Gluten-Free Diets for Healthy Patients

A dietitian's perspective

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TWENTY YEARS AGO, we were inundated with information about the health benefits of a fat-free diet. We thought that if we advised our patients to eat fat-free foods, they would lose weight, reduce heart disease and diabetes, and have better nutrition practices.

Unfortunately, we never went no-fat or even low-fat. Fat consumption by U.S. adults has remained constant at about 80 to 85 grams per day since 1977.[1] Americans are now more obese, and we have a healthcare crisis managing type 2 diabetes. Many dietitians like me fear similar consequences from gluten-free diets in the absence of medical necessity.

Today, thousands of our patients are following gluten-free diets without any medical reason to do so.[2] These patients are not in the 1% of the world's population diagnosed with celiac disease or non-celiac gluten sensitivity.[3,4]

Understanding Gluten

I contacted Brett Carver, PhD, a professor in the Department of Plant and Soil Sciences at Oklahoma State University, who suggested that clinicians advising patients about gluten should first educate them about the substance.

"A patient should understand that 'gluten' is a name given to perhaps the most widely present, and certainly most important, plant protein," he wrote in an email. "The name may be intimidating, but gluten is simply plant protein, and we need protein in our diet. So, in the strict sense, a gluten-free diet is more of a protein-free diet; if a person chooses not to consume this source of plant protein, then the same 20 amino acids will need to be recovered elsewhere in the diet."

Gluten and Gut Bacteria

Supplementing my exploration of this topic was a conference presentation by Julie Miller Jones, PhD, CNS, LN, professor emerita of food and nutrition in the Department of Family, Consumer and Nutrition Science at St. Catherine University. She discussed the dangers of following a gluten-free diet when it is not medically indicated by celiac disease, and how doing so can change the natural flora of the gut.

Jones feels strongly, as do others in the nutrition community, that keeping the gut microbiome healthy is essential to overall wellness. Because thousands of microbiomes live in the gut, keeping this area healthy with normally occurring wheat protein and the bacteria it provides to our bodies is essential.[5]

Jones noted that wheat allergy has a prevalence of only 0.4% in children, and that 80% of these cases of allergy are outgrown by the time children become teenagers.[6-8] She also pointed out that wheat allergies occur in less than 0.5% of the entire U.S. population.[6-8]

Evolving theories suggest that changes in the gut microbiome can occur as early as in utero, due to a mother's intake of antacids while pregnant.[3-5] Theories about the increase in celiac disease include improved awareness; Americans being too "clean," not allowing the immune system to work; foodborne infections and viruses; shortened fermentation times of breads; increases in caesarean births; increase of vital wheat gluten in the food supply;

agronomic practices; and poor diets.[3-5] In the United States, gluten levels in wheat have not changed since the 1920s.[9]

Characteristics of Gluten-Free Diets

Gluten-free diets are higher in fat, calories and meat than the typical gluten-containing diet.[10,11] Many people gain weight on a gluten-free diet because they choose prepared gluten-free foods too often.[10,11] A gluten-free diet contains fewer grains and whole grains, and most of the grains consumed are refined forms.[10] Refined grains are lower in fiber than unrefined grains, so they have a higher glycemic index and are higher in starch, sugar and fat.[3,4,5,10,11] Of course, most of these grains are eaten with protein and fat, so the glycemic index is negated.

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Gluten-free diets can contain as little as 6 grams per day of fiber; the recommended amount is 25 to 38 grams.[5] Diets low in fiber can produce constipation and impair normal gut health.[5] Many gluten-free foods are not enriched or fortified with B vitamins or folate and are consistently low in iron.[3,11,12] And, gluten-free foods cost more on average — as much as 162% more than traditionally prepared foods.[3,4,13-17]

For patients with gut health issues, dietary solutions are often linked to factors other than gluten. Adding foods that contain inulin and oligosaccharides, which are high in prebiotics (i.e., wheat, onions, garlic and bananas), is helpful.[5] (Of note, gluten is a prebiotic.[18]) Probiotics can also be added to the diet, in the form of fermented foods with bacterial populations (yogurt, kefir) or as supplements.[5] Consumption of foods high in antioxidants, such as greens, nuts, colorful fruits and green leafy vegetables, spices and herbs, is also beneficial to gut health.[5]

A study[19] in Australia found that what scientists originally thought was non-celiac gluten sensitivity was actually FODMAPS (fermentable oligo-, di- and mono- saccharides and polyols) sensitivity. These substances are in many grains, fruits, vegetables and dairy products. Testing for this sensitivity must be done with an elimination diet.

Less than 6% of the population should avoid gluten for medical reasons.[4] Food intolerance to gluten and other proteins can arise from many factors, including medications, infections and stress.[5] When celiac disease is suspected, the gold standard for serologic testing is the IgA tissue transglutaminase (tTG).[5] However, it should not be drawn in the absence of gluten in the diet.[5] If you are testing a patient for celiac disease, be sure he or she is eating products containing gluten for 3 weeks to 3 months prior to the blood draw, in order to avoid inaccurate results. A test to reliably diagnose non-celiac gluten sensitivity is not yet available.

In conclusion, since we know that poor dietary practices affect the immune system, let's not make nutrition less healthy by advising patients to stay away from foods their bodies need, just because it's the latest diet trend.[20-23] ■

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