Gut Health Seminar
Questions & Answers
2023

Guest panelists Mindy Conklin and Renee Malone of Hitting Cancer Below the Belt and Dr. Kevin Fergusson, our Bank's medical director, answer your questions from our recent seminar on gut health. The seminar and this Q&A are provided as information for employees. Please consult your primary care physician for advice and information about your individual healthcare and before making any changes to your wellness routines, diet or medications.

General Gut (Colorectal) Health

1. What are some basic "best practices" to maintain gut health?

Some basic practices include consuming more natural or whole foods over processed foods to avoid inflammatory agents and support optimal body function, including gut health. Hydration with water is also essential. Exercise is also linked to positive changes in the gut microbiome, including growth of "good" bacteria that produce nutrients shown to have a protective effect against colorectal cancer (i.e short chain fatty acids, including butyrate) (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5357536/).

2. What is the "gut microbiome" and how do you keep it healthy?

This is a great 5-6 minute video introduction to the gut microbiome: "The Invisible Universe of the Human Microbiome" (https://www.youtube.com/watch?v=5DTrENdWvvM&t=4s) (NPR).

Consuming a diet of whole or natural foods over processed foods including fermented/probiotic foods, water consumption, managing chronic stress, and avoiding overuse of antibiotics are some general recommendations for maintaining a healthy gut. Exercise may also be beneficial.

3. What is causing the increase in colorectal cancer, especially among younger people?

There is compelling research linking diet (similar to the risk factors in older age groups), exposure to environmental toxins in our air, food, and water, excess weight and lack of physical activity, and other factors such as overuse of antibiotics to increased risk of colorectal cancer (https://www.cancer.gov/news-events/cancer-currents-blog/2020/colorectal-cancer-rising-younger-adults); (https://www.nature.com/articles/s41416-021-01665-7).

4. What are the biggest risk factors for colorectal cancer?

Known risk factors include family history of colorectal cancer, certain gut disorders (including inflammatory bowl diseases such as Chron's and Ulcerative Colitis). Dietary risk factors include overconsumption of processed foods, including processed meats, too few whole and natural foods, alcohol consumption and tobacco use. Though a link between vaping and colorectal cancer is not known at this time, it is also generally recommended to avoid things the body really just doesn't need. Excess weight and lack of physical activity are also linked to increased risk of colorectal cancer.

5. What does "leaky gut" refer to?

Our "gut" in this case refers to the small intestine, which is by function somewhat permeable to allow the exchange of needed nutrients from the small intestine to the rest of body. These openings should be just large enough to permit this exchange. In "leaky gut", these openings are larger than they should be and can permit the passage of undigested food particles, peptides, and other substances that are not meant to be outside of the digestive system, and therefore may contribute to an array of complications. Some potential causes of leaky gut include diet and alcohol use, certain medications, and even stress (https://www.health.harvard.edu/blog/leaky-gut-what-is-it-and-what-does-it-mean-for-you-2017092212451).

6. Is there any connection between COVID-19 and a healthy gut microbiome?

There appears to be some research underway to determine the extent of such a connection between the virus and negative effect on the gut microbiome. Some researchers seem unsure, however, if this is due to the COVID-19 virus alone or if other factors such as antibiotic use in patients with COVID play a role (https://www.nih.gov/news-events/nih-research-matters/covid-19-disrupts-gut-microbiome).

Maintaining Gut Health

7. What is the current guidance on colonoscopies? What age is testing recommended and how often?

Screening begins no later than age 45. Screening for colorectal cancer begins earlier if you have a family history of the disease or you are currently having GI issues at any age. The screening option is determined between you and your medical provider. After a "clean" colonoscopy, which means no polyps are found, the time to screen again is 10 years. If polyps were found, or other GI issues, or you have a family history, screening may be more often.

Colorectal cancer can have no symptoms, but here are some potential signs and symptoms, which signal that screening is necessary: chronic constipation (bowel movements less than once a day, constant straining during bowel movement); irregular bowel habits (may involve diarrhea and constipation throughout the week); thin/flat stools; blood in the stool or very dark stools; pain and bloating, and unexplained weight loss.

8. Are there non-invasive alternatives to a colonoscopy that can help detect early signs of colorectal cancer?

There are noninvasive, in-home stool tests that can help to detect colorectal cancer early. A Cologuard in-home test (stool DNA test) with negative results will indicate that you should be screened again within three years. We say within because if you have any GI symptoms you should talk to your medical provider about screening more frequently or with a colonoscopy. After completing a FIT (Fecal Immunochemical Test) kit, you should be screened annually. Any in-home stool test that comes back positive or abnormal requires additional screening via colonoscopy to determine if you have colorectal cancer or another health condition.

9. I've heard the prep for a colonoscopy is unpleasant. What can I expect if my doctor recommends that I get one?

We hear this a lot and have some hopefully good (or at least better) news! You can ask for a low volume prep, which takes less of the unpleasant liquid and replaces the fluid with your own clear liquid that you enjoy drinking (sans the alcohol, of course). Also ask about SuTab, which are pills that can be taken with your own fluid. No matter what, you will be drinking a lot of fluid in order to completely clear out your colon, so ask your medical provider for options where you get to control the type of fluid to be consumed.

10. Do probiotics help maintain colorectal health?

Yes, and YES again. Probiotics are "good guy" bacteria, which live, and need help to thrive, in your gut. The colon is the powerhouse for the immune system and more! There are 40,000 different strains of bacteria that we need to ensure our immune system and digestive system (and all systems) are performing in their most optimal state. These bacteria are not only found in supplements, but also certain foods and beverages including fermented sauerkraut and kimchi, yogurt, kombucha and kefir drinks. (https://www.mdpi.com/2076-2607/9/5/1021)

11. What's the connection between gut health and mental health?

We encourage researching more on the gut-brain axis to learn more about this fascinating connection. The gut is even sometimes referred to as the "second-brain", and makes the majority of the neurotransmitter serotonin (~95%) and dopamine (~50%), which among other functions, including bowel regulation, helps us feel well, relaxed, satisfied, inspired and so on. What happens when you are very nervous? Do you get GI issues? Well, it goes the other way too. What happens when you have an imbalanced gut? Do you have brain fog or do you feel

"flat"? The vagus nerve is central to the gut-brain axis and more information is coming out showcasing the power of the gut for mental wellness! (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6469458/)

12. Is fasting an effective way to maintain colorectal health?

Fasting is another area where we are not in a position to offer specific recommendations, and suggest reaching out to medical providers and other experts for more information. There is, however, some research showing that fasting may have beneficial effects when it comes to several types of cancer, including colorectal cancer. (http://www.publichealthtoxicology.com/Potential-beneficial-effects-of-intermittent-fasting-against-cancer-risk-and-management,149838,0,2.html)

13. What about natural cleanses such as Turkish rhubarb root?

We do not specifically endorse any specific type of “cleanse” over long-term nutritional and lifestyle changes that are known to help reduce cancer risk and support overall health. We suggest such specific questions be addressed by medical providers and nutritionists with this type of expertise.

14. Are there any special considerations for people who use acid-reducing medications such as proton pump inhibitors (PPIs, which include medications such as Nexium, Prevacid, Prilosec, etc.)?

Research points to the possibility of PPIs increasing risk of gastric/stomach cancer and liver cancer. A link between colorectal cancer and PPIs is less apparent, and given the nature of the question it may be best to consult a medical provider about this medication and cancer risk. (https://www.healio.com/news/hematology-oncology/20221019/proton-pump-inhibitor-use-linked-to-elevated-cancer-risk)

Diet and Gut Health

15. Are fermented foods such as kefir, yogurt, kimchee, kombucha and others good for the gut?

Yes, many of these items help provide probiotics/“good guy” bacteria, fiber and other nutrients beneficial to health and wellbeing. A general rule of thumb is to avoid foods and beverages that have excess sugar added.

16. What are some of the best foods for overall gut health?

Protein is needed to help build and repair cells throughout the body, and healthy fats help support and maintain optimal cellular function among other duties. Prebiotic (fiber-rich) foods

help feed the bacteria in our gut that go on to create additional nutrients, and probiotic-rich (fermented) foods may help to deliver more of the "good guy" bacteria we need to maintain a healthy gut and immune system. Water is also an important nutrient. Avoid empty calories or foods with little or no nutritional value.

17. Does sugar play a role in colorectal health? What about sugar substitutes?

Sugar, especially in the excess amounts found in many processed and "junk" foods and drinks, is generally not something we need to thrive. There is growing evidence linking high sugar consumption and cancer in general (https://medicalxpress.com/news/2019-03-evidence-strong-sugar-cancer.html). Recent research also shows a link between excess sugar consumption, particularly from sugar-sweetened beverages, and risk of colorectal cancer diagnosis and death (https://www.mdlinx.com/article/sugar-sweetened-beverages-linked-to-colon-cancer-mortality/2gVizonXLa2sbaYIdBt4fB).

At this time, the link between artificial sweeteners and colorectal cancer is mostly uncertain. One study did find a link with some limitations to overall risk of cancer, and more specifically breast and obesity-related cancers (which does include colorectal cancer). (https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1003950). Zero-glycemic sweeteners from more natural sources, including stevia and monk fruit, may be better substitutes and can be found at your local grocery store.

18. What role does hydration play in gut health?

Water is a nutrient essential to life. Various research reveals water intake, namely lack thereof, may increase risk of several types of cancer, including colorectal cancer. Recommendations for water intake vary, but it is has been suggested that at least 4 to 5 8oz glasses of water daily may help to reduce risk. Generally, it is important to ensure proper daily hydration for a wide range of benefits, including gut health. (https://ascopubs.org/doi/full/10.1200/JCO.2004.99.245)

19. Are there benefits of coconut water — or any other source of hydration — over tap water?

Coconut water can assist with hydration and contains essential electrolytes, including potassium. Some may need to be mindful of the sugar content, and a general recommendation is to avoid coconut drinks that are highly processed and have added sugar. Water in and of itself is absolutely beneficial, and another general recommendation is to at least filter your tap water. Though tap water is treated, it may still contain heavy metals (ex. lead from certain water pipes) and other pollutants, including chlorine and other byproducts that may contribute to cancer risk, including colorectal cancer. (https://dceg.cancer.gov/research/what-we-study/drinking-

water-contaminants)

20. There seems to be conflicting information when it comes to oils — some, like coconut oil, are deemed bad for the heart but good for the gut. Can you share the best oils to use for overall health?

A general rule of thumb here is “the less processed a food is, the more likely to be better”. Research suggests a link between high intake of PUFA (polyunsaturated) oils and inflammatory health conditions due to higher omega-6 fat intake over omega-3 fat intake. It may be better for most to focus on obtaining such fats from whole foods (i.e. wild caught salmon, sprouted nuts and seeds, avocado, etc.) compared to heavily processed liquid oils. (https://www.nfcr.org/blog/pufas-cancer/).

The body does require other types of fats as well including monounsaturated (such as from virgin olive oil) and some saturated fats to support cellular integrity and other bodily functions. There is some research that shows coconut oil to have anti-cancer properties with regard to colorectal cancer in both animal and in vitro studies, and some chemo-protective effects in regard to breast cancer patients. Generally, it is better to avoid highly processed, fried and “junk” foods to reduce intake of many inflammatory agents including certain oils/fats. The Nutrition Coalition may be a helpful resource for additional exploration of our dietary need for fat. (https://www.nutritioncoalition.us/).