

## Diet Intervention for Gastroparesis

### Introduction

*Gastroparesis* means "stomach (*gastro*) paralysis (*paresis*)." In gastroparesis, your stomach empties too slowly. Gastroparesis can have many causes, so symptoms range from mild (but annoying) to severe, and week-to-week or even day-to-day.

This handout is designed to give some suggestions for diet changes in the hope that symptoms will improve or even stop. Very few research studies have been done to guide us as to which foods are better tolerated by patients with gastroparesis. The suggestions are mostly based on experience and our understanding of how the stomach and different foods normally empty. Anyone with gastroparesis should see a doctor and a Registered Dietitian for advice on how to maximize their nutritional status.

### Essential Nutrients - Keeping Healthy

**Calories** - A calorie is energy provided by food. You need calories (energy) every day for your body to work, just like putting gas in a car. If you need to gain weight, you need more calories. If you need to lose weight, you need fewer calories. Protein, carbohydrate, and fat are all different kinds of calories.

- **Protein** - To make and repair all tissues, we need some every day. Most people need about 60 grams of protein per day to meet their protein needs.  
*Examples:* meats, fish, poultry, milk, eggs, cheeses (see table 2)
- **Carbohydrate** (starches and natural sugars) - Our main energy source and one of the easiest nutrients for our bodies to use. Get some at every meal or snack.  
*Examples:* Toast, crackers, potatoes, rice, pasta, fruit
- **Fat** - Another energy source that also provides essential nutrients to our bodies. Extra fat can help you gain weight because it is the most concentrated source of calories - a little goes a long way!  
*Examples:* butter, mayonnaise, oils, lard, olives, avocados, nut butters

**Water or fluids** – We all need a certain amount of fluid every day to make sure we are well hydrated. You can get fluid from juice, milk, water, tea, coffee, soda, and other liquids. Even if you are vomiting a lot, you need to somehow take in fluids to stay hydrated. Vomiting may actually get worse, just from being dehydrated.

**Vitamins and minerals** – These are found in all different kinds of foods and beverages and are essential to us all. Vitamins and minerals do not supply energy, so even if you take vitamins, you still need to eat foods for energy and other nutrients. If you have a lot of vomiting and have lost a lot of weight, your doctor or Registered Dietitian may recommend that you have certain vitamin or mineral levels checked with a simple blood test. If extra vitamins and/or minerals are needed, you may tolerate chewable or liquid forms better.

**Other specific nutrients** – People who have had a big weight loss are at risk for multiple nutrient deficiencies. The most common nutrient deficiencies seen in patients with gastroparesis are iron, vitamin B12 (cyanocobalamin), vitamin D, and calcium. Patients with gastroparesis from partial stomach resections are at greatest risk for these types of nutrient deficiencies.

## Diet Therapy - 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, so you will have to eat more often. Smaller meals more often (6-8 or more if needed) may allow you to eat enough.

**Liquids versus solids** - If eating less at each meal and increasing the number of “meals” does not work, the next step is to switch to more liquid-type foods. Liquids empty the stomach more easily than solids do. Pureed foods may be better also.

**Fat** - Fat slows stomach emptying, but many people with gastroparesis have no trouble with fat in beverages like whole milk, milkshakes, and nutritional supplements. *Unless a fat-containing food or fluid clearly causes worse symptoms, fat should not be limited.* Eating enough may be very hard to do, and liquid fats provide a great source of calories in smaller amounts.

**Fiber** - Fiber may slow stomach emptying and fill it up too fast. This won't leave room for enough calories and protein. A *bezoar* is a mixture of food fibers that may get stuck in the stomach and not empty well, like a hairball in a cat. For patients who have had a bezoar, a fiber restriction is important. This includes avoiding over-the-counter fiber medicines like Metamucil®.

**Table 1:** High Fiber Foods and Medications and Those Associated with Bezoar Formation

<b>High Fiber Foods</b>
<ul style="list-style-type: none"> <li>• Legumes/dried beans (refried beans, baked beans, black-eyed peas, lentils, black, pinto, northern, fava, navy, kidney, garbanzo beans, soy beans)</li> <li>• Bran/whole grain cereals (such as bran cereals, Grape-Nuts®, shredded wheat type, granolas)</li> <li>• Nuts and seeds (pumpkin seeds, soy nuts, chunky nut butters)</li> <li>• Fruits (blackberries, blueberries, raspberries, strawberries, oranges, kiwi)</li> <li>• Dried fruits (apricots, dates, figs, prunes, raisins)</li> <li>• Vegetables (green peas, broccoli)</li> <li>• Popcorn</li> </ul>
<b>Foods Associated with Bezoar Formation</b>
Apples, berries, Brussels sprouts, coconuts, corn, figs, green beans, legumes, oranges, persimmons, potato peels, sauerkraut, tomato skins
<b>High Fiber Medications/Bulking Agents</b>
Examples include: Acacia fiber; Benefiber®; Citrucel®; FiberChoice®; Fibercon®; Konsyl®; Metamucil®; Perdiem Fiber; any psyllium product

**Dental Health** – Normally, the stomach helps “chew” food a second time, but in gastroparesis, it’s not good at this. So, chewing food really well before you swallow is even more important. Plus, frequent vomiting wears down tooth enamel. Make every effort to see your dentist regularly and take good care of your teeth.

**Medications** - There are quite a few medications that can slow stomach emptying. Ask your doctor if any of the medicines you are on could be slowing down your stomach emptying.

## Getting Started

### DO:

1. Set a goal weight you want to meet or keep. Then, check your weight twice a week.
2. Eat enough to meet your goal weight. It may be 4-8 smaller meals and snacks. If your weight is decreasing, drink more liquid supplements or milkshakes and eat more popsicles, gelatin, etc.
3. Eat nutritious foods **first** before filling up on “empty calories” like candy, cakes, sodas, etc.
4. Chew foods well, especially meats. Meats may be easier to eat if ground or puréed.
5. Sit up while eating and stay upright for at least 1 hour after you finish. Try taking a nice walk after meals.

### DON'T:

1. Eat large meals.
2. Eat solid foods that are high in fat.
3. Add too much fat to foods (e.g., butter, mayonnaise, etc.).
4. Avoid high fat drinks like whole milk, shakes, and supplement drinks. Most people tolerate these just fine, so try them! Only avoid them if they make your symptoms worse.
5. Eat high fiber foods or take fiber medicines like those in Table 1.

**On bad days**, remember that solid food is more work for the stomach to empty than liquids. So, try taking just liquids to let the stomach rest. Any food may be used if it is liquefied, thinned, or blenderized and strained.

***If you lose more than 10 pounds without trying, tell your doctor.***

## When Solids Do Not Seem to Be Working – Try Blenderized Food

Any food can be blenderized, but solid foods will need to be thinned down with some type of liquid. Always clean the blender well. Any food left in the blender for more than 1-2 hours could cause food poisoning. If you do not have a blender, strained baby foods will work and can be thinned down as needed with milk, soy or rice milk, water, broth, etc.

## Blenderized Food Continued

- **Meats, fish, poultry and ham:** Blend with broths, water, milk, vegetable or V-8<sup>®</sup> juice, tomato sauce, gravies.
- **Vegetables:** Blend with water, tomato juice, broth, strained baby vegetables.
- **Starches:** Blend potatoes, pasta, and rice with soups, broth, milk, water, gravies; add strained baby meats, etc. to add protein if needed. Consider using hot cereals such as wheat farina or cream of 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 (or even evaporated/condensed milk), soy or rice milk, juice, Ensure<sup>®</sup>, Boost<sup>®</sup> or store brand equivalent, etc., instead of water. Add sugars, honey, molasses, syrups, or other flavorings, butter or vegetable oil for extra calories.
- **Mixed dishes:** Add adequate liquid of your choice to lasagna, macaroni and cheese, spaghetti, chili, chop suey, etc. Then, blend well and strain.

## Getting your Calories

When getting enough calories is a daily struggle, make everything you eat and drink count:

- Take medications with calorie-containing beverages like milk, juice, and sweet tea instead of water or diet drinks.
- High calorie drinks are better than water because they provide calories AND fluid. Use peach, pear, or papaya nectar, fruit juices and drinks, Hawaiian Punch<sup>®</sup>, Hi C<sup>®</sup>, lemonade, Kool-Aid<sup>®</sup>, sweet tea, even soda.
- Fortify milk by adding dry milk powder: add 1 cup powdered milk to 1 quart milk.
- Drink whole milk if tolerated instead of skim or reduced fat. Use whole, condensed, or evaporated milk when preparing cream-based soups, custards, puddings, and hot cereals, smoothies, milkshakes, etc.
- Add Carnation<sup>®</sup> Instant Breakfast, protein powder, dry milk powder, or other flavored powders or flavored syrups to whole milk or juices.
- Make custards and puddings with eggs or egg substitutes like Eggbeaters<sup>®</sup>.
- Try adding ice cream, sherbet, and sorbet to ready-made supplements such as Nutra-shakes<sup>®</sup>, Ensure<sup>®</sup> or Boost<sup>®</sup>. Peanut butter, chocolate syrup, or caramel sauce is also great in these.

**Table 2: Examples of Fat Free Protein Sources**

<b>Product</b>	<b>Serving Size</b>	<b>Protein (g)</b>
Egg Beaters®	¼ cup	6
Better n'Eggs®	¼ cup	5
Egg whites, separated, cooked	2	7
Powdered egg whites	1 tablespoon	11.5
Egg white (Bob's Red Mill®)	2 teaspoon	3
Just Whites® (Deb EL™)	2 teaspoon	3
Fat free luncheon meat	1 oz	6
Fat free milk	1 cup	8
Non-fat dry milk powder	3 tablespoon	10
Non-fat cheese	1 oz	8
Evaporated skim milk	½ cup	9
Non-fat cottage cheese	½ cup	13
Non-fat yogurt (plain)	1 cup	12
High protein broth (Bernard® 800-323-3663)	1 cup	10
High protein gelatin (Bernard® 800-323-3663)	½ cup	12
High protein egg whites (Bernard® 800-323-3663)	1 tablespoon	5
UNJURY® Unflavored Whey Protein (800-517-5111)	1 scoop	20
Pro-Stat® (Medical Nutrition USA, Inc. 1-800-221-0308)	2 tablespoons	15
Beneprotein® (Nestle 888-240-2713)	1 scoop	6

**Table 3: Clear Liquid Options\***

All teas and coffees
Clear juices such as: apple, cranberry, grape
Fruit-flavored drinks
Carbonated beverages/soda
Gatorade® (regular or G2 Gatorade®)
Broth, bouillon, consume'
Plain, flavored gelatins
Popsicles
Sorbet
Clear liquid type supplements (see table 5)

\*Note: Sometimes clear liquids are tolerated better if small amounts of plain rice, potatoes, saltines, etc. are taken with them.

**Table 4: Full Liquid Diet Options**

<b>Full Liquids</b>
All juices (nectars, fruit juices of any kind)
Tomato or V-8 <sup>®</sup> juice
Milks: white milk, chocolate milk, buttermilk, Lactaid milk, soy milk, or rice milk
Carnation <sup>®</sup> Instant Breakfast <sup>™</sup> (or equivalent of powder or milk)
Ovaltine <sup>®</sup>
Nesquik <sup>®</sup>
Nesquik <sup>®</sup> No Sugar Added
Flavored syrups such as strawberry
Eggnog
Milkshakes*
All tea and coffee drinks <ul style="list-style-type: none"> <li>➤ Add whole milk, cream or flavored creamers</li> <li>➤ Coffee Frappuccino<sup>®</sup> Light Blended Beverage</li> </ul>
Smoothies*
Hot or cold cocoa
Hot or cold cocoa
Kefir (liquid yogurts), Go-gurts <sup>®</sup> , etc.
Creamy type yogurt (vanilla, lemon, key lime, etc.)
Puddings or Custard
Smooth ice cream (no nuts)
Hot cereal (low in fiber) such as: grits, cream of wheat, cream of rice or farina
Strained cream soups*
Thinned down strained vegetables, fruits, meats (such as strained baby foods)
Also allowed: <ul style="list-style-type: none"> <li>➤ Butter</li> <li>➤ Hard candy, sugar</li> <li>➤ Syrups, honey</li> </ul>
Can also add to broths or cream soups to increase nutritional value

\*See recipes in Table 6

**Table 5: Commercial Nutritional Supplements**

<b>Product</b>	<b>Company</b>	<b>Website/Phone*</b>
Ensure <sup>®</sup> or Ensure <sup>®</sup> Plus Ensure <sup>®</sup> Clear †	Abbott <sup>®</sup>	www.abbottnutrition.com 1-800-258-7677
Boost <sup>®</sup> Breeze† Boost <sup>®</sup> or Boost <sup>®</sup> Plus	Nestle <sup>®</sup>	www.nestleclinicalnutrition.com 1-800-422-2752
<b>Product</b>	<b>Company</b>	<b>Website/Phone*</b>
Nutra/SHAKE <sup>®</sup> Supreme Nutra/SHAKE <sup>®</sup> Sugar Free Nutra/SHAKE <sup>®</sup> Fruit Plus† Nutra/SHAKE <sup>®</sup> Fruit Plus Free†	Nutra/Balance <sup>®</sup> Products	www.nutra-balance-products.com 1-800-654-3691
Scandishakes <sup>®</sup>	Axcan Pharma	www.aptalispharma.com/scandisha ke 1-800-950-8085
Slim Fast <sup>®</sup> Shakes	Slim Fast <sup>®</sup>	www.slim-fast.com
Milk Shake Plus	Bernard <sup>®</sup>	www.bernardfoods.com 1-800-323-3663
Mighty <sup>®</sup> Shakes Magic Cup™ Dessert	Hormel <sup>®</sup>	www.hormelhealthlabs.com
Orgain™ Organic Nutrition	Orgain™	http://orgain.com/

\*Some products are also available through retail pharmacies or grocery stores (in store or online). Many pharmacy and food chains have their own brands of liquid supplements, examples include:

- ◆ Wal-Mart<sup>®</sup> = Equate<sup>®</sup> Nutritional Shake & Equate<sup>®</sup> Nutritional Shake Plus
- ◆ Kroger<sup>®</sup> = Fortify<sup>®</sup> & Fortify<sup>®</sup> Plus
- ◆ CVS<sup>®</sup> Pharmacy = Liquid Nutrition & Liquid Nutrition Plus
- ◆ Giant<sup>®</sup> = CareOne<sup>®</sup> Nutritional Drink and CareOne<sup>®</sup> Nutritional Drink Plus
- ◆ Food Lion<sup>®</sup> = Healthy Accents<sup>®</sup> & Healthy Accents<sup>®</sup> Plus

†Appropriate for a clear liquid diet.

**Table 6: Recipes for Soups, Smoothies, Fruit Blends, Shakes, and Fruit Drinks**

- ◆ Fortified milk can be substituted to increase protein if needed. To make fortified, high protein milk:
  - 1 quart whole milk
  - 1 cup nonfat instant dry milk
  - Pour liquid milk into deep bowl.
  - Add dry milk and beat slowly with beater until dry milk is dissolved. Refrigerate and serve cold.
- ◆ Soy or rice milks can be substituted for milk in any recipe.
- ◆ Flavor extracts such as vanilla, almond, coffee, etc can be added for interest.
- ◆ Other flavorings such as dry gelatin (e.g., Jell-O®) or pudding mixes, syrups, etc. can be added for additional flavors or extra calories.
- ◆ Ice/ ice chips can always be blended in if desired.
- ◆ When using canned fruits for recipes, for additional calories use those in heavy syrup.
- ◆ Frozen yogurts, ice creams, sorbets, sherbets, soy and rice products can be substituted in any recipe.
- ◆ Sugar free ice creams, yogurts and gelatins, etc., can be substituted as needed for regular ones.
- ◆ For extra flavor, texture and calories, add a frozen banana (peel ripe bananas and place in a plastic freezer bag in the freezer until ready to use).

<b>SOUPS</b>	
<p><b>Super Soup</b>                      10oz can of any cream soup                      4 oz heavy cream                      6 oz whole milk                      4 Tbsp non-fat dry milk powder                      Strain soup before serving.</p> <p>Other soup ideas include:                      Pacific™ Natural Foods creamy soups (tomato, butternut squash, etc.) or other ready-made cream soups</p>	<p><b>Cream Soup Blend</b>                      Prepare any commercial, concentrated cream soup with whole, 2% or skim milk as tolerated. Strain any food pieces with kitchen strainer.</p> <ul style="list-style-type: none"> <li>• Add strained baby meats or poultry for additional protein.</li> </ul> <p>Select ANY commercial soup as desired.                      Put in blender.                      Add fluid as per directions.                      Blend well and strain as needed through kitchen blender if not smooth.</p>

## SMOOTHIES

**Unless otherwise noted: Combine all ingredients in blender and mix until smooth.**

**\*\*Tip for great smoothies with bananas: Peel very ripe bananas, put in quart size freezer storage bag and freeze until ready to use\*\***

### **Basic Smoothie**

½ cup vanilla yogurt or other creamy smooth yogurt such as lemon, key lime, strawberry, etc.)  
1 small ripe banana

### **Strawberry Yogurt Frappe**

1 tablespoon strawberry syrup or other flavoring  
½ cup vanilla yogurt  
½ cup milk  
¼ cup orange juice  
Dash vanilla

### **Strawberry-Banana Frappe** (not sweet)

1 cup milk (or substitute)  
2 bananas  
1 carton (8 oz.) strawberry yogurt  
1 Tbsp lemon juice

### **Peach Plus**

½ Peach, canned  
¼ cup vanilla yogurt  
¼ cup Milk  
Dash vanilla  
Dash nutmeg

### **Kefir Smoothie**

8 oz Kefir – any flavor  
1 ripe banana

### **Tropical Smoothie**

½ cup creamy fruit yogurt  
½ banana  
2 tablespoons orange juice

### **Fruity Yogurt Sipper**

1 ripe large banana or, 2 medium peaches, peeled and pitted  
1 ½ cups whole milk  
1 cup vanilla yogurt  
1 tablespoon powdered sugar  
½ cup ice cubes  
Cut fruit into chunks. Combine all ingredients except ice in a blender until smooth. Add ice, one cube at a time. Blend until smooth.

### **Key Lime Delight Shake**

½ cup vanilla yogurt  
6 oz key lime yogurt  
1 ripe bananas  
⅓ cup milk (or substitute)

### **Berry Good Smoothie**

6 oz strawberry yogurt  
6 oz raspberry yogurt  
6 oz blueberry yogurt  
½ cup milk

## FRUIT BLENDS

### **Pear**

½ cup canned pears  
½ cup cottage cheese

### **Peach**

½ cup canned peach  
½ cup cottage cheese

### **Banana-Apple**

½ small banana  
½ cup cottage cheese  
¼ cup apple juice

### **Strawberry Cheesecake Shake** (not sweet)

6 to 7 strawberries  
½ cup cold milk  
½ cup cottage cheese  
Honey to taste  
Combine all ingredients in blender until smooth.

Combine these next 3 recipes in a blender until smooth. Chill until firm.

### **Option 1**

¼ cup cottage cheese  
¼ cup vanilla ice cream  
½ cup prepared gelatin

### **Option 2**

¼ cup flavored yogurt  
¼ cup vanilla ice cream  
½ cup prepared gelatin

### **Option 3**

¼ cup ricotta or cottage cheese  
¼ cup vanilla ice cream  
½ cup blended fruit  
½ cup prepared gelatin

## SHAKE RECIPES

**Unless otherwise noted: Combine all ingredients in blender and mix until smooth.**

### **Super Milkshake**

½ cup fortified milk  
½ cup high fat ice cream  
1 packet instant breakfast

### **The Super Shake**

1 can Ensure<sup>®</sup> Plus / Boost<sup>®</sup> Plus or equivalent  
1 cup milk  
½ cup ice cream

### **High Protein/High Energy Shake**

½ cup milk (or substitute)  
1 package instant breakfast  
¼ cup egg substitute  
½ cup ice cream

### **Sherbet Drink**

½ cup milk or fortified milk (see below for recipe)  
½ cup sherbet or sorbet  
*Can substitute ½ cup for ½ cup milk:*

- ◆ Osmolite<sup>®</sup>, Osmolite<sup>®</sup> HN
- ◆ Nutren<sup>®</sup> 1.0, plain
- ◆ Soy Milk

Optional: Add ½ cup vanilla ice cream for "Dreamsicle equivalent"

### **High-Calorie Malt**

½ cup whole milk  
1 tablespoon malted milk powder  
½ cup half and half  
1 oz package instant breakfast  
2 cups ice cream, any flavor  
2 tablespoons Ovaltine<sup>®</sup>

### **Chocolate Peanut Butter Shake**

1 can chocolate Ensure® or Boost® or store brand equivalent  
2 tablespoons smooth peanut  
½ cup vanilla ice cream

### **Juice Shake**

¾ cup pineapple juice (or other juices)  
¼ cup egg substitute (optional)  
1-½ cups vanilla ice cream

### **High-Protein Shake**

1 cup fortified milk  
½ cup ice cream  
½ teaspoon vanilla extract  
2 tablespoons butterscotch, chocolate, or your favorite syrup or sauce  
\*For variety, add ½ cup banana or 1 tablespoon smooth peanut butter and 2 teaspoon sugar  
Put all ingredients in a blender. Blend at low speed for 10 seconds.

### **Butterscotch Shake**

8 oz milk  
1 tablespoon butterscotch powdered pudding mix or syrup  
1 teaspoon brown sugar  
1 vanilla instant breakfast

### **Chocolate Mint Shake**

1 cup whole milk  
1 cup chocolate ice cream  
½ teaspoon peppermint extract  
½ packet of chocolate instant breakfast

### **Coffee Buzz**

2 tsp of instant coffee, mixed in 1 TBSP water  
1 cup milk (or substitute)  
1 pack of chocolate or vanilla instant breakfast

### **Creamsicle Breakfast Shake**

¾ cup vanilla or plain yogurt  
¾ cup orange juice  
1 pack vanilla instant breakfast

### **Fruit and Cream**

1 cup whole milk  
1 cup vanilla ice cream  
1 cup canned fruit in heavy syrup (peaches, apricots, pears)  
Almond or vanilla extract to taste  
Blend all ingredients and chill well before serving.

### **Orange Breakfast Nog**

1 ½ cups buttermilk  
2 tablespoons brown sugar  
1 teaspoon vanilla extract  
2-3 large ice cubes  
1/3 cup of frozen orange juice concentrate  
Combine all ingredients except ice in a blender until smooth. Add ice, one cube at a time. Blend until smooth and frothy.

### **Chocolate Crème de Menthe Shake**

1 cup whole milk  
1 cup chocolate ice cream  
1 teaspoon crème de menthe  
½ packet of chocolate instant breakfast

**NOTE: Contains alcohol.**

### **Nana-Peanut Shake**

½ cup milk (or substitute)  
1 banana  
2½ TB peanut butter  
1 cup vanilla ice cream  
Place milk in blender container. Add banana, peanut butter and ice cream. Cover; blend on high for one minute or until thick and smooth.

**Cocoa Supreme**

1 envelope chocolate instant breakfast  
 8 oz milk  
 1 tsp chocolate syrup

Heat milk and add instant breakfast and syrup. Stir well to blend. Top with marshmallows.

**FRUIT DRINKS**

**Unless otherwise specified, mix all ingredients together in a blender.**

**Bucky Badger Punch**

2 cups cranberry juice cocktail  
 1/2 cup orange juice  
 1/2 cup grapefruit juice  
 1 cup 7-UP® or club soda  
 Combine the 3 juices in a pitcher. Add 7-UP® or club soda when ready to serve.

**High Protein Fruit Drink**

8 ounce Ensure Clear® or Boost Breeze®  
 1/2 cup sherbet  
 6 oz gingerale

**Sherbet Punch**

1/2 cup sherbet  
 6 oz gingerale

**BREAKFAST SHAKE**

6 oz. can frozen concentrated orange juice  
 1/4 cup cold water  
 1 cup ice cubes  
 1 carton (8 oz.) plain yogurt

Combine all ingredients except ice cubes in blender, blend until frothy. With mixture still running, drop in ice cubes one at a time.

**Slushy Punch**

1 cup sugar  
 2 ripe medium bananas, cut up  
 3 cups unsweetened pineapple juice  
 2 tablespoons lime juice  
 1, 6 oz can frozen orange juice concentrate  
 1, 1 liter bottle carbonated water or lemon-lime beverage, chilled

Combine carbonated water and sugar until dissolved. In a blender, combine bananas and juices. Blend until smooth. Add to sugar mixture. Pour in carbonated water.

**FROZEN FRUIT SLUSH**

6 oz can frozen fruit juice  
 4 Tbsp sugar  
 3 cups crushed ice

Combine all ingredients in blender and mix until slushy.

**Table 7: Suggested Foods for Gastroparesis**

<p><b>Starches</b></p>	<p><b>Breads:</b> white bread and “light” whole wheat bread (no nuts, seeds, etc.), including French/Italian, bagels, English muffin, plain roll, pita bread, tortilla (flour or corn), pancake, waffle, naan, flat bread</p> <p><b>Cereals:</b> quick/instant oats, grits, Cream of Wheat, cream of rice, puffed wheat and rice cereals such as Cheerios<sup>®</sup>, Sugar Pops<sup>®</sup>, Kix<sup>®</sup>, Rice Krispies<sup>®</sup>, Fruit Loops<sup>®</sup>, Special K<sup>®</sup>, Cocoa Crispies<sup>®</sup></p> <p><b>Grains/Potatoes:</b> rice (plain), pasta, macaroni (plain), bulgur wheat (couscous), barley, sweet and white potatoes (no skin, plain), yams, french fries (baked)</p> <p><b>Crackers/Chips:</b> arrowroot, breadsticks, matzo, melba toast, oyster, pretzels, saltines, soda, zwieback, water crackers, baked potato chips, pretzels</p>
<p><b>Meats, fish, poultry, other proteins (ground or pureed)</b></p>	<p><b>Beef:</b> chipped beef, flank steak, tenderloin, skirt steak, round (bottom or top), rump</p> <p><b>Veal:</b> leg, loin, rib, shank, shoulder</p> <p><b>Pork:</b> lean pork, tenderloin, pork chops, ham</p> <p><b>Poultry (skinless):</b> chicken, turkey</p> <p><b>Wild game (skinless):</b> venison, rabbit, squirrel, pheasant, duck, goose</p> <p><b>Fish/shellfish (fresh or frozen, plain, no breading):</b> crab, lobster, shrimp, clams, scallops, oysters, tuna (in water)</p> <p><b>Cheese:</b> cottage cheese, grated parmesan</p> <p><b>Other:</b> eggs (no creamed or fried), egg white, egg substitute tofu, strained baby meats (all)</p>
<p><b>Vegetables (cooked, and if necessary, blenderized/strained)</b></p>	<p>Beets, tomato sauce, tomato juice, tomato paste or purée, carrots, strained baby vegetables (all), mushrooms, vegetable juice</p>
<p><b>Fruits and juices (cooked and, if necessary, blenderized/strained)</b></p>	<p>Fruits, applesauce, banana, peaches (canned), pears (canned), strained baby fruits (all), juices (all), fruit drinks, fruit flavored beverages</p>

<b>Milk products</b>	Milk – any as tolerated: chocolate, buttermilk, yogurt (without fruit pieces), frozen yogurt, kefir (liquid yogurt), evaporated milk, condensed milk, milk powder, custard/pudding
<b>Soups</b>	Broth, bouillon, strained creamed soups (with milk or water)
<b>Beverages</b>	Hot cocoa (made with water or milk), Kool-Aid <sup>®</sup> , lemonade, Tang <sup>®</sup> and similar powdered products, Gatorade <sup>®</sup> or Powerade <sup>®</sup> , soft drinks, coffee/ coffee drinks, tea/chai
<b>Seasonings/gravies</b>	Cranberry sauce (smooth), fat-free gravies, Butter Buds <sup>®</sup> , mustard, ketchup, vegetable oil spray, soy sauce, teriyaki sauce, Tabasco <sup>®</sup> sauce, vanilla and other flavoring extracts, vinegar
<b>Desserts/sweets</b>	Angel food cake, animal crackers, gelatin, ginger snaps, graham crackers, popsicles, plain sherbet, vanilla wafers, gum, gum drops, hard candy, jelly beans, lemon drops, marshmallows, seedless jams and jellies

**Table 8: Sample Semi-Liquid Meal Pattern**

<p><b>BREAKFAST</b></p> <p>Citrus Juice or other beverage containing vitamin C</p> <p>Thinned Cooked Cereal</p> <p>Liquid Supplement or Milkshake (see suggestions above)</p> <p>Milk</p> <p>Coffee or Tea</p> <p>Cream, Sugar</p> <p><b>LUNCH AND DINNER</b></p> <p>Thinned Soup</p> <p>Thinned or Puréed Meat or Substitute</p> <p>Thinned Potato or Substitute</p> <p>Thinned or Puréed Vegetable</p> <p>Thinned Dessert or Puréed Fruit</p> <p>Liquid Supplement or Milkshake (see suggestions above)</p> <p>Milk</p> <p>Coffee or Tea</p> <p>Cream, Sugar</p> <p>Salt and Pepper</p> <p><b>SNACK: MID-MORNING, AFTERNOON AND BEDTIME</b></p> <p>Milk or Fruit Juice</p> <p>Liquid Supplement or Milkshake (see suggestions above)</p>
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**Table 9: Additional Resources**

- ◆ **University of Virginia Health System, Digestive Health Center website:**  
[www.GInutrition.virginia.edu](http://www.GInutrition.virginia.edu)
  - Under Patient Education, look for Gastroparesis
    - Short version
    - Long version
    - Diabetes version
    - Renal version
  - Under Nutrition Articles by Topic, look for Gastroparesis
    - Parrish CR, McCray S. Gastroparesis & Nutrition: The Art. Practical Gastroenterology 2011;XXXV(9):26.
    - Parrish CR, Yoshida C. Nutrition Intervention for the Patient with Gastroparesis: An Update. Practical Gastroenterology 2005;XXIX(8):29.
- ◆ **Association of Gastrointestinal Motility Disorders, Inc. (AGMD)**  
[www.agmd-gimotility.org](http://www.agmd-gimotility.org)
- ◆ **International Foundation for Functional Gastrointestinal Disorders (IFFGD)**  
<http://www.iffgd.org/>