



Premium Food Ingredients

A top-down photograph of various food ingredients and extracts arranged on a wooden cutting board. The ingredients include fresh herbs like thyme and rosemary, a whole onion, a halved onion, several carrots, green chili peppers, and black peppercorns. There are four bowls: a white bowl containing a smooth, orange-colored liquid; a dark grey bowl containing a dark, thick, brown liquid; a dark grey bowl containing a light-colored liquid with green onions and other ingredients; and a light blue bowl containing a clear broth with sliced carrots and other vegetables. The background is a light grey surface.

**Creating customised ingredients:
From your initial idea to your final
product in 7 key steps**



**Taranaki
Bio Extracts**
The New Zealand Difference

Welcome to the World of Customised Beef Bone Ingredients

Taranaki Bio Extracts manufactures and supplies sustainable, 'all natural' ingredients made from 100% grass-fed beef bones. Butler is their premium range of beef bone products offering bone and collagen extract and quality beef bone broth.

The broth-based food and beverage sector has developed strongly and profitably over the last ten years. While nature provides the nutritional qualities, Taranaki Bio Extracts' (TBE) food science expertise provides a superior process for creating a flavorful, collagen-rich formulation. All our ingredients are crafted by an experienced team, led by an award-winning Food Process Engineer (PhD) with expertise in meat science and food safety.

“

“We recognise the beef bone broth retail market is driven and differentiated by private labels and premium brands – for us and our customers it's all about flavor, mouthfeel, and consistency.”



DR MIKE NORTH
Site Manager



Butler
Premium Food Ingredients

Top Quality Ingredients For Leading Beef Noodle Soup

As a manufacturer of high-quality beef noodle soups, food quality is top priority for us. Our quality is almost entirely determined by the characteristics of the ingredients we use. Our challenge was finding a supplier to provide consistency of both quality nutrition and supply.

Taranaki Bio Extracts have proved strong on both fronts. They deliver to our standards every time.

Read Case Study



Customisation – Your Unique Solution . . .

Alongside our Butler range, we offer customised products – Whether your product requires flavor, mouthfeel, or nutritional customisation, we can work with you at any level:

- TO MAKE AN INGREDIENT AT SCALE FROM YOUR OWN RECIPE.
- TO HELP YOU DEVELOP A CUSTOM RECIPE WITH SPECIFIC PROTEIN CONTENT, TASTE PROFILE AND PRODUCT TEXTURE.
- TO REFINE YOUR PRODUCT REQUIREMENTS SO YOU CAN MOVE FROM A TEST KITCHEN TO COMMERCIAL PRODUCTION.

Customised ingredients offer businesses the opportunity to create a product or range of products, develop a brand, and market it to a specific target market. Customisation is suited when targeting consumers seeking more authentic tastes, nutritional benefits, and convenient home cooking options.

Our expertise in meat science, food engineering, and product development means we speak the same language as food industry customers – from experienced buyers to start-up food businesses. We support customers internationally across Australia, Asia, and throughout the United States.

At Taranaki Bio Extracts, our process is tried and tested – Read on to discover how we can help you create customised ingredients from your initial idea to the final product in 7 key steps.



Discovering the concept, recipe, flavor or enhancement

We supply some strong international retail brands, including one of the leading consumer bone broth brands in the USA.

We're all about providing ingredients to transform your 'possibilities' into practical, product solutions. For us listening is key. We believe in real customer conversations. Whether we're needing to understand your business model to support your decisions in a recipe approach, or work with you to fine tune a recipe you have already started to develop.

Every customer requires a different level of support depending on their own experience, expertise and goals, we can be as collaborative or directed as a customer desires. Our customer requirements typically fit one of the following scenarios with assessment and adjustments along the way;

1. We'll often start with a product we already manufacture, send a sample and get the customers' impressions – what do they think of the flavor? What key elements they would change? – how do they find the texture, mouthfeel, and color? From there we use our experience and expertise to adjust our process settings with the aim of achieving the customers' required result. A lot of companies simply want a base ingredient and they're taking that as a foundation to add their own flavors, using herbs and spices to create unique flavors.

2. Another scenario might involve us providing a recipe with a certain mix of herbs and spices to a customer, enabling them to provide feedback on areas they'd like to dial up or down. There may be some simple changes to the herbs, and more attention spent on the temperature and time elements of the pressure-cooking process to achieve desired results.

“

“We can help fill gaps in knowledge about an ingredient you're looking to include in your finished product, often this means finding a way to create something you have in mind but aren't sure how to make yourselves.”



DR MIKE NORTH
Site Manager





Selecting the right ingredients

At Taranaki Bio Extracts flavor is king. It starts with selecting the right ingredients.

It's important to have a clear understanding at the outset as to what your end flavor goal is. If our customers need support we work together to define this.

Our customised products align with a sustainable approach and natural nutrition to support your brands' offering – Responsible sourcing delivers you 100% pure and natural. We only source raw materials for our ingredients from people we know and trust. All of our suppliers must provide proof of food origins, specifications, quality certifications and more.

The main raw materials we use are quality, grass-fed beef bones. Electronic animal tracking systems (NAIT) and the electronic certificate system means movements of cattle in New Zealand are recorded, so our products can be traced back to origin. If humane animal husbandry matters to you, our products are worth seeking out – animal welfare is a high priority in New Zealand.

Our ingredient combinations range from meaty beef bones and water, through to inclusion of standard aromatics like onion, carrot and celery creating a very versatile broth. If you're looking to add intensity, more pungent ingredients like garlic, ginger, and lemongrass are options. Woody herbs like rosemary, bay, oregano, sage and thyme are popular and ground spices intensify the flavors too. While beef ingredients are our specialty, multi-species are available on request – we don't work with pork or alcohol as we are Halal certified.



Pressure cooking for the best results

Pressure cooking our quality beef bones and ingredients in batches brings out their best, with the benefits of the latest technology to monitor and maximise for premium results.

Pressure cooking provides a lot of scope to tailor product for the customer as it allows us to maximise the key outcomes of flavor and nutritional content. All of our ingredients go into the pressure cookers to be cooked in water – careful thought goes into this part of the process. We're looking for an end result when it comes to nutritional and flavor profiles and we'll tailor the cooking time to achieve that end result – usually anything between 3 to 14 hours.

There's a well-known flavor reaction known in chef's circles as a 'Maillard' reaction. It's the master step when it comes to our delicious flavors. This is the process where sugars react with proteins – it's a chemical reaction between amino acids and reducing sugars to create melanoidins, the compounds which give browned food its distinctive taste. There's no sugar

in meat so using fresh vegetables in the recipe is a simple and natural way to provide sugars for this to occur. For the proteins and sugars to react together they have to cook at a high temperature – above 100 degrees. A lot of the really rich flavors across our portfolio of food ingredients are due to the Maillard reaction. If we couldn't pressure cook we couldn't develop this rich range.

Our products are high in protein and rich in collagen. Temperature and time are key considerations – they impact the amount of protein and collagen extracted from the raw materials, and how much the protein is broken down into small amino acids. Smaller units are more readily absorbed by the human gut, but longer chains of amino acids create a stickier mouthfeel – it's all about tailoring according to the requirements of your final product.





Achieving consistency of flavor – at scale

We understand that a leading brand achieves and holds its' position in the marketplace because it has the highest standards of quality. For us quality is reflected in consistency

Every customer is different, so our system needs to be flexible and robust, enabling us to produce consistently on every count. Taste samples are done at each stage in the cooking process. A final taste is completed on the finished product, along with measures to check on the solids content. Once we have achieved a product our customer is pleased with it's about replicating the same process to achieve consistent results.

As a scientist and engineer, Dr Mike North has in-depth knowledge of heat transfer. Heat transfer is critical to food flavor, quality & safety; heating develops flavor and texture in foods, and heating also destroys bacteria in raw ingredients. Mike's experience means he understands what's happening at a molecular level; the food chemistry that occurs as products go through a process and varying degrees of heat - what's happening inside the food as it is made. And what equipment you need to make certain reactions occur to result in a consistent outcome.

“

“Mathematical models I have developed help food process engineers to predict internal temperatures to calculate temperature and time for many different items being cooked/cooled. This type of knowledge is critical to ensuring our products have consistent quality results across our customised products and Butler range.”



DR MIKE NORTH
Site Manager

Expertise in recipe development

As a food manufacturer of high-quality product, our challenge was getting consistency of both quality nutritional standards and supply. Due to their knowledge and the investment they've made in their equipment, Taranaki Bio Extracts is able to deliver on the mark every time. They have real expertise in assisting with recipe development, particularly with respect to their technical knowledge of processes and product characteristics.

[Read Case Study](#)



STEP 05

Separating the fat and concentrating the product

The key elements in our cooking process are temperature, time and pressure. But what happens after the cooking process is just as important.

Typically, we want to concentrate the broth in order to concentrate the flavour and nutrients. The first step is to remove all the fat from the broth that we've created – this is important to do before the concentration process. A separator separates the fat in the broth, so the broth is ready for concentration. Concentration is essentially removing water. To do this in a kitchen a chef would use a pan on the stove to concentrate the broth by boiling the water off. At Taranaki Bio Extracts we do it a little bit differently – we use what's called a vacuum evaporator.

The vacuum provides negative pressure which drops the boiling point of the water from 100°C to about 70°C. This enables the water to be removed, but due to the low temperature there is no more burn-on effects or further flavor changes occurring. It keeps the flavor profile intact whilst simultaneously concentrating the flavor. We typically target a 10-fold concentration, ending up with about 10% of the volume of broth that we started with, and an end product that is high in protein and rich in nutrients.



STEP 06

Finishing off your unique blend

Following the fat separation and the concentration, the product goes into what's called the blend tank – this blends the broth to a final finish before it is packed off.

The blend tank is where Taranaki Bio Extracts brings the product to the exact specification that the customer wants. Often some of the fat that's been separated off is reincorporated at this point and homogenised into the broth. Alongside flavor the fat content creates a thick silky texture and mouthfeel.

If a customer wants a shelf-stable product, salt is added at this point. While most ingredients are combined during the cooking process, further ingredients like spices are often incorporated at this stage too. Then a final blend check and tastings are completed to ensure all aspects are correct before the product is packed. Samples are taken during the packing stage and these are sent to an accredited laboratory for testing both safety and compositional aspects.

“

“People talk about flavor when they're referring to taste but they're often referring to the mouthfeel as well – the fat incorporated contributes to a rich creamy mouthfeel known as kokumi – a Japanese word literally meaning 'rich taste.' The fat provides a sense of richness, and body to our broths and extracts.”



DR MIKE NORTH
Site Manager





Manufacturing at scale



Our minimum order quantity is typically a single batch – volume-wise this is approximately 2000 kg/ 4,400 lbs. But MOQ can also be influenced by freight options and minimum freight volumes. Delivery is typically by sea-freight and timeframes are dependent on international location. To give an indication a typical timeframe for delivery to Australia is 21 days, to Asia is 30–36 days, and to the United States is 42 days. All of our outwards goods conform to ‘pre-shipment checks’.

Our positive release policy means we don’t release anything from our kitchen until all laboratory tests are confirmed – until we are satisfied the ingredient quality is of the highest standard and within specification.

They’re expert at their craft and meet our high standards

We manufacture a leading retail broth brand in the USA. As one of our main high-volume customers, the ingredients we use in their products must be top quality – consistency is key.

We receive 230 metric tonnes (half a million pounds) of concentrate from TBE annually – COAs present product that’s consistently high quality and on specification. Their deliveries are always reliable.

[Read Case Study](#)

“

“Our own in-house testing is done on each batch, followed by a certified lab test with the results presented on the COA (certificate of analysis). Even with the many different recipes we make, we’re usually running over 99% of our products in spec first time.”



DR MIKE NORTH
Site Manager



Butler
Premium Food Ingredients

Lets Chat

If you feel a fit with our Butler offering, or would like to discuss anything further we'd like to hear from you;

PLEASE CONTACT:



VAUGHAN DEW
Senior Sales Executive

☎ +64 27 224 2625

✉ vaughan@taranakibioextracts.co.nz

Start your winning customised ingredient now . . .

We're committed to your brands' reputation. We protect your reputation by the care we take in our partnership with you.

It starts with our food philosophy, the responsible sourcing of our raw materials, crafting our premium pure quality ingredients and products, and delivering them food-safe and full of goodness to you.

As an ingredient manufacturer we appreciate the time that's needed to produce the best results. We don't believe in shortcuts. Traditional recipes, all natural raw materials, and a pure process result in the flavorful and inherent nutrient-dense richness of our ingredients. When you create customised products in partnership with us, your product has a value proposition that strengthens your own;



TBE adheres to a HACCP (Hazard Analysis + Critical Control Points) plan, which is a food science approach to ensuring that all possible food safety hazards are considered and managed.

Butler
Premium Food Ingredients



Butler[®]

Premium Food Ingredients



✉ vaughan@taranakibioextracts.co.nz

☎ +64 27 224 2625

📍 57 Kohiti Road, Okaiawa 4678, Taranaki, New Zealand

🌐 taranakibioextracts.com



Taranaki
Bio Extracts
The New Zealand Difference