



final report

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Organic Freeze Dry Lamb Liver Pet Treat

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Executive summary

The Australian Pet Treat Category is worth AUD180 - 200 million per annum, saturated with more than 500 different treats to choose from and derived from emu, kangaroo, pork, fish, chicken, beef, lamb, vegan and other ingredients. The price, country of origin, taste, health claims and nutritional value of a treat is most important to pet owners and is determined by the source and quality of the ingredients, along with the drying technology used to make the treat. This report shows protein quality, digestive enzyme efficacy, vitamins and minerals are better if treats are made from organ meat and dried using freeze dry technology.

The Freeze Dry natural treats category is worth AUD 20 million and increasing at a CAGR of 7% as humanisation of pets occur, meaning more people are choosing pet ownership and treating their pets like humans and want to provide them with better more functional treats, so they live longer and healthier lives, similar to that of humans.

An opportunity exists to make Australian Natural and Organic Lamb treats that provides functional health benefits for healthy teeth, better skin, to support digestive health, for stronger joints and bones, allergy free to reduce itching. This Project looks at achieving these benefits by developing Australian Organic Freeze Dry Lamb Liver Treats.

Freeze Dry technology is selected for superior drying to retain equivalent nutritional value, aromas and flavours as fresh raw meat, to appeal to pet owners who believe a raw meat diet is best for their carnivore friend, for a healthier digestive system, better teeth, stronger joints and bones, due to the amino acid and enzymes. Freeze drying offers an advantage over fresh raw meat due to lower risk of bacterial contamination, requires no refrigeration and has the convenience factor.

Organic Lamb Livers were provided by Gundagai Meat Processors, then sent to Freeze Dry Industries for drying, broken into small bite size pieces, packed into 50g retail bags, sealed and sent to various pet shops and pet parents for review and feedback. A 50 gram bag of RAW Freeze Dry Lamb Treats while equivalent to 250 grams of raw meat was not perceived as being of equal value to some air dry treats with more content by mass for the same price, requiring more education about increase cost and nutritive value of freeze dry treats. The project has been able to increase awareness of the health benefits of Australian Freeze Dry Organic Lamb Liver Treats, free of GMO's and chemicals, offering a value multiplier of twenty times when compared to the price of raw lamb offal. The next steps are to win the support from retailers and commercialise and scale production to guarantee industry and supply chain benefits are realised.

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1 Background

The pet treat market in Australian is worth AUD20 million. With pet owners buying three times as many beef treats as lamb treats there is an overwhelming opportunity to increase the pet parent preference for buying lamb treats and to grow the market segment for red meat treats. This report presents the opportunity to develop more demand for Australian organic freeze dry raw lamb treats.

2 Project objectives

Project objectives include:

- Provide a brief overview of the Pet Treat market and enabling technology platform for freeze drying.
- Complete trials and develop proof of concept for organic lamb liver pet treats, including preliminary process map, product costings, lab assays (including amino acid profiles), specifications and brand development.
- Obtain market feedback with pet owners on concept and value proposition(s) for Australian Organic Freeze Dry Lamb Liver Treats for pain gain points, leading to purchasing decisions.
- Completion of Business Model Canvas tool and next steps recommendations
 - Desirability: What is the job to be done for target product-market fit value proposition(s).
 - Feasibility: Technically can it be produced, who are the key partners to scale up.
 - Viability : commercially what is the created/captured value in transforming input red meat organs into pet treats; what is the forecast sales and COGS and supply/demand drivers.
- Establish minimum viable product prototype brief (product description, label list ingredients, nutritive values and intended use), key findings, cost benefit analysis (CBA) and lessons learned on approach taken and next steps.

3 Methodology – Process Map

Natural and Organic Lamb Livers were collected by Gundagai Meat Processors (GMP).



Organic Livers were then minced and freeze dried to validate the manufacturing process and costs. Lab assays were carried out to determine microbial count, protein and fat content.



Product was broken into bite size pieces and packed into 50g bags



Samples of product were shipped to pet owners and pet stores to provide feedback.

4 Results

4.1 Business Model Canvas

COGS is estimated at \$50 per Kg with revenue being \$80 per kg. First year forecast annual sales for Organic Freeze Dry Lamb Liver Treats is estimated to be \$60,000 per annum (12,000 bags x \$5 per bag incl GST), subject to winning a contract with a specialist pet supplier.

<p>Key Partners</p> <ul style="list-style-type: none"> x Gundagai Meat Processors x Maddens Transport x Freeze Dry Industries x Franchise Stores x ALS x Lindsay Transport x QCL cold storage x Visy boxes x Titan Packaging printed film 	<p>Key Activities</p> <ul style="list-style-type: none"> x Meat Processing x Drying x Third party testing x Packing x Marketing x Distributing x Attending expos x Attending farmers markets x Update website with stockists 	<p>Value Proposition</p> <ul style="list-style-type: none"> x Provenance of NSW Riverina and Dorper Lambs regarded for premium quality grass fed meat x Fresh Raw Meat, Paleo Diet designed for your dogs digestive system x Customers can meet our farmers on our website x Grass fed lambs are tastier, have higher nutritive values incl more vitamins & minerals, are free of antibiotics, HGP's & GMO's. x Sustainable food, Australian Certified Organic produce x Single ingredient, allergy free x Every batch third party tested x Freeze Dry to retain heat sensitive vitamins and minerals and keep the flavours of fresh raw meat x Each 50g bag is made from 250g of raw meat x 30% of profits go back to drought affected farmers & their animals 	<p>Customer Relationship</p> <ul style="list-style-type: none"> x Customers will have a direct relationship with the farmer and manufacturer to ensure trust and safe product. x Customers know they are receiving a sustainable organic product best for the planet 	<p>Customer Segment</p> <ul style="list-style-type: none"> x Single ingredient fresh raw meat treats x Organic & Natural x Freeze Dry superior flavours and aromas x Grass Fed x NO Grain Fed feedlot Lambs used in product x Humanely raised and sourced for the best animal welfare
<p>Cost Structure</p> <p>Variable Costs</p> <ul style="list-style-type: none"> x Frozen meat \$3/kg delivered x Drying \$35/kg dry weight x Packaging materials x Packing Labour x Distribution & Fuel x Cleaning x COGS \$50/kg 	<p>Fixed Costs</p> <ul style="list-style-type: none"> x Electricity x Rent x Plant Maintenance x Total \$5/kg 	<p>Revenue</p> <ul style="list-style-type: none"> x Average selling price 50g bag costs \$5 (\$100/kg) x Forecast monthly volume 50kg/month [20 CTNS] (600kg/annum) x Forecast Annual Sales \$60,000 x Forecast Annual Growth 3% 		

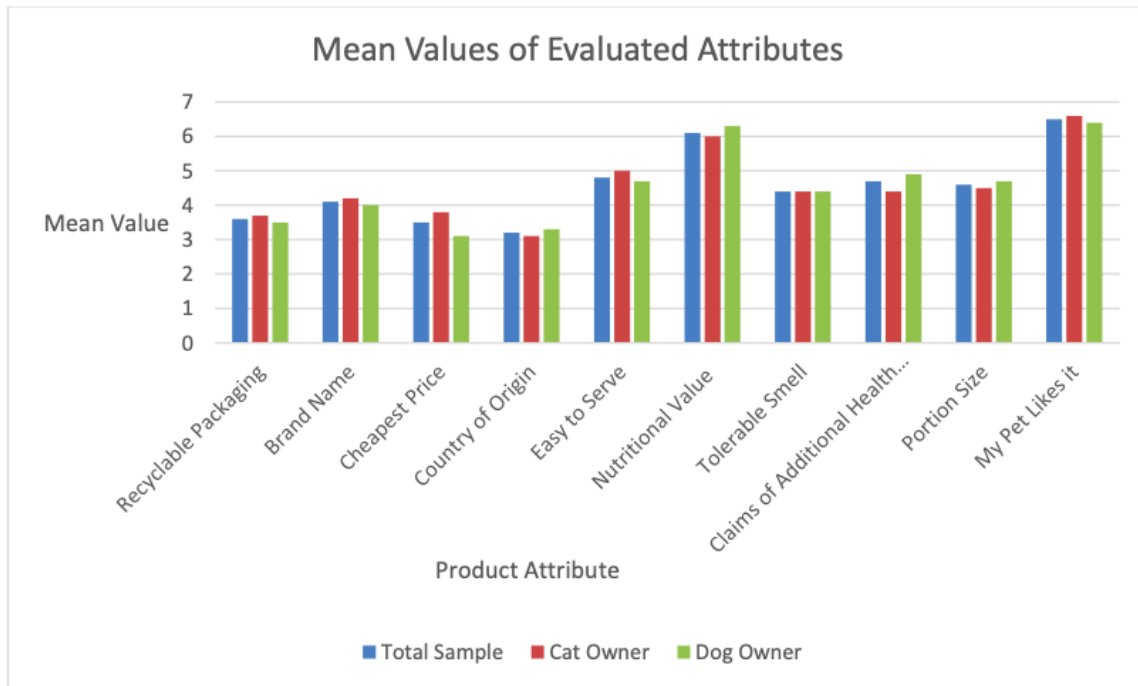
4.2 Proof of Concept Organic Freeze Dry Lamb Liver Treat

The production trial to produce Organic Lamb Liver Bites involved freeze drying material, weighing out bites into 50g bags and sealing retail bags for distribution.

4.3 Market Feedback with Pet Owners on Concept and Value Proposition

Blackhawk a manufacturer of air dry treats currently have a TV advertisement “Could your dog be eating better? Every Ingredient Counts” Implying their research and positioning is asking pet owners to check their ingredients as some may be better and healthier than others. Market research by Surie (2014) reinforces the importance of pets not only liking the treat, but ingredients having better nutritional value and having supportive health claims. Competitive advantage comes from sourcing quality Australian ingredients at the right price, and to satisfy new trends for better nutrition and health claims.

TABLE 4.1 ATTRIBUTES LOOKED FOR BY PET OWNERS PURCHASING PET TREATS

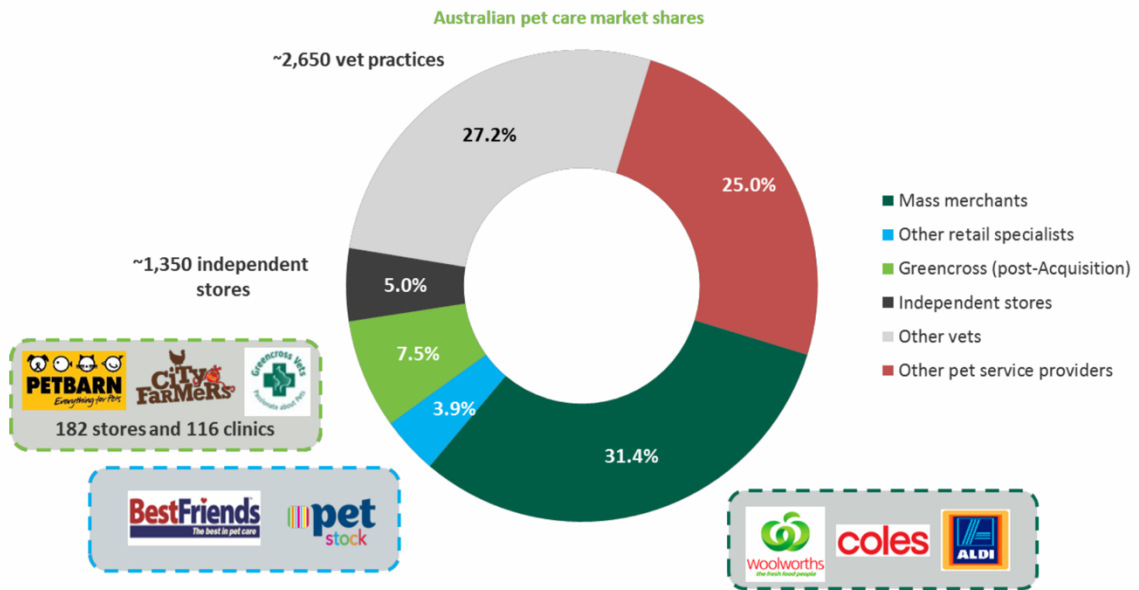


Following distribution to Instagram influencers and pet parents, the feedback has been positive with all pet owners liking the packaging and stating their pets enjoyed the product. The key to success is being able to scale up and obtain a large contract with one of the big box chains (Pet Barn or PetStock) that stock premium treats, compared to the supermarket chains that sell more low price pet treats with inferior ingredients.

TABLE 4.2 PAIN & GAIN POINTS

Customer and key stakeholder interviews and comments capture pain/gain points to understand drivers of purchase decisions

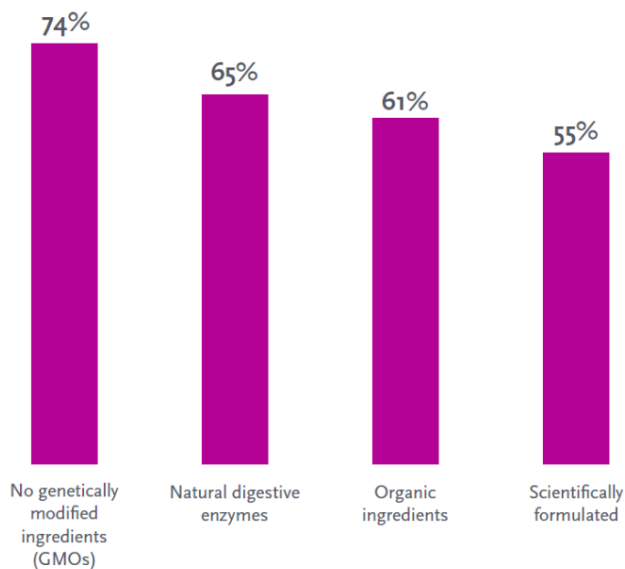
Gain Points	Pain Points
Liver is healthy, full of vitamins and minerals. AUSTRALIAN lamb (Human Grade). Natural & Organic certified ingredients. Single ingredient, high protein. No GMO, no preservatives, no additives. Allergy free. Supports a Raw Meat Diet. Convenient easy to use pack, not messy to touch, no preparation, no refrigeration. Trustworthy third party tested for purity. More interest in provenance. More ethical brand.	Price per kg is top end of price point for treats. 50grams is less than air dry product that is usually 120g for the same price. Cannot compete with low cost grocery chain treats due to price point. Large online stores control the market (Pet Circle Millell Pty Ltd). Cannot get into Vets. Local & export markets are difficult to get established with new brand to build brand loyalty and trust.



4.4 MARKETING MIX

PRODUCT: Riverina Freeze Dry Single Ingredient Organic Lamb Liver Treats 50g (Dorset Lamb). Many pet parents do not know the required dietary nutrition for their pets and take advice from the packaging, scientifically formulated.

Popularity of Natural vs. Scientific Claims Across Countries and Pet Food Types



PRICE: RRP \$9.99 per bag needs to be competitive with other freeze dry brands.

PLACE: Freeze Dry Organic Lamb Liver Treats need to be available online and at specialty pet stores that have significant market share and traffic. What does it take to win? The brand needs to be noticed and meet the ROI criteria to establish itself with key retailers.



PROMOTION: Heavy sampling is needed to get pet owners and their pets familiar with the brand and to build trust. Using social media influencers, attending Pets In The Park and farmers markets offers an opportunity to promote Australian Freeze Dry Treats. Sharing scientific papers on Freeze Dry Meat Treats and benefits to pet health will also help to build trust. Sharing stories about the provenance of the ingredients and Australian Farmers growing organic produce will also help improve the buyer experience.

4.5 COMPETITOR ANALYSIS

There are several competitors in the Australian market for Freeze Dry Dog Treats. No one is doing Organic Lamb Liver Treats. Some brands are positioned for low price and high volume, some for lower volume but premium high end price point.

1. *K9 Natural*– NZ brand, Freeze Dry (owned by US interests) 50g RRP \$9.99 use a combination of lamb offal, kidney, heart, liver in their liver bites – not single ingredient. Use only NZ ingredients and had to mix offal as demand for product has increased.
2. *NuTreats* – NZ brand owned by Bipac Nutraceuticals, Freeze Dry (owned by US interests) 50g RRP \$9.99 (do lamb liver bites)
3. *Everyday Healthy Pets* – Pete Evans Australian brand – Freeze Dried in Tasmania 50g RRP \$14.95 – No Lamb Hearts (single ingredient don't do lamb liver bites)
4. *Freeze Dry Australia* – Australian brand, Freeze Dried (Victoria Base) have their own freeze dryer and packing equipment. Make and sell 100g Freeze Dried Lamb Heart \$12.00 (single ingredient don't do lamb liver) <https://www.freezedryaustralia.com>
5. *Fuzzyard* – Australian brand, Freeze Dried (Victoria Base) – Lamb Heart, Seafood, Kangaroo, Emu (several ingredients) 70g RRP \$14.95
6. *Bell & Bone* – Australian brand, Vegan & Meat 100g Treats, Freeze Dried (Victoria Base) Kangaroo, Salmon & Chicken (Victoria Base), No Lamb Range \$15.95ea
7. *Laila & Me* – Australian brand, RRP \$16.99ea 60g Wild Boar, Beef, Chicken and Roo Single Ingredient (No Lamb)
8. *PAWSOME* - Organic Vegan 270g \$17.90
9. *FUR-FRESH* – 70g RRP \$14.95 Sardine, Salmon, NZ Green Mussel, Chicken, (No Lamb)

5 Discussion

The price for Australian Freeze Dry Treats has to be priced similar to established New Zealand and Australian Natural Brands of freeze dry treats. A price point of \$15 per bag is too high and will not create the high volumes needed for scale up and to create necessary economies of scale in production, to take market share. An Australian freeze dry organic brand requires a superior value proposition in terms of price and quality, to win market share in the treats category. A new Australian Brand of Freeze Dry Lamb Treats if marketed and priced correctly can achieve first year sales of AUD60K.

6 Conclusions/recommendations

There's an abundance of Australian brands with Natural Meat Treats but no brands with Organic Meat Treats because pet parents see Natural as also meaning the same as Organic and large brands see the cost of organic meat being price prohibitive. As the humanisation of pets occurs this may change.

With the pet treat segment in Australia worth \$180 -200 million and the Freeze Dry Segment worth 10% there is room for an organic freeze dry lamb treat. All successful quality and premium pet treat brands are in the Big Box Pet Stores. To be successful the price and value proposition has to be compelling to store owners and pet parents. Consumers have to believe organic ingredients mean more than natural and are in fact superior. As such any new product needs to be supported with a strong marketing and advertising campaign to create the compelling reason to buy organic. The recommendation is to commercialise the Freeze Dry Organic Lamb Treats and work with the supply chain partners to improve the value proposition of organic meat treats to get into specialist pet store chains. The way to win is to have better treats with better ingredients, that pets and parents like.

7 Key messages

To be competitive on the local and global front Australian prices in an emerging market, Organic Lamb Treats need to be comparable to prices paid for Natural Meat Treats. Organic Meat Processors should continue collaborating and helping organic retail brands establish themselves, to build market share. More organic product being sold in retail will benefit the organic lamb industry.

8 Bibliography

8.1 Heading

8.1.1 Sub heading

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9 Appendix

ATTACHMENT 1 LAMB LIVER SPECIFICATION

Organic Grass Fed Lamb Liver is a superfood, high in protein, vitamins and minerals. Experience pasture raised, grass fed sheep liver, from Australia's high quality Dorper Lambs raised humanely in the NSW Riverina.

Freeze dried for maximum flavours and nutrition, in a resealable pack. No artificial flavours or colouring, No salt or sugar, No gluten, No Grain, No GMO, No HGP's or antibiotics. Single ingredient. 100% Natural.

Each 50g treat pack is equivalent to 250g of raw liver, but you do not need to keep it in the fridge. Your dog will love the natural raw meat taste and be healthier and happier for all the vitamins and minerals and the fact they are getting all the functional health benefits from micronutrients, for better digestive health, coat health, teeth and gums, plus stronger muscles and joint health.

Ingredients: 100% Pure Australian Organic Lamb Liver

Manufactured in Australia

Distributed by NXGEN Wholefoods, 150 Hartwood Avenue, ROBIN HILL, NSW, 2795

Nutritional Label

Crude Protein	>65%
Total Fat	Min 13%
Crude Fibre	Max 1%
Moisture	Max 4%

ATTACHMENT 2: VITAMINS & MINERALS COMPARISON BEEF v LIVER

	Beef	Lamb
Amount	1lb	1lb
Weight: gm	454	454
Vitamin A	199130	229070
Vitamin B1	1.16	1.81
Vitamin B2	14.79	14.9
Vitamin B6	14	1.36
Vitamin B12	363	472
Biotin	454	454
Niacin	61.6	76.5
Pantothen Acid	35	32.7
Folic Acid	.99	.99
Vitamin C	140	152
Vitamin E	6.36	-
Calcium	36	45
Copper	12.7	25
Iron	29.5	49.4
Magnesium	59	64
Manganese	1.23	1.04
Phosphorus	1597	1583
Potassium	1275	916
Selenium	206	-
Sodium	617	236
Zinc	17	-
Total Fat	17.5	19.6
Saturated Fat	6.8	6.9
Unsaturated Fat	5	6.63
Cholesterol	1360	1361