Alpha-3 CMP®

Concentrated Marine Phytoplankton

Marine Life Sciences, LLC

Alpha-3®CMP for Food, Feed & Fuel

Umac-Core®for Human Nutrition (umaclife.com)

Nature's way of delivering the suns energy to all living creatures!

How it all began......

Near the pristine waters of Canada's West Coast sits one of the largest and most unique sea farms in the world. The combination of freshwater run off from ancient rain forests and deep ocean nutrients colliding in one location making a literal cauldron of life.



Over an eight year period the founders of this unique sea farm spent countless hours researching, testing and analyzing different techniques to harness the nutrients found in the ocean water. They developed a patented process creating a nutrient-rich algae paste.

Uses of this nutrient-rich paste seemed far reaching, and it soon became evident that significant benefits were seen in human nutrition. Was there a possibility these microscopic marine phytoplankton were ready to be presented to the world as a unique untapped source of nutrition from the sea?





A clinical trial was created and the results showed that indeed the phytoplankton had a wide range of benefits. Soon, people began experiencing positive shifts in different areas of their health. Alpha 3 CMP® is a life altering ingredient which harnesses the best Mother Nature has to offer.

Alpha3-CMP® is...

The ONLY wild-harvested, naturally grown marine phytoplankton The ONLY ruptured cell harvesting with multiple species

Alpha 3 CMP $^{\circ}$ is the only marine phytoplankton that is registered,

Our Process......

Alpha-3 CMP $^{\otimes}$ is an extract from a natural multi-specie blend of marine phytoplankton. Growing and harvesting are part of a patented process which mimics nature's way providing these powerful nutrients.



Before collecting seawater, the area is cleared by Canadian Fisheries for any harmful contaminants. The seawater is collected from a depth of 25m and again tested by our quality control staff and cleared for processing. The batch is then identified to make sure the ideal variety of species is present. With vigorous aeration and organic feed, the ideal conditions exist for a re-creation of the naturally occurring spring bloom causing the natural reproduction of billions of phytoplankton cells.

Marine phytoplankton soon replicate to an optimal concentration level for harvesting. It is during this harvesting process that the cell walls are ruptured releasing the vital life sustaining nutrients. Why do we rupture the cell wall? Because the phytoplankton have silica and cellulose cell walls which our bodies cannot digest.





The ruptured phytoplankton is now in a paste form which is sent to a cGMP licensed facility for further processing. The phytoplankton is further concentrated into a powder or liquid finished product and tested for heavy metals and other contaminants.

The sea farm never uses harmful pesticides, chemicals or heat to grow or harvest the phytoplankton. We do not manipulate the growing process. We just let Mother Nature do what she does best......provide life sustaining nutrients through multi-specie marine phytoplankton!

The ONLY marine phytoplankton with a human clinical study The FIRST marine phytoplankton on the market

licensed and approved for human consumption!

Alpha 3 CMP® Frequently asked questions

Question 1: Why is the color of Alpha 3 CMP ® not dark green like other algae products such as Spirulina or Chlorella?

Color plays a very minor role in the overall nutrient profile of marine phytoplankton. Alpha 3 CMP * (A3) is a multi-specie extract of marine phytoplankton. The species found in A3 are part of a group of marine phytoplankton more commonly known as Diatoms. Diatoms are known for their yellowish-brown pigmentation which is due to the masking of the green color of chlorophyll a by the brown and yellow pigmentation of fucoxanthin and β -carotene.

Products like Spirulina and Chlorella are high in chlorophyll a content while lower or devoid of chlorophyll b and/or c or other carotenoids such as the brown pigment of fucoxanthin. The green pigmentation of chlorophyll a has proven to help in detoxification, but does not have a wide range of health benefits.

Question 2: How does Alpha 3 CMP ° compare to other branded phytoplankton?

Alpha 3 CMP[®](A3) is a multi-specie extract of marine phytoplankton. The species found in A3 are part of a genus of marine phytoplankton more commonly known as Diatoms. These diatoms are an important part of our oceans as they are responsible for 45% of the nutrient production. They are therefore also referred to as primary producers, and play a key role in the marine food chain.

GROWING PROCESS

The patented growing process uses natural sea water and sunlight unlike many other companies that use sterile water and add back salt and minerals to mimic natural sea water. Many other companies grow their products in photo-bioreactors while A3 is grown using natural sunlight in million liter outdoor tanks.

HARVESTING PROCESS

Diatom cells are protected by a unique silica cell wall comprising two shells. Silica is not easily digestible by our digestive systems and therefore the nutrients would not benefit our systems. The patented process used to harvest A3 ruptures those cell walls allowing our bodies to absorb and utilize the micro-nutrients.

OTHER SPECIES

One specie used by other companies is called *nannochloropsis*. This microalga differs from other related species in that they have chlorophyll *a* yet completely lack chlorophyll *b* and *c*. Studies indicate that this specie of microalga is poorer nutrient-based specie especially when grown in a man-made environment. It is used primarily for industrial applications and as a feed source for fish larvae and rotifers. It was found to be poorly digested in the clam and shellfish industry, and is believed to have been responsible for the

collapse of the once prosperous oyster and clam industry in the North Atlantic region (Northern Atlantic Journal of Phycology 2006 42, 963-974).

Question 3: How are the nutrients in Alpha 3 CMP [®] preserved once the silica shell is opened?

Alpha 3 CMP° (A3) is grown and harvested on an as needed basis. Once harvested, the phytoplankton paste is stored in a dark and cool place until it is ready for drying. The drying process is critical in maintaining the nutrient profile as algal derived micronutrients are very susceptible to heat. Also, the pH of the phytoplankton is monitored to make sure the batch maintains its viability.

Question 4: Is "soft shell (cell)" phytoplankton better than open shell (cell) since nutrients in soft shell phytoplankton wouldn't be exposed to oxidation?

The notion that marine phytoplankton have a "soft shell" is purely marketing tactic. In part, microalgae are categorized by their cell wall structure. Typically a cell wall is made up of multiple layers containing either cellulose or silica. Primary producers of nutrients typically contain the more rigid cell walls made of both silica and cellulose. The cell wall may even be strengthened by the silica forming plates or scales. Species such as Spirulina which lack cellulose, unlike the majority of microalgae, facilitates their use for human consumption, but also do not protect them from environmental harms.

Question 5: How concentrated is Alpha 3 CMP [®]?

Alpha 3 CMP[®](A3) is grown to a cell density of up to 5,000,000 cells per milliliter of water. When dried, the ratio is 12 to 1 meaning 12 kg of marine phytoplankton paste make 1 kg of dried product. Therefore, in a daily serving a 75mg of dried product you are receiving the nutrients from 900 mg of marine phytoplankton paste.

Question 6: What does Alpha 3 CMP® mean?

Alpha - Beginning

3 – Nutrition that is focused on mind, body and spirit

CMP - Concentrated marine phytoplankton

Phytoplankton is Mother Nature's way of delivering the suns energy to all living creatures through the process of photosynthesis. The Alpha 3 CMP[®] extracted from Diatoms which are the primary producers of the marine food chain. As primary producers they convert inorganic material into organic material.

The location of the growth and harvesting operation is a unique place full of rich deep sea and land nutrients. While several land and ocean areas of our planet are exhibiting low productivity due to a lack of

mineral elements and critical nutrients, the pacific northwest of Canada exhibits a rich abundance of these essential elements. These factors have resulted in therapeutic prospects for the mind, body and spirit (mood).

Question 7: What species of marine phytoplankton are in the extract?

Alpha 3 CMP® is a multi-specie extract. As a natural product, the specie count can range as high as 100 species. However, the following 19 species account for 70% of the extract with *Skeletonema costatum* accounting for 40% of the total extract.

Asterionellopsis glacialis Rhizosolenia setigera
Chaetoceros constrictus Skeletonema costatum
Chaetoceros debilis Strombidium sp.

Chaetoceros decipiens Thalassionema nitzschioides Chaetoceros laciniosus Thalassiosira aestivalis

Chaetoceros radicans Thalassiosira nordenskioekdii

Cylinddrotheca closterium Thalassiosira rotula Dactyliosolen fragilissimus Thalassiosira gravida

Detonula pumila Ditylum brightwellii Leptocylindrus danicus

Question 8: Are there any completed studies which determine an efficacious daily dose of marine phytoplankton?

The Alpha 3 CMP® ingredient was part of a University of Utah department of health double blind study. The study was conducted using a daily dose of 75mg. Further lab studies look at digestive benefits of higher doses and the results showed that dosage amounts above 75mg s howed no significant increases in absorption.

The following outline displays the results from the University of Utah study:

- Clinically proven nutritional support for improvement of physical, mental and emotional health and well-being†.
- Clinically proven nutritional support to enhance the body's immune system
- Clinically proven nutritional support for management of blood sugar levels in females†.
- Clinically proven to maintain lower PSA levels in males†.

Alpha 3 CMP®

Research Summary

	QUALITY of LIFE	IMMUNE SYSTEM	BLOOD SUGAR	PROSTATE
	Randomized Placebo Controlled Pilot Study ¹			
Study Objective	Assess the effects of Alpha 3 CMP on quality of life: SF-36 and Authentic Happiness Inventory figure 1	Assess the effects of Alpha 3 CMP on immune system: Immune system marker CD3 figure 2	Assess the effects of Alpha 3 CMP on the glycated hemoglobin measurement: A1C	Assess the effects of Alpha 3 CMP on prosate health: Prostate-Specific Antigen (PSA) figure 3
Dosage (Research & Daily Dose)	90 day research dose: in capsule form 75 mg per day in liquid form 2 ml per day	90 day research dose: in capsule form 75 mg per day in liquid form 2 ml per day	90 day research dose: in capsule form 75 mg per day in liquid form 2 ml per day	90 day research dose: in capsule form 75 mg per day in liquid form 2 ml per day
	1. Significantly increased scores on the emotional subscale of SF36 for: feeling full of life, feeling lots of energy, and feeling calm and peaceful.	1. The immune system marker CD3 measurement showed a significant increase within the Alpha 3 CMP group participants.	1. The A1C measurement showed a significant stabilizing effect for females in the Alpha 3 CMP group compared to females of the control and placebo group.	The PSA measurement in the control and placebo groups varied significantly at each time increment.
Results	 Significantly increased scores on the Authentic Happiness Inventory for: good mood, feeling successful, ability to focus, level of optimism and enthusiasm, and filled with joy. 	2. The CD3 measurement showed a highly significant increase between the Alpha 3 CMP group compared to the control and placebo groups.		2. The Alpha 3 CMP group maintained a consistent PSA reading at all time measurements.
				3. In all cases, the Alpha 3 CMP group measured a lower PSA level than the control and placebo groups.
Claim	Clinically proven nutritional support for improvement of physical, mental & emotional health and well-being	Clinically proven nutritional support to enhance the bodies immune system	Clinically proven nutritional support for management of blood sugar levels in Females	Clinically proven to maintain lower PSA levels in males

¹ Health Indicators of Alpha 3 CMP Use Among Apparently Healthy Individuals: A Pilot Study - Conducted by the Department of Health Promotion and Education University of Utah

Figure 1 - Beck Depression Inventory v2

Figure 2 - Absolute CD3 Between-Subject Effect in Males Immunity

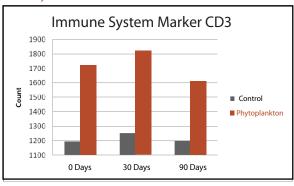
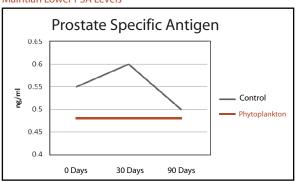


Figure 3 - PSA Between-Subject Effect in Males

Maintian Lower PSA Levels





WITY YOUT PEUS HEELS.
SMOST POWERFUL SUPERMOOD,

MARINE PHYTOPLANKTON

phyto-nutrients from the Sea!

pet owners tell us daily that Alpha 3:

SUPPORTS CELLULAR HEALTH **PROMOTES SHINY COATS** Aids IN WOUND HEALING SUPPORTS JOINT HEALTH **HEALTHY GUMS and more!**

Alpha 3 marine phytoplankton is a microscopic plant from the ocean, loaded with amino acids and rare sea minerals. Testimonies are flooding in from joint health to skin and coat AND MORE... The added supplement that will change your pets life!

www.umaclife.com

Just add to food:

1/2 dropper or 1 capsule(open and sprinkle)- small dogs/cats 1 full dropper or 2 capsules - larger dogs

Alpha3® Human Tested – Animal Approved!



There is no doubt in Maggie Ferguson's mind that UMAC-Core® is saving lives. In December 2008 she had almost given up on Jellybean, a young standard poodle that was desperately ill with Addison's disease, a failure of the adrenal system. As president of the Delta Humane Society Maggie often took dogs into her special care and Jellybean, despite excellent veterinary care was nothing but a bag of bones who was cranky with other dogs, listless, and showing very little interest in food.

One Day Maggie noticed a product on the shelves of her local health food store called UMAC-Core. She read the pamphlet and was interested enough to thoroughly research the product on the Internet www.umaclife.com. Her in-depth studies convinced her to try UMAC-Core with Jellybean.

"The research explained that it feeds the whole body at a cellular level," Maggie says. "And I knew it was a whole food so it couldn't hurt," In fact, UMAC-Core® is the only Phytoplankton product of its kind that has been subjected to intense research and quality control. No other product in this category appearing on health food store shelves has been subjected to scientific double blind tests with human subjects.

Doctors at the University of Utah who conducted the studies were impressed with the results and concluded that UMAC-Core®helps enhance the immune system and support mood fluctuations, quality of sleep, and overall emotional well-being. Tiffany Haarsma, Canadian director of public relations and marketing for Marine Life Sciences that markets UMAC-Core®along with its Canadian and U.S. broker partners says, "What excites me about this initial study is that the University of Utah does not endorse UMAC-Core;® they were simply looking for facts to attain a solid conclusion. The studies indicated what we suspected all along based on the overwhelming positive feedback from UMAC®consumers".

UMAC-Core® is a combination of many different species of wild phytoplankton that has been made available for human consumption for the first time in history - not only available in a commercial sense, but also bio-available. Due to its unique composition, this blend of phytoplankton has been trademarked as Alpha 3 CMP®.

Tom Harper owns the research facility that produces the Alpha 3 CMP® for UMAC-Core on Vancouver Island and has created aquaculture technology unlike any other in the world that provides consumers with a rare nutritional opportunity.

Some of those consumers today are animals like Jellybean.

Within three weeks Maggie noticed remarkable changes in Jellybean. "The first thing I noticed was that she was cleaning up her food," she says. "Before we could barely get her to eat one cup twice a day and she started cleaning it all up and looking for more — now she's up to high quality food and eating four cups a day and she's putting on healthy weight. She's bouncy and happy and wants to play. It's been an amazing journey with her."

Dolly is another canine success story. Dolly is an old Rottweiler/Lab cross that Maggie thought would not survive the winter. She had severe arthritis and seemed to have lost the will to live. She started Dolly on UMAC-Core® and again, the change was remarkable. "She has been amazing," Maggie says. "The inflammation in her joints has gone down. She can still walk when we thought it was the end of the line for her."

Maggie was so impressed with the results her animals showed with UMAC-Core®that she began to take it as well. Within two months she saw noticeable changes. "My sleeping has become so much better," she says. "I have a really hectic schedule and I tend to lie there at night going over it. Now I get a much better sleep than I ever did. I have more energy, my skin is more hydrated and I feel so much better."

She adds that her friend is an even bigger success story. She suffers from hypothyroidism and has been on medication for 20 years. A few weeks after starting UMAC-Core® her friend checked in with her doctor for regular testing and for the first time in 20 years, the doctor lowered her medication. "She was shocked!" Maggie says, adding, "I would absolutely recommend UMAC-Core® Everything I've tried it on has benefited."

She notes that she would always take an animal to a veterinarian and follow the doctor's recommendations – but that UMAC-Core[®] is an outstanding complement to regular therapies.

Tiffany Haarsma says, "UMAC-Core® benefits absolutely everyone, even our furry family members! Everything begins at a cellular level. We have to supply our bodies and our pets bodies with recognizable whole foods, not foods grown in laboratories. The closest thing to human plasma is sea water so isn't it extraordinary that we now have an opportunity to benefit from those wild nutrients that have sustained life in our oceans since the dawn of time".

"I was sick as a dog, and the darn thing wouldn't go away. Finally, I went and got my UMAC! Took it right away in the parking lot. Within six hours my lungs were clearing up, and the coughing had stopped. Amazing stuff-no luck with getting better for two months, and in just an afternoon UMAC-CORE has beaten the "bug." Actually within an hour of taking it, the coughing had stopped-completely, and my lungs were clear and able to take a deep breath first time in two months. My doctor is amazed. Great stuff. I Will not run out again!" Glenda, Phoenix

"When I started Umac -Core I was 149 lbs, feeling sluggish and not sleeping well. I was taking 1/2 dropper full twice daily. After 2 weeks of using the product I noticed a huge increase in energy and general feeling of well being. I'm now 136 lbs and feel as I have a new lease on life. Thank you Umac!"

Debra, Vancouver Island

"I'm taking Marine phytoplankton for 7 weeks now and can't praise this product enough, the benefits are countless, but to name a few:

- -amazing mental and physical energy
- -better sleep (I had problems sleeping for 10 years, now I sleep like a baby!)
- -menopause symptoms have vanished!
- -thicker stronger hair and nails
- -smoother skin
- -a fantastic sense of well-being.

Umac-Core marine phytoplankton did all this and more for me and I'll always take it-Thank you!"

Jessica, Great Britain

"I have painful arthritis in the feet, knees and back and great difficulty in sleeping. I can say after a week on Umac-Core, I am sleeping much better and the painful arthritis in my feet, knees and back has greatly reduced, to almost none! You have given me hope for the future!"

James, Grand Rapids

"This UMAC is by far the most effective food or supplement I've ever tried.

I was very skeptical when I took the first half dropper. However, the effects spoke for themselves: My metabolism was boosted within minutes, I could feel this warm boost first in my brain and then in my chest. I 've noticed that this stuff does a tremendous job in helping my body getting rid of toxins, especially mercury,. My body is much more alive than before. Thank you so much! "Franz, Germany