

MANAGING GASTROPARESIS

Introduction

Gastroparesis means stomach (gastro) paralysis (paresis). The word gastroparesis is used when a patient's stomach empties too slowly. Common symptoms include bloating, nausea, upper abdominal pain, fullness, and poor appetite. Everyone's stomach is unique, so the ability of the stomach to empty can vary from one patient to another. Most patients are able to swallow *and empty* their saliva (about 1 quart per day) and also empty the natural stomach juices they make (about 2-3 quarts per day). Symptoms can vary from week-to-week or even day-to-day. The guidelines presented here are designed to give tips for diet modification. In addition, lots of suggestions are provided for food and drinks. The suggestions are based on experience and not science, as there are no studies that have been done that demonstrate what foods are better tolerated than others by patients with gastroparesis. It is recommended that anyone with gastroparesis see a doctor to seek advice on how to maximize their nutritional status.

The Basics

Volume

The larger the meal, the slower the stomach will empty. It is important to decrease the amount of food eaten at a meal, but in order to meet nutrient needs patients will have to eat more often. Smaller, more frequent meals (6-8 or more if necessary) may allow patients to meet their needs.

Liquids versus Solids

If decreasing the meal size and increasing the number of "meals" does not work, the next step is to switch over to more liquid-type calories. Liquids are better tolerated than solids. Liquids empty the stomach more easily than solids do. Pureed foods may be better tolerated also.

Fiber

Fiber (found in many fruits, vegetables and grains) may act to slow stomach emptying and fill the stomach up quickly, hence nutrient needs may not be met. For patients who have had a bezoar (an indigestible, concretion of foods and/or medications) in the past, a fiber restriction (including avoidance of over-the-counter fiber/bulking medicines) is worthwhile.

Fat

Although fat may slow stomach emptying in some patients, many can consume fat especially in the form of liquids. Fat in the liquid form (as part of beverages such as whole milk, milkshakes, nutritional supplements, etc.) can be well tolerated by many. Unless a fat-containing food or fluid causes problems, fat should not be limited. It is often well tolerated, pleasurable, and it provides a great source of calories small amounts.

Medications

There are quite a few medications that can delay stomach emptying –ask your doctor if any of the medications you are on could be slowing down your stomach emptying.

Getting Started

- ✓ Eat at least six small meals per day; **avoid** large meals.
- ✓ Avoid solid foods high in fat or adding too much fat (see list below) to foods, however, liquid beverages containing fat are often tolerated just fine.
- ✓ Eat nutritious foods first before filling up on "empty calories" (i.e., candy, cakes, pastries, etc.)
- ✓ Eat slowly and chew thoroughly to digest food well; especially meats (meats may be more tolerated if ground or pureed.) Spend at least 20-30 minutes eating at a time.
- ✓ Avoid high fiber foods because they may be more difficult for your stomach to empty or may cause bezoar formation. A bezoar is a mixture of food fibers that may get stuck in the stomach causing it to not empty even more poorly.
- ✓ Sit up while eating and after eating remain upright and/or walk for 30 minutes as this helps gastric emptying and relieves symptoms.
- ✓ If you have diabetes, keep your blood sugar under control. Let your doctor know if your blood sugar runs >200 on a regular basis.

Try Blenderized Food

Any food can be blenderized, but solid foods will need to be thinned with some type of liquid.

- **Meats, fish, poultry and ham:** Blend with broths, water, milk, vegetable or V-8® juice, tomato sauce, gravies.
- **Vegetables:** Blend with water, tomato juice, broths, strained baby vegetables.
- **Starches:** potatoes, pasta: Blend with soups, broth, milk, water, gravies; add strained baby meats, etc to add protein if needed. Consider using hot cereals such as cream of wheat or rice, grits, etc as your “starch” at lunch and dinner.
- **Fruits:** Blend with their own juices, other fruit juices, water, strained baby fruits.
- **Cereals:** Make with caloric beverage such as whole milk, soy or rice milk, juice, Ensure® or equivalent, etc., instead of water. Add sugars, honey, molasses, syrups, or other flavorings, butter or margarine for extra calories.
- **Mixed dishes:** Lasagna, macaroni and cheese, spaghetti, chili, stews, hearty soups, chop suey – add adequate liquid of your choice, blend well and strain.

Always clean the blender well. Any food left in the blender for > 1-2 hours could cause food poisoning. If you do not have a blender, strained baby foods will work and can be thinned down if needed with milk, soy or rice milk, water, broth, etc.

Getting your Calories

When getting enough calories is a daily struggle...

- High calorie drinks are better than water (provides calories **AND** fluid); use peach, pear or papaya nectar, cranberry juice, orange juice, Hawaiian Punch®,
- Hi C®, lemonade, Kool-Aid®, etc.
- Fortify milk by adding dry milk powder – 1-cup powder to 1-quart milk.
- Use whole milk or evaporated milk (if tolerated) instead of skim or 2% for drinking and preparing “cream type” soups, custards, puddings, and milkshakes.
- Add instant breakfast, protein powder, dry milk powder, or other flavored powders or syrups to whole milk or juices.
- Make custards and puddings with eggs or egg substitutes (such as Eggbeaters®).
- Try adding ice cream, sherbets, or sorbets to ready-made liquid nutritional supplements such as Nutra-shakes®, Ensure® or Boost® or others.

FOOD SUGGESTIONS FOR GASTROPARESIS

STARCHES			
<p>Breads White bread (including French/Italian) Bagels (plain or egg) English muffin Plain roll Pita bread Tortilla (flour, corn) Pancake Waffle</p>	<p>Cereals Quick oats (plain) Grits Cream of Wheat Cream of Rice Puffed wheat and rice cereals such as: (Cheerios®, Sugar Pops®, Kix®, Rice Krispies®, Fruit Loops®, Special K®, Cocoa Krispies®, cornflakes, Cocoa Puffs®)</p>	<p>Grains/Potatoes Rice (plain) - any Pasta, macaroni (plain) Bulgur wheat Barley Potatoes (no skin, plain) (all kinds-sweet, yams, etc.) French fries (baked)</p>	<p>Crackers Arrowroot Breadsticks Matzoh Melba toast Oyster Pretzels Saltines Soda Zwieback</p>
MEATS – GROUND OR PUREED			
<p>Beef Baby beef Chipped beef Flank steak Tenderloin Plate skirt steak Round (bottom or top) Rump</p>	<p>Veal Leg Loin Rib Shank Shoulder Pork Lean pork Tenderloin Pork chops 97% fat-free ham Poultry (skinless) Chicken Turkey (all) Wild Game Venison Rabbit Squirrel Pheasant (no skin)</p>	<p>Fish/Shellfish (fresh or frozen, plain, no breading) Crab Lobster Shrimp Clams Scallops Oysters Tuna (in water)</p>	<p>Cheese Cottage cheese Grated Parmesan Other Eggs (no creamed or fried), egg white, egg substitute Tofu Strained baby meats (all)</p>
VEGETABLES (Cooked, and if necessary, blenderized/strained)			
<p>Beets Tomato sauce</p>	<p>Tomato juice Tomato paste or Puree.</p>	<p>Carrots Strained baby vegetables</p>	<p>Mushrooms Vegetable juice</p>
FRUITS AND JUICES (Cooked and, if necessary, blenderized/strained)			
<p>Fruits Applesauce Banana Peaches (canned) Pears (canned) Strained baby fruits (all)</p>	<p>Juices (all) Apple Apple cider Cranberry (sweetened) Cranberry (low calorie) Grape Grapefruit Mango</p>	<p>Nectars (apricot, peach, pear) Orange-grapefruit Orange Pineapple-orange Papaya Pineapple Prune</p>	

FOOD SUGGESTIONS FOR GASTROPARESIS (continued)

MILK PRODUCTS (if tolerated)	OTHER CARBOHYDRATES	SOUPS	FAT (if tolerated)
Buttermilk Yogurt (frozen) Evaporated milk Smooth yogurts (without fruit pieces) Milk powder Milk – any as tolerated	Angel food cake Animal crackers Custard/pudding Gelatin/ Jell-O® Ginger snaps Graham crackers Popsicles Plain sherbet Vanilla wafers	Broth Bouillon Strained creamed soups (with milk or water)	Cream cheese Mayonnaise Margarine Butter Vegetable oils Smooth peanut butter – small amounts
BEVERAGES	SEASONINGS/GRAVIES	SWEETS	
Hot cocoa (made with water or milk) Kool-Aid® Lemonade Tang® and similar powdered products Gatorade® or Powerade ® Soft drinks Coffee Tea	Cranberry sauce (smooth) Fat-free gravies Molly McButter®, Butter Buds® Mustard Ketchup Vegetable oil spray Soy sauce Teriyaki sauce Tabasco® sauce Vanilla and other extracts Vinegar	Gum Gum drops Hard candy Jelly beans Lemon drops Rolled candy (such as Lifesavers®) Marshmallows Seedless jams and jellies	
<i>The following foods have been associated with bezoar* formation; avoid if you have been told you have had a bezoar.</i>			
Apples Berries Coconuts	Figs Oranges Persimmons	Brussels sprouts Green beans Legumes	Potato peels Sauerkraut

*A Bezoar is a mixture of food residues that can accumulate in a stomach that does not empty well.