

March 19, 2021

### **KIMICA CEO Kasahara Received Ph.D. in Pharmacy**

On March 19, Fumiyoshi Kasahara, President and CEO of KIMICA Corporation, received a Ph.D. in Pharmacy from Takasaki University of Health and Welfare. Kasahara has been focusing on the physiological functionality of calcium alginate and has been engaged in research activity with Takasaki University of Health and Welfare since 2011, while serving as the CEO of KIMICA.

Due to the COVID-19 outbreak, Kasahara was able to make effective use of the time he used to spend in meetings with people and traveling, to write the paper on his research findings. This dissertation, titled "Research on the Functionality of Calcium Alginate as a Food Ingredient" was recognized by the Graduate School of Takasaki University of Health and Welfare for its academic value for a Ph.D. degree.

#### **1. Background of his Research**

Alginate is a natural polysaccharide derived from seaweed and sodium alginate is used in many foods as a thickening agent, stabilizer and gelling agent. It is known to have physiological effects such as inhibiting weight gain and lowering blood cholesterol levels and is often used in health products. On the other hand, sodium salt is a risk factor for hypertension, dyslipidemia and arteriosclerosis, so the consumption amount shall be limited. If the calcium salt of alginic acid (calcium alginate) can be found to have the same physiological effects as sodium alginate, it could provide healthy physiological effects such as suppressing weight gain and lowering blood cholesterol levels without worrying about excessive sodium intake, while supplementing calcium, a deficient mineral.

#### **2. Major Results of his Research**

- Calcium alginate suppresses the increase of triglycerides in the blood and reduces the accumulation of liver fat and body fat.
- Calcium alginate lowers blood cholesterol levels.
- Calcium alginate promotes the excretion of radioactive materials (strontium and cesium) from the body and inhibiting their absorption.

#### **【About KIMICA Corporation】**

KIMICA was the first company to industrially produce alginate and has been distributing alginate for 80 years since. KIMICA is the only company in Japan that produces alginate, and the sales share in the domestic market has grown to over 80%. In fields where high grade and high quality are required for foods and pharmaceuticals, KIMICA has the world's top production volume.