

Digest Gluten WITH EASE

Uncomfortable stomach sensation just after eating—that is how many people describe their first sign of gluten intolerance—if they have ever heard of gluten intolerance at all!



discoveries from nutritional science, research, and media attention have greatly increased public awareness of gluten intolerance and its symptoms, which include gas, bloating, muscle cramping, headaches, and fatigue. Health experts have linked gluten intolerance with irritable bowel syndrome (IBS), celiac disease (CD), Crohn's, ulcerative colitis, and other gut-wrenching disorders.

But now thanks to extensive research, health experts say that these symptoms and others can be helped by gluten-free living.

WHAT IS GLUTEN?

Gluten is a protein substance that remains when starch is removed from cereal grains; it gives cohesiveness to dough. Gluten includes the proteins gliadin and glutenin, which are found in grains such as wheat, barley, and rye. Its proteins and proline-rich peptides are surrounded by enzyme-resistant carbohydrate-based molecules that defy digestion by the body's supply of gluten-digesting enzymes. Once shepherded into the stomach, gluten's peptides pass through the gastrointestinal membrane. They have been linked with unfavorable alterations in the immune cells such as leukocytes, leading to allergic, autoimmune and immune overreactions.

DIFFICULT TO AVOID

Yet, even the most dedicated shoppers find it nearly impossible to eliminate gluten from their diets. Although gluten is not found in oats, cross contamination of oats during post-harvest handling and production can lead to traces in finished oat products. Gluten is not listed on labels, but is found in many additives, thickeners and stabilizers such as malt vinegar, hydrolyzed vegetable protein, soy sauce, cereal products, modified starch, and vegetable gum.

Also, dining out can present problems when it comes to avoiding gluten. This makes gluten-free living trying, at best.

HELP IS ON THE WAY

Many of the world's leading gluten experts and researchers are now finding that gluten-related health conditions, especially IBS and CD, respond favorably to digestive enzymes that work by assisting the body in breaking down difficult-to-digest peptides found in gluten. The body has a gluten-specific digestive enzyme known as dipeptidyl peptidase or DPP IV that, when supplied in supplement form, "plays a significant role in the hydrolysis of prolyl peptides and assimilation of proline-rich proteins," say researchers reporting in the July 1993 issue of *American Journal of Physiology*.

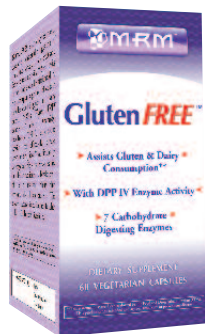
The use of DPP IV is further supported by research in the October 2002 issue of the *American Journal of Physiology-Gastrointestinal and Liver Physiology* (283;4:G996-G1003). Researchers found that DPP IV was instrumental in the breakdown of gluten's peptides. "These results suggest a possible enzyme therapy strategy for celiac disease, for which the only current therapeutic option is strict exclusion of gluten-containing food."

In the May 2007 issue of the *Scandinavian Journal of Gastroenterology*, researchers noted that people with gluten intolerance have "deficient activity" of gluten-digesting enzymes.

MRM'S GLUTEN FREE TO THE RESCUE

Gluten FREE™ from MRM provides a valuable proteolytic enzyme blend with DPP IV activity. But, what makes the Gluten FREE formula different than any other is that it also has a contingent of carbohydrate- and cellulose-digesting enzymes that breakdown the carbohydrate outer cover protecting the gluten peptide, allowing DPP IV to do its job more efficiently. Plus, it also contains lactase, necessary for proper digestion of milk sugars, which can play a role in exacerbating gastrointestinal membrane permeability.

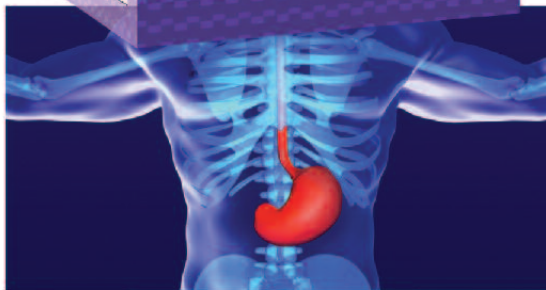
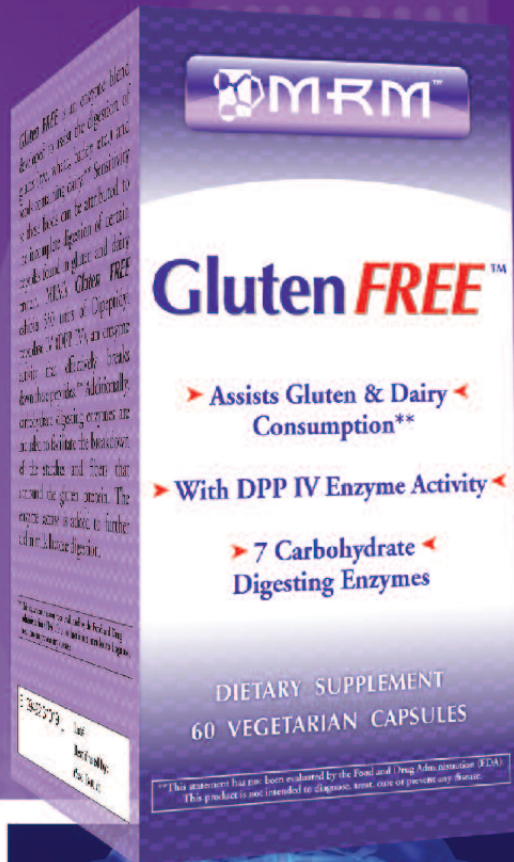
Going gluten-free is extremely difficult these days because of the widespread, undisclosed presence of gluten in prepared foods. But with the help of MRM's Gluten FREE to digest the very peptides that are the cause of your discomfort, you can make a huge change in your life and truly eliminate gluten intolerance. ■



Resources

Gluten FREE from Metabolic Response Modifiers (MRM) is available at health food stores and from natural health retailers nationwide. To find a store near you or for more information, please call 1-800-948-6296 or visit www.mrm-usa.com.

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