International Foundation for Gastrointestinal Disorders

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564

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Gastroparesis Nutrition Strategies

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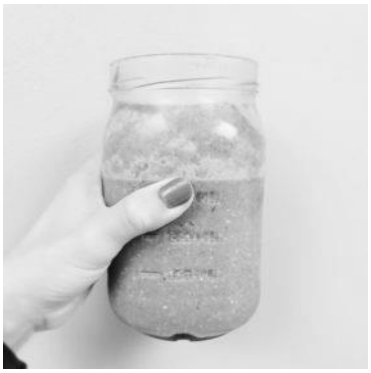
Gastroparesis is a chronic condition characterized by improper functioning of the muscles of the digestive tract, causing delayed stomach emptying and certain symptoms such as nausea, a feeling of fullness after eating only a small amount of food, vomiting undigested food— sometimes several hours after a meal, gastroesophageal reflux (GERD), abdominal pain, bloating, and a lack of appetite. Causes of gastroparesis generally can be classified into three main categories: Diabetic (29%), post-surgical (13%), and idiopathic (36%); however, there are other etiologies. (1)

The severity of gastroparesis (GP) varies from person to person so a "one-size fits all" dietary approach is not recommended nor useful in practice. If you have GP, then it is essential to find out what works best for you. It is also important to keep in mind that GP is not a static condition, meaning symptoms can vary from week-to-week or even day-to-day. For example, during a "GP flare," one may experience a period of time where all he or she can take is liquids while previously solid foods were fine.

The treatment of GP often includes medications, dietary strategies, and lifestyle changes. Regarding diet, what and how one eats can influence symptoms. Various dietary modifications can be used to help manage symptoms and ensure nutrient needs are met. Some common and helpful dietary strategies:

*Pay attention to portion sizes: It is good to start with eating smaller, more frequent meals and snacks and monitoring symptoms. Avoid eating large meals as this will take longer to empty from the stomach and generally increases symptoms. Eating or drinking smaller, more frequent amounts throughout the day can not only help improve GI symptoms but, can help a person consume adequate nutrients (vitamins, minerals, calories) throughout the day. I would highlight that small, frequent meals does not equal grazing/snacking all day long. While this might work for some, in practice I have found this typically backfires and leads to overeating snack foods, reducing appetite at meals, and/or increases symptoms in the evenings. Instead, try giving some time to digest food by spacing meals/snacks out by a couple of hours. The portion size of a meal is going vary from person to person and their specific tolerance, but I often suggest starting with ~1 to 1.5 cups of food per sitting and adjusting from there.



*Changing up the consistency of food: "Particle size" of food/meals is another important dietary strategy for those with GP. Small particle size meals have been shown to improve symptoms compared to large particle size meals in those with gastroparesis. (2,3) Particle size refers to the consistency of foods. A small particle diet consists of foods that are "easy to mash with a fork into small pieces".(2) Some examples of small particle

foods/meals: Pureed fruits & vegetables, vegetable pâté, fruit compote, hummus, smooth soups, smoothies, shakes, pudding, minced meat, a timbale, sauces, gravy, Shepherd's pie, baked egg, silken tofu, mashed avocado, almond flour. (3) Examples of large particle size foods that were allowed in one study included "whole meat, seafood, cheese slices, almonds and nuts, pasta, rice, grated vegetables, raw vegetable salad, wok vegetables, fresh fruit and bread with whole grain and / or sourdough". (2) The two studies that looked at the particle size of foods and symptoms, found small particle size foods/meals to be better tolerated than large particle size meals in people with diabetic GP. (2,3) These studies highlighted low glycemic index (GI) foods, which are typically recommended to those who have diabetes for blood glucose control, were tolerated when the food consistency was changed. Reducing particle size can be a helpful strategy for increasing nutrient-dense, lower GI foods if/when eating them in whole food form increases GI symptoms.

*Regarding diabetic GP: Optimizing blood sugar control is essential. High blood sugar (hyperglycemia), blood glucose >200 mg/dL, has been shown to worsen the symptoms of diabetic GP. (4) Additionally, wide fluctuations in blood glucose (ex: high blood sugars and after-meal low blood sugars) worsens gastric emptying more than continuously high blood glucose levels. (4) To improve glucose control: Check blood sugars regularly, keep a medication, food and blood sugar log, have good communication with an endocrinologist, certified diabetes educator, and dietitian.

*Write it down: Try keeping a food and symptom journal to identify what foods are well tolerated and which ones are not. This is something you can show to your dietitian who can assess your overall nutrient intake and make recommendations based on types and timing of foods. If someone has diabetic GP, then including blood sugars in this log is essential.

*Lower fat and lower fiber intake: High-fat foods & high fiber foods take longer to empty from the stomach than low-fat foods and low fiber foods.

Important: A lower fat, lower fiber diet does not mean you need to eat a fat-free and/or fiber-free diet. For fat: Liquid beverages with fat are easier to tolerate then solid fats and can be a good way to increase calories. For example; 2% or whole milk, soymilk, or oral supplements, small amounts of liquid oils (olive oil, canola oil, avocado oil). Avoiding/limiting fried foods and high-fat meats such as bacon, hot dogs, salami, bologna, and sausage can help reduce symptoms. Regarding fiber: Fiber is found in whole grains, fruits, vegetables, nuts, seeds, and beans/peas. To make these nutrient-dense foods easier to tolerate try peeling of thick skins, cooking until fork-tender, limiting to ~1/2 cup per meal or snack, blending into a smoothie, trying canned versions and fruit/veggie squeeze pouches. Choose refined grains instead of whole grains and creamy nut butters versus crunchy.

*Chew foods thoroughly when eating solids: Digestion starts in the mouth, chewing food well reduces the amount of work the stomach has to do.

*Hydration: Drink adequate fluids during the day to meet hydration needs. If vomiting, sip on Pedialyte, Propel, or Gatorade to replace electrolytes.

*Nausea: For some, ginger can alleviate nausea. Try using ginger tea, ginger chews, fresh ginger added to smoothies, cooking with powdered or fresh ginger, or taking ginger capsules.

*Dental health: Do not brush teeth immediately after vomiting. When stomach acid comes in contact with our teeth it weakens or softens the enamel and brushing during this time can cause damage, over time this can lead to tooth erosion. Instead of brushing rinse with "water, a diluted mouth rinse, or a mixture of water and 1 tsp. baking soda" and wait at least 30 minutes to brush. (5)

Resources I like and use in practice:

- Living with Gastroparesis by Crystal Saltrelli, CHC http://livingwithgastroparesis.com/
- UM GI Dietitians Pinterest page for some product examples: https://www.pinterest.com/UMGIdietitians/gastroparesis/

For more information visit:
Hallerhealthandwellness.com

All information presented here has been adapted from Emily Haller, Haller Health and Wellness blog.

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5. American Dental Association. https://www.mouthhealthy.org/en/az-topics/c/cold-and-flu-season