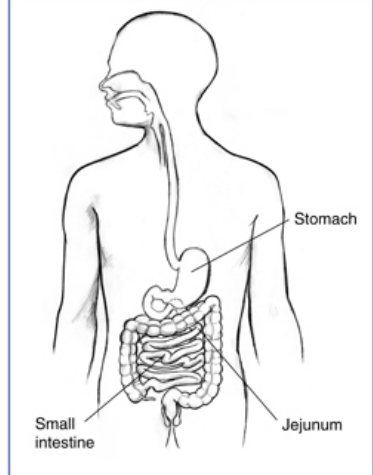


NORTHEASTERN GASTROENTEROLOGY ASSOCIATES

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Gastroparesis

What is Gastroparesis? Gastroparesis is a disorder that slows or stops the movement of food from the stomach to the small intestine. The stomach muscles are controlled by the vagus nerve and normally contract to break up food and move it through the gastrointestinal (GI) tract. Gastroparesis is also known as delayed gastric emptying.

 <p>The diagram shows a human torso from the neck to the waist. The stomach is located in the upper abdomen, and the small intestine is shown as a coiled tube below it. Labels with lines pointing to the organs include 'Stomach', 'Small intestine', and 'Jejunum'.</p>	<p>Symptoms of Gastroparesis:</p> <ol style="list-style-type: none">1) Nausea2) Feeling of fullness after eating – even a small meal.3) Vomiting undigested food – sometimes several hours after eating.4) Gastroesophageal reflux (GERD).5) Stomach pain6) Abdominal bloating7) Lack of appetite.
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What causes Gastroparesis? Most people who are diagnosed with gastroparesis have idiopathic gastroparesis which means that even with testing there is no known cause. Diabetes is the most common known cause of gastroparesis. High blood sugar levels can damage the Vagus nerve. Other identifiable causes include intestinal surgery and nervous system disorders like Parkinson's disease and Multiple Sclerosis. Gastroparesis is more common in women than in men.

The purpose of the gastroparesis diet is to reduce symptoms and maintain adequate fluids and nutrition. There are three steps to the diet.

Step One Diet – Consists of liquids, which pass through the stomach quickly. Liquids prevent dehydration and supply the body with necessary salts and minerals. Step One diet is inadequate in all nutrients except sodium and potassium. It should not be followed for more than three days without additional nutrition support.

Step Two Diet – Provides additional calories by adding a small amount of dietary fat – less than 40 grams each day. For patients with gastroparesis, fatty foods and oils should be restricted because they delay gastric emptying. However, most patients Step Two level are usually able to tolerate this amount. Step Two diet may be inadequate in Vitamins A and C and the mineral iron. A multivitamin is usually prescribed.

Step Three Diet – is designed for long-term maintenance. Fat is limited to 50 grams/ day and fibrous foods are restricted, because many plant fibers cannot be digested. Step Three diet may be inadequate in Vitamins A and C and the mineral iron. A multivitamin is usually prescribed.

Special Considerations:

Diets must be tailored to the individual patient because the degree of gastroparesis may range from mild and easily corrected to severe and long standing. Special medical conditions must be considered. For example, patients with diabetes that have gastroparesis are allowed sugar containing liquids on Step One diet because that is their only source of carbohydrates.

However, these patients should avoid concentrated sweets on Step Two and Step Three diets. (These foods are noted with an asterisk (*)) on the food lists.

On all of the diets, liquids and foods should be taken in small, frequent meals in order to maintain adequate nutrition.

Step One Diet Food Groups

Groups	Recommended	Avoid
Milk and Milk Products	None	All
Vegetables	None	All
Fruits	None	All
Breads and Grains	Plain saltine crackers	All others
Meats and Meat Alternatives	None	All
Fats and Oils	None	All
Sweets and Desserts	None	All
Beverages	Gatorade and soft drinks (sipped slowly throughout the day)	All others
Soups	Fat-free consommé and bouillon	All others

Step One Sample Menu:

Breakfast: Gatorade ½ cup Ginger ale ½ cup Bouillon ¼ cup Saltine crackers – 6	Lunch: Gatorade ½ cup Coke ½ cup Bouillon ¼ cup Saltine crackers - 6	Dinner Gatorade ½ cup Sprite ½ cup Bouillon ¼ cup Saltine crackers - 6
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Nutrition information provided by Step One diet:

Calories	790
Fat	90 mg
Protein	11gm
Carbohydrates	156 gm
Sodium	3531mg
Potassium	244 mg

Step Two Food Groups

Groups	Recommended	Avoid
Milk and Milk Products	Skim milk, products made with skim milk, low-fat yogurt, low-fat cheeses	Whole milk products, creams (sour, light, heavy whipping), half and half
Vegetables	Vegetable juice (tomato, V-8, well-cooked vegetables without skins (acorn squash, beets, carrots, mushrooms, potatoes, spinach, summer squash, strained tomato sauce, yams)	All raw vegetables, cooked vegetables with skins, beans (green, wax, lima), broccoli, Brussels sprouts, cabbage, cauliflower, celery, corn, eggplant, onions, peas, peppers, pea pods, sauerkraut, turnips, water chestnuts, zucchini.
Fruits	Apple juice, cranberry juice, grape juice, pineapple, prune juice, canned fruits without skins, (applesauce, peaches, pears).	Citrus juices, all fresh and dried fruits, canned fruits with skins (apricots, cherries, blueberries, fruit cocktail, oranges, grapefruit, pineapple, plums, persimmons)
Breads and Grains	Breads and cereals, cream of wheat, pasta, white rice, egg noodles, low fat crackers	Oatmeal, whole grain rice, whole grain cereal, whole grain breads.
Meats and Meat Alternatives	Eggs, peanut butter (maximum 2 Tablespoons/ day)	Beef, poultry, fish, pork products, dried beans, dried peas, dried lentils.
Fats and Oils	Any type of fat, but only in small amounts	None
Sweets and Desserts	Hard candies, caramels, puddings and custards made from skim milk, frozen yogurt, fruit ice, gelatin, ice milk, jelly, honey, syrup	High-fat desserts (cakes, pies, cookies, pastries, ice cream), fruit preserves.

Beverages	Gatorade and soft drinks (sipped slowly throughout the day)	All others except allowed juices
Soups	Fat-free consommé and bouillon, soups made from skim milk, and fat free broths containing pasta or noodles and allowed vegetables	Soups made with cream, whole milk, or broths containing fat

Sample Menu Step 2

Breakfast: Skim milk ½ c Poached egg 1 1 slice White toast Apple juice ½ c	Morning Snack: Ginger ale ½ c Canned pears ½ c	Lunch: Mozzarella cheese – 2 oz. 6 saltine cracker Chicken noodle soup – ¾ c Gatorade ½ c	Afternoon snack Skim milk ½ c Cornflakes ½ c Sugar 2 t.	Dinner: Peanut butter 1T Saltine cracker 6 Vanilla pudding ½ c Grape juice ½ c	Evening snack: Frozen yogurt ½c Saltine cracker 6
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Nutrition information provided by Step Two diet:

Calories	1343
Fat	35 mg
Protein	52gm
Carbohydrates	206gm
Sodium	2639mg
Potassium	1411 mg

Step Three Food Groups

Groups	Recommended	Avoid
Milk and Milk Products	Skim milk, products made with skim milk, low-fat yogurt, low-fat cheeses	Whole milk products, creams (sour, light, heavy whipping), half and half
Vegetables	Vegetable juice (tomato, V-8, well-cooked vegetables without skins (acorn squash, beets, carrots, mushrooms, potatoes, spinach, summer squash, strained tomato sauce, yams)	All raw vegetables, cooked vegetables with skins, beans (green, wax, lima), broccoli, Brussels sprouts, cabbage, cauliflower, celery, corn, eggplant, onions, peas, peppers, peas, peppers, pea pods, sauerkraut, turnips, water chestnuts, zucchini.
Fruits	Fruit juices, canned fruits without skins (applesauce, peaches, pears)	Citrus juices, all fresh and dried fruits, canned fruits with skins (apricots, cherries, blueberries, fruit cocktail, oranges, grapefruit, pineapple, plums, persimmons)

Breads and Grains	Breads and cereals, cream of wheat, pasta, white rice, egg noodles, low fat crackers	Oatmeal, whole grain rice, whole grain cereal, whole grain breads.
Meats and Meat Alternatives	Eggs, peanut butter (maximum 2 Tablespoons/ day)	Beef, poultry, fish, pork products, dried beans, dried peas, dried lentils.
Fats and Oils	Any type of fat, but only in small amounts	None
Sweets and Desserts	Hard candies, caramels, puddings and custards made from skim milk, frozen yogurt, fruit ice, gelatin, ice milk, jelly, honey, syrup	High-fat desserts (cakes, pies, cookies, pastries, ice cream), fruit preserves.
Beverages	Gatorade* and soft drinks (sipped slowly throughout the day), coffee, tea, water (note: non-caloric beverages should be limited if patient cannot maintain adequate intake.) *Concentrated sweets	All others except allowed juices
Soups	Fat-free consommé and bouillon, soups made from skim milk, and fat free broths containing pasta or noodles and allowed vegetables	Soups made with cream, whole milk, or broths containing fat

Sample Menu Step 3

Breakfast: Skim milk ½ c Cream of wheat ½ c Sugar 1t Orange juice ½ c 1 slice White toast Margarine 1t Jelly 1T	Morning Snack: Low fat yogurt ½ Sprite ½ c	Lunch: Tuna fish 2 oz Low fat mayo 2T White bread 2sl Canned peaches ½ c Gatorade ½ c	Afternoon snack Chocolate pudding ½ c Ginger Ale 1/2c	Dinner: Baked chicken 2oz White rice ½ c Cooked beets ½ c Dinner roll 1 Skim milk ½ c Margarine 2t	Evening snack: Ice milk ½ c Pretzels 2
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Nutrition information provided by Step Three diet:

Calories	1822
Fat	42gm
Protein	75gm
Carbohydrates	286 gm
Sodium	2234 mg
Potassium	2467mg

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