

From the pristine waters of Canada's west coast...

UMAC-CORE™

Marine Phytoplankton

Retail Reference Manual

Restores, Strengthens
& Balances your
Cellular System



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The Discovery of a Unique Natural Resource

Near the pristine waters of Canada's West Coast, Tom and Margaret Harper set out to build one of the largest shellfish farms in the world. With Tom's passion for the ocean and Margaret's for science, they felt they had the right ingredients to accomplish their dreams.



Several difficulties soon arose hampering their quest to produce the highest quality shellfish. New regulations and expensive, low quality feed made it difficult to compete with other farms. Over the next eight years, they spent countless hours researching, testing and analyzing different techniques to grow an alternative nutrient-rich food source. They developed a patented process creating an algae paste, Alpha-3 CMP (Concentrated Marine Phytoplankton), to feed their shellfish.

They soon were producing shellfish up to five times larger than those fed traditional industry food. This catapulted their business, soon everyone was clamoring for their shellfish. To meet demand it became a 24/7 business..... Everything seemed great.

Not without a unique challenge ...

As business continued to grow and prosper, Tom's health began to deteriorate. He was given only months to live and was advised by his doctor to get his affairs in order. This was a very trying time in his life as he contemplated leaving behind his family and losing his life long efforts with the Sea Farm.

While passing his tanks of Alpha-3 CMP, he considered the amazing health benefits realized by his shellfish seed. He thought of all the plants in the world and knew many of them had medicinal properties. Something intuitively told him to begin eating the nutritious Alpha-3 CMP paste. Within weeks he started to feel less pain and his energy returned. Was there a possibility these microscopic Marine Phytoplankton grown in the Alpha-3 CMP paste were ready to be presented to the world as a unique untapped source of nutrition from the sea?

As he shared his Alpha-3 CMP paste, soon others began experiencing positive shifts in different areas of their health. His focus shifted from producing food for his shellfish seed to finding a way to deliver the paste to a rapidly growing number of people interested in improving their health. This life altering experience changed his perspective of life. He embarked on a journey to share his unique experience with the world.

UMAC-Core™ was launched affording all living creatures the opportunity to benefit from these amazing nutrients from the sea!

Before Wheatgrass...
Before Spirulina...
Before Chlorella...
There was....
PHYTOPLANKTON
3.5 Billion Years in the Making!

Marine Phytoplankton is the original food source sustaining life in the ocean for millions of years. Alpha-3 CMP™ contains a unique combination of rich nutrients, amino acids, rare trace elements, vitamins and minerals. It is a renewable and sustainable blend that provides nutrients to our cells in order to restore, strengthen and balance our systems.

Marine microbes remain elusive and mysterious, even though they are the most abundant life form in the ocean, form the base of the marine food web, and drive energy and nutrient cycling.

Scientists at NASA theorize that billions of years ago, these microorganisms marked the beginning of life on Earth. Our oceans are adrift with these microscopic, single-celled plants that use energy from the sun and nutrients extracted from surrounding water to make their own carbohydrates through a set of chemical reactions called photosynthesis.

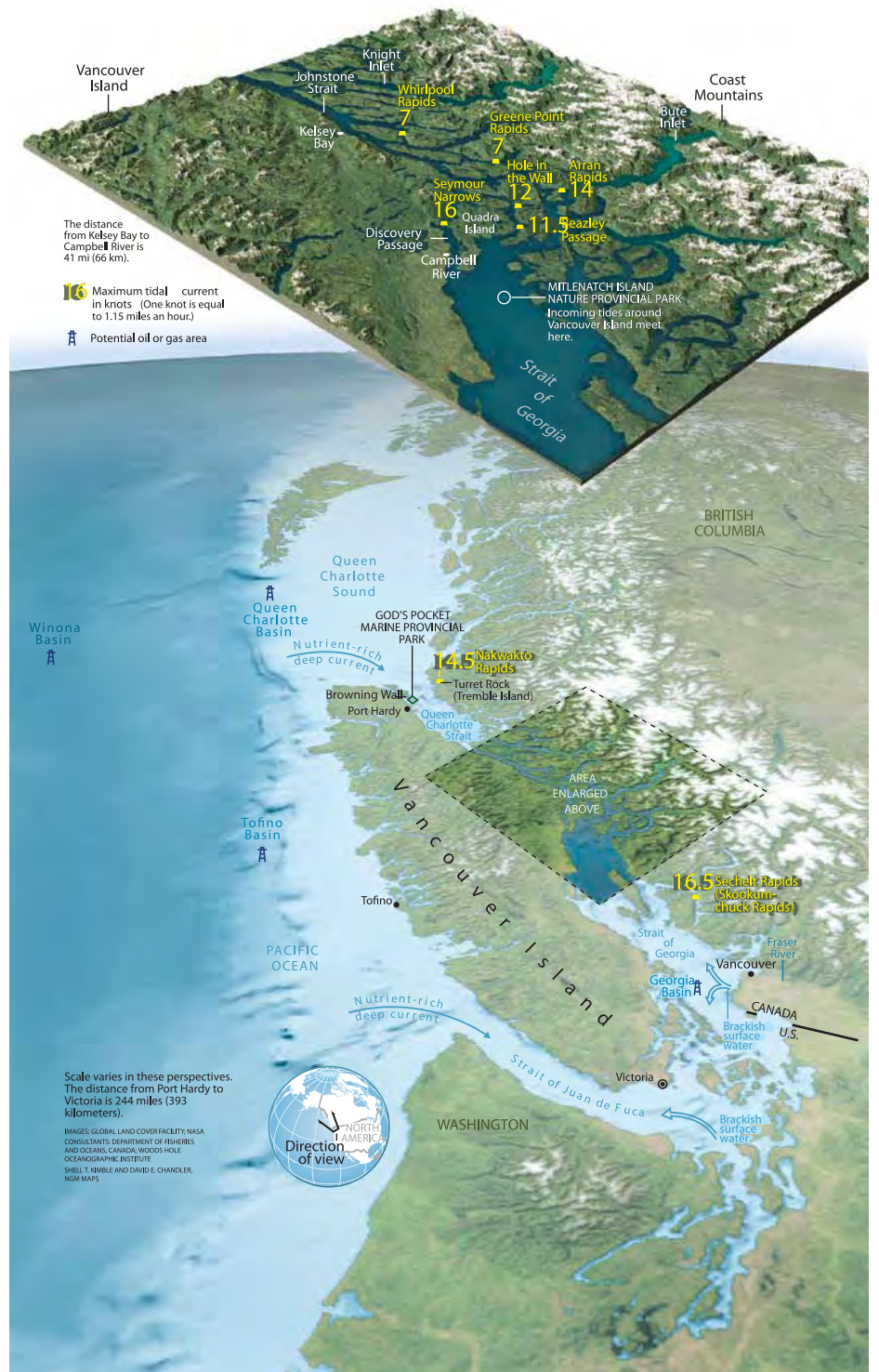
UMAC-CORE's key ingredient is Alpha-3 CMP™. It is a complete whole food. It contains everything your body requires to keep cells vital and strong. It provides many elements that many of us now lack, including carotenoids, chlorophyll, enzymes, and cellular material not found in this combination in other "Super Green" Foods. This is the only known product to take natural marine phytoplankton communities containing a complete suite of marine trace elements in proportion to those found naturally in human plasma.

The mineral elements and electrolytes in Phytoplankton are almost tailor-made for the human body. Because of poor farming practices, chemicals and additives, our reliance on land-based food sources often leads to deficiencies in micronutrients and trace elements. Our bodies need these elements to perform as nature intended. Left to its own devices, the human body has a marvelous system called homeostasis which keeps all systems in balance. Take away any critical component and the body experiences malfunctions that cause less than optimal performance which, in turn, may lead to disease.

Unique Location

The pristine waters of Canada's West Coast...

As awareness rises concerning pollution found in the oceans and its impact on marine life and human consumption, the relevance of the location of the Sea Farm becomes of paramount importance. These waters offer an unsullied pristine marine environment unlike any other in the world. The waters of Canada's west coast become a vast protein shake of nutrients, blended by upwellings, back eddies and surges directed by the ebb and flow of tides. There is tremendous energy packed in some of the world's fastest water.



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National Geographic
August 2006

*"The tides carry and mix nutrients from immense deepwater upwellings at both the Northern and Southern entrances. What makes these straits an exceptional **cauldron of life** is the way in which ocean tides interact with freshwater.....This creates a vacuum of sorts that draws even more deep ocean water and more nutrients into the straits."*

Giving back to Mother Nature

Our facility offers rare contributions back to “Mother Earth” which few industrial facilities can match.

Marine Phytoplankton forms the essential and vital base of the food chain for most life forms in our oceans. It is imperative that any process used to extract these specific, extraordinary combinations of natural Marine Phytoplankton is done without disrupting the fragile ecosystem. We utilize eight one-million liter land based tanks to grow the Alpha-3 CMP™ blend of Marine Phytoplankton. Great care is taken to ensure our process mimics Mother Nature in all ways possible. Seawater containing a diverse blend of Marine Phytoplankton is gravity fed into our tanks. There, our patent pending proprietary technology is used to re-create the “spring bloom” on land. They then multiply by the billions until the water is dense with these potent, nutrient-rich Marine Phytoplankton. Once the bloom has reached its full mass, the Marine Phytoplankton are harvested and moved through the next stage of the process.

Benefits.....

One of the major threats facing our environment is the release of carbon dioxide into our atmosphere. The journal of Geophysical Research finds that phytoplankton exert a significant and previously uncalculated influence on the Earth’s climate. Our growing and harvesting process consumes carbon dioxide and emits oxygen back to the atmosphere. According to NASA, phytoplankton are responsible for approximately 50% of the carbon consumption and up to 90% of the oxygen production in the Earth’s atmosphere.

For years, large industrial facilities such as this have struggled with the fine balance of manufacturing products without damaging our environment. Our Sea Farm is not only providing the newest “Super Food” to mankind, we proudly protect our environment, reduce carbon dioxide and provide oxygen into our atmosphere.

UMAC™ affiliates with other environmentally and health conscious groups such as Co-op America, Citizens For Health, Integrative Health Network, and the Marine Life Sciences Assistantship with the University of Utah Department of Health.

Sea Farm



Research and Development



Complementary and Alternative Medicine is utilized by 62% of the adults in the United States and, of the alternative practices used, “natural products” and diet-based therapies accounted for a substantial portion. According to *Alternative Therapies in Health and Medicine*, dietary supplementation was practiced by over 38 million adults between 1997 and 2002.

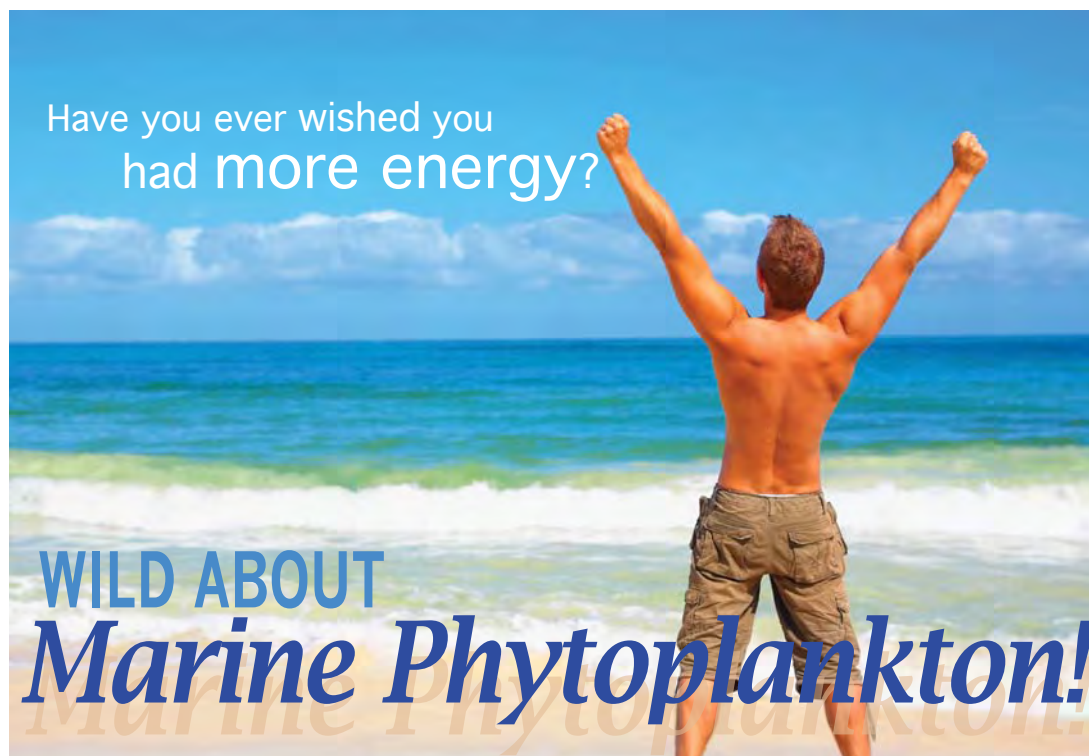
A nonprofit foundation has been established in partnership with the University of Utah Department of Health to research the health benefits of Marine Phytoplankton for human consumption. Glenn Richardson, Ph.D., Professor and Director of Integrative Health at the University of Utah, heads the Research Advisory Board consisting of medical doctors, Ph.D.’s and other health care professionals presently conducting this study. The research intends to identify areas in which the consumption of Marine Phytoplankton improves physical and/or psycho-spiritual health employing a mixed-method approach.

The April 2007 issue of the *Journal of Nutrition* recites a study by scientists from King’s College in London that found that relatively small amounts of omega-3 fatty acids from marine phytoplankton can lower blood pressure and could ultimately reduce the risk of cardiovascular disease. Extensive research suggests that a sustainable vegetable source synthesized by marine phytoplankton may reduce inflammation, help certain chronic disease such as heart disease and arthritis, and play a crucial role in brain function as well as normal growth and development.

Dr. Bob Row, Qualicum Beach, B.C., incorporates *UMAC-Core™* into his medical practice. He explains, “I feel *UMAC™* provides the nutrients needed by the mitochondria to repair and produce ATP at much higher levels. *UMAC™* has been reported to have a tendency to normalize blood sugar levels, which benefits those under stress. It works by providing essential nutrients needed by the body to stay in an optimal level of health. It is a whole concentrated food from as close to nature as it can be.”

The full benefits of Marine Phytoplankton are still being discovered. This ongoing research through clinical studies continues to unveil the amazing nutritional opportunities ahead for *UMAC™*.





Where does energy come from? To answer these questions we need to begin with the ultimate source of energy- the Sun. We harness the Sun's energy through direct contact and diet. Plants absorb the Sun's energy through photosynthesis and are later consumed by animals and humans, thus conveying the Sun's energy. The closer we eat to the original source, the more energy and nutrients we receive.

“Marine Phytoplankton is a pure source of nutrients that can help to restore vital cell functioning” -Glenn E. Richardson Ph D.

Scientists theorize that millions of years ago tiny micro-organisms, called phytoplankton, pioneered the ability to convert energy, or light from the Sun, into essential nutrients and oxygen (Photosynthesis). These unique micro-organisms provide all other life forms with essential nutrients, trace elements and oxygen. Phytoplankton fuels life at all levels.

In addition to being the most important superfood available to harness solar energy and deliver essential nutrients, phytoplankton supplies our atmosphere with up to 90 percent of it's oxygen. Which means most of the world's oxygen doesn't come from forests, grasslands or lush tropical jungles, but microscopic ocean plants.

Phytoplankton nourishes all the oceans of the world, but thrives in the pristine waters of the Pacific Northwest. The unique temperate coastal tides carry and mix nutrients from immensely deep ocean water through upwellings, back eddies, and fjords creating the world's most diverse and nutrient rich blend of phytoplankton. These nutrient-saturated currents create a literal cauldron of life.

The micronutrients and perfect ph balance found in phytoplankton are exactly what our cells need to function at optimal levels. Delivering such a high density of nutrients to our cells will enhance and improve the structure and function of all organs in our bodies. Conversely, a diet lacking in these micronutrients challenge cellular integrity resulting in dysfunction and increased disease.

UMAC-CORE™ Manufacturing

Seawater Collection

Seawater is gravity fed into the facility through an intake tube that runs out 1 km from land to a depth of 25 m.



The collected Seawater that was tested for safety contains:

- Natural ingredients for growth initiation
- Low concentration of naturally occurring wild phytoplankton cells
- No surface-related toxins or contaminants

Spring Bloom on Land

Using a combination of our patent pending technology and photosynthesis, the wild marine phytoplankton reach a density appropriate for harvesting. Diatoms are naturally a golden brown color.



Dense bloom of diatoms

High Density Cultures

Alpha-3 CMP™ primary dominant genera:
Skeletonema, Thalassiosira, Chaetoceros,
Phylum Chrysophyta, Class Basillariophyceae

Algal type:	Diatoms
From:	Chains and Single cells
Cell Wall:	Silica Frustule (polymerized silicic acid)
Pigments:	Chlorophylls a and c
PDF Paper:	b-carotene, diadinoxanthin, fucoxanthin, Xanthophylls in Microalgae(Jin et al. 2003)



Tanks with vigorous aeration

Processing

Our product is tested and processed according to GMP standards in a certified laboratory and manufacturing facility.



Research & Development



Automated packaging line

Packaging

- Fully automated packaging under sterile conditions.
- **Powder** is encapsulated in Veggie Capsules, which are then packaged in air tight bottles.
- **Liquid** is placed in dark glass bottles to protect the pigment from light exposure.

Final Products

Recommended Daily Intake (RDI)

- **Capsules**.....3 Capsules (75 mg)
- **Liquid**.....2 ml Liquid

It is important to remember that algae is considered a whole food, so you can eat it with other vitamins, medications or herbs. As always, if you are pregnant, nursing or have any questions or concerns, consult your health care provider.

Unique Sea Farms Quality Control

Once the raw wild marine phytoplankton has reached full “bloom” and is harvested, it is sent to the manufacturing facility to be processed into UMAC-CORE™ capsules and liquid. At the conclusion of each run of product, a full analysis is performed to ensure the products adhere to the guidelines for heavy metals, yeast, mold and bacteria. Each batch of finished product is accompanied by a Certificate of Analysis.

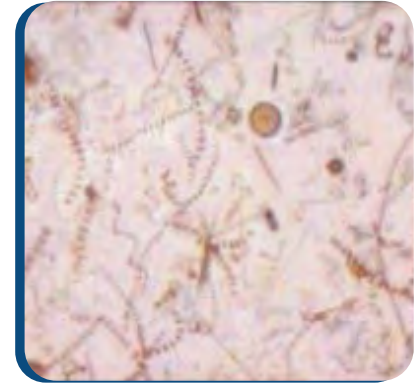


Product Comparison

MARINE ORIGIN

MARINE PHYTOPLANKTON

UMAC-CORE™ is a blend of several species of marine phytoplankton, primarily from the larger, nutrient-rich Bacillariophyceae (classified commonly as diatoms). The proprietary patented process harvests natural seawater, capturing the marine phytoplankton in million liter tanks. This is the only known product to take natural marine phytoplankton communities containing a complete suite of marine trace elements in proportion to those found naturally in human plasma. All marine phytoplankton are classified as microalgae, but not all microalgae are marine phytoplankton.



Marine Phytoplankton

MACROALGAE

Kelp are large macroalgae (seaweeds), belonging to the brown algae. Kelp grows in underwater forests (kelp forests) in clear, shallow oceans requiring water temperature to be below about 20° C. It offers protection to some sea creatures, or food for others. Of the more common algae products currently on the market, Kelp is correctly classified as a marine macroalgae.

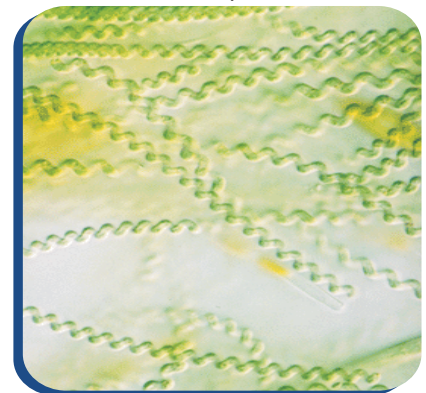


Kelp

FRESHWATER ORIGIN

SPIRULINA

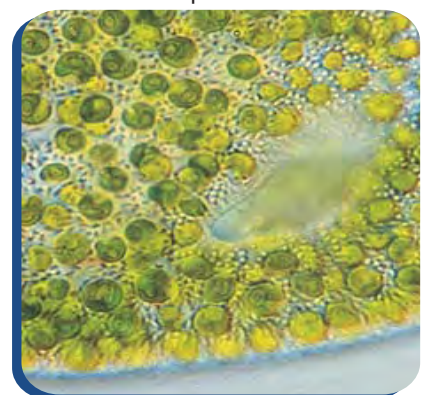
Spirulina is a simple, one celled form of algae that grows in warm freshwater environments. Even though spirulina is distantly related to kelp, it is not a sea plant. The freshwater ponds and lakes it favors are notably more alkaline than ordinary lakes and cannot sustain any other forms of microorganisms.



Spirulina

CHLORELLA

Chlorella is a form of unicellular green algae found in still, freshwater soil or bark of trees. Chlorella has a strong cell wall that prevents it's native form from being adequately broken-down and absorbed by the human digestive system. Special processing is required to break it's cell wall.



Chlorella

Nutritional Properties of Microscopic Marine Algae

Alanine

- Activates muscles
- immune system booster

Arginine

- new muscle builder
- supports immune system
- Detoxifies the liver

Asparagine

- Immune system booster
- brain energizer

Aspartic Acid

- assists making healthy DNA
- Immune system booster

Betacarotene

- Immune system booster
- Defends against free radical attack
- Aids digestion
- Vision enhancement
- cornea protector

Bioflavonoids

- immune system booster
- Removes toxins from skin cells

Biotin

- promotes healthier-looking hair

Boron

- promotes stronger bones
- improves mental clarity
- assists with unclogging arteries

Calcium

- promotes stronger bones
- Calms nerves
- improves cholesterol levels

Chlorophyll

- Promotes bowel regularity
- Cleanses interstitial tissues

Chromium

- Moderates existent diabetes
- Prevents adult-onset diabetes

Cobalt

- Repairs nerve cells
- Helps produce red blood cells

Copper

- Eases Arthritis
- Helps produce red blood cells

Cysteine

- Detoxifies carcinogens

Essential Fatty Acids

- Reduces cardiovascular disease

Electrolytes

- Helps kidneys regain optimum function

Fiber

- Eliminates toxic wastes

Fluorine

- Fights tooth decay
- improves bone density

Folic Acid

- increases mental focus
- Prevents anemia

Germanium

- Helps control Epstein-Barr virus

Gamma Linolenic Acid

- lowers cholesterol

Glutamic Acid

- Reduces alcohol/sugar craving

Glutamine

- increases mental focus

Glutathione

- defends against free radical attacks

Glycine

- Calms nervous system

Glycogen

- Boosts physical stamina

Histidine

- Enhances nutrient absorption
- Removes toxic metals

Iodine

- assists with maintaining

Iron

- decreases anemia
- increase emotional health
- increase physical energy

Isoleucine

- Build muscle
- Helps repair the liver

Lecithin

- Dissolves cholesterol deposits
- Improves short-term memory

Leucine

- Reduces Hypoglycemic symptoms

Linoleic Acid

- Combats viral infections

Lysine

- Helps prevent osteoporosis

Magnesium

- Promotes tranquility
- Moderates mood swings
- Reduces migraine headaches

Manganese

- Assists joint mobility

Methionine

- Enhances memory
- Mood elevator
- Removes heavy metals

Molybdenum

- Increases longevity

Niacin (Vitamin B3)

- Stress reducer
- Lowers cholesterol assists in reversing atherosclerosis

Nickel

- Promotes cellular growth and reproduction

Nucleic Acids

- Memory enhancement

Omega-3 Fatty Acids

- increases cell membrane flexibility
- cholesterol dissolving properties
- reduces cardiovascular diseases

Omega - 6 Fatty Acids

- Relieves arthritis symptoms
- skin tone improvement
- reduces cardiovascular disease

Pantothenic Acid

(Vitamin B5)

- reduces morning pain caused by arthritis
- reduces toxicity from alcohol
- defender against free radicals

Phenylalanine

- improves mental clarity
- sugar cravings reducer

Phosphorous

- assists with healthy teeth
- increases bone fracture repair

Potassium

- hypertension reducer
- blood pressure control

Proline

- increases learning ability
- assists repairing torn cartilage

Pyridoxine (Vitamin B6)

- Immune system booster
- relieves PMS

Riboflavin

- boosts physical energy
- defends free radical attacks
- reduces eye fatigue

RNA

- improves mental focus

Selenium

- strengthens immune system
- relieves anxiety

Serine

- enhances skin beauty

Silicon

- skin tightening

Sodium

- assists preventing sunstroke

Superoxide Dismutase

- assists in preventing free radical activity

Substance P

- increases mental focus

Thiamine (Vitamin B1)

- increases energy
- improves mental attitude
- tension reliever

Theonine

- immune system enhancer
- ameliorates skin tone

Tyrosine

- improves emotional health
- enhances mental alertness
- increases memory ability

Valine

- promotes muscle tissue building

Vanadium

- assists in controlling blood sugar levels

Vitamin B12

- increases physical energy
- enhances mental focus
- assists with nervous system repair

Vitamin C

- promotes healthier gums
- reduces risk of cancer
- reduces duration of common cold

Vitamin E

- immune system booster
- promotes healthy nerve tissue

Zinc

- supports prostate health
- strengthens immune system
- reduces outbreaks of acne
- increase memory access
- reduces common cold symptoms

Key Benefits of UMAC-CORE™

- Food based nutrition
- Liquid (for better absorption)
- Essential vitamins, minerals & nutrients
- Promotes healthy cell communication

Other Potential Benefits

- Helps cleanse & detoxify your blood
- Helps with skin related disorders
- Assists in digestion
- Helps metabolize energy and fat
- Helps bolster your immune system
- Encourages weight loss
 - Provides needed energy and vitality
 - Powerful antioxidant
 - Helps control blood pressure

Plankton
gone
WILD!

Supplement Facts

Serving Size 1 Capsule

Amount Per Serving	
Proprietary Blend	25 mg*
Alpha-3 CMP™ (Concentrated Marine Phytoplankton)	
<i>Skeletonema costatum, Thalassiosira aestivalis, Thalassiosira nordenskiöldii.</i>	

*Daily Value not established.

Other Ingredients: Maltodextrine, veggie capsule.

Supplement Facts

Serving Size 1/2 Dropper (1 ml)

Amount Per Serving	
Proprietary Blend	8 mg*
Alpha-3 CMP™ (Concentrated Marine Phytoplankton)	
<i>Skeletonema costatum, Thalassiosira aestivalis, Thalassiosira nordenskiöldii.</i>	

*Daily Value not established.

Other Ingredients: USP grade glycerine, water.



UMAC-CORE CONCENTRATED MARINE PHYTOPLANKTON

For more information
visit www.umac-core.com
or call toll free 1-866-415-8622



Ride the new wave of health!

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Alpha3
CMP
Nutrition
from
the Sea!