



Green Lipped Mussel Powder

Buyer's Guide | 2020

GREEN LIPPED MUSSELS: A NEW ZEALAND SUPERFOOD

Mauri Tū, Mauri Ora.

This New Zealand Maori proverb translates as, "An active soul is a healthy soul."

It seems the native Maori people had discovered their own source of health and mobility - their traditional diet was rich in Green Lipped Mussels and other seafood, allowing for better mobility well into their later years.

But like everything in life, there was a trade-off.

To get the benefits, you have to eat them raw.

Jump forward a few hundred years and researchers are rediscovering the benefits of Green Lipped Mussels.

What they've found is pretty remarkable.

"An active
soul is a
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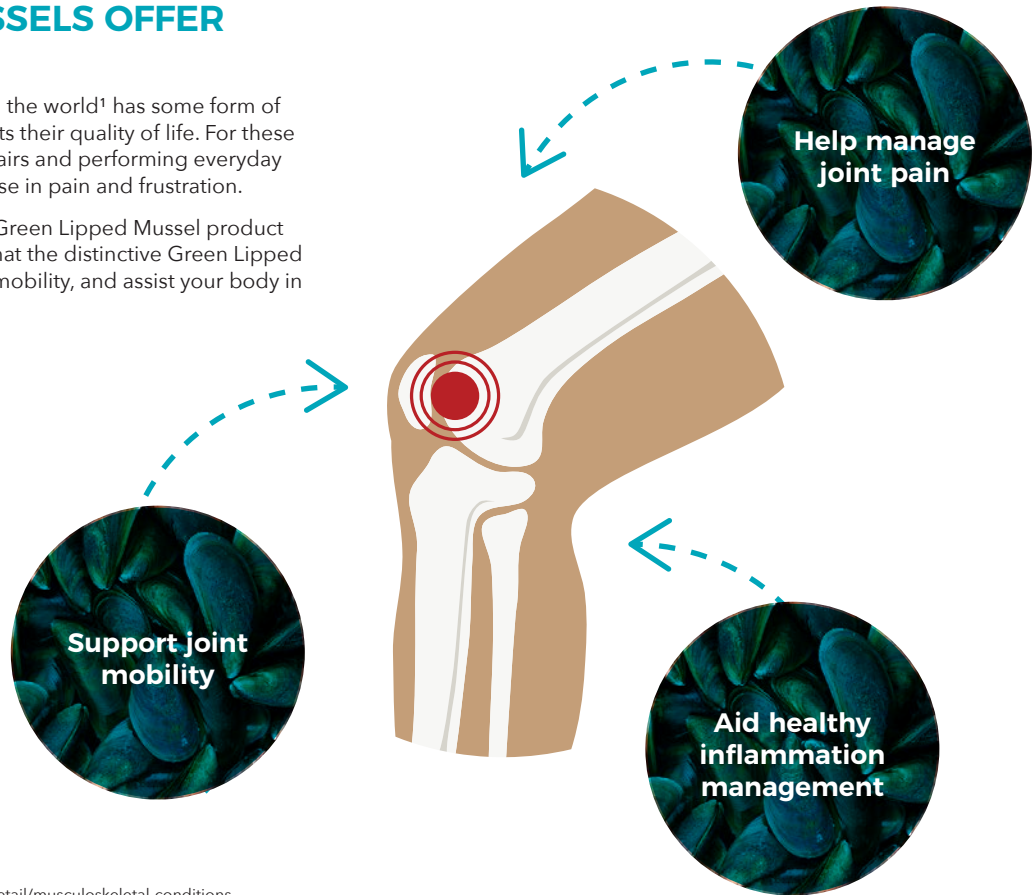
A traditional
superfood
repackaged for the
modern world



GREEN LIPPED MUSSELS OFFER BIG BENEFITS

More than one in five people around the world¹ has some form of joint problem, and it seriously impacts their quality of life. For these people, getting dressed, climbing stairs and performing everyday household chores become an exercise in pain and frustration.

Since the early 1970s when the first Green Lipped Mussel product hit the market, studies have shown that the distinctive Green Lipped Mussel can help with joint pain and mobility, and assist your body in managing inflammation.



1. <https://www.who.int/news-room/fact-sheets/detail/musculoskeletal-conditions>

INGREDIENTS FROM THE SEA

The Green Lipped Mussel grows in the clean, unpolluted waters off the New Zealand coast. It's an excellent source of protein, vitamins and minerals. These ingredients are why the Maori people were able to defy aging and live an active life. For the Maori, remaining active as they aged was normal, something we still aspire to today.

Two ingredients play a special role in joint health - glycosaminoglycans and omega-3 fatty acids.

Glycosaminoglycans

Called "GAGs" for short, these molecules are also known as the "glue of life," due to their vital role in the health and maintenance of cartilage, tendons, skin and connective tissue.

They are also necessary for brain and tissue development.

We lose glycosaminoglycans as we age, causing three main problems:

- Cartilage becomes drier, thinner and less effective as a cushion between bones. The two GAGs most closely associated with cartilage problems are chondroitin sulfate (a familiar nutrient used to treat osteoarthritis naturally) and keratin sulfate.
- Skin shows signs of aging as connective tissues, which include collagen and elastin, become stiff. The culprits here include a loss of dermatan sulfate and hyaluronate.
- Some glycosaminoglycans - mucopolysaccharides, or MPS - help ensure that tissues retain moisture so they function as they should.

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Omega-3 fatty acids

There are many reasons to love the benefits of omega-3s; they support heart health, brain function and emotional wellness. However their ability to support joint health makes the omega-3s a huge asset in Green Lipped Mussel Powder.

Inflammation management

Omega-3 fatty acids can help support healthy inflammation management, which can ease discomfort and support joint mobility. Inflammation is the body's natural response to outside stress like infection, illness, or injury. In this sense, it's a healthy and necessary immune response that helps your body heal.

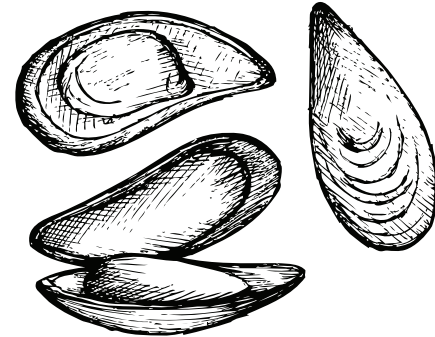
When your body is healed, the inflammation should stop. But the process can go awry, triggering an inflammatory response when there is no threat or when the process of inflammation doesn't return the damaged area to a normal healthy state. This is called chronic inflammation, which has been linked to a host of health problems, including premature aging.

Relief for stiff joints

Research has shown that the fatty acids in omega-3s - DHA and EPA - may inhibit the proteins that contribute to stiff joints while replenishing the moisture in cartilage, effectively easing discomfort while resisting the progression of stiffness.

Support and maintain cartilage

Green Lipped Mussels also contain lipids that help maintain the structure of cell membranes as well as proteins that inhibit the enzymes that cause joint cartilage to break down.



GREEN LIPPED MUSSEL SUPPLEMENTS: AN OVERVIEW

The Maori benefited from Green Lipped Mussels because they often consumed the entire mussel raw. By doing so, their bodies were able to absorb all the nutrients found in the mussel, including essential omega-3 fatty acids and proteins.

But eating raw mussels isn't something most people are able, or willing, to do, regardless of the benefits.

In response to the demand for relief from joint pain, the first Green Lipped Mussel Powder came to market in 1973, and companies have been working on advancements ever since.



"The Maori benefited because they often consumed the entire mussel raw."



HOW TO CHOOSE THE BEST PRODUCT

There are a large number of Green Lipped Mussel products on the market, and as you'd expect, not all are created equal. Results depend on how those supplements are processed and the care the manufacturer takes to retain the mussel's nutritional properties and benefits.

Like many food items, Green Lipped Mussels lose their nutritional value quickly. Both freezing and cooking can diminish the health benefits by changing the structure of the mussel and destroying key components.

If the Green Lipped Mussel product is processed incorrectly, you won't receive all the benefits the mussel has to offer. In addition to quality control and testing, you should look for two things in a product: it should be freeze dried and use cold extraction (opened mussels by hand rather than using steam).

Our mission at Xtend-Life has always been to help our customers live longer, healthier lives, and we're committed to providing high-quality products that do just that, such as our Green Lipped Mussel Powder.

We source our bulk Green Lipped Mussel Powder from Aroma NZ, a family-owned company based in Christchurch that was established in 1961. Because Aroma focuses on providing the best product using the latest technologies, the business's goals align with our own. They have established a solid reputation based on the use of quality Green Lipped Mussels and scientific studies that back their product claims.

It's a good partnership, especially since their forays into the latest technology allow us to bring you the best possible Green Lipped Mussel Powder, a product we're proud to sell because it offers real benefits, backed by both science and nature.



"Green Lipped Mussel Powder is a product we're proud to sell because it offers real benefits..."

WHAT MAKES XTEND-LIFE'S GLM POWDER SUPERIOR?

Aroma has been at the forefront of Green Lipped Mussel Powder research, and with its GlycOmega-Plus™ proprietary blend, it has taken its previous product to the next level. This new generation of Green Lipped Mussel Powder helps support healthy inflammation management because it is as close to the natural product as possible.

Quality inspected

The mussels are harvested from EU/US FDA approved growing areas in the pristine waters of New Zealand. They are inspected for quality prior to harvesting, ensuring that the live mussels brought to Aroma's plant were harvested at their peak, when the most nutrients are present in the flesh.



Freeze dried

Green Lipped Mussels are freeze-dried at temperatures that are low enough to retain the benefits of the mussel meat. This means taking the supplement gives you the same benefit the Maori people experienced when eating fresh raw mussels direct from the ocean.

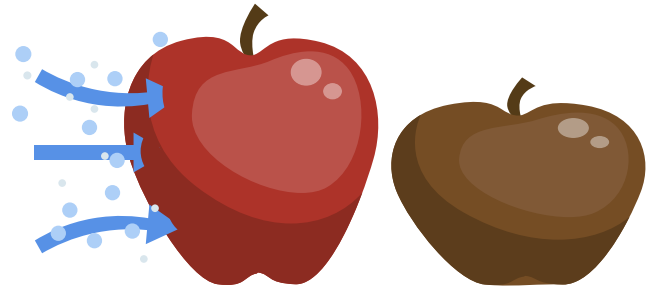
If the mussels were to be cooked and ground - as some manufacturers do when producing Green Lipped Mussel Powder - many of the nutrients would break down, and you'd be taking a product that offered little real benefit.

Cold extraction

This includes opening mussels with an automatic cold extraction separator which separates the meat from the shell during the cold extraction process rather than using steam. It is more expensive, but it results in a superior product in the end.

Quick processing

Aroma also processes its harvest quickly, since the more time it takes from harvest to finished product, the more likely the mussel will oxidize - like the flesh of an apple when exposed to air - diminishing the benefits. The mussels are combined with a plant-based antioxidant to amplify the beneficial effects and act as a chemical-free stabilizer.



Batch tested

Each new batch of Green Lipped Mussel Powder undergoes testing at a 3rd party laboratory, where researchers specifically focus on the chondroitin sulfates that can help support joint and connective tissue functions, easing discomfort and supporting the mobility of joints.

GLM BENEFITS: BEYOND HEALTHY JOINTS

Because so many of the nutrients in the Green Lipped Mussel - including a range of amino acids - are retained during the freeze-drying process, Xtend-Life's Green Lipped Mussel Powder offers benefits beyond improved joint comfort and mobility.

Immune system

Green Lipped Mussel Powder may help support the body's ability to fight both viral and bacterial infections, as well as improving the production of antibodies, supporting wound healing.

And because it supports healthy inflammation management, it has the potential to help manage healthy bacteria in the gut, where 80 percent of the immune system is.

Nutrition

Essential omega-3 fatty acids, proteins and carbohydrates in Green Lipped Mussels contribute to the body's total daily nutritional requirements. This can help improve overall health, boost endurance and energy levels and fill in gaps that may exist in even the healthiest of diets.

Bones and teeth

By supporting the health of surrounding tissue, there is less pressure on both teeth and bones, so they have the support they need to keep them strong.



Skin, hair and nails

The omega-3s in Green Lipped Mussels can support the health and appearance of skin, hair and nails. Two key glycosaminoglycans - dermatan sulfate and hyaluronate - can also significantly reduce the visible signs of aging by helping collagen and elastin stay healthy and pliable.

Nervous system

When nerve cells function better thanks to the lubrication provided by omega 3s, organs work better, muscles repair themselves more quickly and tissue regenerates at a faster rate.

Heart health

Those omega-3s also benefit the circulatory system, supporting blood flow to and from the heart and supporting the health of arterial walls.

Pet health

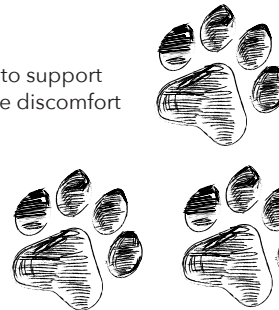
A 2013 study from Canadian researchers² found that Green Lipped Mussel supplements contributed significantly to the well-being of dogs with joint discomfort, improving both pain and mobility. "This shows the efficacy of a GLM-enriched diet, which should definitely be proposed as an adjunctive treatment to conventional medication," researchers said.

Other benefits

Green Lipped Mussel Powder has also been shown to support recovery from sports related injuries, help relieve the discomfort of bursitis and menstrual cramps.



2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3525174/>



STUDY REVEALS GLYCOMEGA-PLUS BENEFITS

Aroma commissioned a study by the University of Queensland which found that Aroma's GlycOmega-PLUS™ Green Lipped Mussel Powder eased joint discomfort in 59 percent of those taking the supplement.

"A key contributor to the results was the quality and purity of the stabilized mussel from Aroma NZ and the extract's preservation of therapeutic activity," said Luis Vitetta and Samantha Coulson, the primary clinical investigators for the project.

During a 12-week period, subjects using Aroma's GlycOmega-PLUS™ Green Lipped Mussel extract to support joint health found themselves using less over-the counter pain medication than before. This is the same premium quality Green Lipped Mussel Powder used by Xtend-Life.

According to study author and researcher Samantha Coulson, the research found that the Green Lipped Mussel Powder performed better, and worked quicker, than glucosamine supplements when it came to both discomfort and stiffness.

"The study proved that Aroma NZ's GlycOmega-PLUS™ significantly helped reduce joint discomfort and increased joint mobility in patients and confirmed that our Green Lipped Mussel contains significant properties to support healthy inflammation management," said Ben Winters, director, Aroma NZ.

The study also found that the freeze-dried Green Lipped Mussel Powder helped reduce the presence of a certain bacteria that promotes chronic inflammation.

"Back-to-back successful clinical studies on our Green Lipped Mussel extract have confirmed its efficacy, providing strong evidence of how it could help the millions of people globally who suffer with joint immobility and stiffness every day of their life," Winters said.

<https://pubmed.ncbi.nlm.nih.gov/22366869/>

"The trial showed that our Green Lipped Mussel Powder worked more rapidly than glucosamine..."



OIL VS POWDER

If you've decided that Green Lipped Mussel is right for you - it's a natural way to support joint health and function - you probably have some questions about the differences between powder and oil. While each offers clinically-proven results, consider this.

When oil is extracted from the mussel, much of the nutrient-dense meat is left behind. The oil contains omega-3 fatty acids but it is missing some key nutrients that make our Xtend-Life freeze dried powder a superior product.

Xtend-Life's Green Lipped Mussel Powder is recommended because the product is sourced from pristine waters using sustainable farming practices and the quick and effective method of freeze drying retains the benefits found in a raw mussel.



"The quick and effective method of freeze drying retains the benefits found in a raw mussel."



QUALITY MATTERS

Our rigorous standards and testing mean that with Xtend-Life, the Green Lipped Mussel Powder you purchase at any time will always be of the same high quality.

The result is that you get the same benefits as of consuming the raw mussel, without having to plan an excursion to the coast of New Zealand to harvest them yourself.

WHAT'S IN XTEND-LIFE'S GREEN LIPPED MUSSEL POWDER?

60% - 62%

PROTEIN

(in form of essential amino acids)

11% - 12%

CHONDROITIN SULFATES

(which target joint health)

12% - 13%

COMPLEX CARBOHYDRATES

4% - 5%

LIPIDS

5% - 6%

MINERALS

Xtend-Life recommends 2400 milligrams per day for optimum results. Among these nutrients are omega-3 fatty acids, enzymes that help break down the food we eat into nutrients we can use and vitamins including antioxidants to fight free radicals and oxidation.



**We recommend
2400 milligrams
per day for
optimum results**



Supplement Facts

Serving size: 4 Capsules
Servings per container: 30

Amount Per Serving	%DV
Calories	10
Total Carbohydrate	<1 g <1%*
Protein	2 g 4%*

Green Lipped Mussel Powder (<i>Perna canaliculus</i>)	2400 mg	**
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* Percent daily values (DV) are based on a 2000 calorie diet

** Daily value (DV) not established

Other Ingredients: Capsule (Hydroxypropylmethyl Cellulose, Water), Rosemary Leaf Extract.
Contains shellfish (mussel).
Does not contain soy, dairy, gluten or peanut.

BENEFITS OF XTEND-LIFE GREEN LIPPED MUSSEL POWDER

Green Lipped Mussel Powder has been called a “miracle food” because it is one of the most complete foods available. It offers a host of nutrients, as well as mineral salts that are similar to the electrolytes found in human blood cells.

And while there are plenty of versions on the market, our customers have come to expect the best from us, and that’s what we deliver.

As a raw mollusc, Green Lipped Mussels help with tissue formation and the balance of body fluids, both of which play a role in supporting joint health.

Our Green Lipped Mussel Powder is as close to that raw, natural state as possible, because we know that nothing beats the real thing when it comes to nutrients.



Strong Joints...

I'm a canoe racer, been racing since 1983. I'm just about 75, going on 5. My wife says I've been taking the Green Lipped Mussel Powder for over a year now. I have noticed less joint pain after a 3-hour workout, but this is the best. My dog Dixie got bit by a tick, antibiotics killed the infection but left her hind legs limping. The vet gave me stuff which didn't work, so I started giving her my GLM. She's fine now and gets one every mealtime.

Ken W,
Sept 2020



Best Thing for Inflammation...

This is the best thing I have ever taken for inflammation, and its good for you too. I am 49, a plumber, and didn't know if I could go on due to inflammation & back problems. By the use of the Green Lipped Mussel daily, and an inversion table, I am in better shape than many younger people. I researched for the best source many hours, and believe Xtend-Life to be the best one.

James,
Aug 2019



Amazing product...

I've suffered with painful knees for years, but the pain is greatly minimized when taking Green Lipped Mussel Powder. Earlier this year I thought my increased exercising would eliminate the need for this product. I could not be more wrong! I now have at least an extra month supply on hand at all times. Highly recommended!

Dan,
July 2020



THE PROOF IS IN THE POWDER

Daily User!

I have been using this product for about 2 years now. I use to wake up in the morning in pain due to stiff knees. I take 2 capsules a night before bed, and the pain in the morning has gone away. Since being on this, I cannot REMEMBER the last time I was sick with the cold or flu. I ran out of the capsules about a month ago and forgot to order. Within about 5 days, my pain has come back, and I am now battling a cold. I have re-order the product and can't wait for it to arrive!

Tracey M,
Mar 2020

★★★★★



These Mussels Work...

I'm just 70 and have been using this product for at least 15 years. If I somehow run out of the product, my knee starts to hurt, and my shoulder rotation loss returns. All 3 of my dogs also took or take the capsules with noticeable results to their ease of movement.

Diane S,
Sept 2020

★★★★★

This works really well in conjunction with Not Just Joints...

I am a 60-year-old woman who has arthritis in all my joints. This is the only product that's working to lessen the pain. I will continue to use this product because I like the results.

Sharon D,
Sept 2020

★★★★★

One of My Staples...

I have been taking the Green Lipped Mussel Powder daily for about 10 years. I pull the capsules apart and sprinkle the powder onto my daily salad. I believe I get an overall benefit to my connective tissues. Since this is food and not a synthetic, there is no downside.

Jane L,
Sept 2020

★★★★★



ENVIRONMENTALLY FRIENDLY

Xtend-Life's Green Lipped Mussel Powder is produced using the very best Green Lipped Mussels harvested in the pristine and pure waters of New Zealand. New Zealand is a haven for mussel growers as the waters around the country ensure that young mussels grow and develop into healthy mature adults.

With the ever increasing global demand for seafood and shellfish - especially Green Lipped Mussels - wild fisheries cannot cope with the volume. Instead of pillaging Mother Nature, commercial growers (also called aquaculture) quickly became the industry's answer to sustainable mussel stocks.

These mussel farms have proved to be so successful in Green Lipped Mussel sustainability that since 2002, this portion of New Zealand's aquaculture industry has achieved huge growth.

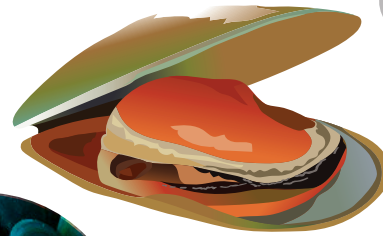
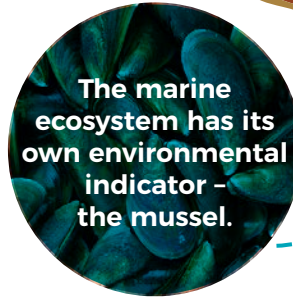
Xtend-Life fully supports sustainability effort. As with all of our products, we will always source our raw materials from eco-friendly suppliers who are as passionate about delivering a quality product as we are. This ensures future generations can enjoy the ocean's bounty just as much as we can today.



PRISTINE WATERS = PERFECT MUSSEL POWDER

In order to determine the quality of a fresh water ecosystem, many biologists simply look at the local frog population. A thriving number of frogs will more often than not mean that the environment where they live is free from contaminants and pollutants.

The marine ecosystem has its own environmental indicator - the mussel. Green Lipped Mussels are harvested in the pristine and pure waters of New Zealand throughout the year and their unrivalled level of purity results in nothing but the very best mussel powder on earth.



FEATURE:

MUCOPOLYSACCHARIDES: THE UNSUNG HEROES OF JOINT HEALTH

Green Lipped Mussel Powder has been widely acknowledged as a nutritional gem, containing a myriad of proteins, omega-3 fatty acids and complex carbohydrates. However, recent research has revealed the importance of one key component found exclusively in high concentration within the flesh of raw Green Lipped Mussels – Mucopolysaccharides (also known as MPS).

MPS are a unique group of complex carbohydrates which play a significant role in human metabolism, growth and health.

In addition to an array of other important functions, MPS help modulate the bio-exchange of the inter-cellular matrix (the millions of gel-like spaces that hold the body's water composition) where oxygen and nutrients are transferred to the individual cells, as well as where metabolites (organic cellular waste) are removed.

To put it more simply, MPS are like the nails in a house, the rivets in a ship's hull or the fibres in clothing – small in proportion to the whole but necessary to hold the structure together.

In your body, they are the unsung heroes which enable you to perform the daily functions that can easily be taken for granted.

MPS decrease with age

Unfortunately, the amount of MPS in our bodies decreases as we age. For example, after your first ten years, you would have already lost over 90% of the MPS in your body. The fact that human tissues are so high in MPS during the developmental years strongly indicates they are an integral factor in growth and overall wellbeing.

Processing is paramount

In an industry where there are many products – some good, some bad and some downright unacceptable in terms of health, nutrition and even safety – choosing the best Green Lipped Mussel Powder can be daunting.

To fully benefit from health factors associated with Green Lipped Mussels, you need the Green Lipped Mussel Powder that has retained a high proportion of natural MPS during the manufacturing process.

Xtend-Life's Green Lipped Mussel Powder is 100% natural and has been produced without using any cooking or high temperatures.

History

Having been part of folklore for many decades, MPS finally became known to scientists and health professionals during the 1970s. Dr Orville H. Miller, Professor of Pharmaceutical Chemistry at the University of Southern California, first identified the essential factors of a number of natural medicines.

Dr. Miller's research approached the potential health-improving properties of the Green Lipped Mussel from an historic nutritional view. He related the observed effects of similar nutrients, the folklore of natural medicines through the lens of modern scientific research.

A lifelong student of folk remedies, he travelled across the world, analyzing samples of snakes, iguanas and mussels to determine their reputed health-giving elements. Dr. Miller found the beneficial properties came from the carbohydrate – or mucopolysaccharides (glycosaminoglycans) – content of these foods.

New Zealand's Green Lipped Mussel, he believed could be an ideal source of mucopolysaccharides.

A WORD FROM WARREN MATTHEWS

"I hope that you have found the information in this guide to be helpful.

We are truly proud of the quality of our Green Lipped Mussel Powder and as a whole food it complements not only our Omega 3 /DHA Fish Oil products, but also our other sophisticated supplements such as Total Balance and Not Just Joints."

Warren Matthews
Chairman and Founder, Xtend-Life



"Our Green Lipped Mussel Powder complements our supplement range."

CONTACT

Xtend-Life Group
0800 520 0311
12 Mary Muller Dr. Hillsborough,
Christchurch 8022, New Zealand
Website: www.xtend-life.com



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