



## TECHNOLOGY

# Method to Prepare Sulfated Psyllium for Use to Reduce the Risk of Chronic Human Diseases

## OVERVIEW

Psyllium, the seed husk of the plant genus *Plantago*, is an excellent source of soluble and insoluble dietary fibers. Its nutritional properties have the potential to be harnessed for important medical benefits, including the treatment of constipation, heart disease, colon cancer, gastric hypoacidity, and obesity. Unfortunately, psyllium's extremely strong gelling properties prevent its dispersal in liquid, thus restricting the incorporation of psyllium into functional food products such as Metamucil.

Researchers at the University of Maryland have developed a procedure to counteract these unfavorable properties of psyllium and to improve its health properties. Sulfated psyllium derivatives, developed at UM, have reduced gelling properties and show in vitro binding capacities comparable to or greater than that of cholestyramine resin (commercial cholesterol lowering agent) on a same per weight basis. The bile acid binding capacity of sulfated psyllium is approximately 8.4 times greater than that observed for untreated psyllium. These results suggest that sulfation is a possible approach for obtaining novel psyllium derivatives for use in functional foods or supplemental and pharmaceutical products with a variety of health benefits.

## CONTACT INFO

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## Additional Information

### INSTITUTION

University of Maryland, College Park

### PATENT STATUS

Patent(s) pending

### LICENSE STATUS

Contact OTC for licensing information

### EXTERNAL RESOURCES

- [US Patent 9,206,118](#)

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