Renewables Deliver the Texture of Success

Global food consumers want more than good taste. Texture, structure and physical stability – not to mention health and convenience – are also in high demand. FMC BioPolymer serves recognized leaders in global food markets, providing value-added ingredients from natural, renewable resources.

A THREE-PART SERIES ON FMC’s FOOD & FIBER ROLE
We are the chew in your cookie and the texture of your ice cream. We are the smooth in your salad dressing, the peaks in your frosting and the soft silk that lingers on your tongue as you savor a whipped dessert. You don't see FMC BioPolymer in these “experiential” consumer requirements, but our global food ingredient customers know we’re there and the role we play in making their products number one.

Keeping Customers and Consumers #1

For more than 60 years, FMC BioPolymer has maintained its position as an industry leader in harnessing natural, renewable resources to deliver market-leading solutions for food products companies around the globe. Today’s consumers want healthier foods and greater convenience. And they don’t want to lose the same tactile sensations they receive from other foods they love. In other words, they want health food that doesn’t taste or feel like health food!

There is a tremendous increase in per capita consumption of processed foods in many emerging markets around the world. In order to help food ingredient customers to stay ahead of those trends, FMC BioPolymer continually explores new ingredient technology and new formulations to help our customers maintain their competitive edge in a fiercely competitive market.

Naturally, different markets demand different taste and texture sensations. One way in which we work alongside our customers to better serve local market needs is through our nine strategically placed food laboratories around the globe, all constantly exploring new ways to keep our customers at the forefront. Our newest food lab, in Singapore, will provide greater support for the rapid growth in Southeast Asia markets.

What all these labs have in common is a dedication to serving customer needs with unique chemistries and customized solutions. And they all start with the same ingredients: seaweed, hardwood pulp and softwood pulp.

Harvesting Underwater Treasures

While it requires careful cultivation and harvesting, seaweed is an abundant, renewable resource. Its inherent natural properties provide a wide range of performance characteristics that are highly valued by food companies and their customers.

The treasure extracted from red seaweed is carrageenan: a family of robust carbohydrates. FMC BioPolymer is the world’s leading and most experienced producer of carrageenan extracts. We develop and customize...
carrageenan blends that provide highly specific gelling, thickening and stabilizing properties that enable our customers to satisfy the increasing demands of their consumers.

Our carrageenan products are sourced from independent seaweed harvesters worldwide and from cultivation sites we operate. And all of these efforts are designed to be fully sustainable.

In other remote regions of the world – including the Philippines, Indonesia, Tanzania and Madagascar – entire communities cultivate and harvest this carrageenan source in warm, shallow water. Once again taking a leadership role, FMC established standards for product consistency as well as workforce health and safety. For many of these communities, subsistence living was the former norm, but thanks to this reliable and lucrative cash crop, the standard of living has been improved.

FMC BioPolymer is also one of the world’s largest alginate manufacturers. Alginate, one of the most versatile of all biopolymers, is extracted from brown seaweed as a mix of calcium, magnesium, sodium and potassium salts.

Brown seaweed harvests are managed sustainably, too. For instance, seaweed stewardship off the coast of Norway is closely regulated by that government and seaweed fields are divided into more than 400 zones. These zones are harvested according to the seaweed’s natural cycle of replenishing itself to full maturity over a five-year cycle. We have similar arrangements in Estonia, Mexico, Australia, Iceland and Chile.

Once these raw ingredients from the sea are purified and processed, they are blended to deliver characteristics that consumers savor, such as creamy mouth-feel and excellent flavor release. They enable solids, such as cocoa, to be more easily suspended in liquids. They provide the texture necessary to make a particular food tempting and palatable. Because of their texturizing properties, they enable fat reduction in many products. Further, recent studies suggest that derivatives from alginate may provide additional health benefits. This could point to an even brighter future for FMC’s masterful applications of these renewable resources.
Microcrystalline Cellulose: Plant Fiber from Wood Pulp

For 50 years, FMC BioPolymer has been meeting the demands of the food industry with our ever-expanding line of Avicel® products. The raw component of each Avicel product is mainly microcrystalline cellulose (MCC), a plant fiber processed from specialty grades of hardwood and softwood pulp. We develop and customize our Avicel products to meet each customer’s specific requirements for viscosity, gelling, suspension and stabilization.

The total capabilities of the entire Avicel product line are simply too vast to cover here, including its binding and disintegrant properties in pharmaceuticals. The versatile characteristics made available through this source of natural, renewable material has served the shifting tastes of billions of consumers while helping many of our customers maintain first place positions in their respective markets.

Most Valuable Ingredient: Innovation

Ninety-eight percent of FMC BioPolymer’s products are made from sustainable resources and the quest for 100 percent continues. Our customers are aware of our commitment to sustainability and the ways in which our products contribute to their success. They also understand the value of the resources, experience and technical expertise we bring to growing their businesses.

All around the world, our network of professionals work with customers to develop new technologies and applications that specifically suit their needs, increase the efficiency of their own R&D activities, make them a more nimble competitor and enhance their sustainability efforts, too. We recently developed a Carbon Footprint Calculator that determines the environmental impact of a particular carrageenan compared to other products with similar functionalities. Helping reduce a customer’s carbon footprint inevitably cuts production costs and contributes to the health of our planet.

By delivering innovative, sustainable solutions that bring customers’ products quickly to market and by providing service fueled by a commitment to exceeding expectations, FMC is leveraging its natural, renewable product lines to create a sustainable future for everyone.

Do you have comments or ideas on sustainability for FMC? Please share them at sustainability.info@fmc.com.