

Other advantages of Calcium Alginate

You can use any amount you want

Standard dosage of soluble alginate salts in food application is 1-2% because alginates exhibit viscosity when dissolved in water, but Calcium Alginate is insoluble and does not affect mouthfeel with high concentrations.



No worry about salt content

KIMICA's Calcium Alginate can be used without any concern about health problem.



Extracorporeal discharge of hazardous heavy metals

Calcium Alginate catches harmful heavy metals such as lead and cadmium, and transports and discharges heavy metal ions like radioactive strontium to the outside of the body.



No excessive consumption of iodine

Excessive intake of iodine contained in seaweed may cause health problem, such as a decrease in the function of the thyroid gland. KIMICA's Calcium Alginate is highly purified, there is no need to worry about excessive iodine intake.



Chiba Plant (Futtsu-shi, Chiba)

Propose the optimal grade of Calcium Alginate in line with the development of our customer's products.

Provide safe and reliable products manufactured at the plant certified with ISO9001:2015 and FSSC22000.

Calcium Alginate capsules supplements are also available.



Filling and Packaging process

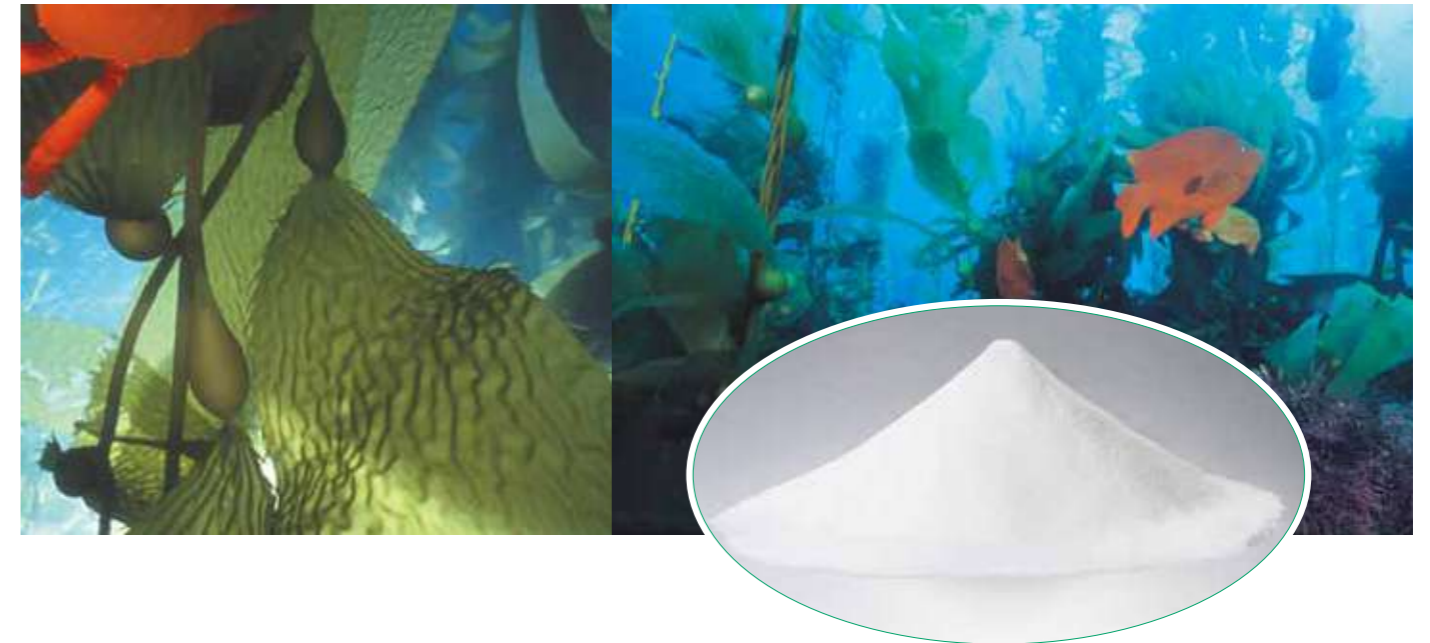


QC Laboratory



QC Laboratory

Calcium Alginate



Alginate is a natural dietary fiber contained in seaweed

● High molecular polysaccharides nurtured in seaweed

● Insoluble, smooth with no viscosity

● Variety of excellent functions

Suppression of blood glucose elevation

Inhibition of triglyceride absorption

Controlling cholesterol absorption

Inhibition of blood pressure elevation

Improve bowel movements

Calcium reinforcement

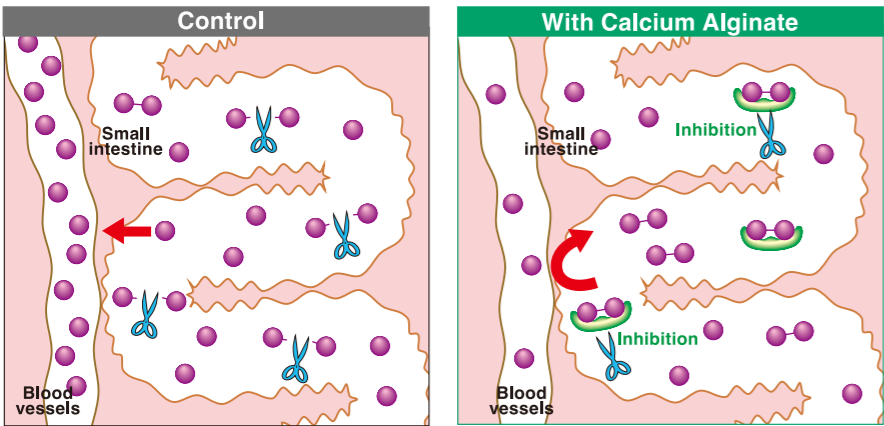
Calcium Alginate is extracted from 100% natural seaweed.



Suppression of blood glucose elevation

Calcium Alginate inhibits the degradation of dietary sugar and prevents its absorption into the body.

Mechanism of inhibition of blood glucose elevation

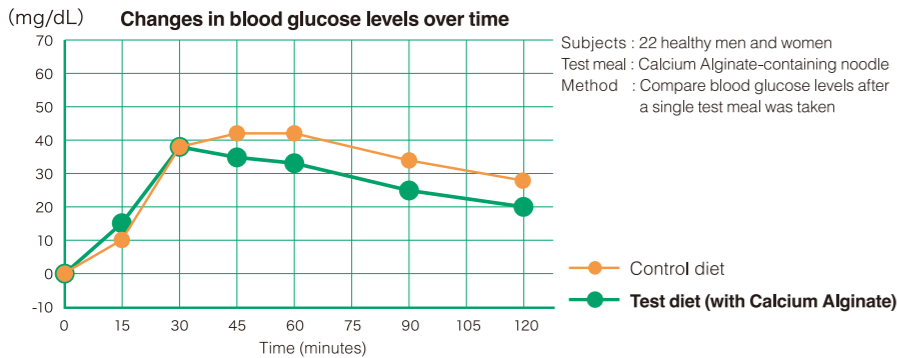
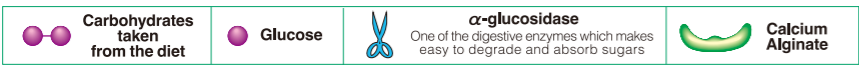


Sudden increase in blood sugar levels

Glucose consumed in the diet is degraded into glucose by α -glucosidase and absorbed into the blood.

Suppress rapid increase in blood glucose level

Calcium Alginate suppresses rapid increase in blood glucose level by inhibiting α -glucosidase function and preventing absorption into the body.

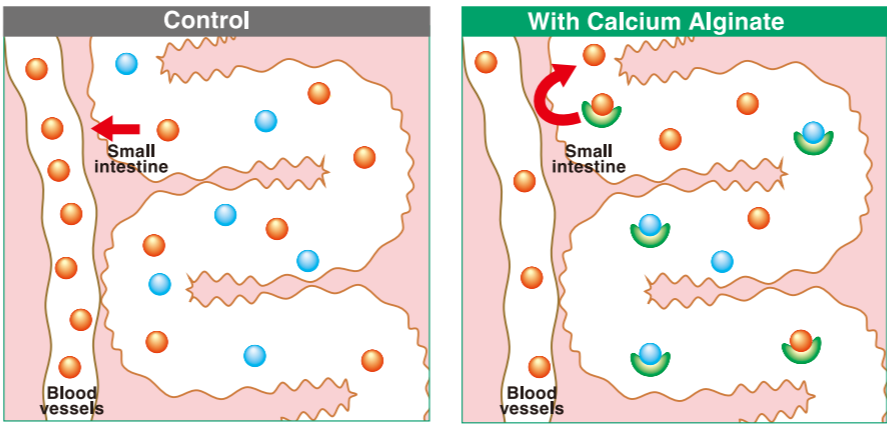


References : Pharmacology and Treatment, Vol. 46, 2083-2089 (2018)

Inhibition of triglyceride and cholesterol absorption

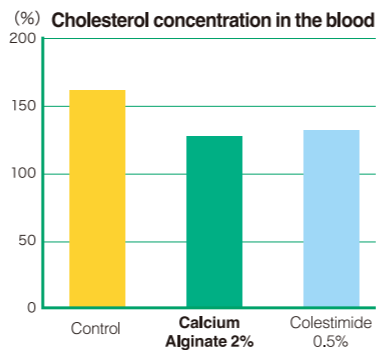
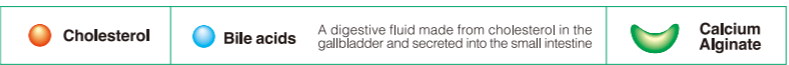
Calcium Alginate binds triglycerides and bile acids and discharge it from the body.

Mechanism of cholesterol absorption inhibition

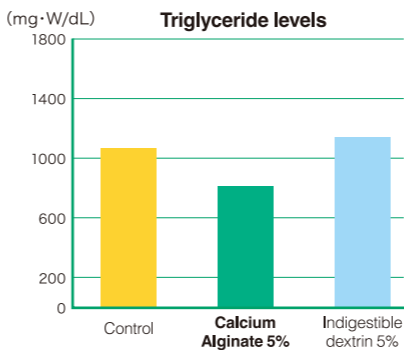


Dietary cholesterol is directly absorbed into the bloodstream. Excessive cholesterol intake may increase the risk of atherosclerosis because cholesterol gets into blood vessel walls.

Calcium Alginate enwraps bile acids in the intestine and discharge it with the stool. To compensate for the decreased amount of bile acids, cholesterol, the source of bile acids, is further consumed, and blood cholesterol decreases.



Reference : Biol.Pharm. Bull.39, 62-67(2016)

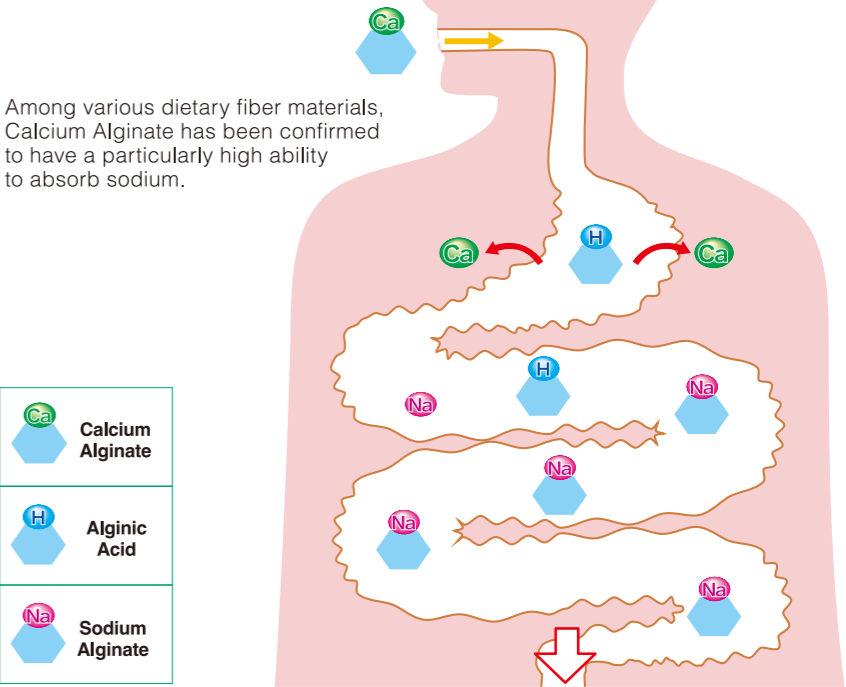


Reference : Biol.Pharm.Bull. 42, 365-372(2019)

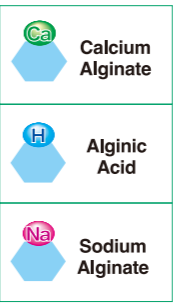
Inhibition of blood pressure elevation

Calcium Alginate releases calcium in the body and binds sodium to discharge from the body.

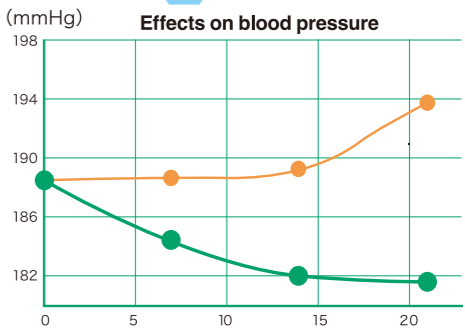
Mechanism of sodium absorption and excretion



Among various dietary fiber materials, Calcium Alginate has been confirmed to have a particularly high ability to absorb sodium.



The effects of Calcium Alginate on blood pressure were investigated in spontaneously hypertensive rats. In spite of the 1% salt-loaded diet, the increase in blood pressure was suppressed in rats fed Calcium Alginate.



References : Journal of the Japanese Society of Physicians Vol. 39 (3), 187-195 (1988)

Improve bowel movements

The dietary fiber alginate engulfs and swells water in the intestine, softening and increasing the bulk of the stool. As a result, the intestine is irritated and bowel movements improve.



References: Progress in Medicine Vol. 20 No. 10 (2000)

Supplement of Calcium

Calcium is a nutrient necessary for bone and tooth formation. Calcium Alginate can also be added in foods as a source of calcium that tends to be deficient.



Supplement of dietary fiber

Seaweed is a food with healthy image, it is also known that excessive intake of seaweed is harmful to health. To consume alginate, eating large quantities of seaweed is never good. KIMICA Calcium Alginate is extracted from seaweed and highly refined, and it enables to take food fiber much more efficiently than eating seaweed itself.

10g of Calcium Alginate \Rightarrow Approx. 3.7 cabbages*



* Reference : Japanese Food Standard Ingredients Table 2015