

SEAWEED NUTRITIONAL GUIDE

	DULSE/LEAS	SEA SPAGHETTI	NORI	LAMINARIA DIGATATA	ALARIA	CARRAGEEN	SEA LETTUCE	SEA GRASS	BLADDERWRACK	SUGAR KELP	SARGASSUM	ASCOPHYLLUM
Protein (% dry matter)	12-21	6-11	15-37	8-14	9-20	11-18	15-25	10-18	5-10	6-11	-	5-12
Fat (%)	0.7-3	0.5	0.12-2.48	1	1-2	1-3	0.6-1	0.5-1.7	0.5-2	0.5	2.6-3.8	2-4
Carbohydrate (%)	50	61	50-76	48	46	55-66	42-46	48	62	61	-	42-64
Vitamin C (ppm)	150-280	75	130-1110	12-18	100-500	10-30	100-200	40-122	100-700	13-18	-	500-1650
Beta-Carotene (ppm)	456	240	4500	336	41	-	310	-	present	-	36-60	35-80
Vitamin B1 (ppm)	7	-	3-6	5	5.5	-	2.5	-	-	-	9 ppb	1-5
Vitamin B2 (ppm)	2.5	-	10-29	22	0.3-1	-	12.4	-	-	-	-	5-10
Vitamin B3 (ppm)	2-19	-	50-98	34	5	-	98	-	-	-	-	10-30
Vitamin B6 (ppm)	9	-	112	86.3	62	-	0.1	-	-	-	-	0.1-0.5
Vitamin B12 (ppb)	89000	-	10000-20000	120-600	50	600-4000	6000	1,617,000	-	-	6	0.8
Vitamin E (ppm)	-	33.3	3300	8.9	-	-	9.1	-	-	-	-	260-450
Calcium (ppm)	2000-8000	8910-9282	2000-8000	12,400-13,200	11,670	9000-1300	7300	6000	2500	8910-9282	1300-1500	1000-3000
Iodine (ppm)	150-550	185	150-550	800-5000	165	200-300	240	780	500	5000	80	700-1200
Iron (ppm)	56-350	22-40	56-350	50-70	126	170-210	870-1370	1700	150	100	92-139	101-176
Magnesium (ppm)	2000-5000	5670-6944	2000-5000	6400-7860	8960	6700-8351	2800	3500	1	5670-6944	10,000-160,000	5000-9000
Phosphorus (%)	-	-	-	-	-	-	1	1	0.35	-	0.14	0.15
Manganese (ppm)	10-155	1-16	7-83	1-16	1-14	2-28	347	1-12	130	1-16	6-15	10-15
Sodium (%)	0.8-3	3-3.4	0.5-3.2	2-5.2	4.6	2-2.26	1.1	0.4	4	3-3.4	1.5-1.7	3-4
Zinc (ppm)	28.6	55	41	28.6	34	71.4	20	95	14-80	30	7-16	70-240
Copper (ppm)	10.8	4.3	7.9	5	6.8	5.6	7.3	8	4	3	9-11	18-35
Potassium (%)	7.8	3.5	3.5	11	7.4	3	0.7	3.5	4.3	5	7.9-9.5	2.3
Energy (kj/100g dry matter)	1187	1299	1657	1260	1447	1445	1047	959	-	861	-	-
Alginic acid (%)	-	-	-	Mannitol 7.5	-	-	-	-	18-22	18	(Mannitol 14)	26
Laminarin	-	-	-	0-18%	Retinol 0.75 ppm	-	-	-	Fucoidan 16-20%	16%	-	10%

The Mineral and Vitamin content of all seaweeds varies considerably throughout the seasons. This chart gives an indication of the environmental and annual range. Source of classification and nutritional analysis is from *A Guide to commercially important seaweeds on the Irish Coast*, by Jim Morrissey, Stefan Kraan and Michael D Guiry. Other values are from communication between Stefan Kraan and Prannie Rhattigan.

