Club stores, Asian and Ethnic grocery stores and markets.

3.2 In country analysis

3.2.1 In country USA Analysis

- Sampling of Mexican and Indian restaurant goat-based meals
- Visit to restaurant supply depot reviewing product and price offering for cooked and raw meat proteins
- Visit to Club store reviewing product and price offering for cooked and raw meat proteins
- Visit to chain stores to review reviewing product and price offering for cooked and raw meat proteins as well as retail shelf displays for fresh and frozen products.

3.2.2 Australia

- Boning trials and analysis of carcase yields for Rangeland and Boer cross goats.

3.3 Analysis of feasibility and desirability of new market opportunities

Analysis of:

1. New products
2. Refinement of existing product offering
 - a. Existing product in new channels
 - b. Existing product in new packaging styles
 - c. Further differentiation of products (carcase sex, weight, age)

Figure 4 indicates focus on the market side of the supply chain. Prioritisation of end consumer opportunities through market channels helped identify the value-added product groups that will enable the highest value creation for the client. Although supply side is not a focus, manufacturing capabilities were considered when prioritising market development strategies.

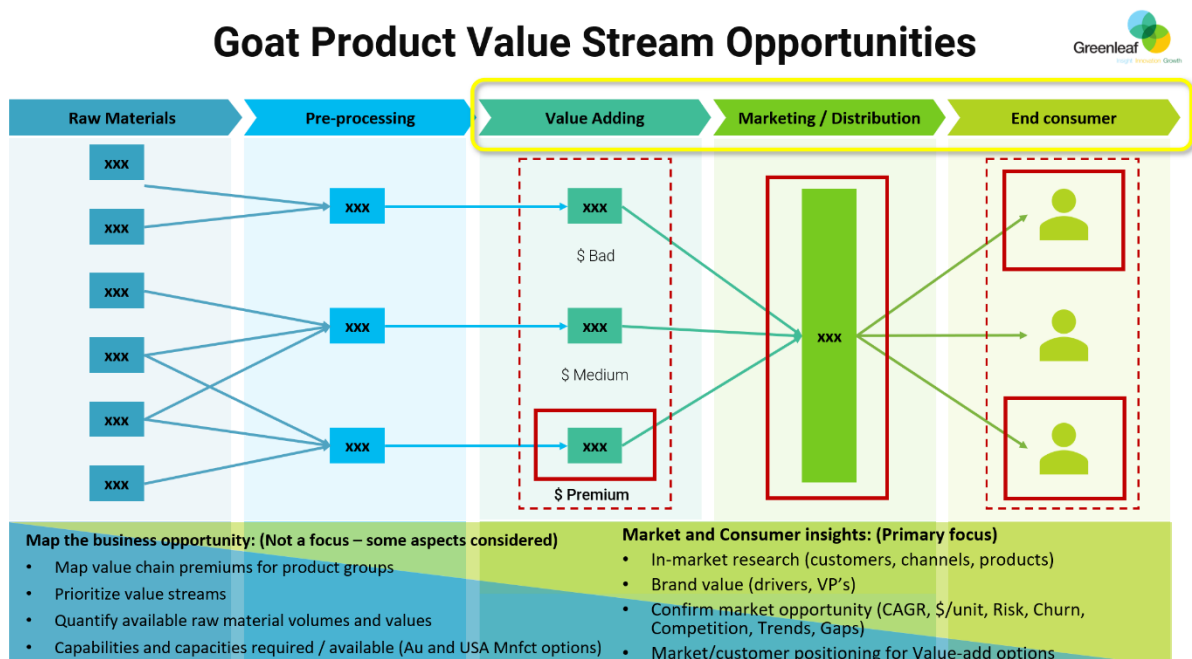


Figure 4: Goat product value stream opportunities

Step 1c: Consolidate findings to direct targeted market research

Consolidate and prioritize options through the Desirable, Feasible, Viable lenses to identify targeted interventions for which a high-level implementation plan will be developed.

Lens 1: What's Desirable - Review of what North American consumers would buy (not what they think they want)

Consumer facing data on demographics, premiumisation and ethnic trends will be considered as part of the activities indicating the current and future desirability for new format goat products including, chilled versus frozen and primal cuts for new uses, compared with traditional hot pot style applications and other non-goat applications that could adapt goat products to address the meal occasions.

The North American market review will consider the technical trade barriers to exporting value added and further processed goat products. Based on the types of products a review of the required product attributes such as shelf life, bone-in versus boneless product, chilled versus frozen formats and packaging and labelling requirements will be considered. Demographics and willingness to pay will be determined. Scan of existing pre-cooked products and formats will be assessed to understand current market trends. Pricing analytics will possible will be used to assess premiumisation opportunities.

Lens 2: What's Feasible - Analysis of value-adding technology and processing capabilities to enhance goat products

This focuses on what is technically feasible to manufacture. For example, pre-cooked boneless goat curries and shredded goat meat for wraps and fillings. This will build iteratively towards recommended business and market development strategies using a desirability, feasibility and viability lens. As insights are gained progressively around the value adding capabilities that could be created (feasibility), they will be pressure tested against existing higher level market and consumer research and through personal contact in markets around the likely adoption by consumers in several market channels within North America.

Lens 3: What's Viable – What profitability drivers could be achieved

Insights about what consumers desire, coupled with an understanding of what is feasible to manufacture, will be combined to consider the most viable or profitable market development strategies for the client. The outcome will be a prioritised market / NPD strategy for goat products into North America.

An in-country workshop was held with 16 participants including 3 from Meat & Livestock Australia's North America's division, one representative from Greenleaf Enterprises and thirteen from across commercial import, wholesale and goat processing businesses in the United States of America.

Step 2: Market Development Plan

A staged market development plan was prepared with recommendations on product range, priority market channels, as well as communication, engagement and marketing communication methods to support the program.

3.4 Recipe, packaging and new product development

Through the project two recipes were developed and uploaded on Thomas Farms website along with the professionally photographed cooked product (slow cooker Jamaican curry goat and goat massaman curry) as shown in Figure 6. The photographs from these recipes shoot will be included in improved packaging as shown in Figure 5.




Figure 5: Retail goat cube packaging



Figure 6: Goat recipes on Thomas Farms website

Source: https://thomasfarms.com/blogs/recipes/tagged/Protein_Goat

Skin-on and burnt bone in goat cubes were trialed with Thomas Farms chefs and key clients as part of new product research and development.




SLOW COOKER JAMAICAN CURRY GOAT

PREP TIME 10 MINUTES	COOK TIME 6-8 HOURS	TOTAL TIME 6-8 HOURS
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Our Slow Cooker Jamaican Curry Goat is bursting with aromatic flavors. Begin by searing the goat cubes to allow them to brown then to the slow cooker. Add a medley of ingredients including onion, potatoes, peas, ginger, Jamaican curry powder, thyme, cayenne pepper, scallions, and broth. Let it simmer on low for 6-8 hours allowing the goat to become tender and melding with these flavors. Serve the Jamaican dish as is or over rice, garnished with additional scallions. Enjoy the rich and authentic taste of Jamaican cuisine at home.

INGREDIENTS

SWAP PROTEIN



- 2 tablespoons olive oil
- 1 package Thomas Farms Bone-In Goat Cubes
- 1 teaspoon kosher salt
- 1 yellow onion, sliced
- 3 yellow potatoes, peeled and cubed
- 2 garlic cloves, minced
- 1 teaspoon minced ginger
- 3 tablespoons Jamaican curry powder
- 2 stalks of fresh thyme
- 1/2-1 teaspoon cayenne pepper
- 2 scallions, chopped (white and green)
- 1 teaspoon allspice
- 1 teaspoon alliums seasoning
- 2 cups beef or chicken broth
- Salt to taste




GOAT MASSAMAN CURRY

PREP TIME 1 HOUR 15 MINS	COOK TIME 1 HOUR 45 MINS	TOTAL TIME 3 HOURS
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The exotic flavors in our Goat Massaman Curry make for a delectable one-of-a-kind dish. Tender Thomas Farms Goat Cubes are marinated in a fragrant blend of curry paste, ginger, and lemongrass, then cooked to perfection in a creamy coconut milk sauce. Add potatoes and green beans for hearty and satisfying dish. Adjust the seasoning with fish sauce, lemon juice, and brown sugar for a harmonious balance. Garnish with fresh coriander and serve over jasmine rice for an unforgettable culinary adventure.

INGREDIENTS

SWAP PROTEIN



- 1 1/2 pounds Thomas Farms Goat Cubes
- 1 onion, sliced
- 1 tablespoon finely grated ginger
- 2-3 tablespoons massaman curry paste
- 1 tablespoon oil
- squeeze of lemon juice
- 1 stalk lemongrass, white part only, bruised
- 16 ounces can coconut milk
- 3/4 pound chat potatoes, halved
- 1 cup green beans, halved
- fish sauce, to taste
- lemon juice, to taste
- brown sugar, to taste
- 2 tablespoons chopped coriander

Figure 7: New recipes developed and uploaded onto website

Source:

<https://thomasfarms.com/blogs/recipes/slow-cooker-jamaican-curry-goat>

<https://thomasfarms.com/blogs/recipes/goat-massaman-curry>

4. Results

4.1 Goat meat background

Development of value-added products and new market channels has the potential to support the transformation of the Australian goat industry from a commodity boom and bust industry to a market orientated, value-based industry where quality products demanded by consumers are delivered consistently across the entire year. The longer-term objective is to create a more stable market for Australian goat and to increase the overall demand for goat meat into North America. Thomas Foods International (TFI) USA has the capability for development of value-added and pre-cooked goat products in-market to diversify the offering of Australian goat meat. This has the potential to increase customer reach, diversify product mix and potentially increase per capita consumption through convenience and communication of additional consumer value propositions (low fat, high protein, rangeland low carbon footprint).

To grow consumer demand, a detailed understanding of current and potential consumer demographics was required to ideate what new product formats could support increased per capita consumption. Additionally, market channels that could provide new goat offerings also needed to be understood. These market opportunities were then prioritised in conjunction with value-adding processing capability that will cost-effectively meet those market opportunities.

The traditional goat consumer base includes Halal (Muslim), Caribbean Island, Hispanic, Indian, Pakistani, Nepalese as well as Southeast Asian consumers looking for skin-on goat products. The Australian goat exports include frozen carcasses, frozen assorted cuts followed by a small quantity of frozen leg cuts and cubed pieces. In 2023 goat exports included chilled goat airfreighted 27.2 tonnes to Oman and Malaysia, 19.7 tonnes of frozen Capra and 33,842 tonnes of frozen goat products (MLA 2024).

4.2 Macro trends and value drivers for the USA consumer

4.2.1 Trends in protein consumption

1,300 meat consumers surveyed in January and February 2023 were grouped into personas by Midan Marketing (Table 2). Connected Trendsetters had a strong willingness to try new meat products and expand purchasing, while Claim Seekers offer the opportunity to market goat meats' environmental and health benefits.

Table 2: Meat consumer segmentation

	Connected Trendsetters	Claim Seekers	Convenience Cravers	Committed Carnivores	Classic Palates
%	14%	24%	17%	23%	22%
Persona	Early adopters that are into experimenting	Open to experimenting	Time poor and not confident in the kitchen	Lower income but love to cook and eat meat	Traditionists who respond to sale prices
Insights	Love cooking and active with social media and online shopping	Willing to pay more for meat with claims – organic, grassfed, antibiotic free, humanely raised	Require fast and easy meal solutions with preference for pre-cooked	Open to experimenting within their monetary constraints.	Not motivated by health claims and feel meat is expensive.
Top purchase locations					
Supercentres	62%	50%	52%	67%	40%
Supermarket	46%	69%	48%	67%	69%
Club store	38%	35%	29%	31%	23%
Health/Natural	35%	25%	24%	30%	
Deep Discount Grocer					19%
Bought fresh meat online – last 3mths	80%	26%	44%	28%	8%
Unmet needs					
Healthy product: No hormones / additives	1	1	2	2	2
Availability	2	3	1	4	4
Info on how raised & processed	3	2	4	4	3
Lower prices	4	4	3	1	1
Packaging	4	4	5	3	5

Source: Midan Marketing 2023

Convenience is important with 30% of consumers willing to pay extra if the product saves them time and 16% of consumers stating it takes too long to prepare meat for an everyday meal (Midan Marketing 2023). Gen Z and Millennials are influenced by social media brand presence and influencers. 52% of consumers consider sustainability when buying meat with 74% of these consumers seeking out fresh meat with sustainability credentials on the pack. 68% of Claim Seekers are looking for meat labelled as grassfed and 82% are looking for all-natural meat (Midan Marketing 2023).

The consumption of protein foods in restaurants has declined since 2007 from 11% to 5%, with an increase in school lunches and at home consumption. Purchases from retailers has increased aligned with the increase of 'at home' consumption of protein-based meals to from 67% to 71% (Economic Research Service 2021). This follows the 'gourmet at home' trend where consumers are looking for high quality ready to cook or ready to eat meals which mimic the restaurant experience without needing to leave their home with 44% of people surveyed saying they are sitting down to dinner more since 2020 (Norton 2022).

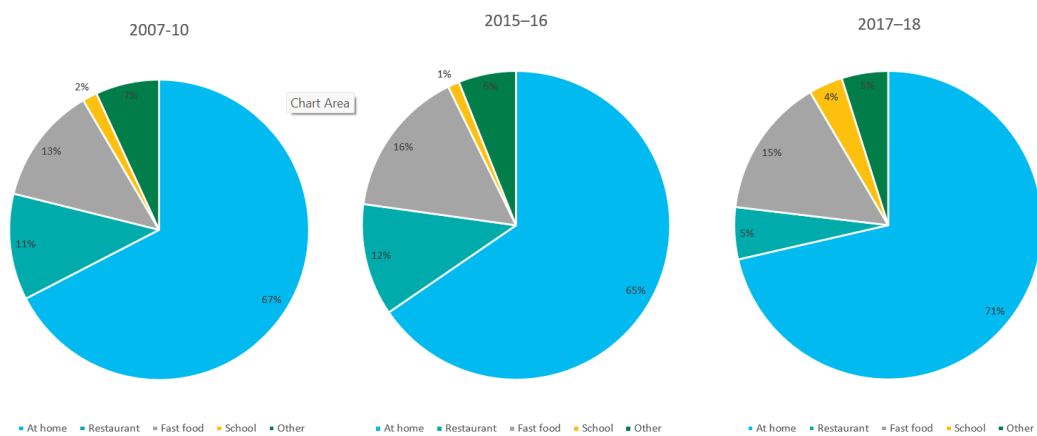


Figure 8: Purchase location of protein-based foods in USA

Source: Economic Research Service (2021)

A survey by Butcherblock in 2021 of 1,745 over 25 year olds found that 79% has practices or traditions when it comes to dinner. 29% had a meal tradition for certain days of the week for example 'Taco Tuesday' or pizza on Friday nights. Targeting meal tradition with reasons to spend more money than normal on meal as shown in Figure 9 for example holidays, special occasion eating, convenience and health claims provides a marketing opportunity to create a value added product which consumers are willing to pay for.

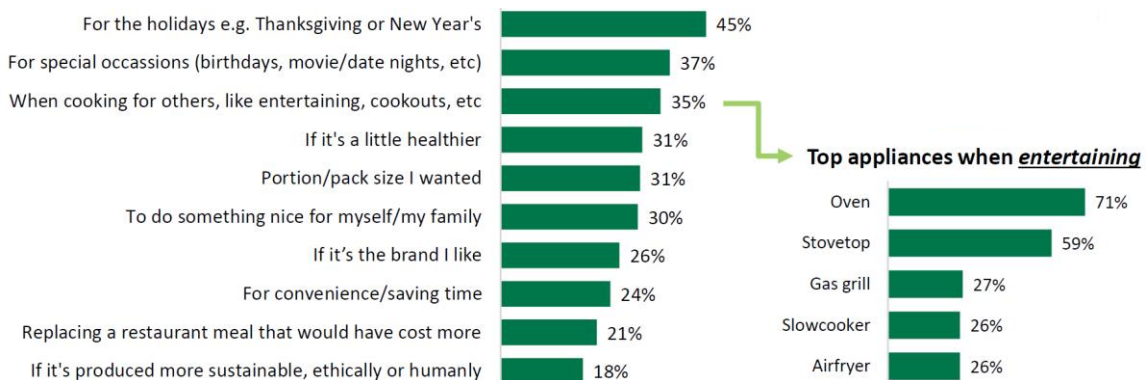


Figure 9: Reasons for spending more than normal on meat

Source: FMI 2024

- Identifying products and price points to market goat meat to food service sector is critical to expand goat meat consumption to everyday consumers in USA.
- 'Gourmet at home' ready to cook or ready meat and meal products are growing in market share.
- Targeting distribution of goat products at retail outlets and online stores for example Convenience Cravers are looking for ready to heat and eat while Connected Trendsetters purchase online based on influencers recommendations.

4.2.2 Protein consumption by species

The growth of chicken meat consumption has increased over the past twenty years as show in grey in Figure 10. The consumption of beef has declined by 4 kilograms per year while pork consumption, based on extrapolation of retail data has remained steady.

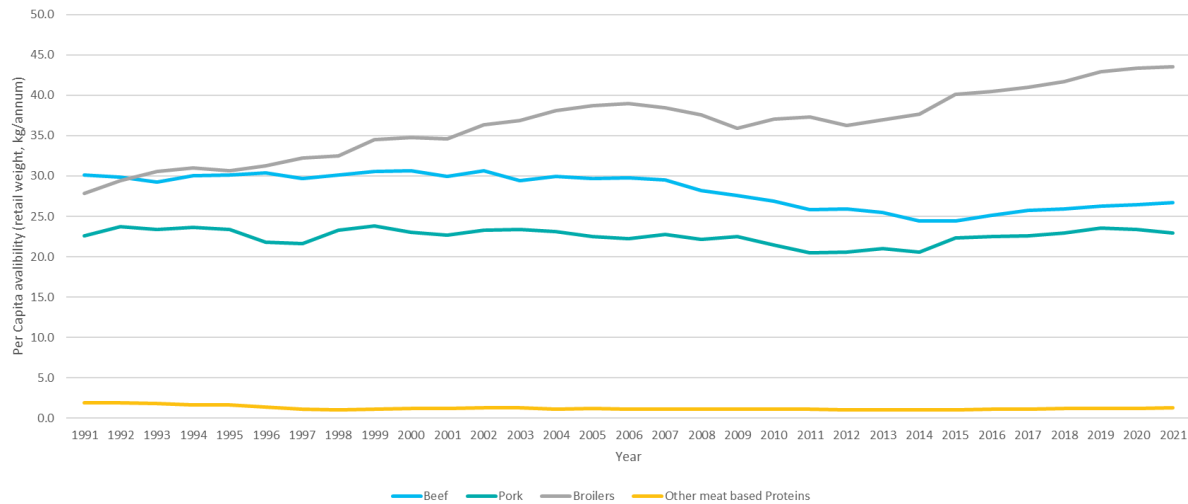


Figure 10: Protein per capita available at USA retail level (kg/annum)

Source: www.ers.usda.gov/data-products/food-consumption-and-nutrient-intakes/

The minor proteins shown in Figure 11 include lamb and veal with a steady increase in lamb consumption seen since 2011, although on a per head basis the consumption is 600 grams compared to beef and pork which is over 25 kilograms per year.

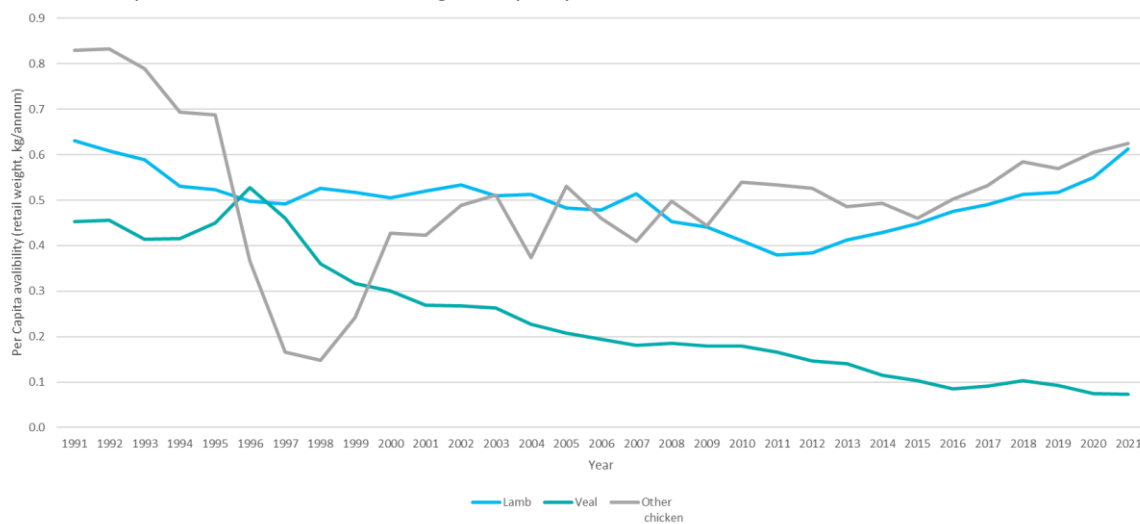


Figure 11: Breakdown of other meat-based proteins

Source: www.ers.usda.gov/data-products/food-consumption-and-nutrient-intakes/

4.2.3 USA Protein imports

The increase in imports of both seafood and meat products are shown in Figure 12 with seafood having a higher overall dollar value as well as sustained growth.

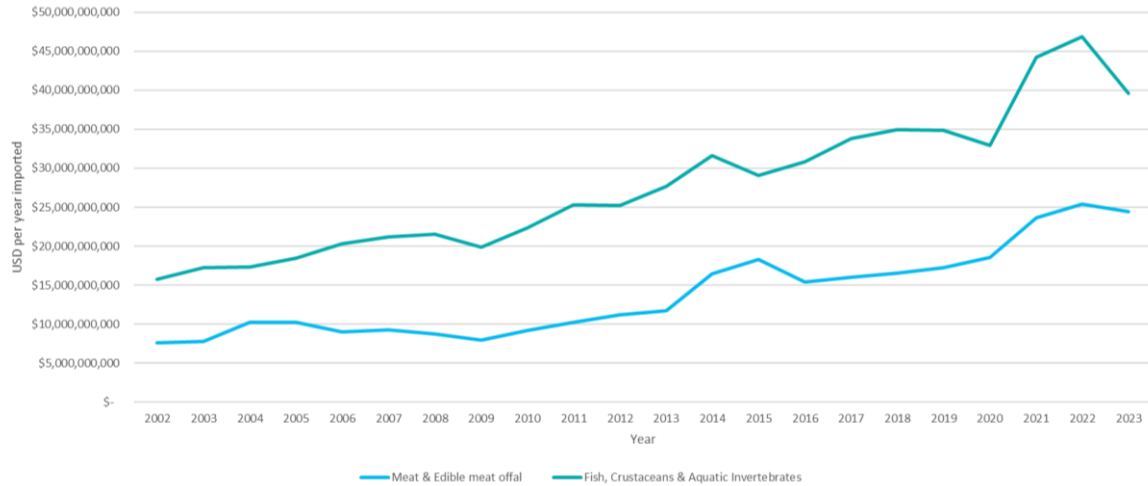


Figure 12: Fish and meat imports (\$/annum) into USA

The interpretation of the importation of meat products needs to be considered in relation to the domestic supply, relative price and availability of product from major suppliers including Canada, Australia and Mexico.

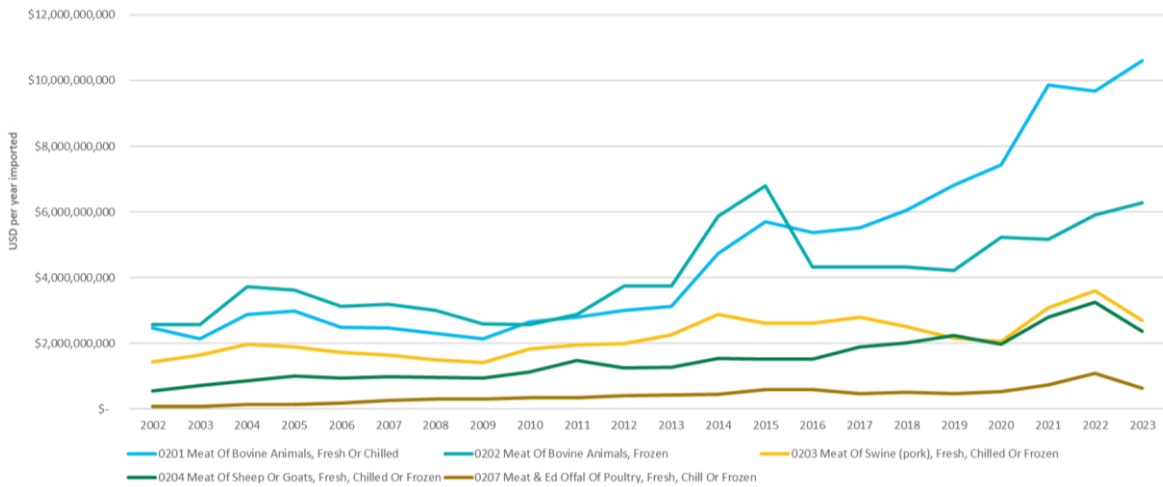


Figure 13: Import value into USA by HS Code 02

Australia, followed by New Zealand is the largest supplier of sheep and goat products to the USA. The overall value of exports has increased year on year since 2016 except for the dip in 2020. There is a small quantity of product supplied into the USA from Mexico and Chile.

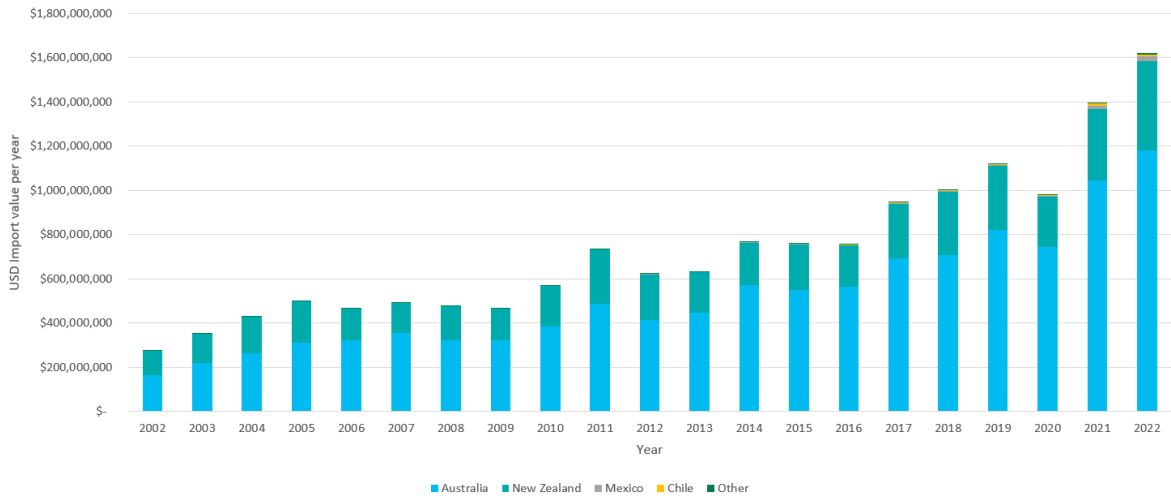


Figure 14: Sheep and goat meat imports into USA by country (\$/annum)

The total importation value per year of goat meat into the USA is highlighted in Figure 15. The value has increased in the past 20 years, noting the growth of chilled sheep, lamb and goat meat post 2020.

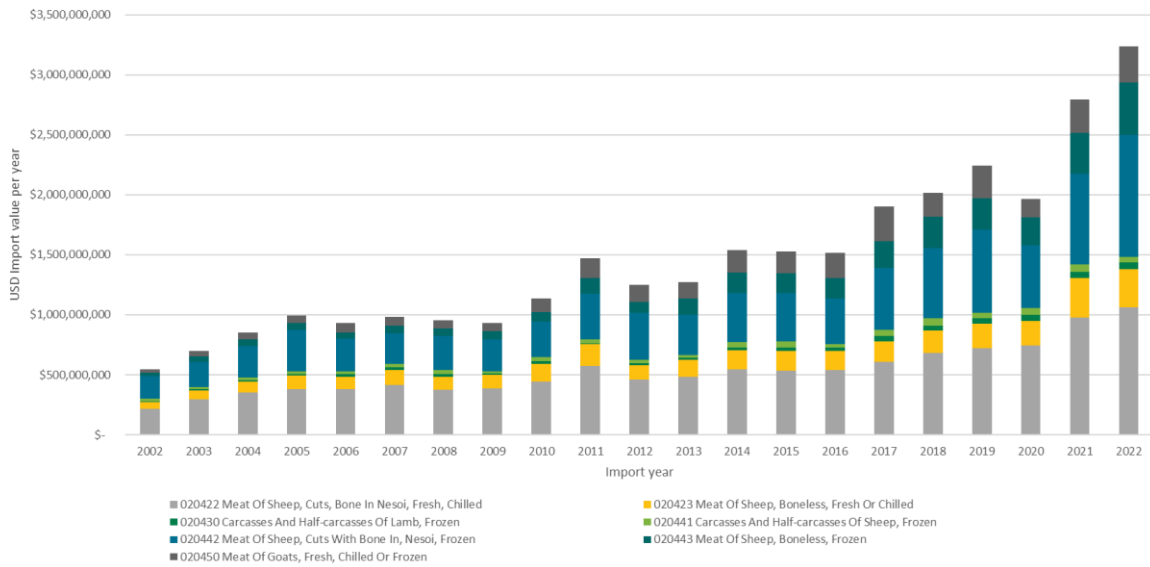


Figure 15: Breakdown of sheep and goat meat category by import value (\$/annum)

4.2.4 USA Goat meat trade

The USA both imports and exports goat meat as shown in this section.

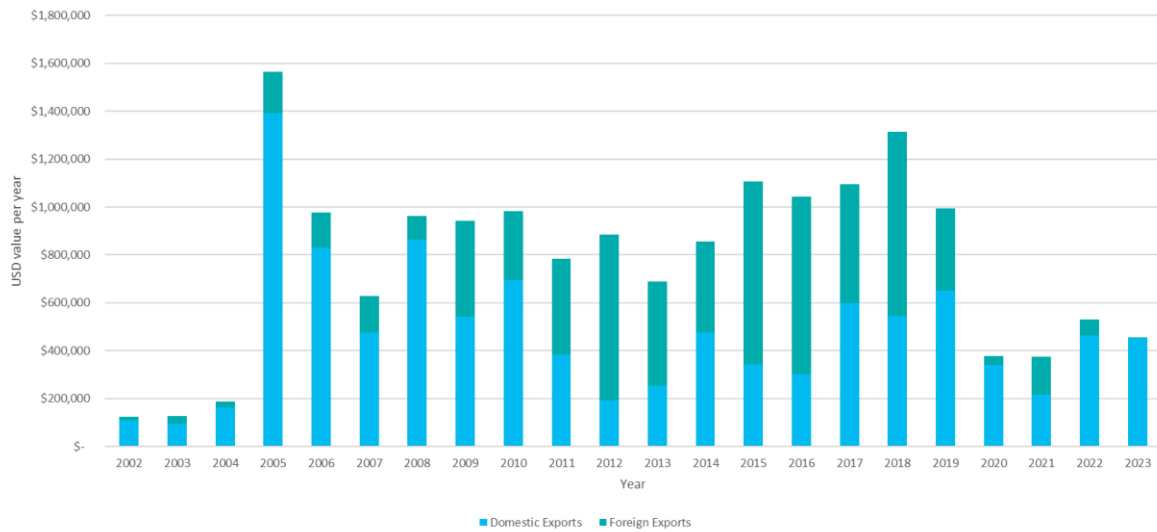


Figure 16: Goat meat exports (\$/annum)

The largest goat meat processing capacity is in Colorado with 22 million pounds of goat meat per year with a processing capacity of 26,000 head per day. Texas has 13 plants registered to process goat, with a processing capacity of 16,000 head per day and production of 13.5 million pounds of goat meat per year.

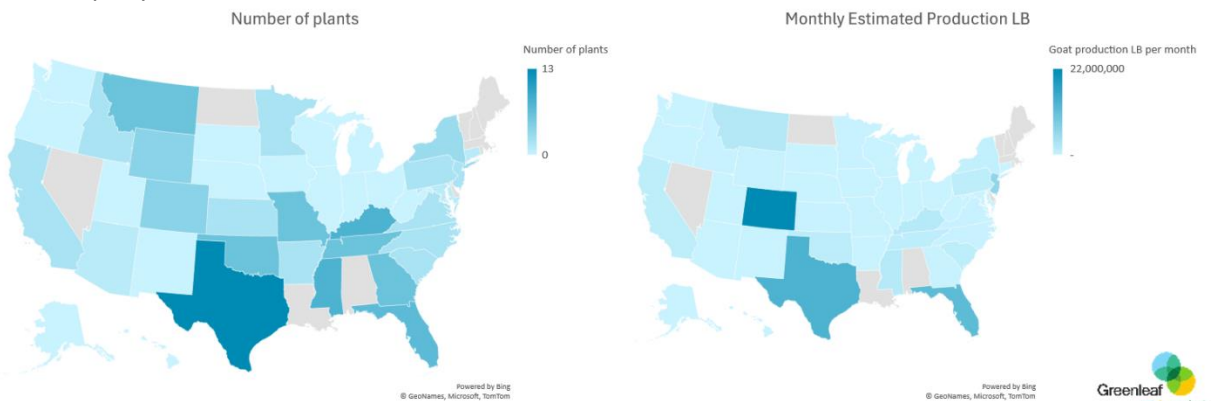


Figure 17: USA Domestic goat meat processors and processing capacity per State

Australia is the main supplier of goat meat into the USA with a small quantity from Mexico and New Zealand.

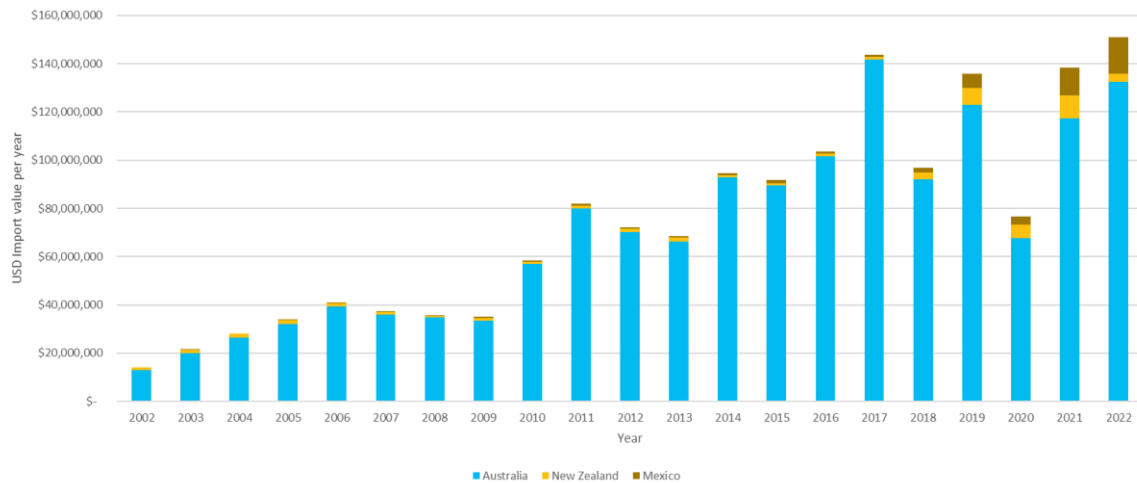


Figure 18: Goat meat imports into the USA by country of origin (\$/annum)

The peak import of Australian goat meat volumes declined from 2015 to 2020, with an increase in 2022 to 2018 and 2019 volumes based on Australian Department of Agriculture, Forestry and Fisheries data. The export of goat meat from Australia was frozen 6 way listed as ‘assorted cuts’, whole goat carcasses, cubed pieces and leg chump off.

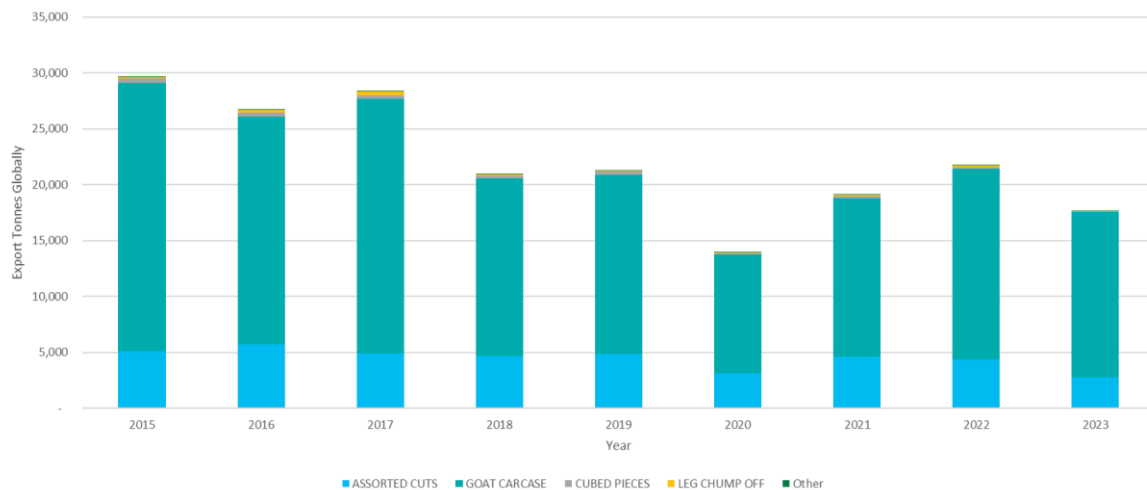


Figure 19: Export volumes (t) goat products by product type from Australia to USA

Summary:

- Chicken consumption has continued to grow at a retail level.
- Lamb consumption and Australian exports have grown from a low base.
- Australia is the key goat supplier into the USA market.
- There are negligible volumes of processed goat exported from Australia into the USA with carcasses and 6-way being the main export products.

4.3 Consumer analysis

Mutton and goat meat are often combined for statistical analysis. In the USA, mutton and goat can be interchanged based on price and availability. Goat is one of the world’s most consumed meats based on it being a staple in population bases including Africa, Asia and the Middle East with Africa and Asia (Mazhangara et al., 2019). The United States of America has a diverse ethnic population where eating goat meat is part of their traditional diet.

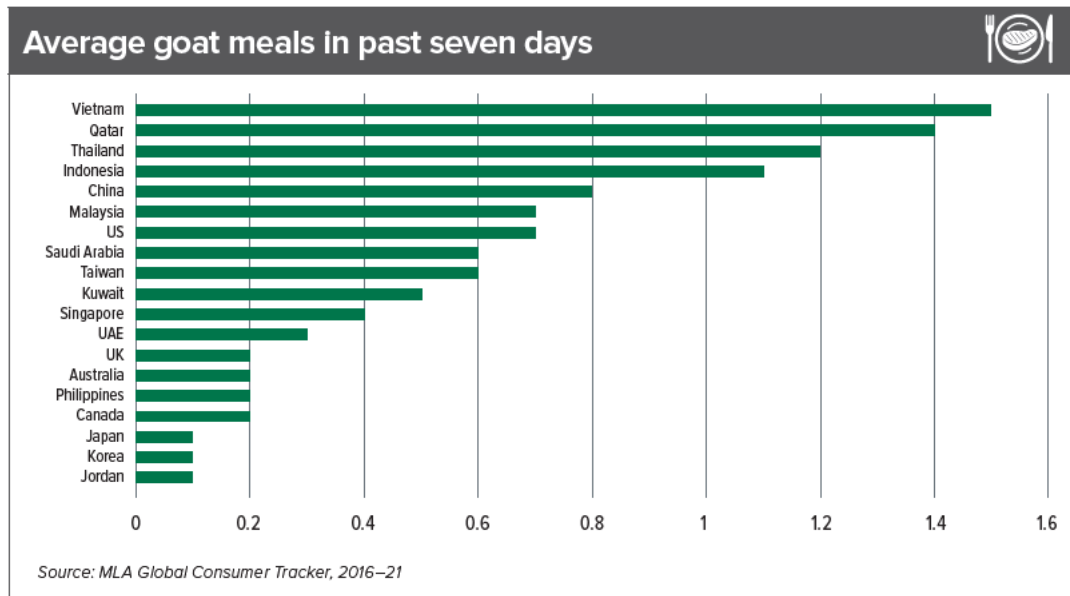


Figure 20: Goat meat consumption by country previous 7 days

Source: MLA 2022 Global goat snapshot (www.goatindustrycouncil.com.au/wp-content/uploads/2022/05/Global-Goat-snapshot-2022.pdf)

Goat and chicken meat demand is high for consumers where pork is forbidden (Muslims) and beef is prohibited (Hindus).



Figure 21: Mutton and goat meat consumption by country 2020

Source: FAO 2020 <https://www.visualcapitalist.com/cp/mapped-meat-consumption-by-country-and-type/>

Many immigrants have come from regions with strong demand for goat meat, including the Middle East, Asia, Africa, the Caribbean, and Central America. For ethnic Chinese, goat is to be eaten in the colder months. The Mexicans, Africans and Caribbean nationals enjoy goat for holidays and family celebrations.

Religious celebrations where goat is a preferred protein for some consumers are outlined in Table 3. Southern Italians, Greek and Portuguese cultures serve roast goat for Easter while in some

cultures and families across Southern Europe goat is served on Christmas day. In addition to the religious festivals listed below are the Diwali and Dashain for Hindus (Cornell University 2024)

Table 3: Religious celebrations where goat meat is consumed

Holiday	2023	2024	2025	2026	2027
Eid ul Adha - Festival of Sacrifice	June 28-29	June 17-18	June 6-7	May 27-30	May 16-19
Islamic New Year	July 19	July 7	June 26	June 16	June 5
Passover/Pesach	April 5-12	April 22-30	April 12-20	April 1-9	April 21-29
Western Roman Easter	April 9	March 31	April 20	April 5	March 28
Orthodox Easter	April 16	May 5	April 20	April 12	May 2
Ramadan Month of Fasting	March 22- April 20	March 10- April 8	February 28- March 30	February 17 - March 18	February 7- March 8
Eid-al-Fitr Ramadan Ends	April 21-22	April 9-10	March 30-31	March 19-20	March 9-10
Rosh Hashanah Jewish New Year	September 15-17	October 2-4	September 22-24	September 11-13	October 1-3
Mawlid al-Nabi Birth of the Prophet	September 27	September 15	September 4	August 25	August 14
Thanksgiving	November 23	November 28	November 27	November 26	November 25
Chanukkah	December 7-15	December 25-January 2	December 14-22	December 4-12	December 24-January 1
Christmas	December 25	December 25	December 25	December 25	December 25

Source: Barkley (2024)

Table 4: Muslim population by State

State	Muslim Population
New York	724,475
California	504,056
Illinois	473,792
New Jersey	321,652
Texas	313,209
Michigan	241,828
Maryland	188,914
Virginia	169,371
Pennsylvania	149,561
Massachusetts	131,749

Source: World population review (2024) using USA 2020 Census data

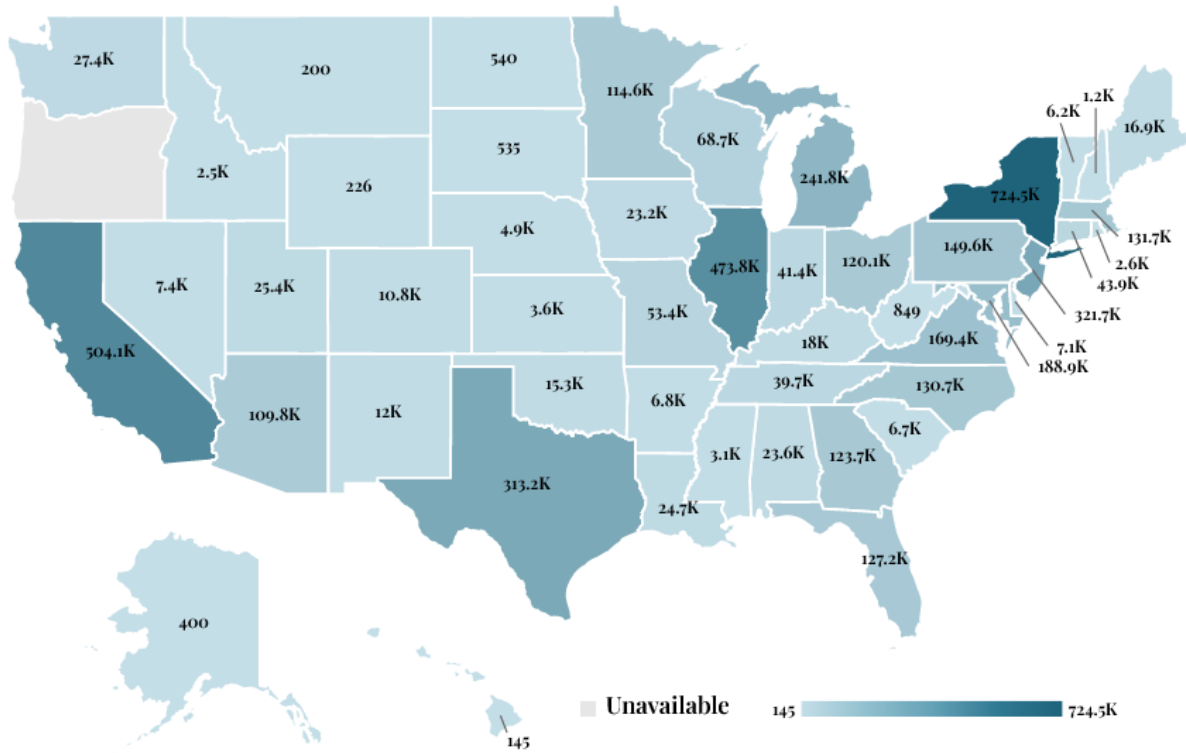


Figure 22: Muslim population by state based on census data

Source: Greenleaf analytics using USA 2020 Census data

4.3.1 USA and Canada population dynamics by ethnicity

Based on the 2020 census data the population ethnicities have been mapped and displayed graphically in this section. California, Texas and Florida have large Hispanic, African and Asian population bases which have traditionally consumed goat. These areas and others shown in Table 5 require additional analysis to identify ways to grow goat consumption in these states with traditional goat consumers.

Table 5: Total combined number of ethnic people per state – top 10 states

State	Asian	Hispanic or Latino	Black & Africans	Total Population (Asian, Black, Hispanic)
<i>California, USA</i>	5,957,867	15,732,184	2,025,218	23,715,269
<i>Texas, USA</i>	1,608,173	12,070,642	3,508,706	17,187,521
<i>Florida, USA</i>	623,692	6,025,039	3,241,015	9,889,746
<i>New York, USA</i>	1,776,286	3,867,299	2,633,840	8,277,425
<i>Georgia, USA</i>	479,156	1,132,604	3,349,240	4,961,000
<i>Illinois, USA</i>	747,296	2,299,726	1,660,423	4,707,445
<i>New Jersey, USA</i>	923,546	2,028,470	1,111,632	4,063,648
<i>North Carolina, USA</i>	341,052	1,114,799	2,155,650	3,611,501
<i>Puerto Rico, USA</i>	2,671	3,190,139	4,088	3,196,898
<i>Virginia, USA</i>	602,881	905,750	1,594,785	3,103,416

Source: Greenleaf analytics using USA 2020 Census data

Hispanic and Latino population by state in 2020

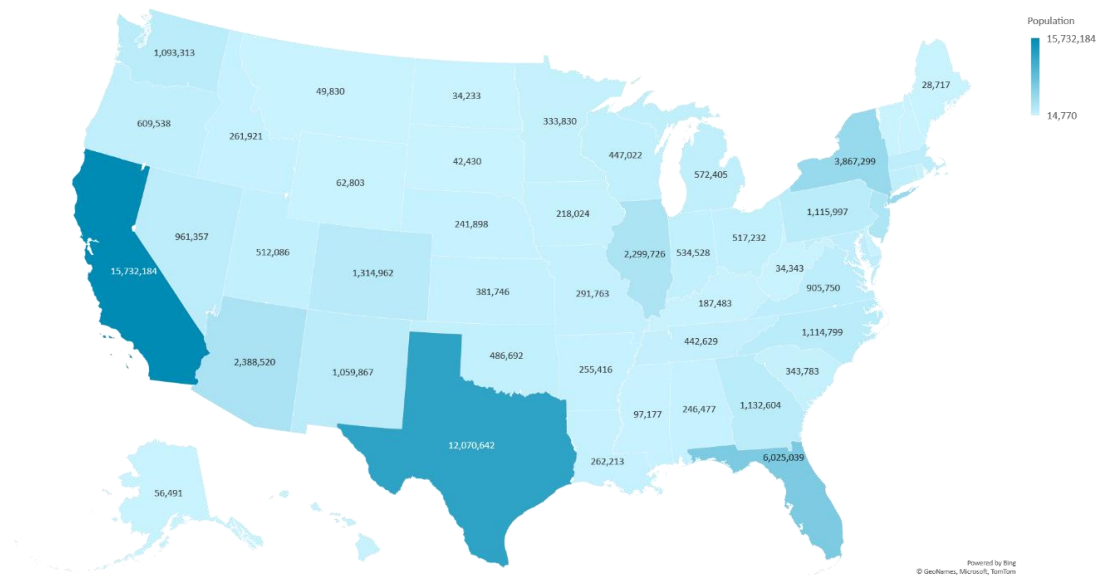


Figure 23: Hispanic and Latino % and number by State 2020

Source: Greenleaf analytics using USA 2020 Census data

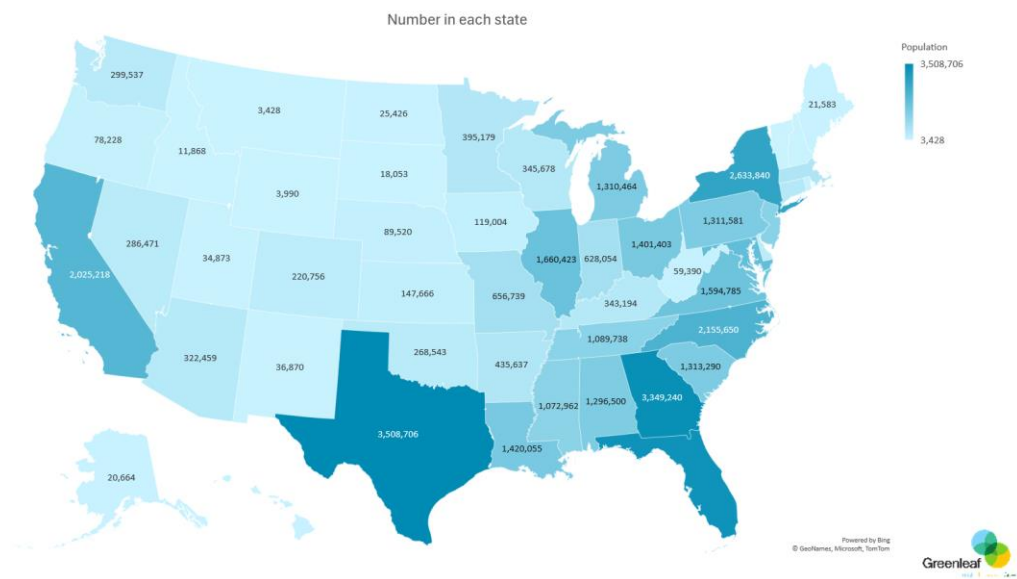


Figure 24: Population identifying as Black and African by State

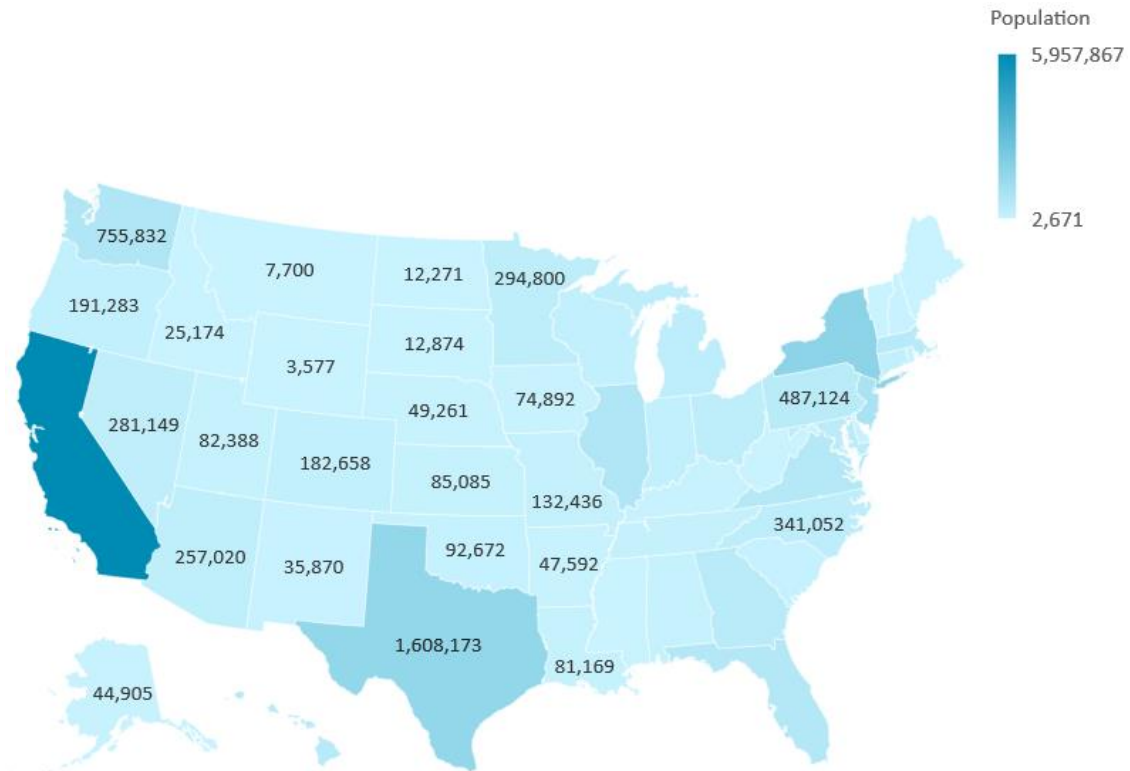


Figure 25: Population identifying as Asian by State

Table 6: Medium and average income per city

Geographic Area Name	Median Income	Average income
New York city, New York	\$ 74,694	\$ 120,216
Los Angeles city, California	\$ 76,135	\$ 117,701
Chicago city, Illinois	\$ 70,386	\$ 104,223
Houston city, Texas	\$ 60,426	\$ 95,984
Philadelphia city, Pennsylvania	\$ 56,517	\$ 82,901
Phoenix city, Arizona	\$ 75,969	\$ 103,239
San Diego city, California	\$ 100,010	\$ 133,099
Dallas city, Texas	\$ 65,400	\$ 106,493
San Antonio city, Texas	\$ 58,829	\$ 78,812
San Jose city, California	\$ 133,835	\$ 181,349
Jacksonville city, Florida	\$ 69,309	\$ 89,368
Charlotte city, North Carolina	\$ 74,401	\$ 115,509
Columbus city, Ohio	\$ 61,727	\$ 82,674

Source: Greenleaf analytics using USA 2020 Census data

In Canada 23% of the population (8,361,505) are migrants (Statistics Canada 2021). 4.7% of the population identified as having Chinese origins and 3.7% Indian origins. 4.9% of the population identify as Muslims and 2.3% as Hindu.

Summary:

- Goat is important protein for many cultures, ethnicities and religious groups.
- There are distinct population concentrations in the USA and Canada where goat meat could be targeted towards the ethnic consumer base.
- New York, California and Illinois have large Muslim, Asian, Hispanic and Latino population.
- Africans and those with African descent living in Florida provide a market opportunity.
- California has areas with higher-than-average income.

Market opportunities:

- Consumer surveys have shown a preference to chilled goat and if unavailable, consumers will purchase frozen goat meat products.
- There are states with no, to limited goat being processed commercially including Wisconsin, Illinois, Washington, Indiana for example. Consumers in these markets will be open to buying frozen goat as there is no local chilled production.
- Washington has 2 million Hispanics, Asians and Africans with 37% of the population having an ethnic background with no local goat processing.

4.3.2 What consumers value

Consumers are seeking products which meet their needs and wants. Section 4.2.1 highlighted the trends in protein consumption with 5 Persona's described: Connected Trendsetters (14%), Claim Seekers (24%), Convenience Cravers (17%), Committed Carnivores (23%) and Classic Palates (22%) (Midan Marketing 2023). Each consumer segment (Persona) values different product attributes to varying degrees. Classic Palates persona for example places a high value on price while Convenience Cravers places a high level of importance (value) on how frictionless the product is to purchase, prepare and consume as a meal.

Attributes which consumers value in protein products include:

1. Product attributes
 - a. Tangible – eating quality, product consistency, chilled/frozen
 - b. Intangible – how slaughtered, how raised (claims)
2. Price
3. Convenience:
 - a. availability to purchase the product (how frictionless is it to find and buy) and
 - b. convenience in regard to preparation, cooking and consuming

An analysis of 200+ protein products on USA supermarket shelves identified that lamb products in Trader Joe's, Aldi, Costco and Wildfork Foods in Georgia and Philadelphia were marketed as grass fed with one product having 'free range' on the packaging. The beef products which were marketed as grass fed were also certified as organic including mince, rib eye steak, hamburger patties and sous vide sliced sirloin.

The grassfed beef products also included the following product claims on the packaging:

- No Hormones
- No Antibiotics
- Natural
- Organic

Bison meat was labelled with no antibiotics, no hormones, natural on 5 products and no artificial flavours or colours on one product. Across all the protein products reviewed, 72 had the no antibiotics claim, 51 no hormones and 33 the words natural or organic as shown in Table 7.

Table 7: Product claims on retail packaging of 200 proteins in USA supermarkets

Claim	#
No Antibiotics	72
No Hormones	51
Natural/Organic	33
Halal	21
No Artificial Flavours or Colours	21
Grassfed	19
Free Range	4
No MSG	3
Carbon Neutral	1
Kosher	1

Muslim consumers:

Muslims are looking for meat protein which is permitted and has been certified Halal. For consumers in the USA their perception of Halal refers to the fact that the animal is ‘clean’ with consumers looking for Zabiha Halal labelling and or a guarantee due process has been followed. The American Halal Foundation (Hussaini 2023) stated Halal certification means the animal has been slaughtered according to the core principles of Zabiha. Consumers are looking for a guarantee of appropriate slaughtering procedures as evidenced by questions on forums and social media regarding is this product ‘Zabiha Halal’ as highlighted in Figure 26 and Figure 27.

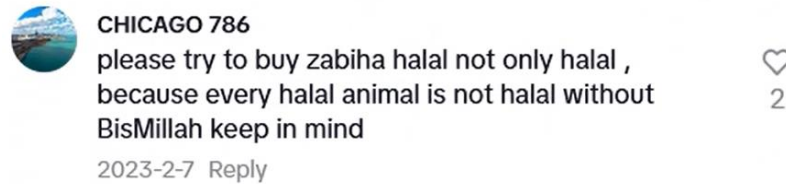


Figure 26: Consumers questioning Halal certification authenticity

Source: <https://www.tiktok.com/@manikaamerica/video/7196881317307469099>

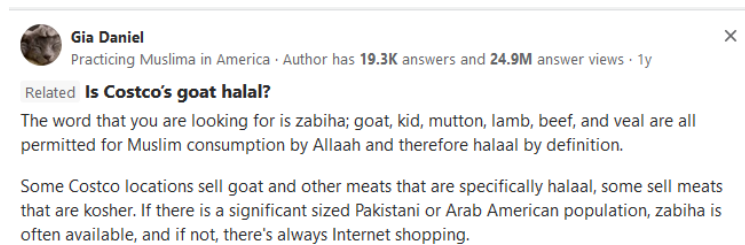


Figure 27: Consumers questioning Halal certification status

Source: <https://www.quora.com/What-is-the-review-of-Costco-s-halal-goat>

It is recommended that Australia goat exporters engage with Halal Food Councils and industry stakeholders like the American Halal Foundation to help communicate that Australian Halal goat is Zabiha Halal and processed by hand upholding the required protocols and procedures. Social media provides an opportunity to work with influencers in the Muslim community to engage and educate potential consumers.

4.3.3 Protein category retail (natural channel data)

Ground (mince) beef was the number one selling category in 2023 with 23% of the total sales revenue for 2023 within the beef category using data from Circana with an average price for mince less than \$10/lb.

Table 8: Top selling beef retail products

Product Type	Sum of Dollar Sales	Sum of Unit Sales	Sales Price (USD/lb)
PRIVATE LABEL GROUND BEEF	\$ 4,006,944,629	464,772,502	\$ 8.62
GROUND BEEF	\$ 3,394,413,325	384,770,760	\$ 8.82
UNKNOWN GROUND BEEF	\$ 1,564,699,949	173,838,819	\$ 9.00
BEEF LOIN	\$ 1,159,929,011	79,235,041	\$ 14.64
BEEF RIBEYE	\$ 1,114,234,239	56,356,710	\$ 19.77
BEEF CHUCK	\$ 822,418,372	69,519,508	\$ 11.83
BEEF SIRLOIN	\$ 777,193,471	70,004,990	\$ 11.10
BEEF ROUND	\$ 642,519,236	61,123,010	\$ 10.51
BEEF INGREDIENT CUTS	\$ 624,076,124	87,827,327	\$ 7.11
PRIVATE LABEL BEEF LOIN	\$ 590,782,950	42,346,495	\$ 13.95
FZ BEEF	\$ 586,838,652	53,533,430	\$ 10.96
PRIVATE LABEL BEEF RIBEYE	\$ 524,254,080	27,540,444	\$ 19.04
FZ GROUND BEEF	\$ 513,019,142	44,313,118	\$ 11.58
UNKNOWN BEEF RIBEYE	\$ 422,107,396	19,866,187	\$ 21.25
PRIVATE LABEL BEEF CHUCK	\$ 409,919,090	33,301,000	\$ 12.31
UNKNOWN BEEF LOIN	\$ 398,477,178	26,205,345	\$ 15.21
PRIVATE LABEL BEEF SIRLOIN	\$ 361,112,806	29,442,712	\$ 12.26
PRIVATE LABEL BEEF ROUND	\$ 324,369,520	29,851,417	\$ 10.87
PRIVATE LABEL BEEF INGREDIENT CUTS	\$ 321,708,447	39,942,696	\$ 8.05
PRIVATE LABEL FZ GROUND BEEF	\$ 306,957,535	25,462,069	\$ 12.06
UNKNOWN BEEF SIRLOIN	\$ 305,235,051	30,858,773	\$ 9.89
UNKNOWN BEEF CHUCK	\$ 267,128,126	24,145,420	\$ 11.06
BEEF RIBS	\$ 255,167,043	24,608,994	\$ 10.37
UNKNOWN BEEF ROUND	\$ 204,751,646	20,405,599	\$ 10.03
BEEF BRISKET	\$ 196,873,202	13,552,549	\$ 14.53

Source: Analysed data sourced from Circana using 2023 supermarket scan data for major retailers

Table 9: Top selling pork cuts based on total retail sales

Product Type	Sum of Dollar Sales	Sum of Unit Sales	Unit price
PORK LOIN	\$ 953,533,870	143,060,269	\$ 6.67
PORK RIBS	\$ 588,831,953	75,002,886	\$ 7.85
PRIVATE LABEL PORK LOIN	\$ 547,315,504	82,221,435	\$ 6.66
PORK SHOULDER	\$ 267,147,328	42,325,050	\$ 6.31
PRIVATE LABEL PORK RIBS	\$ 256,853,620	30,927,462	\$ 8.31
UNKNOWN PORK LOIN	\$ 161,171,623	23,911,640	\$ 6.74
UNKNOWN PORK RIBS	\$ 137,827,549	17,878,563	\$ 7.71
PRIVATE LABEL PORK SHOULDER	\$ 128,798,293	18,332,140	\$ 7.03
PORK INGREDIENT CUTS	\$ 126,964,615	31,150,906	\$ 4.08
GROUND PORK	\$ 66,871,768	13,437,378	\$ 4.98
SMITHFIELD PORK LOIN	\$ 63,082,718	9,028,548	\$ 6.99
FARMLAND PORK LOIN	\$ 61,846,961	9,018,744	\$ 6.86
UNKNOWN PORK SHOULDER	\$ 60,289,556	10,073,241	\$ 5.99
SMITHFIELD PORK RIBS	\$ 59,505,634	8,532,590	\$ 6.97
PORK RIBS BACK RIBS BONE-IN – 2000050617421	\$ 53,479,679	7,349,119	\$ 7.28
PRIVATE LABEL PORK LOIN CENTER BONE-IN CHOPS - 2000049229401	\$ 53,229,164	9,394,485	\$ 5.67
PRAIRIE FRESH PORK RIBS	\$ 47,842,811	7,074,383	\$ 6.76
PRIVATE LABEL PORK RIBS BACK RIBS BONE-IN - 2000050557441	\$ 47,451,664	3,392,141	\$ 13.99
PORK LOIN SIRLOIN BONELESS CUTLETS – 2000050764921	\$ 45,945,872	6,357,366	\$ 7.23
PRIVATE LABEL PORK LOIN TOP LOIN BONELESS CHOPS - 2000050498541	\$ 45,631,691	8,097,777	\$ 5.64
PRIVATE LABEL PORK LOIN CENTER BONELESS CHOPS - 2000051339541	\$ 40,314,330	7,374,453	\$ 5.47
PRIVATE LABEL PORK SHOULDER BLADE BONE-IN ROAST - 2000042256681	\$ 38,861,430	4,559,324	\$ 8.52
PRIVATE LABEL PORK INGREDIENT CUTS	\$ 37,407,382	9,001,380	\$ 4.16
PRIVATE LABEL PORK RIBS BACK RIBS BONE-IN - 2000050662451	\$ 37,383,272	6,180,363	\$ 6.05
PRIVATE LABEL PORK LOIN ASSORTED BONE-IN CHOPS - 2000051258871	\$ 35,750,059	2,885,122	\$ 12.39

Retail sales highlight the pork loin cuts having the highest sales value and volume. Pork, chicken and beef are staple meats. Lamb leg and rib-eye bone in has the highest unit price value across the top 25 product lines for beef, pork, lamb and bison.

Despite Bison being available to purchase in supermarkets and seen as an iconic product, the sale of goat volume and value was higher in the USA natural supermarket channel in 2023. The total value of goat sales across the USA natural supermarket channel with Circana data in 2023 was \$16,486,897 with unit sales of 2,786,901, while there were 411,997 units of bison product sold with a sales value of \$5,168,768.

Table 10: Top selling lamb retail products

Product Type	Sum of Dollar Sales	Sum of Unit Sales	Unit price
LAMB RIBEYE	\$ 51,547,285	3,791,454	\$ 13.60
LAMB LOIN	\$ 50,322,955	5,655,902	\$ 8.90
LAMB SHOULDER	\$ 31,547,867	5,078,092	\$ 6.21
LAMB LEG	\$ 28,575,763	1,378,981	\$ 20.72
UNKNOWN LAMB RIBEYE	\$ 26,650,578	2,031,690	\$ 13.12
PRIVATE LABEL LAMB LOIN	\$ 26,294,230	2,955,557	\$ 8.90
GROUND LAMB	\$ 19,541,732	2,370,247	\$ 8.24
PRIVATE LABEL LAMB RIBEYE	\$ 19,341,119	1,544,855	\$ 12.52
UNKNOWN LAMB LOIN	\$ 17,909,247	2,163,863	\$ 8.28
UNKNOWN LAMB SHOULDER	\$ 17,553,721	2,868,675	\$ 6.12
LAMB LOIN LAMB LOIN BONE-IN CHOPS - 2000050764971	\$ 14,747,221	1,759,122	\$ 8.38
PRIVATE LABEL LAMB SHOULDER	\$ 12,908,344	2,037,772	\$ 6.33
PRIVATE LABEL LAMB LOIN LAMB LOIN NAE BONE-IN CHOPS - 2000050741871	\$ 12,777,403	1,668,418	\$ 7.66
LAMB INGREDIENT CUTS	\$ 12,312,192	1,937,168	\$ 6.36
PRIVATE LABEL GROUND LAMB	\$ 12,045,727	1,537,093	\$ 7.84
LAMB RIBEYE LAMB RIBEYE BONE-IN ROAST - 2000050396621	\$ 11,249,620	551,304	\$ 20.41
UNKNOWN LAMB LEG	\$ 10,687,495	523,545	\$ 20.41
PRIVATE LABEL LAMB LEG	\$ 10,376,532	544,084	\$ 19.07
LAMB RIBEYE LAMB RIBEYE BONE-IN CHOPS - 2000047452631	\$ 8,813,748	794,162	\$ 11.10
LAMB SHOULDER BLADE BONE-IN STEAK - 2000050396641	\$ 8,804,312	1,185,520	\$ 7.43
PRIVATE LABEL LAMB RIBEYE LAMB RIBEYE NAE BONE-IN CHOPS - 2000050740621	\$ 8,715,155	857,732	\$ 10.16
PRIVATE LABEL LAMB RIBEYE LAMB RIBEYE NAE BONE-IN ROAST - 2000050740631	\$ 8,420,342	498,084	\$ 16.91
PRIVATE LABEL LAMB LOIN LAMB LOIN NAE BONE-IN CHOPS - 2000050575861	\$ 7,000,748	588,746	\$ 11.89

Table 11: Bison product sales

Product Type	Sum of Dollar Sales	Sum of Unit Sales	Unit price
TENDER BISON BUFFALO	\$ 429,651	42,856	\$ 10.03
HIGH PLAINS BISON BUFFALO GROUND PLASTIC WRAPPED 12 OZ -	\$ 369,374	36,366	\$ 10.16
HIGH PLAINS BISON BUFFALO GROUND PLASTIC WRAPPED 16 OZ -	\$ 358,459	28,885	\$ 12.41
PRIVATE LABEL FROZEN REGULAR BISON PATTY 16 OZ -	\$ 241,047	20,915	\$ 11.53
HIGH PLAINS BISON BUFFALO LOIN STEAK PLASTIC WRAPPED 8 OZ - 0884730006532	\$ 152,311	10,165	\$ 14.98
HIGH PLAINS BISON BUFFALO LOIN SIRLOIN STEAK STACKED RIGID PACK 6 OZ -	\$ 129,492	13,021	\$ 9.94
HIGH PLAINS BISON BUFFALO RIB RIBEYE STEAK STACKED RIGID PACK 8 OZ -	\$ 127,694	7,503	\$ 17.02
FORCE OF NATURE FROZEN REGULAR BISON PATTY 16 OZ - 0850006943121	\$ 110,927	6,427	\$ 17.26
HIGH PLAINS BISON BUFFALO GROUND STACKED RIGID PACK 16 OZ -	\$ 101,190	8,390	\$ 12.06
TENDER BISON BUFFALO GROUND VACUUM PACKED 16 OZ -	\$ 88,834	6,626	\$ 13.41
HIGH PLAINS BISON BUFFALO GROUND NAE GROUND PATTY VACUUM PACKED 10.66 OZ -	\$ 87,212	9,748	\$ 8.95
TENDER BISON BUFFALO GROUND PLASTIC WRAP TRAY 16 OZ -	\$ 86,683	12,401	\$ 6.99
TENDER BISON BUFFALO GROUND NAE BURGER INDIVDL WRAP IN BOX 12 OZ -	\$ 82,220	8,792	\$ 9.35
TENDER BISON BUFFALO RIB NAE RIBEYE STEAK PLASTIC WRAP TRAY 10 OZ -	\$ 44,508	3,202	\$ 13.90
TENDER BISON BUFFALO LOIN STRIP STEAK PLASTIC WRAP TRAY 8 OZ -	\$ 41,130	3,789	\$ 10.85
TENDER BISON BUFFALO GROUND NAE GROUND PLASTIC WRAP TRAY 16 OZ -	\$ 39,507	3,374	\$ 11.71
HIGH PLAINS BISON BUFFALO AO BUFFALO DELMONICO STEAK VACUUM PACKED 8 OZ	\$ 35,182	2,528	\$ 13.92
CAROLINA BISON BUFFALO	\$ 27,613	2,303	\$ 11.99
CAROLINA BISON BUFFALO GROUND VACUUM PACKED 12 OZ -	\$ 27,613	2,303	\$ 11.99
TENDER BISON BUFFALO LOIN NAE STEAK PLASTIC WRAP TRAY 8 OZ -	\$ 25,521	3,358	\$ 7.60
TENDER BISON FROZEN REGULAR BISON STEAK 8 OZ -	\$ 22,033	1,631	\$ 13.51
TENDER BISON FZ BUFFALO	\$ 22,033	1,631	\$ 13.51
TENDER BISON BUFFALO AO BUFFALO CHUCK ROAST VACUUM PACKED 24 OZ -	\$ 21,248	1,314	\$ 16.17
HIGH PLAINS BISON BUFFALO GROUND PLASTIC WRAPPED 24 OZ -	\$ 10,171	563	\$ 18.06
HIGH PLAINS BISON BUFFALO AO BUFFALO NAE STEW VACUUM PACKED 12 OZ -	\$ 5,667	703	\$ 8.06

Table 12: Goat product retail sales in 2023

Product Type	Sum of Dollar Sales	Sum of Unit Sales	Unit price
BILLY GOAT BURGER FROZEN ORIGINAL BEEF BURGER 32 OZ - 0041006016051	\$ 232,019	17,542	\$ 13.23
BILLY GOAT BURGER FROZEN REGULAR BEEF BURGER 32 OZ - 0041006016031	\$ 160,201	12,490	\$ 12.83
BILLY GOAT BURGER FZ GROUND BEEF	\$ 392,220	30,032	\$ 13.06
FZ GOAT	\$ 279,122	16,792	\$ 16.62
GOAT	\$ 4,955,030	892,153	\$ 5.55
GOAT - 2000048762321	\$ 259,817	10,116	\$ 25.68
GOAT - 2000050449741	\$ 552	9	\$ 60.02
GOAT CHUCK - 2000047628571	\$ 1,255,992	157,064	\$ 8.00
GOAT INGREDIENT CUTS - 2000015484181	\$ 1,694,436	424,439	\$ 3.99
GOAT INGREDIENT CUTS - 2000047629591	\$ 1,125,552	229,085	\$ 4.91
GOAT INGREDIENT CUTS BONE-IN - 2000071601311	\$ 31,444	5,425	\$ 5.80
GOAT LEG - 2000004908301	\$ 22,140	4,274	\$ 5.18
GOAT LEG - 2000049276691	\$ 385,308	35,352	\$ 10.90
GOAT VARIETY MEATS - 2000072016521	\$ 174,152	25,422	\$ 6.85
SWIFT FROZEN REGULAR GOAT CUBE 32 OZ - 0663701270641	\$ 44,031	3,279	\$ 13.43
SWIFT FROZEN REGULAR GOAT CUBE 35.2 OZ - 0810095373581	\$ 5,490	315	\$ 17.45
SWIFT FZ GOAT	\$ 49,521	3,593	\$ 13.78
THOMAS FARMS FROZEN REGULAR GOAT CUBE 32 OZ - 0647086621001	\$ 229,548	13,195	\$ 17.40
THOMAS FARMS FZ GOAT	\$ 229,548	13,195	\$ 17.40
THOMAS FARMS GOAT	\$ 5,637	967	\$ 5.83
THOMAS FARMS GOAT INGREDIENT CUTS - 2000076142411	\$ 4,974	878	\$ 5.67
THOMAS FARMS GOAT INGREDIENT CUTS - 2000076824071	\$ 663	90	\$ 7.39
UNKNOWN GOAT	\$ 4,949,393	891,186	\$ 5.55
WESTERN EXPORTERS FROZEN REGULAR GOAT CUBE 35.2 OZ - 0853278000011	\$ 26	2	\$ 11.99
WESTERN EXPORTERS FROZEN REGULAR GOAT CUBE 35.2 OZ - 9332005000012	\$ 26	2	\$ 11.99
WESTERN EXPORTERS FZ GOAT	\$ 52	4	\$ 11.99

Source: Analysed data sourced from Circana using 2023 supermarket scan data for major retailers

Goat is available as fresh and frozen from the meat processing plants based in the USA and from Australia as frozen goat. Australia is selling goat legs, goat bone in cuts and cubed which is processed primarily in the USA. Burger meat is produced from local goat products.

Australian goat is available from a leading warehouse club store in the USA. The goat products available are store dependent. When searching for goat, lamb and goat are presented together.

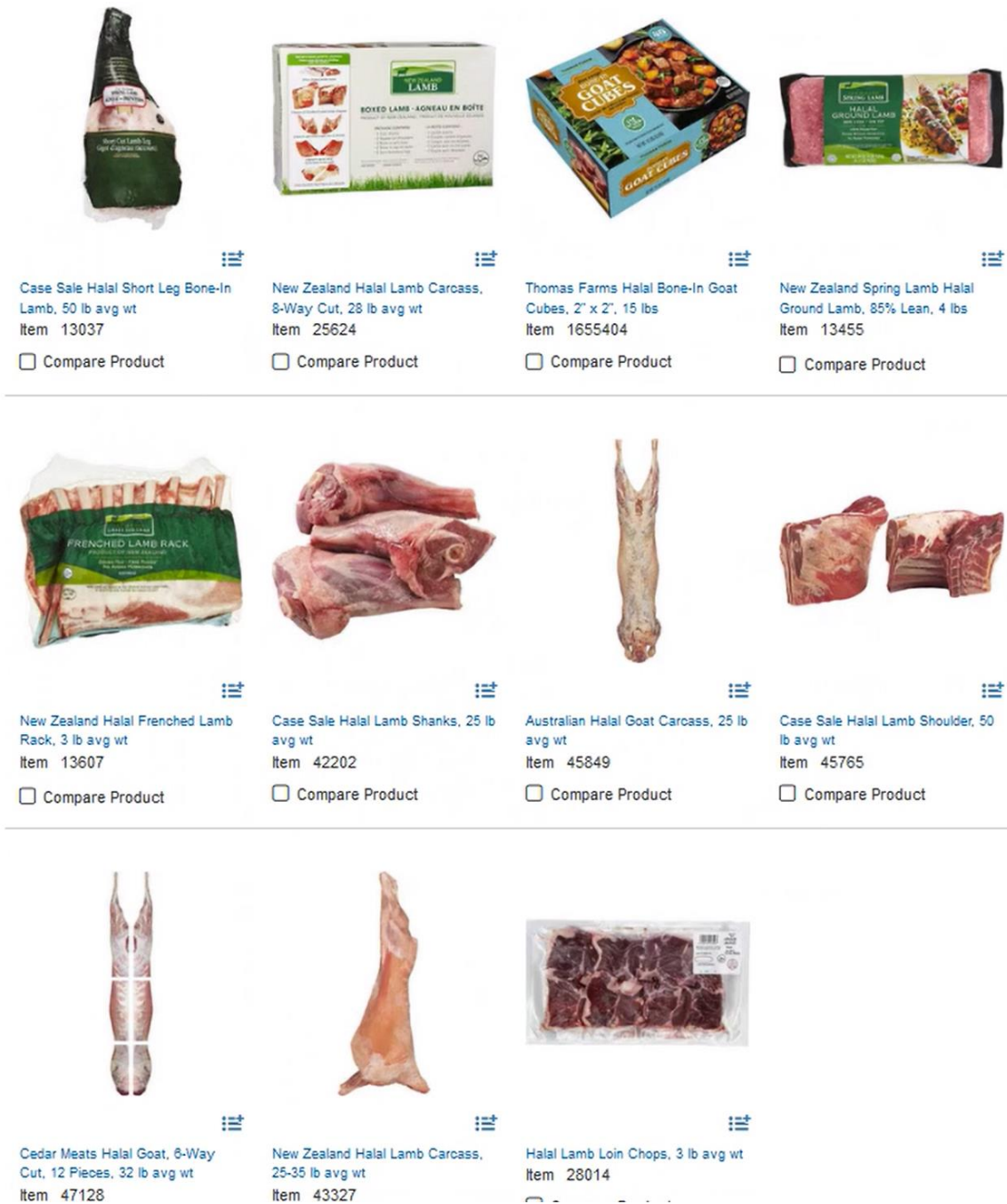


Figure 28: Goat products available from a reputable warehouse club store in the USA

Source: www.costcobusinessdelivery.com/frozen-lamb-goat.html

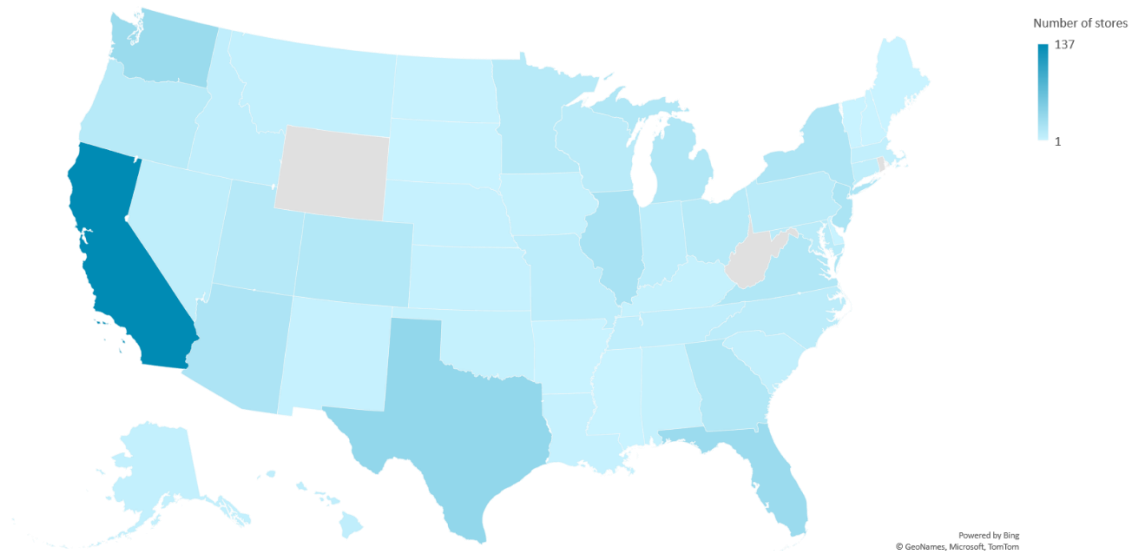


Figure 29: Number of Costco stores by state

Costco has the highest number of stores in California with 137 stores, 38 in Texas, 33 in Washington and 32 in Florida. Other club stores are interested to stock goat however they were wanting to understand the target market and prove there is a demand for goat before product ranges of goat will be stocked.

When comparing bison consumption with goat consumption for 10 selected cities with the data provided by Circana, it was identified that that 93% of the sales of goat products were in New York. California has the highest sales of Bison products with ground beef followed by steaks as the most popular products consumers purchased. Bison is renowned for its high protein and low-fat levels; attributes which goat also offers. There is an opportunity to further develop the Californian market to increase goat consumption targeting the health conscious and the ethnic consumer.

Table 13: Goat retail sales by city from all supermarkets sourced by Circana for 2023

Product Type	Sum of Dollar Sales	Sum of Unit Sales	% of sales
Atlanta, GA - Multi Outlet	\$ 10,046	619	0.0%
California - Standard - Multi Outlet	\$ 41,567	3,907	0.1%
Chicago, IL - Multi Outlet	\$ 785,221	60,171	2.2%
New York, NY - Multi Outlet	\$ 14,796,748	2,599,896	93.3%
Orlando, FL - Multi Outlet	\$ 245,838	56,002	2.0%
Philadelphia, PA - Multi Outlet	\$ 465,364	48,604	1.7%
Richmond/Norfolk, VA - Multi Outlet	\$ 24,569	1,231	0.0%
South Carolina - Multi Outlet	\$ 3,908	212	0.0%
West Texas/New Mexico - Multi Outlet	\$ 113,636	16,259	0.6%
Grand Total	\$ 16,486,897	2,786,901	

Table 14: Bison product sales by city from all supermarkets sourced by Circana for 2023

Product Type	Sum of Dollar Sales	Sum of Unit Sales	% of sales
California - Standard - Multi Outlet	\$ 2,471,856	201,126	49%
Chicago, IL - Multi Outlet	\$ 677,977	57,986	14%
Dallas/Ft. Worth, TX - Multi Outlet	\$ 23,162	2,146	1%
New York, NY - Multi Outlet	\$ 11,754	877	0%
Orlando, FL - Multi Outlet	\$ 269,568	14,957	4%
Philadelphia, PA - Multi Outlet	\$ 1,012,327	82,644	20%
Richmond/Norfolk, VA - Multi Outlet	\$ 175,767	15,585	4%
South Carolina - Multi Outlet	\$ 284,564	20,709	5%
West Texas/New Mexico - Multi Outlet	\$ 241,794	15,968	4%
Grand Total	\$ 5,168,768	411,997	

4.3.4 Ready to heat and eat products

Analysis was undertaken of retail supermarkets and food service supply outlet in the United States of America shelves through in country visit and desk top research through online shopping websites and summarised in Table 15.

Table 15: Retail shelf price of heat and serve proteins in the USA

Heat and serve products	n	Av USD/lb	Av AUD/kg	min AUD/kg	max AUD/kg
Chicken	24	8.31	27.61	15.64	37.61
Beef	11	9.80	32.56	12.65	49.80
Pork	8	7.20	23.91	18.24	30.86
Chicken curry ready to eat meals	5	9.56	31.74	31.36	31.84

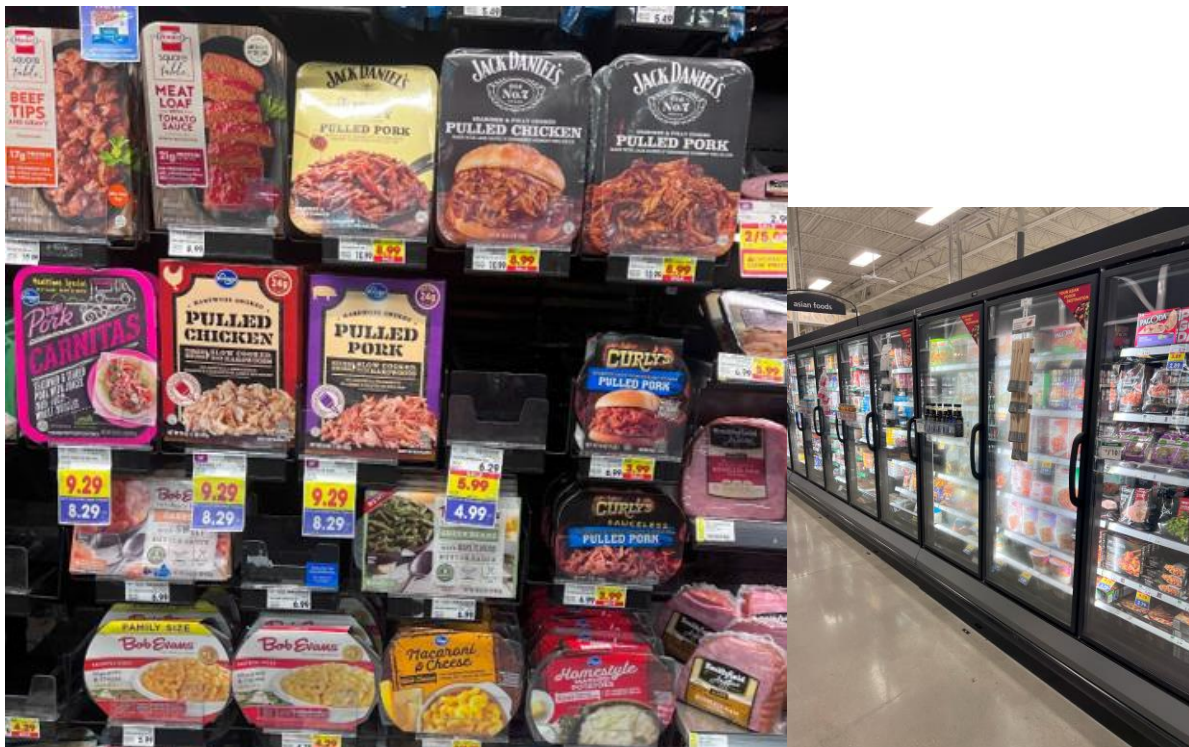


Figure 30: Ready to heat and eat meat – USA in-store research

Retail sales volumes and prices were analysed from purchased point of sales data sourced from Circana. The largest sales units were in ready to heat and eat meals with Thai and Korean style meals being popular. The pulled pork pulled chicken meat, meat loaf and beef tips in gravy had prime central spot in supermarket shelf in the chilled section. The analysis has identified there is a potential opportunity for a heat and eat goat meat pulled meat product that is Halal and marketed as product high in protein, low in fat and 'natural', with Australian goat meat as a 'food ingredient' provided to an existing established.

Through desk top analysis and research there is an opportunity for sous vie goat meat to be added to Mexican Quick Service Restaurants.

Researchers identified that the words mutton and goat is often used interchangeably when describing goat meat curries. Sheep meat is also used interchangeably with goat meat in recipes based on goat meat availability and price.

To ensure the promotion of Australian goat meat as goat meat and build retail pull through with product awareness the recommendation is to initially focus on the Mexican style 'pulled goat' for food service.

SHOP OUR PROTEINS





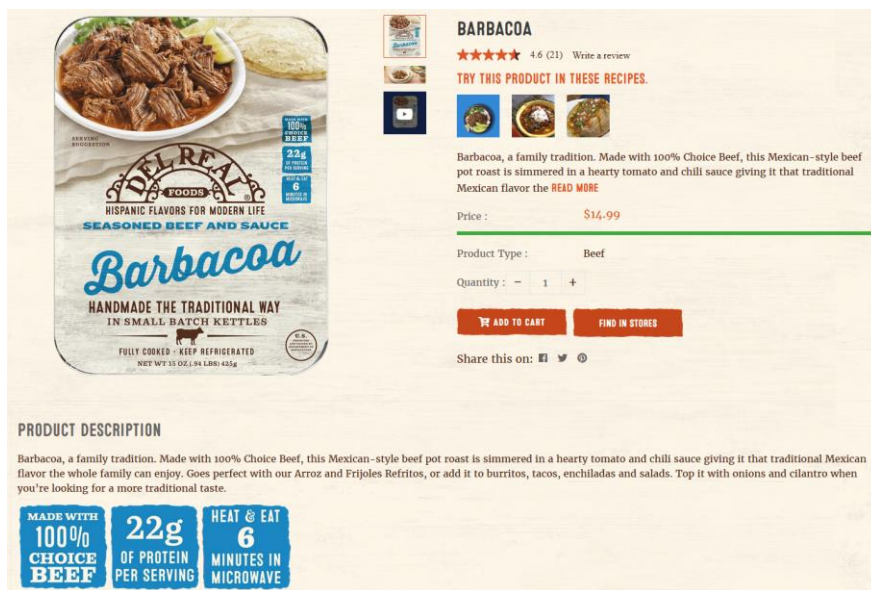
 <p>BIRRIA TACO KIT</p> <p>15OZ</p> <p>\$12.99</p> <p>Quantity</p> <p>- <input type="text" value="1"/> +</p> <p>ADD TO CART</p>	 <p>CARNITAS</p> <p>15OZ</p> <p>\$12.99</p> <p>Quantity</p> <p>- <input type="text" value="1"/> +</p> <p>ADD TO CART</p>	 <p>BARBACOA</p> <p>15OZ</p> <p>\$14.99</p> <p>Quantity</p> <p>- <input type="text" value="1"/> +</p> <p>ADD TO CART</p>	 <p>POLLO DESHEBRADO</p> <p>15OZ</p> <p>\$12.99</p> <p>Quantity</p> <p>- <input type="text" value="1"/> +</p> <p>ADD TO CART</p>
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Figure 31: Range of Mexican ready to heat and eat proteins

Source: <https://delrealfoods.com/pages/buyonline>



BARBACOA

★★★★★ 4.6 (21) Write a review

TRY THIS PRODUCT IN THESE RECIPES.

Barbacoa, a family tradition. Made with 100% Choice Beef, this Mexican-style beef pot roast is simmered in a hearty tomato and chili sauce giving it that traditional Mexican flavor the [READ MORE](#)

Price : **\$14.99**

Product Type : Beef

Quantity : - 1 +

ADD TO CART **FIND IN STORES**

Share this on: [Facebook](#) [Twitter](#) [Pinterest](#)

PRODUCT DESCRIPTION

Barbacoa, a family tradition. Made with 100% Choice Beef, this Mexican-style beef pot roast is simmered in a hearty tomato and chili sauce giving it that traditional Mexican flavor the whole family can enjoy. Goes perfect with our Arroz and Frijoles Refritos, or add it to burritos, tacos, enchiladas and salads. Top it with onions and cilantro when you're looking for a more traditional taste.

MADE WITH 100% CHOICE BEEF **22g OF PROTEIN PER SERVING** **HEAT & EAT 6 MINUTES IN MICROWAVE**

Figure 32: Ready to heat and eat meat Beef Barbacoa

Source: <https://delrealfoods.com/products/barbacoa?variant=35318341796003>

Chilled product in 5-pound bags that are ready to heat and serve is recommended based on other food service providers with similar products for example beef barbacoa (cooked, pulled, boneless beef) which retails for US\$14.99 for 15 oz (425g) (AUD 54.34/kg). The ingredient list includes Beef, Water, Crushed Tomatoes in puree (Crushed Tomatoes, Tomato Puree, Salt, Citric Acid, Calcium Chloride), Seasoning (Chili Pepper, Red Pepper, Garlic powder, Salt, Spices), Apple Cider Vinegar, Salt, Onion).

4.3.4.1 The target consumers for retail packs of ready to heat and eat Mexican style goat meat

- Middle class Anglo-American looking for a nutritious mid-week dinner which is economical and can be served within 10 minutes.
- Middle to upper class Americans which are health conscious and are looking for:
 - High protein
 - Low fat
 - Low cholesterol
 - No artificial flavours, colours, preservatives
 - No MSG
 - Gluten Free
- Conscious consumers
 - Free range / organic / natural / grass fed
 - No antibiotics, GMO's, hormone growth promotants
- Muslims seeking Halal certified ready to heat and eat products
- Second generation Americans with Hispanic origins that are looking for authentic taste and style but don't have the time to prepare the products.

To supply this new product, it is proposed to hot bone the larger goats in Australia where the meat is removed hot from the bone. The focus is on no bone fragments, maximum meat removed from the bones and not on presentation and individual preparation of the cuts. This will require innovation in the processing plant and supply chain to create new systems and product development to minimise supply chain costs and maximise value creation.

4.4 Food service analysis

Goat is traditionally served in curries and in Mexican cuisines through food service outlets in the USA. Mexican cuisines are the second most popular with Indian and Korean cuisines expanding in popularity particularly with the 18–44-year-olds. 55% of Indian restaurants were serving goat, Caribbean (10%) and Mexican (9%) based on Menu Matters (2018) survey. It should be noted that while goat is listed on the menu goat and mutton meat is often used interchangeably depending on price and availability.

Table 16 was the response to the Global data (2024) consumer survey USA Q1 Which of the following cuisines do you find most appealing? Select your top 5.

Table 16: Most appealing cuisines by age for USA consumers

	18-24	25-34	35-44	45-54	55-64
American	33%	34%	50%	60%	62%
Mexican	23%	29%	48%	57%	55%
Chinese	23%	33%	44%	47%	48%
Italian	10%	24%	28%	46%	53%
Japanese	23%	14%	24%	22%	16%
Spanish	17%	18%	26%	14%	13%
Thai	23%	21%	11%	9%	13%
French	10%	12%	9%	13%	13%
Indian	20%	15%	15%	7%	13%
Caribbean	10%	15%	19%	9%	9%
Korean	20%	13%	16%	6%	6%
Latin (other than Mexican)	13%	9%	13%	8%	11%
German	7%	7%	7%	8%	9%
Middle Eastern	7%	6%	15%	4%	7%
Vietnamese	3%	9%	12%	6%	3%

Source: GlobalData 2024

Chains of Mexican Restaurants which provide an opportunity for a pre-cooked ready to heat and serve pulled goat product. Goat exists on the menu in a limited number of chains. New product development is recommended with a Mexican Chain for goat barbacoa prepared using sous vide to complement the retail product development.

Table 17: Mexican chain store quick service restaurant chains by location

Name	Head office location	Year started	Number of locations
Chipotle Mexican Grill	Newport Beach, California	1993	2,250
Qdoba	San Diego, California	1995	729
Moe's Southwest Grill	Atlanta, Georgia	2000	680+
El Pollo Loco (United States)	Costa Mesa, California	1980	480
Rubio's Coastal Grill	Carlsbad, California	1983	200+
On the Border Mexican Grill & Cantina	Dallas, Texas	1982	150+
Taco Cabana	San Antonio, Texas	1978	142
Tijuana Flats	Maitland, Florida	1995	130
Cafe Rio	Salt Lake City, Utah	1997	120
Chuy's	Austin, Texas	1982	102
Salsarita's Fresh Mexican Grill	Charlotte, North Carolina	2000	80+
Pancheros Mexican Grill	Coralville, Iowa	1992	71
El Torito	California	1954	69
Baja Fresh	Scottsdale, Arizona	1990	60
Rosa's Cafe	Fort Worth, Texas	1983	45

Source: https://en.wikipedia.org/wiki/List_of_Mexican_restaurants

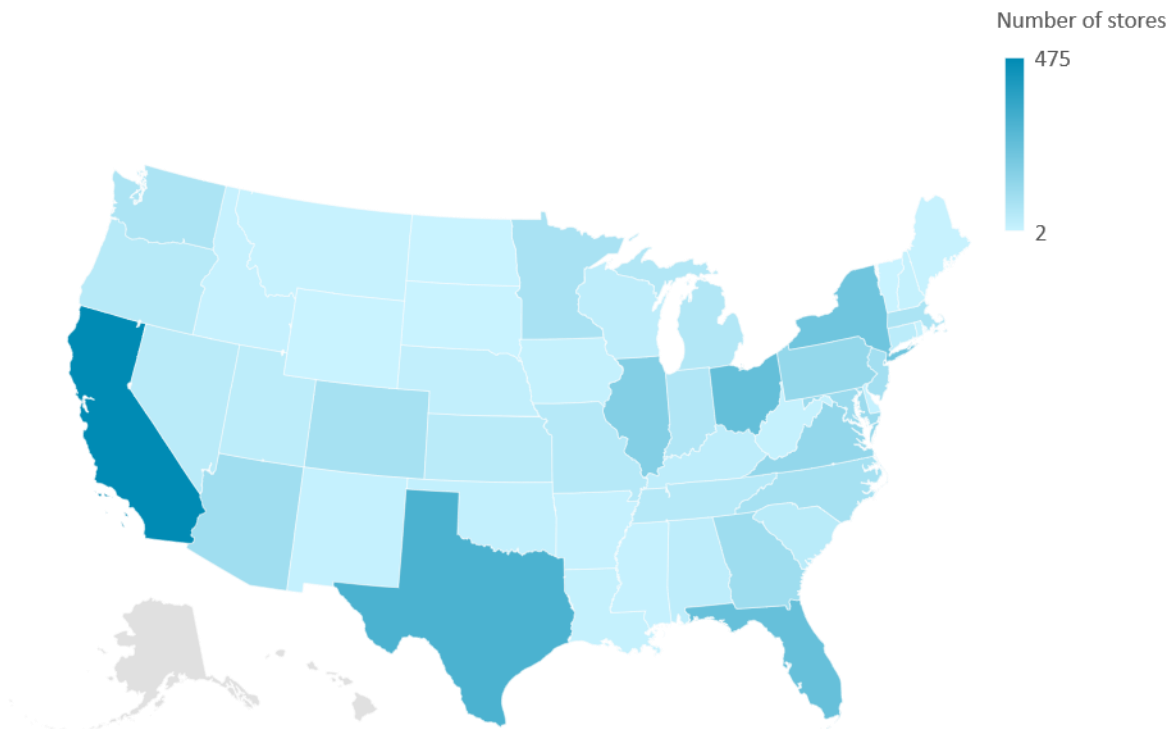


Figure 33: Chipotle stores in USA

Source: Greenleaf analytics using locations of USA stores from <https://locations.chipotle.com>



CHIPOTLE

Serve time 15 to 20 minutes

Build Your Own Burrito, Tacos, or Bowl

Burritos are served in a flour tortilla, Choose 1-3 tacos in soft flour or crispy con tortillas

Choose Your Filling

Chicken, Steak, Barbacoa, Carnitas, Sofritas, or Veggies

Choose Your Beans

Black Beans, Pinto Beans, No Beans

Choose Your Rice

White Rice, Brown Rice, No Rice

Choose Your Toppings

Queso, Guacamole, Fresh Tomato Salsa, Roasted Chili-Corn Salsa, Tomatillo-Green Chili Salsa, Tomatillo-Red Chili Salsa, Sour Cream, Fajita Veggies, Cheese, Romaine Lettuce,

Salad

Chopped romaine lettuce with your choice of Meat or Sofritas, Beans, Queso, Salsa, Guacamole, Sour Cream, or Cheese, with freshly made Chipotle-Honey Vinaigrette

Paleo Salad Bowl

Romaine Lettuce, Barbacoa, Fajita Veggies, Tomatillo-Green Chili Salsa, Guacamole

Keto Salad Bowl

Romaine Lettuce, Carnitas, Tomatillo-Red Chili Salsa, Guacamole, Cheese

Whole 30 Salad Bowl

Romaine Lettuce, Carnitas, Fajita Veggies, Fresh Tomato Salsa, Guacamole

Double-Protein Bowl

Chicken, Steak, White Rice, Black Beans, Tomatillo-Red Chili Salsa, Sour Cream, Romaine Lettuce

Sides

Chips & Queso (S, L), Side of Queso, Chips & Guacamole (S, L), Side of Guacamole, Chips & Fresh Tomato Salsa, Chips & Roasted Chili-Corn Salsa, Chips & Tomatillo-Red Chili Salsa, Chips & Tomatillo-Green Chili Salsa, Chips

Barbacoa –
goat or beef



Barbacoa is traditionally made with goat meat offering an opportunity to incorporate goat into a Mexican restaurant chain menu.

Trends and experiences in food service then drive consumer demand for similar eating experiences to create 'gourmet at home'. A marketing and product development strategy was developed and is presented in the next section to grow market share and value of Australian goat meat in North America.

4.5 Market and product development strategy

4.5.1 Proposed retail market and product development strategy

To grow market share and value of Australian goat it is recommended to start with existing products and develop new channels and new customers with these existing products. Over time product lines can be extended with existing customers and new products developed. The development of new products requires whole of supply chain interventions. Through new channels, customers seek to understand what new products they would be prepared to stock, identify what sells and what their customers are asking for. The existing products include frozen whole carcasses, frozen six way and cubed goat.

The focus for the initial marketing is recommended to be on packaging size, type, and communication of value propositions on the packaging. The precise packaging claims on health attributes of goat meat, farming systems (free range, grassfed, no antibiotics) and the Halal certification is required for the target consumer markets.

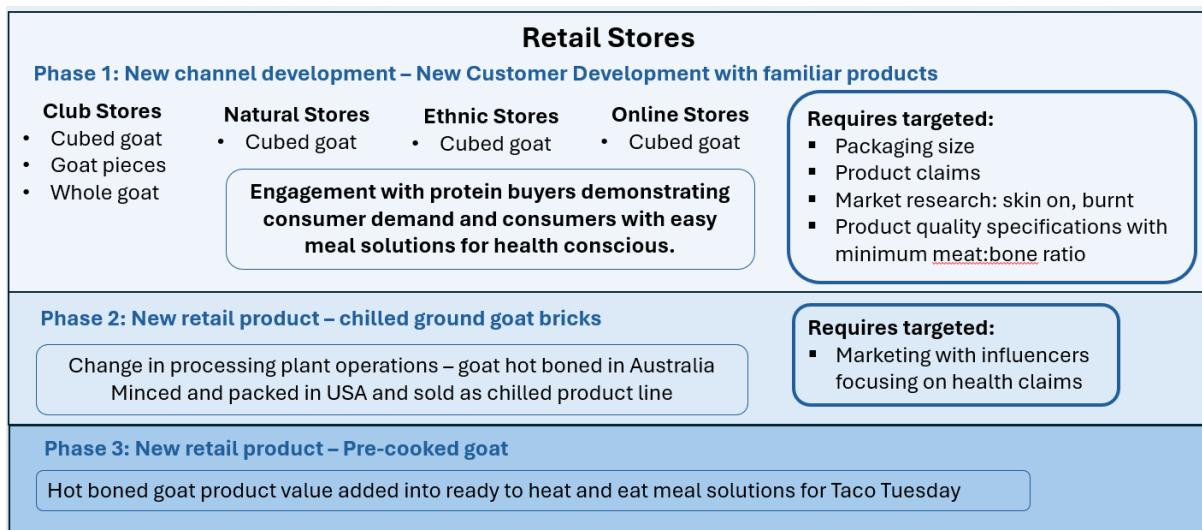


Figure 34: Retail market and product development strategy

Phase 1: New channel development+ New customer development

Proposed marketing and sales activities:

1. Detailed consumer profiling in target markets and aligning packaging size and product attributes to identify tag lines for packaging to target consumers.
2. Development of a brochure / slides / graphics which outlines the traditional goat consumers and untapped market consumption for specific retail stores including:
 - Club stores
 - Ethnic retail chain stores
3. Development of communication materials for websites where goat products are stocked.
4. Goat recipes developed and published processors and exporters of Australian goat meat for example Barbacoa for pulled taco meat.
5. Sales and marketing activities with key retail protein buyers.

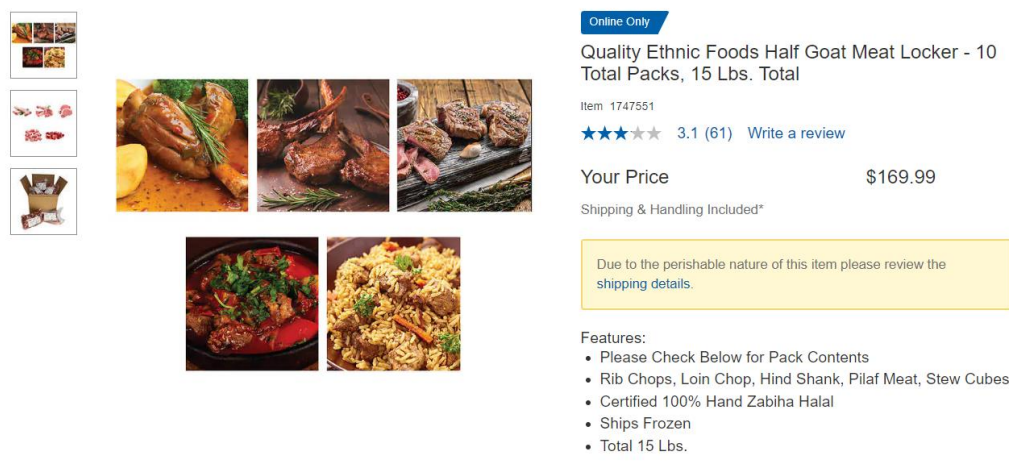
- Presentation on market potential
- Taste testing of products cooked with goat meat including bringing buyers into to try goat with Mexican, Indian and Asian cuisines (Korean and Vietnamese).

Goat pieces

Currently goat carcasses are cut 6 ways and 1 to 1.5 carcasses are put into a box, frozen and sold via Club Stores and through restaurant depot stores. Consumers are unsure what is in the box and what pieces they are buying. The review of social media comments on frozen 6-way and mixed goat in a box product from Australia identified there is an opportunity to value add through cutting carcasses differently.

Already in the marketplace are products with the goat carcasses being 'cut' to create additional value that the consumer is willing to pay for. The separation of cuts provides an opportunity to create legs, shanks, cubes, rack and ribs for example which make it easier for consumers to utilise and purchase the goat into recipes per cut. The price for this is higher with consumers willing to pay for value created and for a guarantee of what's in the box.

Home / Grocery, Household Essentials & Pet / Meat & Seafood



Quality Ethnic Foods Half Goat Meat Locker - 10 Total Packs, 15 Lbs. Total

Item 1747551

★★★★☆ 3.1 (61) [Write a review](#)

Your Price **\$169.99**

Shipping & Handling Included*

Due to the perishable nature of this item please review the shipping details.

Features:

- Please Check Below for Pack Contents
- Rib Chops, Loin Chop, Hind Shank, Pilaf Meat, Stew Cubes
- Certified 100% Hand Zabiha Halal
- Ships Frozen
- Total 15 Lbs.

Product Details Specifications Shipping & Returns

Product Details

Includes:

- 2 - 1 lbs. Rib Chops
- 2 - 1 lbs. Loin Chops
- 2 - 1 lbs. Hind Shank
- 2 - 1 lbs. Pilaf Meat
- 2 - 3.5 lbs. Stew Cubes

Quality Ethnic Foods is committed to providing delicious halal food for you and your family. Our company began over 20 years ago with one goal in mind: provide the highest quality hand harvested halal products, period.

Goat meat, often overlooked and undervalued, holds immense versatility and delightful flavors cherished across various cultures. It deserves more recognition for its exceptional qualities. Not only is it healthier than beef or lamb, but it also surpasses chicken in nutritional value, boasting a rich abundance of nutrients like B12 and niacin. Moreover, due to goats' natural tendency to avoid fat accumulation in their muscles unlike cows, goat meat maintains a comparatively low fat content and cholesterol levels.

Figure 35: Goat pieces in a box

Source: www.costco.com/quality-ethnic-foods-half-goat-meat-locker---10-total-packs%2C-15-lbs.-total.product.4000186433.html

Note:

- The pictures are of cooked product on the Costco page to support consumers and home cooks in their meal decisions as well as the raw meat on a separate page.
- There is a description of health benefits for non-traditional goat consumers.

- Specific wording relating to Halal to clarify its ‘Hand Zabiha Halal’

Whole or half goat in a box – product and packaging to suit target market

There is demand for half or whole smaller goats frozen in a box which then can fit in a conventional chest freezer. It is recommended that additional market research be undertaken to validate the price and volume of product.

4.5.2 Phase 2 & 3: New retail product development

4.5.2.1 Retail Phase 2 – chilled ground goat meat

By volume, mince (ground meat) is the highest selling product through retail channels. Developing a ground goat mince product offers health-conscious consumers a low fat, high protein alternative combined with product claims of free range, no added hormones and antibiotics satisfies consumers looking for both health and animal welfare outcomes.

The development of a ground goat product for sale in North America requires a change in the status quo for Australian goat processing plants. The cost implications of hot boning goat in Australia have been modelled below.

Table 18: Supply chain boneless goat yield and costs for hot boned goat meat from Australia to USA

Producer	Over the hooks (OTH) \$/kg	5.00
	Average hot carcass weight (kg)	15
	Carcass value \$/head	75

BONELESS PRODUCT

Saleable meat	Meat % of Carcass by weight	64
	Bone % by weight	36
	Saleable meat % from de-boned meat	95
	Saleable meat average per carcass (kg)	9.12
	\$/kg value for saleable meat based on OTH price	8.22
Processor costs	Labour to process \$/hd	6.00
	Overheads \$/hd	3.00

	Total costs processing \$/hd	9.00
	Processing cost \$/kg of saleable meat	0.99
	Processor Margin %	20
	Ex processing plant selling price \$/kg	11.05
USA	USA landed price \$/kg	12.16
	USA landed price USD/kg	8.02
	USA landed price USD/lb	3.65

4.5.2.2 Retail Phase 3 – Pre-cooked goat meat

Starting with increased presence of goat meat in the food service, particularly quick service restaurants will provide consumers with exposure which will then see an increase in cooking goat for special occasions for 'gourmet at home' meals. The retail pre-cooked goat meals should be introduced after or in conjunction with the presence of pulled goat in Mexican Quick service restaurants. Refer to section 4.3.4 for the analysis on ready to eat meals.

The approximate value creation opportunity by selling high quality sous vide pulled goat product has been calculated where goat protein is 85% of the total product volume and sauce is 15% by volume. Retail packs of sous vide pulled quality meat are selling at USD15/lb. Wholesale value of goat meat in based on purchase of boneless product from Australia could be USD5.10/lb providing a suitable margin across the supply chain.

4.5.3 Food Service marketing and product development strategies

Goat is purchased by food service as whole goat, cubed meat and frozen six-way products from wholesalers and restaurant depots which restaurants, hotels, cafes and catering services can buy in bulk their own supplies for example Restaurant Depot and Costco Business Centres. Expanding products which provide less preparation time for chefs and kitchen staff and are more versatile for example ground (minced) goat meat will help to expand customer and consumer supply base.

The food service market offers opportunities particularly with Mexican, Indian, Chinese and Vietnamese cuisines. Working with key chain stores in areas with higher affluence, interest in trying new things and are health conscious initially with raw product followed by sous vide products is recommended as shown in Figure 36.

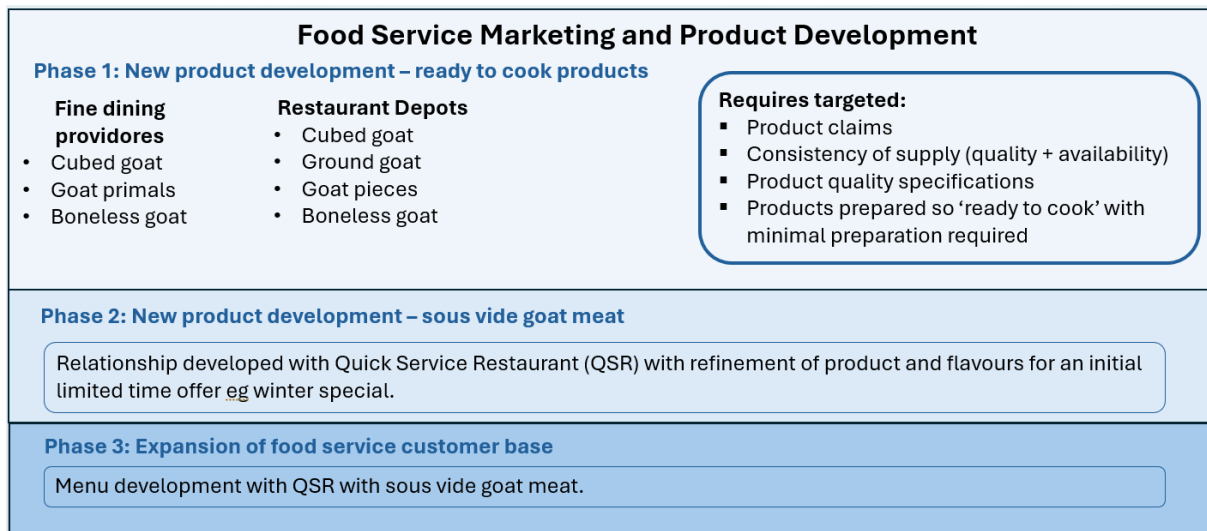


Figure 36: Food service marketing and product development

4.5.4 Risk Management

Mutton and goat meat are used interchangeably by some restaurants and consumers depending on price and availability. To grow market share and value of Australian goat meat it is crucial that goat meat is marketed as a product with unique culinary attributes and health benefits reaching consumers who don't traditionally consume goat meat in their everyday meal options.

For the USA market the target meal is mid-week under 10 minute to heat and serve for higher income earning consumers looking at replacing a quick service restaurant meal for time poor health-conscious consumers. A diversified product mix will spread risk management. It is recommended that the diversified product mix include:

1. Primal cuts – more than just 6-way as shown in Figure 35: Goat pieces in a box
2. Cubed goat – bone in and boneless with recipe ideas on the packet and on web-pages
3. Smaller goats as half or whole goats in boxes which sit flat in the freezers will allow access to the Hispanic market that are looking for small whole or half goats to roast. This is a different market to the 'mutton' market creating added value and diversification.
4. Boneless products. Freezing boned out product provides an opportunity to tap into cubed boneless and sous-vide market which is both food service and retail market for frozen product. This enables product to be held over during the wet season when goat supply diminishes in Australia.

Bone in cubing of goat meat in Australia is expensive and difficult as it is currently done by hand or with machinery and requires three passes of frozen product on bandsaws. Goat is cubed in America in outsourced facilities limiting customisation of carcass cuts. Development of an automated or semi-automated cubing machine would add value in Australia with processing plants having the ability to control quality while minimised labour requirements.

Complaints of the cubed goat meat around the sharp ribs being cubed and low meat to bone ratio. It is recommended that cuts be developed for the ribs, so they are not cubed to increase the meat to bone ratio and reduce the complaints for 'jagged' edges.

5. Conclusion

In conclusion the market analysis has identified gaps which can be addressed to increase sales volume and value for Australian goat meat into the North American market. Ethnic supermarket chain stores, ethnic restaurants and food service outlets provide an untapped opportunity. Mexican as well as Indian quick service restaurants will provide an opportunity to expose non-traditional goat meat consumers to goat. From the restaurant experience, consumers will be inspired to serve goat-based meals in their homes.

Addressing barriers to purchasing at retail level as well as improved communication with consumers will help to raise goat meat profile as a healthy, high protein, low cholesterol option. Providing a ready to heat and serve protein for quick service restaurants and in retail ready packs will help to broaden the market base and reach consumers who are interested to eat goat but are unsure how to cook it or don't have the time.

5.1 Key findings

- Australian goat exported frozen products include – carcasses, assorted cuts (6way), leg cuts and cubed pieces, capra (young goat).
- Chilled goat is exported from Australia to Oman and Malaysia.
- Local fresh goat is sold as whole carcasses, half carcasses, mince, hamburgers, primal cuts with an entire carcass sold in retailers which is broken further down than the traditional 6-way cut.
- Target market for ready to cook products are connected trendsetters (14%) and claim seekers (24%) while ready to eat products will be attractive to the convenience cravers (17%) who aren't confident in the kitchen and are looking for easy meal solutions.
- Shopping for and buying fresh meat online is increasingly becoming mainstream with 80% of connected trendsetters and 44% of convenience cravers having bought fresh meat online in the three months prior to the survey.
- The online retailer product pictures and descriptions are an important point of sales marketing tool. Recommendations are to include:
 - pictures of the raw and cooked product,
 - animated product description with a focus on product claims including free range, grass fed, naturally raised, animal free from the use of hormones and antibiotics.
 - Halal certified processing adhering to The American Halal Institute standards
 - Consumers are looking for mid-week meal solutions and are prepared to pay for healthy convenient options.
 - Consumers prefer chilled meat however some states in USA have limited local goat production and are familiar with frozen products.
 - Goat meat is a versatile protein which is traditionally consumed in Africa, Asia, Indian Sub-continent, Latin America, Mediterranean region and the Middle East.
 - The health benefits (high protein and low in cholesterol), grass fed and 'free from' claims of Australian goat meat are of interest to an increasing discerning middle class consumer.
 - Celebrations and festivities are key times when goat is consumed. Recommendations are to utilise Influencer and online marketing when people are looking for recipe inspiration.

- Ground beef is the number one selling category at the retail level. Creating a ground goat product would enable non-traditional goat consumers substitute beef for goat in familiar recipes and broaden meal options (burgers, meat balls, kofta's and Taco's).
- In the 10 cities analysed for retail sales of goat, New York had most sales.
- The highest bison products sales were in California. Bison offers low fat, high protein product attributes similar to goat meat.
- Ready to heat and serve protein meal bases and meal kits are a growing market segment. The heat and serve protein category currently offer beef, chicken and pork options ranging from \$12.65 to \$49.80 per kilogram.
- Thai and Korean were the most popular ready to heat and eat meal solutions.
- Goat meat is regarded as a delicacy by the Hispanic population base and if affordable a staple protein.
- Barbacoa is a Mexican recipe which can utilise beef or goat. Ready to heat and eat beef Mexican meal options are in the marketplace for Barbacoa retailing at AUD 54.34 per kilogram.
- Barbacoa is listed on the Chipotle Mexican Grill menu as a filling option. There are more than 2,240 Chipotle Mexican Grill quick service restaurants in the USA.
- The most popular cuisine options are American, Mexican, Chinese and Italian for the 35+ age group. 18–34-year-olds are favouring Japanese, Thai, Indian, Korean and Spanish cuisines offering an opportunity to familiarise the younger consumers with goat as a staple protein.
- Non-traditional goat consumers would be willing to try goat based on recommendations from their influencers however recipes and cooking advice is required.
- Opportunity exists to develop a ready to cook and ready to heat and eat meal market. Supply chain innovation is required, particularly within Australian processing plants to bone goat hot. An example of this is veal in New Zealand which is hot boned and used in baby food products.
- Product innovation options:
 - Selling a single capra (young goat) in a carton – when hot the legs are tucked in to fit in a small box/carton.
 - Selling goat pieces in a box – neck, shoulder, leg, shanks, loin for a higher price than 6-way.
- Protein managers of retail and business stores are not familiar with goat meats' unique selling points, culinary and cuisine versatility with marketing and promotional activities and materials required. Restaurants purchase from wholesalers, depots and from providores. Expanding distribution channels will help customers (food service and consumers) purchase more Australian goat meat.
- Food service outlets are looking for ready to cook options for meat products. A focus on waste minimisation is critical with frozen goat cubes offering a solution that enables correct portioning for the meals being cooked, reduces kitchen preparation time compared to 6-way and extended shelf life with a frozen product. A bone in and boneless cubed product is of interest to the food service market.
- Sought after cuts by potential customers and consumers surveyed include boneless meat, cubed bone in, cubed boneless as well as bone-in legs. Availability from wholesalers and retailers was identified as a reason that customers weren't purchasing goat meat.

5.2 Benefits to industry

The value of the red meat supply chain starts with the customer. A higher price and higher demand at the level of the consumer will increase and stabilise the farm gate price because of a more market driven value-added supply chain. The farm gate benefit will result from an increase in value by the consumer.

By selling 1 million goats at an additional \$2 per kilogram OTH, at an average of 18 kilogram dressed this equates to an additional \$36 million per year for the producer. This is achievable with the development of diversified product base beyond carcasses and frozen 6-way. Refer to Table 18: Supply chain boneless goat yield and costs for hot boned goat meat from Australia to USA for detailed supply chain margin calculations.

For example, ready to heat and eat beef Mexican meal options like Barbacoa retailing at \$AUD 54.34 per kilogram. The ready to heat and eat meal option contains a minimum of 15% water and crushed tomatoes meaning the meat is valued at AUD64 per kilogram.

Growing value and volume of goat meat sales in Northern America will help to underpin international sales and provide goat producers with surety there is a long-term demand for goat meat.

6. Future research and recommendations

6.1 Future Research

Flavour profiling and customer acceptance

- ❖ Research is required to understand the impact of the goat meat flavour profile on customer acceptance for existing products and new products including carcasses, assorted cuts, cubed product and heat and serve products.

Customer satisfaction with consistency of flavour for heat and serve products in retail ready packs and in quick service restaurants will be essential.

Research questions:

- Do entire adult males need to be kept separate to ensure consistent eating experience?
- Can the entire adult males be marketed as an 'intense flavour' to be suitable for certain markets? What is the classification for animal type, for example 8 tooth entire male which needs to be kept separate from the heat and serve products to ensure a consistent eating experience?
- What are the carcass sortation parameters to ensure a consistent eating experience?
- What products (boneless meat) is acceptable for a hamburger and sous vide from a taste perspective?

Note processing plants selling mutton already sort by carcass type for example ram carcasses and meat is sold separately. Based on Australian export of ram meat there is minimal product that has been exported to USA and Canada – less than 1% of ram meat exported to Australia is going to USA and Canada from 2015 to April 2024. In 2023, 64% of ram meat was exported to Singapore and 14% was exported to Indonesia (MLA 2024). From 2015 to April 2024 an average of 10% of Australian mutton exports were to USA, with USA the third biggest importer of mutton from Australia, behind China (35%) and Malaysia (11%) (MLA 2024).

Marketing and New Product Development Research

- How can the different carcass types be marketed and branded to increase product margins and align to consumer eating expectations and experiences?
 - Whole / half carcass in a box for capra and smaller goats
 - Mince
 - Cubed – bone in, bone out, skin on, burnt
 - Goat pieces in a retail pack
 - Goat ribs (to remove ribs from cubed meat to increase meat to bone ratio)
 - Boneless cuts
- Cost benefit analysis of producing boneless goat at different carcasses sizes.
- Development of cut optimisation and carcass sortation to maximise cut and carcass returns.
 - A younger goat might have a poor yield when boned out however this carcass can be used as high-end product such as racks and short loins or sold as half or whole capra for a price premium.
- Automated goat cubing machine for bone in and boneless frozen product for retail ready and cook ready products.

- Development of flavour profile and cooking method with a branded program to communicate to consumers to minimise sub-optimal eating experiences.
- Heat and serve pulled goat as protein meal base for food service and retail ready packs developed.
- Targeted sales and marketing on identifying distribution channels that will support premium goat meat sales.
- Working with the exporters to supply the appropriate raw material products to allow high end restaurant chains to develop limited time offers for seasonal goat with BBQ menu items for summer, soups and stews for winter.
- Chilled goat is currently being exported to Middle East and South East Asia. What is the premiumisation possible with chilled goat to North American market? What is the shelf life on chilled goat cuts?

6.2 Recommendations

1. Goat processing facilities and exporters continue to develop new products beyond frozen carcasses and 6-way including boneless product, shoulders and legs.
2. Marketing materials are developed to support Australian goat exporters sales conversations with meat buyers of major retail chains, wholesalers and distributors.
 - a. Sales and marketing teams are supported to understand goat meat's unique selling points (low fat, low cholesterol, high protein, free range, low carbon footprint) for low and slow meals
 - b. Recipes are developed and shared on product packaging, QR codes, websites etc to support consumers in how to cook and prepare goat meat.
 - c. Senior protein buyers for chain stores are provided with goat sample meals to understand the value and versatility of goat meat
3. Flavour profile system is developed to ensure that the right strength of flavour is destined to the right market – stronger flavoured meat from older entire males is targeted to Caribbean customers while younger animals are perfect for Hispanic roasted goat BBQ's.
 - a. Develop a grading system to align with cooking preferences and styles. Lean carcasses with high muscle to bone ratio are perfect for curries.
4. Continue R&D with Australian goat processors on value adding options, market premiumisation and development of new products which address consumer complaints and feedback including:
 - a. Tough meat – addressed through
 - i. sous vide heat and serve options,
 - ii. cubed product,
 - iii. recipes on slow and low cooking options provided on packs,
 - iv. age / carcase characterisation for whole and half carcasses,
 - v. processing additive to tenderise meat
 - b. Strong flavour / unpleasant eating experience – addressed through
 - i. Separating out entire males and age/stage/type of carcase which has a strong flavour profile and finding alternative target markets as per ram meat.

- ii. Developing a mild, medium and strong flavour profile based on eating characteristics relative to cooking styles.
- c. Poor meat to bone ratio – addressed through
 - i. Selected cuts to keep as bone in cubes for example leg provides a very good muscle to bone ratio for bone in cube cuts
 - ii. Carcase sortation - Selecting carcasses and cuts that will be bone in product. Younger animals and smaller carcasses to be sold as whole animals for 'capra'. Older animals which are not meaty to be hot boned and sold as boneless products.
 - iii. Feedback to producers and seedstock breeders on carcase meat to bone ratios to support selection of animals which are preferred by consumers.
 - iv. Sharp bones (ribs) with limited meat are a common consumer complaint. By not including rib bones in cubed product this would increase the overall meat to bone ratio.

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