



A NATURAL INGREDIENT FOR BONE REMINERALIZATION AND ACID-BASE BALANCE MANAGEMENT



A UNIQUE INGREDIENT



ORIGIN

Algalithe comes from a red algae of the corallinaceae family, commonly called *lithothamnion* (Genus: *Lithothamnion* or *Phymatolithon*, Species: *calcareum*). This seaweed grows mainly in the North Atlantic Ocean, especially in the seabed (up to 28 meters) where the ocean currents are weaker and do not impact its growth. Lithothamnium calcareum has the unique ability to fill up with calcium, magnesium and 51 trace elements found in its environment during its growth.

Thus, this red macro-algae calcifies over time and forms sedimentary banks. These fossilized seaweeds are carried away by the tides and accumulate in the recesses near the coast. They are then harvested in Norwegian waters on limited plots in order to respect the renewal of the ecosystem.



COMPOSITION

- > 32 % of calcium
- > 2 % of magnesium
- 51 trace elements
(Chromium, copper, iron, magnesium, iodine, selenium, manganese, potassium, sulfur, etc...)

> 32%

Calcium

> 2%

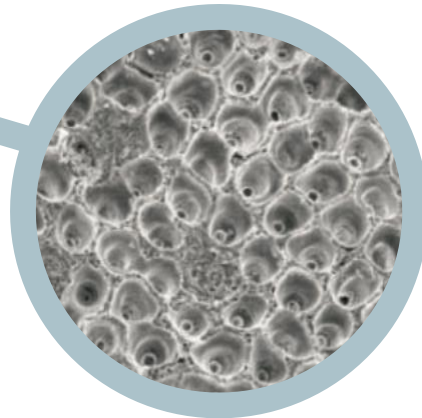
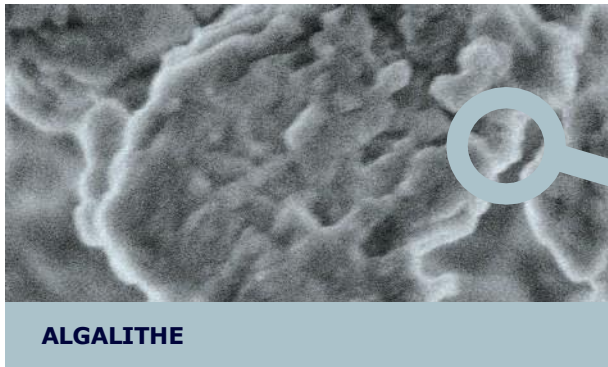
Magnesium

51

Trace elements

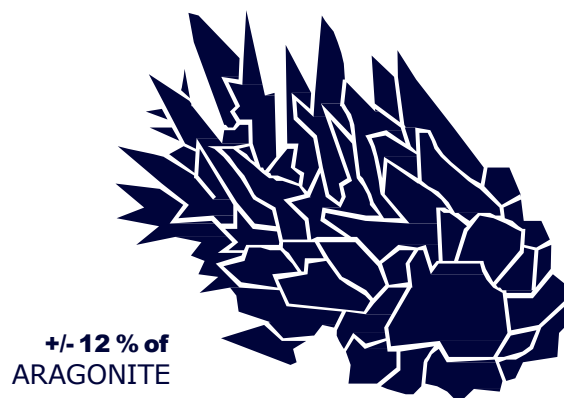
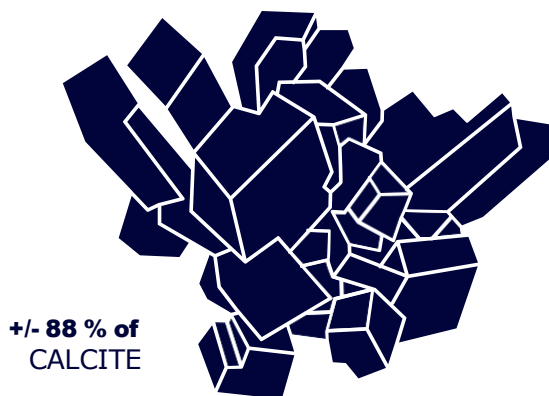
REMARKABLE MICROPOROSITY

Microscopic section at 500nm showing the porosity of Algalithe versus a land limestone.



COMPLEMENTARY CRYSTALLINE FORMS

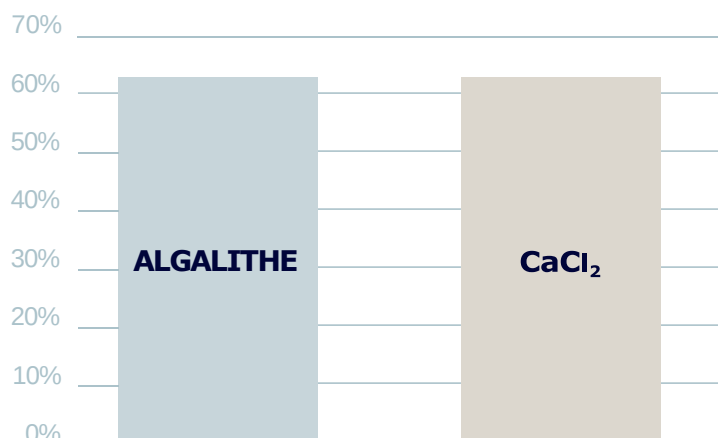
Algalithe contains calcium carbonate whose crystalline forms are complementary: aragonite (+/- 12%) and calcite (+/- 88%). Calcite releases calcium more slowly than aragonite. The release of calcium is gradual which helps to improve absorption.



BONE REMINERALIZATION

An internal *in vitro* study simulating the gastrointestinal conditions has shown that Algalithe possesses a very good calcium bioavailability, similar to the reference solute CaCl_2 .

CALCIUM CONCENTRATION IN THE DIGESTIVE TRACT (IN % OF INITIAL CALCIUM CONCENTRATION)

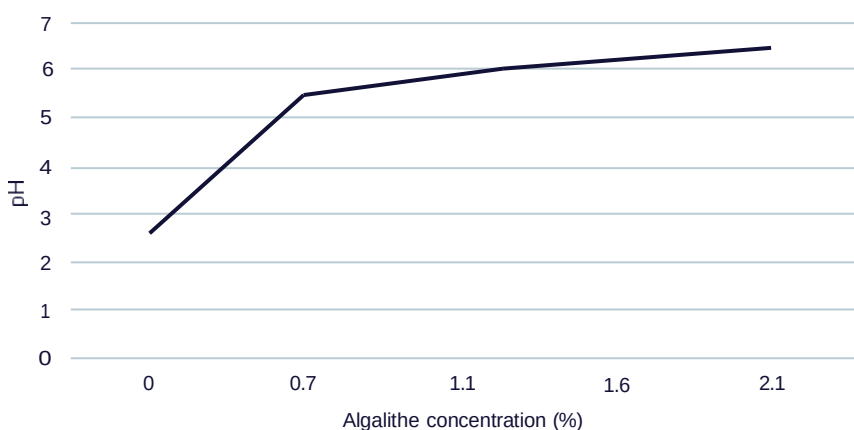


From its high richness in a bioavailable calcium form, Algalithe is an excellent natural ingredient to efficiently provide the human body with calcium.

ACID-BASE BALANCE

Algalithe is an alkaline component: its pH is close to 10 ! A small amount of Algalithe allows a pH increase of an acidic environment:

ALKALIZING POWER



This assay shows that a small amount of Algalithe is able to quickly increase the initial acidic pH and then to buffer the solution at a physiological pH.

Thus, thanks to its composition and structure, Algalithe is an excellent natural antacid ingredient.

TARGETED AUDIENCE

Thanks to its highly bioavailable calcium and magnesium supply and its antacid power, Algalithe is particularly suitable for food supplements intended for:

- Person beginning an acid-base diet
- Person who is prone to gastric reflux
- Person who is prone to cramp or muscle pain
- Person suffering from Crohn disease
- Person suffering from irritable bowel disease
- Person suffering from coeliac disease
- Person with a calcium deficiency
- People who are lactose intolerant
- Vegetarian and vegan
- Women over 40 years old
- Men over 50 years old
- Person suffering from osteopenia
- Person suffering from osteoporosis

FOOD APPLICATIONS

The presence of calcium in the form of carbonate makes it an indispensable ally in food applications. Algalithe has the same functionalities as those of the calcium carbonate, while being a plant-based product, clean label, as well as neutral in taste and odor.



USES

Straqim has developed 3 Algalithe grades in order to meet the needs of nutraceutical and food applications:

- Algalithe 25 : this powder, almost white in color and very fine, is ideal for vegetable drinks, smoothies, fruit and vegetable juices, bakery products, dairy products and ready-made meals (especially vegan).
- Algalithe 150 : with its excellent compressibility and its suspension properties, this grade is especially suitable for tablets, sachets and stick packs.

NEW

Algalithe G : its granulated form enhances flowability and also reduces dust emission. It's the perfect grade for capsules (in process of being finalized, Algalithe 150 also works fine in capsules)

100% of Recommended Daily Intake: 2.5g/day

CLAIMS according to EU Regulation N°1169/2011	For beverages*	For products other than beverages*
« Calcium source »	Dose of 0,2 g / 100 g	Dose of 0,4 g / 100 g
« Rich in Calcium »	Dose of 0,4 g / 100 g	Dose of 0,8 g / 100 g

* Definition of the various categories of beverages according to the "Guidance document describing the food categories in Part E of Annex II to Regulation(EC) N° 1333/2008 on Food Additives".

PROCESS STEPS

PACKAGING

MICRONISATION

The production process: traceability is guaranteed.

