

“Promoting Gut Barrier Function for Better Health: Addressing Leaky Gut Through Diet”

Webinar Questions Answered by Colleen Webb, MS, RDN

Please note that these are brief answers to complex questions and are not meant as medical advice. Please seek medical advice for more complete information.

- **For the 1,2 3 at meal recommendations, is fruit included too, or should it only be vegetables?**

The 1-2-3 rule is not really a rule at all. It's a fun way to encourage patients to eat more of whatever they need, so personalize this “rule” for your patients based on their needs and preferences. Many of my patients benefit from eating more vegetables.

- **Can you share ideas for adding plants at breakfast? I recommend veggie omelets, smoothies with spinach, nut butters, hemp seeds on toast but new ideas are always welcome! Especially hard to convert my southern patients who have lived on sausage and biscuits for decades.**

Others to consider include savory oatmeal with vegetables, avocado toast, mashed sweet potato breakfast bowls, breakfast quesadillas with eggs, beans and veggies (can batch and freeze for a quick grab-and-go option), and yogurt parfaits with a variety of nuts, seeds and fruit.

- **Re the 1,2,3 rule, does timing impact gut health? For example, if someone ate a larger breakfast and a smaller dinner, would they get the same benefit? Similarly, if they did 2 servings each or spread them out more consistently throughout the day, would this have the same impact?**

Ultimately, our goal is to help our patients eat more whole plant-based foods. When they eat these foods it should not matter as long as your patients enjoy and tolerate their selections.

- **What about individuals who complain of bloating (GI exams negative) and say they need to take Gas-X when eating vegetables?**

If Gas-x helps to manage symptoms, I have no problem with my patients taking it, especially if it allows them to eat a wider variety of plants.

- **Is the Sunfiber (guar bean fiber) example shown on the fiber supplement slide well researched and known to slowly ferment?**

Yes, partially hydrolyzed guar gum is slowly fermented. Research supports its ability to alter the gut flora and produce SCFAs.

- **Does Protonix increase permeability and if so, any additional recommendations for someone taking Protonix and NSAIDs for Barrett's Esophagus?**

Long-term use of PPIs has been shown to disrupt the gut barrier, so it's possible they increase intestinal permeability. There's some evidence that dietary components, such as prebiotics and vitamin C, improve markers of leaky gut after NSAID consumption. So, the recommendations are the same... eat a wide variety of wholesome plant-based foods.

- **What probiotics are good for constipation?**

See the [US Probiotic Guide](#) and filter by "constipation".

- **Do you have brands of probiotic you like? And do you have a list of what strands of bacteria for certain symptoms?**

The clinical benefits of probiotics depend on many factors, including the species and strain of the probiotic. The [US Probiotic Guide](#) is an excellent resource to help patients and healthcare providers choose the most appropriate probiotic supplement.

- **Could a high FODMAP diet lead to an increase in allergic reactions like hives and non-celiac gluten sensitivity?**

FODMAPs are carbohydrates. If someone has an allergic reaction to a FODMAP-containing food, they're reacting to something else in the food, not the FODMAP.

- **Can you elaborate on the 14-fold increased efficacy for glutamine compared to what?**

Compared to whey protein. Here's [a link](#) to the article.

- **How much zinc do you recommend to correct a deficiency?**

For my IBD patients, I recommend 50 mg elemental zinc x 2-4 weeks.

- **What tools/questions do you use to screen patients for a zinc deficiency?**

Low plasma or serum zinc. Signs of a zinc deficiency include altered sense of smell or taste, poor wound healing, hair loss, and difficulty seeing at night.

- **Which emulsifiers are the better/worse ones?**

Check out this excellent 2022 narrative review by De Siena et al titled "[Food Emulsifiers and Metabolic Syndrome: The Role of the Gut Microbiota](#)".

- **Please comment on artificial sweeteners 'impact on gut barrier -- what would you recommend please?**

Research has linked artificial sweeteners to a growing list of health concerns, including dysbiosis and increased intestinal permeability. We need more research to make any definitive conclusions, but I'm not convinced they're safe, so I don't recommend them. Instead, I recommend my patients use small amounts of real sugar.

- **Where does Colleen go for recipe and menu ideas for her clients?**

It depends! For low FODMAP recipes, I love the websites [FODMAP Everyday](#) and [Fun Without FODMAPs](#). And, you can't go wrong with anything from FODMAP Experts (and RDNs), Patsy Catsos and Kate Scarlata.

Otherwise, I modify highly ranked recipes from a variety of websites, including Food52, the NY Times cooking section, and [101 Cookbooks](#) as needed to fit my patients' needs and preferences.

Some of my favorite cookbook authors are Ellie Krieger, RDN, Yotam Ottolenghi, and Sarah Britton.

- **What does MAC stand for?**

Microbiota accessible carbohydrates.

- **I wonder how you would advise, or what your take is on the fermentable fiber (MACs) versus low FODMAP diet, do they sort of contradict each other?**

Not always, fortunately! A low FODMAP diet excludes some, but not all, MACs. For example, oats and potatoes are two examples of low FODMAP foods with fermentable fiber.

- **Do you suggest low fodmap diet for patients with UC?**

Yes, if they have coexisting IBS. Roughly 35-40% of IBD patients in remission report ongoing GI symptoms despite minimal evidence of inflammation. Many of these patients have overlapping IBS. A short-term low FODMAP diet may be a safe and effective method for managing gut symptoms (especially abdominal pain, bloating and gas) in patients with inactive ulcerative colitis. However, there is no evidence a low FODMAP diet impacts inflammation associated with UC.

- **If you have a patient with a 98+ colonic transit time with SIBO and severe constipation, and is not tolerating food with insoluble fiber what do you recommend as far as diet?**

A gentle low fiber diet with an emphasis on fruit and vegetable smoothies and pureed soups. Focus on eating behavior – recommend patients chew their food well and eat slowly. Ensure proper hydration, and consider adding an oral rehydration solution in patients who are excessively thirsty despite drinking lots of water.