



# International Foundation for Gastrointestinal Disorders

3015 Dunes West Blvd, Suite 512, Mount Pleasant, SC 29466

Tel: 414-964-1799 • Website: [iffgd.org](http://iffgd.org) • Email: [iffgd@iffgd.org](mailto:iffgd@iffgd.org)

---

## **Diet & Digestive Health Twitter Chat IFFGD & Andrea Hardy, RD Microbiome and Gut Health**

*The Diet & Digestive Health (#DDHChat) Twitter chat series with the International Foundation for Gastrointestinal Disorders (IFFGD) and lead dietitian Andrea Hardy, RD. We are excited to help educate patients, caregivers, and others about Microbiome and Gut Health.*

### IFFGD - introductory tweets and remarks:

The views and experiences shared by our participant are their own and do not reflect the official positions of IFFGD. Each patient is different. Always consult with your health care provider or a registered dietitian (RD) on a diet treatment plan that is right for you. Information and resources shared during today's chat should not replace medical care that you are receiving. And reminder be sure to include #DDHchat in each of your tweets.

### IFFGD - welcomes everyone to the chat and introduces Dietitian Andrea Hardy, RD

Welcome to our September #DDHChat on Microbiome & Gut Health with lead host @AndreaHardy (Andrea Hardy, RD). Gut microbiota (or the microbiome if we include the functional capacities as well) play important roles in helping maintain our health. Among other things, a healthy gut microbiota helps with digestion, maintaining our immune system, and protecting us from dangerous microbes. An imbalance of the microbiome may have long lasting effects and could influence brain-gut interactions. An imbalance in the gut microbiome can also make a person more vulnerable to a functional gastrointestinal (GI) disorder.

Whenever you notice changes in your symptoms it is important communicate these changes with your healthcare provider. Various dietary modification and other lifestyle changes may help to reduce symptoms that may occur. It is natural to have some concerns about finding the right treatment plan for you. For some seeking support from a registered dietitian could help. During the next hour, we'll discuss the importance of diet and your gut health. #DDHChat

We're joined today by registered dietitian @AndreaHardyRD (Andrea Hardy, RD) to share her unique insights on Microbiome & Gut Health for those living with #GI conditions. #DDHChat

### IFFGD and Andrea Hardy, RD Q&A:

#### **Q1: What significant impacts might diet have on the diversity of our gut microbiota? #DDHChat**

Our gut microbiota is the make up of bacteria, viruses & fungi in the gut. Diversity is one proposed marker of what constitutes a healthy gut microbiota – however we don't have a formal definition yet! That being said, diversity is associated with better health

***Informing, assisting, and supporting people affected by gastrointestinal disorders.***

outcomes. Diet is the quickest and easiest way to positively influence our gut microbiota. I like to say our gut bacteria are 'picky eaters'. A more diverse diet full of different types of fiber and phytochemicals is associated with a more diverse gut microbiota. #DDHChat

**Q2: What GI signs and symptoms are commonly associated with a gut microbiome imbalance? #DDHChat**

This is a bit tricky as again we don't have a definition yet. However, I like some of the proposed criteria brought forth by Joel Dore. Which highlights that a non-resilient gut microbiota has oxidative stress, inflammation, increased intestinal permeability & low richness of microbes. A change in the gut microbiota is associated with several conditions – however we don't know if it's the chicken or the egg. Did the disease state cause the change? Or is the change driving the disease? If we look to research specifically in IBD, we actually see it's a combination of the two. Both the disease alters the gut microbiota, and the actual development of the disease can be influenced by the gut microbiota. This is really neat stuff – because it opens the door to potential targets for therapy down the road – however at this point, more research is needed. #DDHChat

**Q3: What effects do non-digestible carbohydrates have on the microbiota? #DDHChat**

Non-digestible carbohydrates, also known as 'MAC's' – or microbiota accessible carbohydrates act as fuel for our gut microbiota. What we don't digest, our gut microbiota can – you're not eating for one, you're eating for trillions! MAC's, in particular, fuel populations of beneficial bacteria in the gut. These beneficial bacteria produce important compounds called short-chain fatty acids (SCFA's). SCFA's are important anti-inflammatory compounds that fuel our gut barrier and play an important role in our health. Getting enough of these MAC's is key to promoting diversity and abundance of bacteria in the gut, two proposed markers. #DDHChat

**Q4: Can a #LowFODMAP diet support the microbes in our gut? Should this be a long-term solution if patients see relief from their symptoms? #DDHChat**

Because a low FODMAP diet reduces fermentable carbohydrates, we actually can see a reduction of bifidobacteria, a type of beneficial bacteria in the gut. It's important that patients using the #LowFODMAP diet realize there are 3 phases, elimination, reintroduction, and a long term modified #LowFODMAP, where we liberalize the diet as much as possible to ensure variety and adequate amounts of these fermentable fibers. Keep in mind, our gut microbiota rapidly changes based on what we feed it, so short term changes are not something to worry so much about, rather what we do long term is what matters. #DDHChat

**Q5: What kind of foods might affect the PH of our intestine and in turn also impact the microbiota? #DDHChat?**

Interestingly, there's a lot of misinformation going on around wanting to eat 'alkaline'. However, when we look at colonic health, maintaining a lower pH (higher acidity) is actually associated with better colonic health. Good bacteria can thrive at this lower pH, and this lower pH inhibits growth of pathogenic bacteria. How does this happen? We feed our gut microbes fiber, and they produce short chain fatty acids (SCFA's) which help to maintain the pH of the colon. Excessive intake of meat, coupled with inadequate fiber can make more protein available to our gut microbiota for break down. When this happens, compounds like ammonia can be produced and can have negative impacts on our gut, including increasing the colon pH. #DDHChat

**Q6: What affects do prebiotics and probiotics have on the gut microbiota? #DDHChat**

By definition, prebiotics are substrates that are selectively utilized by host microorganisms that have a benefit on our health. Prebiotics are typically certain types of fiber that can be found in our plant-based foods that promote the growth of specific strains of gut bacteria that are known to be beneficial, which encourage production of SCFA's – great for your gut! Probiotics are live microorganisms that when taken in the

***Informing, assisting, and supporting people affected by gastrointestinal disorders.***



## International Foundation for Gastrointestinal Disorders

3015 Dunes West Blvd, Suite 512, Mount Pleasant, SC 29466

Tel: 414-964-1799 • Website: [iffgd.org](http://iffgd.org) • Email: [iffgd@iffgd.org](mailto:iffgd@iffgd.org)

---

right amount, have a benefit to our health. What's important to note about probiotics is that their action is strain-specific – we always want to match the right strain to the right person for the right reason. What most people don't realize is, probiotic supplements are like tourists – they come in, perform a specific function and leave – and don't take up residency in the gut. They can be used therapeutically in certain situations. #DDHChat

**Q7: What type of food can negatively impact the gut microbiota? #DDHChat**

Excess intakes of red and processed meats, fried foods, and sugary treats can displace our intake of more nutritious foods – meaning less fiber for your gut microbiota! Alcohol is one I think we don't touch on enough on – alcohol can negatively impact your digestive health and the gut microbiota. Other things that appear to negatively impact our gut microbiota include excess salt, excess intake of saturated fat and inadequate fiber – think a “Western style diet” as what can potentially negatively impact our Gut Microbiota. #DDHChat

**Q7.5: “I've heard it's possible to increase your tolerance to lactose containing products & legumes if you consume small portions regularly. Do you know if you can increase your tolerance to other FODMAPs (i.e., sugar alcohols, fructose, fructans) w/ reg. consumption?” #DDHChat**

Regularly consuming beans can improve your tolerance to the gas-causing effects. I'm not aware of any evidence on any other FODMAP for this. That being said, in my practice I find it's highly individual, consuming small amounts regularly works for most individuals, but can often vary on several factors including things like stress, amount of movement, and hormones to name a few. I typically suggest continuing to trial poorly tolerated FODMAP's in small amounts when patients are feeling well to see how they continue to do with them! #DDHChat

**Q8: What kind of foods will help support a healthy gut? #DDHChat**

The two most important things are fiber and variety. Fiber found in our plant-based foods includes fruits, vegetables, whole grains, nuts & seeds, and pulses. As well, some literature suggests that things like polyphenols and antioxidants that we aren't able to digest also positively influence the gut microbiota. Focusing on a variety of these foods is key – time and time again in research we find the whole is greater than the sum of its parts – supplementing w/ purified fiber supplements appears to not provide the same level of benefit as the whole food – so eat your veggies! #DDHChat

**Q9: For someone with food sensitives or other GI conditions, what tips can you provide to help them include gut healthy foods into their diet? #DDHChat**

Start low and go slow – work your way up to 25-38 grams of fiber a day so your gut can get used to it. Start by adding in some nuts and seeds, or an extra serving of veg and work up from there! Space your intake of high fiber foods throughout the day. Choose foods you know you tolerate, for example someone on a low FODMAP diet may choose to eat zucchini, red bell pepper and carrots in a stir fry to get their fiber in. Can't hit your fiber targets due to food intolerances? Talk with your #RD or #doctor about some fiber supplements that are easy to tolerate and can help to bridge that fiber gap! #DDHChat

**Q10: As we wrap things up, can you share 4 tips with our #DDHChat followers today to help them kick start their week with #Gut healthy foods?**

1) Aim for 2 cups of vegetables at lunch and supper each day. Today at lunch I'll be eating cucumber, carrots and hummus alongside a whole grain wrap with sprouts, and pickled beets!

***Informing, assisting, and supporting people affected by gastrointestinal disorders.***

- 2) Try to get in 30 different plant-based foods a week to up the amount of variety in your diet. It sounds like a lot but keep a running list and see how close you get, and then simply shoot to beat that the following week!
- 3) Include whole grains and complex carbohydrates to up your intake of MAC's – skip the low carb trend and focus on quality carbohydrates – whole grain pasta, quinoa, oats etc.
- 4) Cook 1 recipe a week with pulses (beans/peas/lentils). I like to swap out half my ground beef for a can of rinsed, drained lentils, and now we're getting into soups & stews season – pulses make a great addition to the diet!

Live Questions:

**LQ1: #DDHChat I have a question about the effects of food poisoning on the microbiome, especially about how it might relate to prolonged (and unwanted) weight loss. (London, Ontario)**

Great question! Food poisoning can disrupt the gut microbiota and lead to things like post infectious IBS. Talking with your family doctor and gastroenterologist to ensure a proper work up is done is key - and we will have some tips today on #DDHChat @IFFGD

*We hope that you all have learned something new about Microbiome & Gut Health today. Be sure to share with us how you include gut healthy foods in your daily routine using #DDHChat on twitter.*

IFFGD - final tweets & remarks.

Special thank you to @AndreaHardyRD (Andrea Hardy, RD) for joining us today and sharing your unique insights on #GutHealth. To learn more about Gut Health with Andrea Hardy, RD visit [www.andreahardyrd.com](http://www.andreahardyrd.com) #DDHChat