

A-Z Seaweed Nutrition Facts

Know what's in seaweed and how your body responds to it



Seaweed Nutritional Profile

Include minerals, essential fatty acids, nucleic acids like HMK and DNA, phytochemicals as saccharides, protein and fiber

20-45%	Protein with a good amino acid profile. Vitamins beta-carotene (pro-vitamin A), some vitamins of the B complex (B1, B2, B3, B5, B6, B12, & Folic acid. E and K up to
40%	Soluble Fiber (agar, carrageenan, & alginate) 10-20% Carbohydrate (sugars & sugar alcohols)
3-9%	Insoluble Fiber: cellulose, xylans & others
1-4%	Fat: less than
10%	Water
2%	in Lipids, (high in PUFA)
	7/8/05

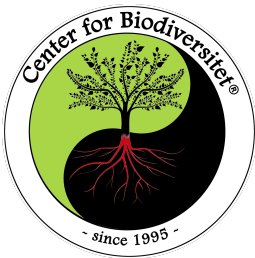
Mica C. Kerkdijk Rissa C. Gimenez

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Seaweeds. A Smorgasbord of Nutrients in Every Bite

Edible seaweeds or sea vegetables are one of the world's most potent super foods. They grow gracefully in coastal shorelines and sway with the energetic currents of the sea.

Like a sponge, seaweeds soak up an extraordinary wealth of minerals from the ocean. And when we bite into these sea vegetables, the rich minerals assimilated from the ocean are in turn supplied to us.

What's amazing is that the minerals absorbed from the ocean are the same minerals found in the blood of a healthy human being! It's no wonder seaweeds are so good for our health and overall well-being.

Seaweed's macro minerals include sodium, calcium, magnesium, potassium, chlorine, sulphur, and phosphorus. They also contain micro minerals essential for avoiding deficiencies, such as iodine, iron, zinc, copper, selenium, molybdenum, and many other elements such as fluoride, manganese, boron, nickel, and cobalt.

Edible seaweeds also contain a fully loaded cocktail of all the vitamins. The dominant vitamins are Provitamin A in the form of beta- and alpha-carotene found in red and brown algae; Vitamin C in red and brown algae; and Vitamin E in brown algae. The Vitamin B group is by and large well represented. What makes seaweed unique is that they contain Vitamin B12, the vitamin not present in any soil-grown vegetables!

More than minerals and vitamins, sea vegetables are also rich in protein, amino acids, essential fatty acids, and fiber — powerful properties that promote overall well-being and help prevent or even fight a variety of diseases!

To make you better understand what you get when you munch into some seaweed, here's spelling out the food wonder's nutrients. Check out a boatload of seaweed benefits—at a glance!



The **A-Z** of Seaweed Nutrition

Seaweed has...	What it does for you...
Alanine	• Reduces cholesterol.
	• Provides energy for your muscles, brain, and central nervous system.
	• Boosts your immune system by producing antibodies.
Arginine	• Builds new muscle.
	• Supports your immune system.
	• Detoxifies your liver.
Asparagine	• Strengthens immune system.
	• Energizes the brain.
	• Aids metabolism.
Aspartic Acid	• Helps make healthy DNA.
	• Enhances the immune system.
	• Assists liver in removing excess toxins.

Beta-carotene	• Enhances vision. Protects the cornea.
	• Aids in digestion.
	• Raises immune system
	• Defends against free radical attack.
Bioflavonoids	• Removes toxins from skin cells.
	• Helps prevent skin inflammation especially in infants.
	• Remedies menstrual disorders.
Biotin	• Promotes healthier and shinier hair.
	• Helps prevent skin inflammation especially in infants.
	• Reduces muscle pains.
Boron	• Promotes stronger bones.
	• Improves mental clarity.
	• Assists by unclogging arteries.
Calcium	• Promotes stronger bones.
	• Calms nerves.
	• Improves cholesterol levels.
Chlorophyll	• Cleanses interstitial tissues.
	• Promotes bowel regularity.
	• Protects against cancer.
Chromium	• Helps metabolize fat.
	• Moderates existent diabetes.
	• Prevents adult-onset diabetes.

Cobalt	• Promotes a healthy nervous system by repairing nerve cells.
	• Helps produce red blood cells.
Copper	• Shields against infections.
	• Eases arthritis.
	• Helps produce red blood cells.
Cysteine	• Detoxifies carcinogens.
	• Helps fight free radicals.
	• Prevents occurrence of frequent colds.
Essential Fatty Acids (EFAs)	• Reduces cardiovascular disease.
	• Helps regulate cholesterol.
Electrolytes	• Prevents dehydration by replenishing lost fluids.
	• Helps kidneys regain optimum function.
	• Strengthens teeth.
Fiber	• Inhibits constipation.
	• Eliminates toxic wastes.
Fluorine	• Fights tooth decay.
	• Improves bone density.
Folic Acid	• Increases mental focus.
	• Prevents anemia.
	• Promotes liver health.

Germanium	• Improves immune system.
	• Boosts body's oxygen supply.
	• Helps control Epstein-Barr virus.
Gamma Linolenic Acid (GLA)	• Lowers cholesterol.
	• Alleviates PMS (Premenstrual Syndrome).
	• Soothes rheumatoid arthritis.
Glutamic Acid	• Reduces alcohol and sugar cravings.
	• Increases muscle strength.
	• Protects heart muscle and function.
Glutamine	• Aids digestion.
	• Increases mental focus.
	• Bolsters immune system.
Glutathione	• Promotes liver health.
	• Defends against free radical attacks.
	• Keeps normal function of immune system.
Glycine	• Calms nervous system.
	• Eases insomnia.
	• Lowers blood sugar levels.
Glycogen	• Boosts physical stamina.
	• Maintains energy resource.

Histidine	• Enhances nutrient absorption.
	• Removes toxic metals.
	• Cushions against arthritis.
Iodine	• Promotes healthy thyroid function.
	• Assists maintaining and regulating body weight.
Iron	• Decreases anemia.
	• Increases emotional health.
	• Raises physical energy.
Isoleucine	• Build muscles.
	• Regulates blood sugar.
	• Helps repair the liver.
Lecithin	• Lowers blood cholesterol and lowers cholesterol deposits.
	• Improves short-term memory.
Leucine	• Reduces hypoglycemic symptoms.
	• Helps repair muscle tissue.
	• Assists wound healing.
Linoleic Acid	• Combats viral infections.
	• Helps control blood pressure.
	• Aids in metabolism.
Lithium	• Promotes mental health.
	• Maintains alertness.
Lysine	• Assists calcium absorption.
	• Helps prevent osteoporosis.

Magnesium	• Promotes tranquility.
	• Moderates mood swings.
	• Diminishes migraine headaches.
Manganese	• Assists joint mobility.
	• Shields cells from free radicals.
Methionine	• Enhances memory.
	• Elevates mood.
	• Removes heavy metals.
Molybdenum	• Increases longevity.
	• Safeguards against anemia.
	• Boosts energy.
Niacin (Vitamin B3)	• Reduces stress.
	• Lowers cholesterol.
	• Assists in reversing atherosclerosis.
	• Lifts mood and energy.
	• Hikes up concentration.
Nickel	• Promotes cellular growth and reproduction.
Nucleic Acids	• Enhances memory.
	• Forms part of one's genetic make-up.
Omega-3 Fatty Acids	• Relieves arthritis symptoms.
	• Improves skin tone.
	• Minimizes cardiovascular disease.

Omega-6 Fatty Acids	<ul style="list-style-type: none"> • Relieves arthritis symptoms. • Improves skin tone.
Pantothenic Acid (Vitamin B5)	<ul style="list-style-type: none"> • Lessens morning pain caused by arthritis. • Reduces toxicity from alcohol. • Guards against free radicals. • Aids in lowering blood pressure. • Helps alleviate insomnia.
Phenylalanine	<ul style="list-style-type: none"> • Improves mental clarity. • Cuts down sugar cravings. • Improves appetite.
Phosphorous	<ul style="list-style-type: none"> • Promotes tooth health. • Increases bone fracture repair.
Potassium	<ul style="list-style-type: none"> • Reduces hypertension. • Helps control blood pressure. • Promotes normal blood sugar levels.
Proline	<ul style="list-style-type: none"> • Increases learning ability. • Assists repairing torn cartilage. • Keeps skin healthy.
Pyridoxine (Vitamin B6)	<ul style="list-style-type: none"> • Immune system booster. • Relieves PMS (Premenstrual Syndrome). • Helps prevent dry, cracked hands.

Riboflavin (Vitamin B2)	• Boosts physical energy.
	• Defends free radical attacks.
	• Reduces eye fatigue.
	• Promotes new cell growth.
RNA	• Improves mental focus.
Selenium	• Strengthens immune system.
	• Relieves anxiety.
	• Cuts cancer risk.
Serine	• Enhances skin beauty.
	• Enhances mood.
Silicon	• Tightens skin.
	• Strengthens cartilage and other connective tissues.
Sodium	• Assist in preventing sunstroke.
	• Helps maintain body's fluid balance.
Superoxide Dismutase (SOD)	• Assist in preventing free radical activity.
	• Increases mental focus.
Thiamine (Vitamin B1)	• Increases energy.
	• Improves mental attitude.
	• Tension reliever.
	• Improves appetite.
	• Reduces feelings of numbness on hands and feet.

Theonine	• Enhances the immune system.
	• Ameliorates skin tone.
	• Relieves anxiety.
Tyrosine	• Improves emotional health.
	• Enhances mental alertness.
	• Increases memory ability.
Valine	• Promotes muscle tissue building.
	• Preserves energy.
	• Lessens degenerative effects of alcohol.
Vanadium	• Helps control blood sugar levels.
	• Supports normal thyroid function.
Vitamin B12 (Cobalamine)	• Increases physical energy.
	• Enhances mental focus and memory.
	• Assist with nervous system repair.
	• Helps produce red blood cells.
Vitamin C	• Promotes healthier gums
	• Reduces risk of cancer.
	• Reduces duration of common cold.

Vitamin E or Tocopherol	<ul style="list-style-type: none"> • Boosts immune system. • Promotes healthy nerve tissue. • Relieves menopausal symptoms.
Zinc	<ul style="list-style-type: none"> • Supports prostate health. • Strengthens immune system. • Reduces outbreaks of acne. • Increases memory access. • Reduces common cold symptoms.

In-depth Nutrient Profile

KELP (sea vegetable) (Note: "--" indicates data is unavailable)		
amount	0.25 cup	
total weight	20.00 g	
Basic Components		
Nutrients	Amount	%DV
calories	8.60	0.48
calories from fat	1.01	
calories from saturated fat	0.44	
protein	0.34g	0.68
carbohydrates	1.91g	0.64
dietary fiber	0.26g	1.04
soluble fiber	0.00g	
insoluble fiber	0.00g	
sugar - total	0.00g	
monosaccharides	0.00g	
disaccharides	0.00g	
other carbs	0.00g	
fat - total	0.11g	0.17
saturated fat	0.05g	0.25
mono fat	0.02g	0.08
poly fat	0.01g	0.04
trans fatty acids	0.00g	
cholesterol	0.00g	0.00
water	16.32g	
ash	1.32g	

Vitamins		
Nutrients	Amount	%DV
vitamin A IU	23.20 IU	0.46
vitamin A RE	2.40 RE	
A - carotenoid	2.40 RE	0.03
A - retinol	0.00 RE	
A - beta carotene	14.40 mcg	
thiamine - B1	0.01 mg	0.67
riboflavin - B2	0.03 mg	1.76
niacin - B3	0.09 mg	0.45
niacin equiv	0.25 mg	
vitamin B6	0.00 mg	0.00
vitamin B12	0.00 mg	0.00
biotin	0.00 mg	0.00
vitamin C	0.60 mg	1.00
vitamin D IU	0.00 IU	0.00
vitamin D mcg	0.00 mcg	
vitamin E alpha equiv	0.17 mcg	0.85
vitamin E IU	0.26 IU	
vitamin E mg	0.17 mcg	
folate	36.00 mcg	9.00
vitamin K	13.20 mcg	16.50
pantothenic acid	0.13 mg	1.30

Saturated Fats		
Nutrients	Amount	%DV
4:0 butyric	0.00 g	
6:0 caproic	0.00 g	
8:0 caprylic	0.00 g	
10:0 capric	0.00 g	
12:0 lauric	0.00 g	
14:0 myristic	0.00 g	
15:0 pentadecanoic	0.00 g	
16:0 palmitic	0.00 g	
17:0 margaric	0.00 g	
18:0 stearic	0.02 g	
20:0 arachidic	0.00 g	
22:0 behenate	0.00 g	
24:0 lignoceric	0.00 g	

Mono Fats

Nutrients	Amount	%DV
14:1 myristol	0.00 g	
15:1 pentadecenoic	0.00 g	
16:1 palmitol	0.00 g	
17:1 heptadecenoic	0.00 g	
18:1 oleic	0.00 g	
20:1 eicosen	0.00 g	
22:1 erucic	0.00 g	
24:1 nervonic	0.00 g	

Poly Fats

Nutrients	Amount	%DV
18:2 linoleic	0.00 g	
18:3 linolenic	0.00 g	
18:4 stearidon	0.00 g	
20:3 eicosatrienoic	0.00 g	
20:4 arachidon	0.00 g	
20:5 EPA	0.00 g	
22:5 DPA	0.00 g	
22:6 DHA	0.00 g	

Other Fats		
Nutrients	Amount	%DV
omega 3 fatty acids	0.00 g	0.00
omega 6 fatty acids	00.01 g	
Amino Acids		
Nutrients	Amount	%DV
alanine	0.02 g	
arginine	0.01 g	
aspartate	0.03 g	
cystine	0.02 g	4.88
glutamate	0.05 g	
glycine	0.02 g	
histidine	0.00 g	0.00
isoleucine	0.02 g	1.74
leucine	0.02 g	0.79
lysine	0.02 g	0.85
methionine	0.01 g	1.35
phenylalanine	0.01 g	.84
proline	0.01 g	
serine	0.02 g	
threonine	0.01 g	0.81
tryptophan	0.01 g	3.13
tyrosine	0.01g	1.03
valine	0.01g	0.68

Other

Nutrients	Amount	%DV
alcohol	0.00 g	
caffeine	0.00 mg	
artif sweetner total	0.00 mg	
aspartame	0.00 mg	
sugar alcohol	0.00 g	
glycerol	0.00 g	
inositol	0.00 g	
mannitol	0.00 g	
sorbitol	0.00 g	
xylitol	0.00 g	
organic acids	0.00 mg	
acetic acid	0.00 mg	
citric acid	0.00 mg	
lactic acid	0.00 mg	
malic acid	0.00 mg	
choline	0.00 mg	0.00
taurine	0.00 mg	

Note: The nutrient profiles are derived from Food Processor for Windows, Version 7.60, by ESHA Research in Salem, Oregon, USA. Of the 21,629 food records contained in the ESHA foods database, most of them- including those of the World's Healthiest Foods- lacked information for specific nutrients. The designation "--" was chosen to represent those nutrients for which there was no measurement included in the ESHA foods database.



A Friendly Reminder: Don't Go Overboard

Although edible seaweeds contain an extensive array of nutrients, they also contain a few like iodine and sodium that in large amounts are counter-beneficial. The adult daily requirement is 150 micrograms a day. So a little goes a long way.

Too much iodine in the diet can cause the thyroid to work less efficiently. 1,000 micrograms a day should be the upper limit, says Alfred A. Bushway, Ph.D. professor of food science at the University of Maine in Orono.

Sea vegetables also contain high amounts of sodium. Make sure you soak them in water for about 30 minutes prior to cooking. This will reduce the sodium content by 50 to 70%.

Notice:

This book is intended as a reference volume. Not as a medical manual. The information given here is designed to help you make informed decisions about your health. It is not intended as a substitute for any treatment that may have been prescribed by your doctor.

References:

The Natural Health Bible by Lisha Simester © 2001, 2006
Quadrille Publishing Ltd.

The Doctors Book of Food Remedies, © 1998 Rodale, by
Selene Yeager, and the Editors of Prevention Magazine

The Reader's Digest Family Guide to Alternative Medicine,
© 1992 Reader's Digest (Australia) Pty Limited

Internet References:

Harvard School of Public Health, <http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/vitamins/>

Shirley's Wellness Café, <http://www.shirleys-wellness-cafe.com/seaveg.htm>

FISHERIES INFORMATION NEWSLETTER #95 (OCTOBER -
DECEMBER 2000), http://www.spc.int/coastfish/News/Fish_News/95/NIAR_9.htm

Seaweed Online Information site, <http://seaweedonline.com/>

Seaweed, Spirulina Nutrition data, <http://www.nutritiondata.com/facts/vegetables-and-vegetable-products/2765/2>