

November 14, 2017



Study Confirms the Extraordinarily High Level of Dietary Fiber in MGP's Fibersym® RW Resistant Wheat Starch

ATCHISON, Kan., Nov. 14, 2017 (GLOBE NEWSWIRE) -- Results of a human dietary study recently conducted at Monash University in Melbourne, Australia, confirm that an extraordinarily high level of dietary fiber exists in MGP's Fibersym® RW resistant wheat starch. The study was conducted to determine what percentage of this ingredient is digestible when consumed in a meal.

"We are very excited about the results of this study, which further verify how Fibersym RW can deliver a number of health-related benefits when formulated in food to boost dietary fiber," said Ody Maningat, Ph.D., vice president of ingredients R&D and chief science officer at MGP.

Michael Buttshaw, vice president of ingredients sales and marketing, added, "This is a fabulous development, and one that clearly and certainly validates the use of Fibersym RW as a dietary fiber source. It strongly supports the findings of previous studies that have demonstrated Fibersym's effectiveness in creating better-for-you food products."

Fibersym RW falls into the category of starches termed resistant starch because it resists digestion in the upper gastrointestinal tract. "The resistant fraction constitutes one type of dietary fiber, which is important to human health because of its beneficial physiological effects when it passes through the digestive system," Dr. Maningat noted.

The dietary study in Australia was conducted with eleven healthy ileostomates, persons who had previously lost their colon surgically and had the ileum end of their small intestine brought to the surface of their abdomen.

In the study, subjects consumed an omelet/milk breakfast together with 25 grams of native (unmodified) wheat starch. The output of their small intestines were then collected and frozen over the next 24 hours. The outputs were assayed for starch and found to contain an average of approximately 10 percent of the starch consumed. One week later the experiment was repeated, except the subjects consumed an omelet/milk breakfast containing 25 grams of Fibersym RW instead of native (unmodified) wheat starch. The analysis of the ileostomy effluents from this experiment showed an average of approximately 84 percent of input starch in the output.

"In regard to fiber fortification, Fibersym RW can be added to food without changing process conditions," stated Paul Seib, Ph.D., professor emeritus at Kansas State University,

Manhattan, and one of the investigators in the study. “Because Fibersym RW is indigestible, it can reduce calorie intake leading to weight loss, counter diabetes by lowering the levels of blood sugar and insulin, and improve gut health and function without bloating.”

According to Dr. Maningat, “Fibersym RW contains approximately 84 percent *in vivo* dietary fiber in the form of resistant starch.” He explained that dietary fiber in a food is routinely determined on a laboratory bench by an *in vitro* assay where digestion conditions are set to mimic *in vivo* digestion. Over a dozen or so *in vitro* assays are recognized by professional analysts. However, digestion conditions vary within the assortment of *in vitro* assays, causing different answers when assaying dietary fiber in a food that contains resistant starch.

“*In vitro* bench-top assays of dietary fiber in Fibersym RW, as a pure ingredient, can range from about 25 percent to approximately 92 percent dietary fiber depending on which *in vitro* assay is chosen,” Dr. Maningat said. “Our collaborative dietary study involving four entities shows that it is correct to use the Prosky assay (AOAC Method 985.29) or the Lee Method (AOAC Method 991.43) in determining the true (*in vivo*) dietary fiber content of Fibersym RW.”

The human clinical study at Monash University was recently published in the scientific journal titled *Bioactive Carbohydrates and Dietary Fibre* (see Iacovou, M. et al., *Bioactive Carbohydrates and Dietary Fibre* (2017), <http://dx.doi.org/10.1016/j.bcdf.2017.08.002>).

About MGP

Founded in 1941, MGP (Nasdaq:MGPI) is a leading supplier of premium distilled spirits and specialty wheat proteins and starches. Distilled spirits include bourbon and rye whiskeys, gins and vodkas, which are carefully crafted through a combination of art and science backed by decades of experience. The company's proteins and starches are created in the same manner and provide a host of functional, nutritional and sensory benefits for a wide range of food products. MGP additionally is a top producer of high quality industrial alcohol for use in both food and non-food applications. The company is headquartered in Atchison, Kansas, where distilled alcohol products and food ingredients are produced. Premium spirits are also distilled and matured at the company's facility in Lawrenceburg, Indiana. For more information, visit mgpingredients.com.

Contact:

Steve Pickman 913.367.1480

steve.pickman@mgpingredients.com

Source: MGP Ingredients, Inc.