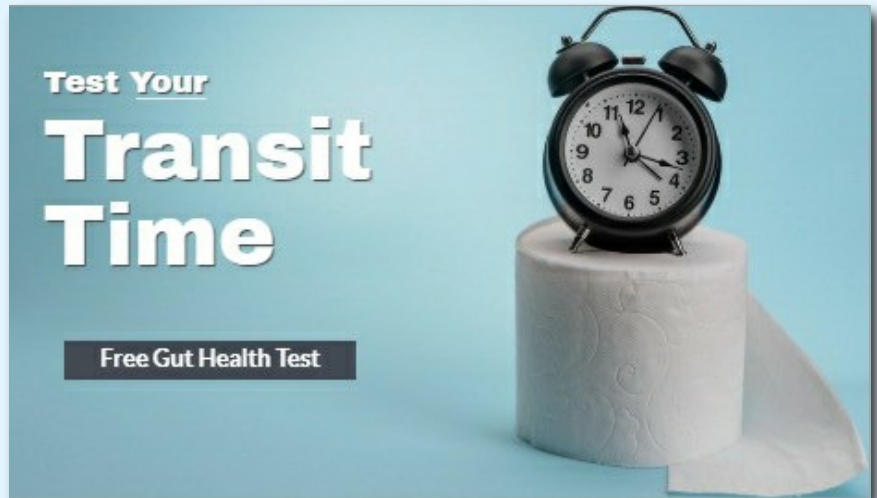


Transit Time

“ If we allow undigested food to sit in a heated environment, the process of fermentation begins and food byproducts begin to rot and putrefy.”

Did you ever think that someone's transit time could be a time bomb? I know it's simple but transit time is one of the easiest ways to measure gut health. It is something measurable and inexpensive. Transit time is the time it takes for food to travel from mouth to rectum. The healthy range should be between 12 hours and 24 hours.

A simple concept, but think about it for a second. If we allow undigested food to sit in a heated environment, the process of fermentation begins and food byproducts both good and bad begin to rot and putrefy. Yeast begins to grow and gas increases from the fermentation. Many metabolic byproducts are dumped into the intestines to be removed from the body, but if those substances stay in the body too long they get reabsorbed. Bile acids if allowed to sit in the colon too long can irritate the



lining of the bowel and its function.

Hormone byproducts for example should be allowed to exit the body as intended. But if they are allowed to sit in the colon for extended periods of time they can be reabsorbed which increases the potential for estrogen related cancers. Both the Lymph system and the small intestine empty into the large bowel and if the bowel is sluggish, both lymph and GI function can be impaired. There is a lot of truth in what pioneers in the field of

natural medicine have long since claimed that “death begins in the colon.” Especially since we now know that 70% of the immune system is located in the bowel. The bowel is really like a garden and produces many important B vitamins, short chain fatty acids as well as home to trillions of bacteria that complete digestion, modulate pain and turn on and off inflammation. But just like a garden's soil can produce vegetables, that same soil can produce massive amounts of weeds

that choke the life out of the vegetables.

One of the key things we can do to maintain a healthy gut is to keep things moving so that stagnation or fermentation will not dictate our garden's produce. Just to give you an idea, the short chain fatty acid butyric acid is food for the enterocytes in the large bowel and reduces ammonia, etc. If food stays in the colon beyond 24 hours, butyric acid production is inhibited. Testing a patient's transit time can give you clues about their gut health. The test allows you to measure transit time which is useful to you and often motivating for the patient.

Here are the basics of the test. Give a unique indigestible marking agent that will be seen in the stool and see how long it takes to come out. Make sure the patient is not allergic or sensitive to that substance or it will increase or decrease the transit time and negate the test. Here's an example of how to eat the agents and what they will see. ¼ cup of organic NON GMO corn mixed with scrambled pastured eggs expect to see the yellow corn kernels in stool. 3 or 4 whole red beets as a salad with some form of protein expect to see a deep red in stool. 5 -10 grams of charcoal in capsules or tablets on an empty stomach expect to see a black stool.

Note when the agent first appears and when it last appears. If the agent comes out in less than 12 hours it means that the transit time is too short and nutrients are not being absorbed. Consider food sensitivities and or digestive issues. 12-24 hours is the optimal transit time. More than 24 hours indicates that the transit time is too long. Do the basics first and retake the test in 2 weeks and watch the progress.

You can see a link to the right for a form used to monitor patient progress.

What are the basics? Drink more water. I suggest at least 2 quarts of purified water. Chew food till it is a liquid. All digestion starts north to south. Increase fiber not just as a bulking agent but as food designed to feed or increase patient's probiotic biodiversity. Increase movement to 30 minutes daily a combination of walking, dancing, bicycling, climbing stairs, or whatever brings life.

For increasing fiber consider BioFiber Complete, a new fiber from Biotics Research designed to feed and stimulate the production of healthy bacteria to create bio-diversity, especially the lean loving gut microbes. BioFiber Complete contains 10 types of fibers: Organic Flax, Organic Broccoli Sprouts, Organic Kale Sprouts, Chia Seed Fiber, Fenugreek Seed Fiber, Non-GMO Sugar Beet Fiber, Bamboo Fiber, Acai Berry Extract, Apple fiber and Apple Pectin. Each serving contains 5 grams of fiber loaded with phytonutrients essential for probiotic growth and diversity. Mixes easily in water, and contains no added sweeteners, flavors and is free of gums.

Another basic is probiotics. To make sure the healthy bacteria are present as in BioDoph-7 Plus or Children's ENT-Pro. Measuring transit time may take some extra effort, but it shows you care. And fixing the issues that lead to prolonged transit time can avoid or at least slow down the "time bomb" of inflammation and chronic disease.

Thanks for reading this week's Tuesday Minute. I look forward to being with you again next Tuesday.