Thanks to the outstanding quality of natural marine plants from the North Atlantic and our unique processing techniques, Acadian’s Seaplus™ products meet or surpass the rigorous international production quality and sustainability standards required by our customers.

Acadian has two production facilities capable of meeting expanding demand; guaranteeing its customers the highest quality and meeting respective international requirements.

With a view to the importance of the harvest quality for obtaining a high-grade final product, Acadian Seaplants Limited is continuously studying the harvest process. Monitoring each stage from our unique processing techniques to ongoing testing and evaluation throughout the manufacturing steps results in superior finished products and ensures the sustainability and traceability of the natural resource.

As a fully-integrated company, Acadian Seaplants is responsible for every stage of its operation including sustainable harvesting and cultivation of marine plants, scientific research and technology development, engineering, manufacturing, market development, sales and technical customer support.

Acadian Seaplants is a fully-integrated, bio-tech manufacturer of premium marine products, including wild harvested and cultivated functional ingredients derived from select species of aquatic plants. In 1981, Acadian Seaplants was founded and established the seaweed industry in Canada. Today, Acadian Seaplants is the largest independent marine plant processing company in North America and a global leader in aquatic plant products for humans, animals and plants. Acadian’s brands are used in more than 80 countries.

Our Company

Our Company

Harvesting & Cultivation

Harvesting & Cultivation
Our Products

**Ascophyllum nodosum**

**Description:** a wild-harvested brown seaweed from the cold, pristine North Atlantic

** Constituents:** naturally rich in antioxidants and marine-based secondary metabolites such as phlorotannins, fucoxanthin and organic iodine

**Benefits:** purported potent anti-diabetic effects; robust antioxidant activity; improved immune response; anti-obesity effects; topical anti-aging activity; improved oral health; potent pre-biotic and GI Tract health benefits

**Use:** extraction of alginic acid; applications in the health and wellness industries

**Products:** Cut & Sift (flakes); mesh sizes USSS #14, 40, 40/100; 100; 200

Enriched: USSS # 20, 40, 100 4-5000 ppm iodine; USSS #100 5-6000 ppm iodine

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**Fucus vesiculosus**

**Description:** a wild-harvested, edible brown seaweed from the cold, pristine North Atlantic

** Constituents:** contains a significant amount of fucoidan and a wide range of bioactive compounds

**Benefits:** purported potent antioxidant capabilities; anti-viral activities; anti-inflammatory effects; anti-obesity effects; immune system stimulation; neural protection; skin anti-aging agent

**Use:** in food, cosmetic, nutraceutical and pharmaceutical applications

**Products:** Cut & Sift (flakes); USSS #40; 60

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**Chondrus crispus**

**Description:** a wild-harvested, edible red seaweed from the cold, pristine North Atlantic

** Constituents:** carrageenan, highly bioactive glycolipid and pigment content

**Benefits:** purported potent antioxidant activity; proven prebiotic effects (functional) enhanced immune response; gelling/stabilizing capacity; anti-inflammatory effects, neural protection

**Use:** the hydrocolloidal (gelling and thickening) properties of carrageenan are used widely in food, pharmaceutical and cosmetics

**Products:** Cut & Sift (flakes); USSS #100

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**Palmaria palmata**

**Description:** a wild-harvested, edible red seaweed from the cold, pristine North Atlantic

** Constituents:** a rich source of potassium; mycosporine-like amino acids, floridoside, highly bioactive glycolipid and pigment content

**Benefits:** naturally rich in antioxidants, nutritional components, and skin protective agents; high protein content (25-35%); anti-proliferative properties; excellent potassium source; UV protection/anti-aging properties, anti-inflammatory effects

**Use:** a popular food seaweed and used in a variety of applications in the food, nutraceutical and cosmetic applications

**Products:** Cut & Sift (flakes); USSS #60
Acadian’s SeaPlus Human Wellness™ products provide a variety of health and wellness benefits for the expanding nutraceutical, cosmetic and food & beverage industries.

**Laminaria digitata**

- **Description:** A wild-harvested, edible brown seaweed from the cold, pristine North Atlantic
- ** Constituents:** An alginate-containing seaweed naturally rich in polyphenols, fucoidan, organic iodine, and dietary fibres such as laminarin
- **Benefits:** Important human nutritional components; potent antioxidant capabilities; improved gut flora (prebiotic); immune system stimulation; cholesterol reduction; antibacterial properties
- **Use:** Food, nutraceutical, and cosmetic applications
- **Products:** Cut & Sift (flakes); USSS# 20/50; 100

**Furcellaria lumbricalis**

- **Description:** A wild-harvested, edible red seaweed from the cold, pristine North Atlantic
- ** Constituents:** Naturally rich in antioxidants and it contains furcellaran, a novel sulphated galactan (polysaccharide)
- **Benefits:** Significant antioxidant content; potent immune stimulation; anti-viral activity; gelling/stabilizing capacity
- **Use:** Food and cosmetic applications
- **Products:** Baled

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**Custom boutique offerings**

Acadian Seaplants is the global leader in specialty seaweed cultivation technology. We operate the largest land-based, commercial macro-algae cultivation facility in the world.

We cultivate unique, pure and clean seaweeds for nutritional, health, cosmetic, and other exacting applications.

Our operation provides the highest level of biomass control, supply security and traceability for customers, beginning with the selection and domestication of wild ocean strains, to commercial biomass cultivation to final processing and packaging.

We process an array of wild and cultivated seaweeds and can accommodate custom blending including *Laminaria/Ascophyllum* blends, different iodine levels using EK, and much more.

Ask us about our BrewClar™ products for the wine and brewing industries.
Nutritional Value of Marine Plants

The power of marine plants has been drawn upon for thousands of years for their ability to prolong life, prevent disease, and impart health and wellness. Worldwide research on their unique benefits is continuously being conducted and brown marine plants have been found to be highly beneficial, followed by the red and then green seaweeds.

Minerals

Marine plants derive an interesting wealth of minerals from the ocean. The mineral content includes a wide range of macro elements such as sodium, calcium, magnesium, potassium, chlorine, sulfur and phosphorus. Marine plants also contain essential trace elements required to prevent vitamin deficiencies such as iodine, iron, zinc, copper, selenium, molybdenum, as well as many others such as fluoride, manganese, boron, nickel and cobalt. Two elements that are of particular interest are iodine and calcium, both of which are implicated in vitamin deficiencies prevalent in the world population. The organic iodine plays an important role in the regulation of metabolism, cognitive development, and promotion of the maturation of the nervous system.

Vitamins

The entire range of vitamins is represented in marine plants and this provides a very rich cocktail. The principal vitamins are provitamin A in the form of β-carotene and of α-carotene, vitamin C and vitamin E. The group B vitamins are also generally well represented. Of particular interest is the presence of the Vitamin B12 in certain seaweeds, which is absent in land plants.

Lipids

The levels of lipids in marine plants are usually low, however, there is a much higher proportion of essential fatty acids than in land plants, and these fatty acids are highly bioactive. Marine plants contain high levels of essential polyunsaturated fatty acids (the famous EPA, and DHA, (C20:5, n-3; C22:6, n-3 in particular). The arachidonic acid (W6-C20:4) is well represented and the 18 carbon polyunsaturated fatty acids (linolenic or linoleic) are present in high concentration. Galactolipids such as monogalactosyldiacylglycerols (MGDG) have proven to be highly antioxidative and anti-inflammatory.

Fibers

The total content in fibers is high in marine plants. The insoluble fraction represents a small proportion of the total fibers. The soluble fibers constitute a large portion of the total fibers especially in brown algae. The soluble fibers are generally linked to a hydration activity (absorption, retention, and swelling) that affects the transit of the bolus in the stomach and small intestine, which can have a hypocholesteric or hypoglycaemic effect. Prebiotic effects of seaweed fibers are well established, and typically fiber content is high and diverse. Fiber content of seaweed is very different and unique compared to that of land plants, and this diversity leads to the proliferation of a beneficial gut microbiome when consumed.

Polysaccharides

The principal polysaccharides contained in brown seaweeds are alginic acid, fucoidan and laminarin. Alginic acid is a natural absorbent for radioactive elements, heavy metals and free radicals. Research shows that it lowers cholesterol. Alginates possess strong gel-forming qualities, which have cholesterol-lowering effects. Fucodian has been shown to be effective in stopping the growth of tumor cells and inhibiting chemical carcinogens in animals. Laminarin is a polysaccharide anticoagulant helpful in the prevention and treatment of cardiovascular disease.