

**Dietary Supplements**  
**Wachters' Organic Sea Products**  
**Product Specification Information**

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**No. 22 - Sea Vegetation**

No. 22A - Product Code 5140 - 100 tablets

No. 22B - Product Code 5141 - 480 tablets

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Wachters' Exclusive Blend of Sea Vegetation™ is our original product. It was developed by Dr. Joseph V. Wachter from his research resulting from his experience of health restoration in the 1920s by the Alaskan Tlinglit Eskimos who used sea vegetation in his cure.

A Viennese pianist who concertized through Europe, Wachter discovered he had developed the dreaded tuberculosis when he collapsed in Hungary, during a performance.

On what he thought would be his last adventure, young Wachter voyaged to New York City and, earning his way by performing in saloons and hotels, reached Alaska in an exhausted state. Jack London, the famed American novelist best known for "The Call of the Wild," became Wachter's friend. London persuaded Wachter that the Tlinglit Eskimos could cure the pianist of coughing disease.

For the next six months, the Tinglits treated Wachter to strong teas, potions and compresses made from seaweed. When he had recovered his health, he was able to walk 10,000 miles from Nome, Alaska to New York City. From there, he traveled via ox cart west to San Francisco, studying the traditional health and nutrition practices of native Americans and finding his future wife along the way.

Dr. Wachter developed the Wachters' Blend containing up to 15 species of sea vegetation gathered worldwide. Selected from the five families of brown, red, green, blue and blue-green sea vegetation, the Wachters' Blend represents a broad spectrum of 61 naturally chelated minerals and trace minerals and more than 25 vitamins ( including B<sup>12</sup> and D), enzymes, proteins and microfood factors.

Among the species of sea vegetation (phytoplankton) used in the Wachters' Blend are Sargassum, Arthrothamnus, Ecklonia, Laminaria, Chondrus, Rhodymenia, Alaria, Eisenia, Undaria and Porphyra. These sea plants are

harvested from Atlantic Ocean countries, Ireland, England, Scotland and other areas such as South America, Alaska, Canada and the Far East. Each specie is selected for its specific micronutrients to achieve the rich nutritional balance Dr. Wachter sought in his formula.

Sea vegetation has often been called one of nature's "Super Foods" because of the range of nutrients in each specie. Since micronutrient activity in sea plants often varies in value from season to season, proper harvesting is most important.

Green seaweed contains high cellulose and protein to help stimulate peristaltic movement of the large intestine to aid in proper elimination. Vitamin B<sup>12</sup> is well represented in selected species of sea vegetation. Green algae is particularly high in Vitamin B<sup>12</sup>. Folic acid, part of Vitamin B family, is found in the brown species of sea plants. Pantothenic acid is generally higher in green and red sea vegetation than in the brown species. Niacin and Vitamin C are more prominent in red and brown algae.

Wachters' Blend of Sea Vegetation has been chelated by nature. Chelation, a process whereby a carrier metallic ion is bonded to non-metallic ions in a single molecule, carries the molecules to the bloodstream, thereby enhancing absorption. Chelation increases nutrient digestibility.

The digestive process is designed to chelate nutrients that we eat. However, many people do not digest their food efficiently and often nutrients are able to be used by the body and excreted. Chelated foods, such as the Wachters' Blend, are assimilated three to ten time more quickly than nonchelated ones, according to Earl Mindell.

One of the characteristics of sea vegetation is that it does not absorb poisonous heavy metals, such as Mercury and Strontium 90. *Sea Horizons*, a publication of Dow Jones, reports, "Marine algae produces an acid that rids humans of dangerous radiation bearing Strontium 90. The fallout from a nuclear blast circulates in the upper atmosphere. It rains down on crops which animals and humans eat... Once the Strontium 90 is in the gastrointestinal tract, it is absorbed into the bloodstream and finally deposited in the skeletal tissues..."

Professor Yukio Tanaka, a scientist at McGill University, in a paper, "Application of Metal Binding Properties of Marine Algae in Medicines, concurs with the *Sea Horizons* article. Radioactive Strontium 90 in the diet is absorbed through the intestinal tract into the blood system and then deposited in the bones where it can cause the growth of bone tumors if accumulated in sufficient amounts."

Tanaka continues, “However, if an alginate [from sea vegetation] is added to the diet, the radioactive Strontium 90 is bound [chelated] to form an insoluble Strontium Alginate gel in the digestive tract and is excreted in the stool without causing any sufficient damage to the body.”

Seaweeds are one of the oldest families of vegetables in the world today and yet receive very little attention or credit as vegetables. In fact, the term “seaweed” is inappropriate, because they are not really weeds at all, but rather large forms of marine algae that grow in the coastal ocean waters of many countries. These “sea vegetables” have been harvested for thousands of years and are useful for food, medicine, fertilizer among other uses.

Seaweeds are members of the algae family and range in size from tiny one-celled plants to gigantic two hundred feet long Pacific kelp. Most are perennials and live for more than two years. They thrive in cool waters and rushing tides that bring new supplies of nutrients while washing out debris. Seaweeds grow in both fresh and salt water, as microscopic drifting plants like phytoplankton, or larger floating or anchored plants.

The majority of the larger seaweeds are secured to the ocean bottom have three parts: a holdfast, which is a root-like device used for attachment; a flexible shaft that rises from the holdfast, called a stipe; and a flat blade that extends from the end of the stipe. Blades are similar to the leaves of a land plant; they absorb nutrients from the sea water and carry out photosynthesis.

Historically, inhabitants of coast sea areas have harvest seaweed for its beneficial properties. In China, people have eaten seaweed for more than 5,000 years. Korea sent sea vegetables to the Imperial Chinese court for medicinal use over 2000 years ago. In the 6th century B.C., Sze Tsu wrote, “Sea vegetables are a delicacy fit for the most honored guest.”

The Japanese use sea vegetation as a vegetable, condiment, jelly, flavoring, soup stock and salad. Over 25% of the Japanese diet includes a variety of sea vegetables. It has been estimated that the average Japanese eats 4.3 grams of dried algae daily, twice the necessary nutritional amount.

*Limu* is an ingredient of the Hawaiian *lulau* filled with pork, dried fish and taro leaves, eaten at *luau* feasts. The Irish survived the potato famine in mid-19th century by eating a bushy seaweed known as Irish moss. Colonial American settlers spread seaweed on their fields for fertilizer and dried it for food, tea and poultices.

Pliny the Elder referred to the use of seaweed in the first century A.D. when compiling his *Natural History*. The Romans prized seaweed as a natural fertilizer and food for animals. The ancient Greeks are known to have used seaweed to treat intestinal disorders and to counteract goiter, without known about the presence of iodine in these sea plants.

Sea vegetation has long been used in Western food and cosmetic recipes. The head of a glass of beer or the texture of ice cream is dependent on sea vegetation extracts. The cosmetic industry uses alginates from sea vegetables for toothpaste, hand creams, shampoos and lotions. Many other uses of sea vegetation derivatives are found in the pharmaceutical, textile, ceramic and agricultural industries.

Seaweeds have had a minor place in history. During his first voyage to discover the new world in 1492, Christopher Columbus' ship the *Pinta*, became entangled by the large seaweeds in the Sargasso Sea. First thought to be ocean monsters, Columbus soon observed they were sea-going meadows and sought to avoid them in his future voyages.

**Chemical Analysis of the Wachters' Exclusive Blend of Sea Vegetation™** as determined by independent laboratory analysis in the Josephine E. Tilden Memorial Museum and Library located at Wachters' Home Office in Daly City, CA.

Tablets, powders and liquids based on the Wachters' Exclusive Blend of Sea Vegetation™, manufactured by Wachters' Organic Sea Products, contain no preservatives, colorings, artificial flavorings, sugar, starch or animal products. No heat, moisture or chemicals are used in preparation.

**PHYSICAL PROPERTIES**

**Appearance:** 60 & Fine Granule  
**Color:** Dark Green to Light Brown  
**Odor and Taste:** Typical Sea Vegetation  
**Particle size:** 60 to 100 Mesh  
**Species:** Red, Brown, Green

**CALORIES**

Minimum  
 The calorimetric value in the Wachters' Exclusive Blend of Sea Vegetation™ is relatively modest. It is the biologic action of marine algae that give it its greatest value.

**CHEMICAL COMPOSITION**

Moisture	10.00%
Ash	35.00%
Protein	10.00%
Crude Fiber	7.00%
Fat	2.60%
Carotene and Xanthophyll, Chlorophyll, Auxins, Cytokinins, Gibberellins. (Vitamins A <sup>3</sup> and A <sup>7</sup> -These are hormones that encourage growth. These may be in fact Vitamins A <sup>1</sup> and A <sup>4</sup> )	

**TOTAL PROTEIN CONTENT 7-16%**

## VITAMINS

A (Carotene)	(avg) 12,000-15,000 I.U. per lb.
B <sup>1</sup>	(avg) 5,900 mg per lb.
B <sup>2</sup>	(avg) 5,700 mg per lb.
B <sup>12</sup>	(avg) 5 mcg per lb.
C	(avg) 35,300 mg per lb.
D3	(avg) 261,834 I.U. per lb.
E	(avg) 1,360 I.U. per lb.
Biotin (H)	(avg) 5. mcg per lb.
B6	6,000 mg per lb.
Choline	.02750%
Pantothenic Acid	.0007%
Inositol	.02500%
K	14.2 P.P.M.
Folic Acid	0.31 P.P.M.
Folonic Acid	0.60 P.P.M.

## STEROLS\*

Cholesterol, Sitosterol, Dihydro 7 Cholesterol, Chloesten, Stigmasterol, Carotene, Zanthophyllis, Cryptoxanthin, Echinenone, Zeaxanthin, Lutein and Euglenanone.

\*Sterols found of Marine Algae have been reported to exhibit antihypercholester olemic activity as has B-Sitoslerols in humans.

## LIPIDS

**Fatty Acids:** Lauric, Myristic, Palmitic, Palmitolinoleic, Heptadecanoic, Stearic, Oleic, Linoleic, Linolenic, Others.

**Insaponifiable Sterols:** Titerpen alcohols, Carotenoids, Chlorophyll a, Others, 3-4 Benzopyrene

**ELEMENTS** (Minerals and trace minerals in approximate micrograms per grams)

## NUCLEIC ACIDS

Ribonucleic Acid (RNA)  
Deoxyribonucleic Acid (DNA)

## CARBOHYDRATES

Mannit	(avg) 4.20%
Alginic Acid	(avg) 26.70%
Mathylpentosans	(avg) 7.00%
Laminarin	(avg) 9.30%
Undefined Sugars	(avg) 14.40%
Fucordin	(avg) 6.00%

## ESSENTIAL AMINO ACIDS

Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Threonine, Tryptophan, Valine

## NON-ESSENTIAL AMINO ACIDS

Alanine, Arginine, Aspartic Acid, Cystine, Glutamic Acid, Glycine, Histidine, Proline, Serine, Tyrosine

## PESTICIDES

All

Negative

BHC 1, 2, 3, 4, 5, 6

Hexachlorocyclohexane Negative

DDT 1, 1, 1 Trichoro-2, 2-bis

(p Chlorophenyl) Ethane Negative

## TYPICAL MICROBIOLOGICAL ANALYSIS

Standard Plate Count

680/g

Fungi

None

Yeasts

None

Coliforms

None

Salmonella

None

Shigella

None

E. Coli Enteropathogene

None

Aluminum	3,840-	Gold	0.170	Platinum	Trace
Antimony	2.823	Hydrogen	Undeclared	Potassium	25,600.-
Barium	24.750	Indium	Trace	Rhodium	Trace
Beryllium	Trace	Iodine	1,240.-	Rubidium	0.085
Beryllium	0.034	Iron	1,780.200	Selenium	0.850
Bismuth	0.006	Iridium	Trace	Silicon	3,042.-
Boron	350.-	Lanthanum	0.379	Silver	0.086
Bromine	259.700	Lithium	Trace	Sodium	41,000.-
Calcium	36,800.-	Magnesium	4,160.-	Strontium	1,550.0
Carbon	Undeclared	Manganese	470.000	Sulfur	30,284.0
Cerium	0.160	Molybdenum	30.840	Tellurium	0.014
Cesium	0.068	Nickel	40.600	Thallium	5.786
Chlorine	36,700-	Niobium	Trace	Thorium	Trace
Chromium	3.600	Nitrogen	.06240	Tin	1.910
Cobalt	2 4.400	Oridium	Trace	Titanium	0.200
Copper	12.700	Osmium	0.006	Tungsten	0.650
Fluorine	652.-	Oxygen	Undeclared	Vanadium	10.500
Galium	Trace	Palladium	Trace	Wolfram	Trace
Germanium	0.079	Phosphorous	4,200.-	Zinc	70.00
				Zirconium	0.020

Laboratory analysis of samples of Wachters' Exclusive Blend of Sea Vegetation™ have observed zero levels of mercury.

Wachters' manufactures over 100 nutritional products, all containing the Wachters' Blend of Sea Vegetation™. Only pharmaceutical grade ingredients are used. All tablet and powder products are made without heat or moisture.

Wachters' Organic Sea Products contain no preservatives, colorings, artificial flavorings, starch, yeast or animal products. No heat or chemical are used in preparation.

These statements have not been evaluated by the Food and Drug Administration. These statements are not intended to diagnose, treat, cure or prevent any disease. Please consult your health practitioner.

**The Wachters' Organic Sea Products Corporation, 550 Sylvan Street, Daly City, CA 94014  
Order line: 1-800-682-7100 - Website: [www.wachters.com](http://www.wachters.com)**