

Nutrition After a Gastrectomy

After a **gastrectomy**, where all or most of your stomach is removed, it can be hard to make sure your body gets all the right nutrients it needs. Follow the guidelines in this handout to make sure you get enough nutrition after surgery.

What are my general guidelines for eating after my gastrectomy?

- You may not feel hungry after surgery. Plan to eat every 2 to 3 hours.
- Eat small, frequent meals ($\frac{1}{4}$ to $\frac{1}{2}$ cup of food at a time).
- Eat slowly. Take small bites, and chew your food really well before swallowing.
- Every time you eat, eat food that has protein. Protein is very important for healing.
- Avoid drinking large amounts of liquids during your meals. Instead, drink liquids 30 minutes to 1 hour before and after your meals (small sips with meals are okay).
- Make sure to stay hydrated. Drink 64 ounces (about 2 liters) of fluids every day.
- Avoid carbonated (fizzy) drinks, because these may increase gas and bloating.
- Your body may not digest sugary foods as well after surgery, so avoid foods with a lot of added sugars.
- It may be hard to meet your calorie needs with food alone. Try using nutritional supplements like Ensure[®] or BOOST[®], or protein shakes or powders.
- Avoid all alcohol for the first 6 weeks after surgery. After this time, only drink alcohol in very small amounts.

What vitamins and minerals should I take after my gastrectomy?

We recommend taking these vitamins and minerals to help make sure you get all the nutrition you need after your gastrectomy:

- **Multivitamin with iron:** Take twice daily (1 pill at breakfast and 1 pill at dinner).
 - Don't take gummy multivitamins, as these do not contain iron.
- **Vitamin B12:** Take either one 500 micrograms (mcg) sublingual (under the tongue) lozenge every day or take a 1000 mcg intramuscular (IM) injection (shot) every month.
- **Vitamin D:** Take 2000 units of cholecalciferol (vitamin D3) every day or continue taking Vitamin D as recommended by your doctor.
- **Calcium citrate:** Take 1200-1500 milligrams (mg) every day.
 - It's best if you take this in divided doses of 500-600 mg 2-3 times per day.
 - This also works best if you take it at least 2 hours apart you're your multivitamin with iron and any other iron supplements you're taking.

You may find it helpful to use chewable or liquid versions of these vitamins and minerals.

What are my nutrition goals after my gastrectomy?

Maintaining your weight is the best sign that you are eating enough calories. If you find yourself losing more than 2 pounds a week, try increasing your calories by eating and drinking more protein or adding an extra snack. Good sources of protein include meat, fish, eggs, cheese, milk, and yogurt. Here are some examples of how much protein is in different foods:

Food	Protein (in grams)	Calories
1 cup whole milk	8	160
1 cup skim milk	8	80
1 cup milkshake with whole milk	16	420
1 cup plain yogurt	8	125
1 egg	7	75
1 cup Carnation Breakfast Essentials® with whole milk	17.5	290
2 tablespoons smooth peanut butter	10	230
1 ounce (oz) of meat, fish, or poultry	7	75
1 oz cheese	7	100
½ cup cottage cheese	14	150
1 jar strained meats (for example, baby food)	13	120

What should I eat and drink after my gastrectomy?

After your gastrectomy, you may follow either a **full liquid diet** or a **mushy soft diet**. Your surgeon will let you know which diet you should follow. If you start on a full liquid diet, they will also tell you when you can switch to a mushy soft diet.

- **Full liquid diet:** This diet includes foods that are or become liquid at room or body temperature.
- **Mushy soft diet:** This diet includes only foods that are soft and moist (wet). The goal of a mushy soft diet is to provide a balanced diet with enough protein and calories with foods that are easy to eat and digest.

What can I eat and drink on a full liquid diet?

Food groups	What to eat and drink:	What to avoid:
Milk and calcium sources	Milk and milk beverages, yogurt (without seeds, nuts, or fruit), pudding, hot cocoa, soy milk, almond milk, rice milk, custard	All others
Meat and protein sources	Cream soups without chunks (you can strain or blend the soup to get rid of chunks)	All others
Fruits and vegetables	All fruit and vegetable juices	All others
Grains	Refined or strained cooked cereals (like cream of wheat)	All others
Drinks	Most drinks, including high protein and high calorie oral supplements (like BOOST® and Ensure®)	Carbonated (fizzy) drinks
Fats	Butter, margarine, cream, oils	All others
Sweets and desserts	Plain sugar candy, honey, sugar, popsicles, plain Jell-O, syrup, sherbet, custard, pudding, ice cream without fruit or nuts added	All others
Other seasonings and condiments	Iodized salt, spices (in small amounts), flavorings, syrups	All others

What can I eat and drink on a mushy soft diet?

Food groups	What to eat and drink:	What to avoid:
Breads, cereals, and starchy foods	<ul style="list-style-type: none"> • Soft white breads (rolls, biscuits, pancakes) • Cornbread • Cooked cereals (oatmeal, cream of wheat, cream of rice) • Baked potato (without the skin) or mashed potatoes • Cooked noodles (pasta, casseroles, etc.) • Dry cereal softened in milk (except those listed to avoid) 	<ul style="list-style-type: none"> • Whole wheat or seeded breads, toast, hard crusted breads or bread-products • Dry cereals that are coarse (rough) and high in fiber • Shredded wheat • Popcorn • Crackers • French fries • Pizza
Vegetables	<ul style="list-style-type: none"> • Well-cooked soft or pureed (blended) vegetables • Tomato paste • Tomato puree 	<ul style="list-style-type: none"> • Raw vegetables (including salad) • Corn • Vegetables with tough skins, membranes, or seeds
Fruits	<ul style="list-style-type: none"> • All fruit juices • All canned fruits • Soft fresh fruits like ripe bananas, applesauce, cantaloupe, melon (without seeds), berries, and avocado • Peeled apple or pear • Fruit smoothies 	<ul style="list-style-type: none"> • Fresh fruits with tough skins, membranes, or seeds • Dried fruits
Dairy	<ul style="list-style-type: none"> • Milk (all types) • Yogurt (without toppings or granola) • Custard • Ice cream (without nuts or seeds) • Cottage cheese • Cheese • Milkshakes 	None

Food groups	What to eat and drink:	What to avoid:
Meat and protein sources	<ul style="list-style-type: none"> • Eggs • Tender poultry like chicken or turkey (ground or finely chopped with sauce) • Crumbled ground beef or turkey • Moist meatloaf • Soft fish • Tofu • Nut butter 	<ul style="list-style-type: none"> • Tough, dry, or crispy meats • Bacon
Sweets and desserts	<ul style="list-style-type: none"> • Sherbet • Gelatin (Jell-O) • Pudding • Lemon ice • Cakes, brownies, doughnuts, scones, cookies, or pie crust 	<ul style="list-style-type: none"> • Desserts containing nuts, dried fruits, or seeds • Very dry, crunchy desserts
Other seasonings and condiments	<ul style="list-style-type: none"> • Sauces • Soups • Seasonings • Salad dressing • Sour cream • Cream cheese • Olives • Ketchup 	<ul style="list-style-type: none"> • Potato chips • Snack chips • Spicy foods
Fats	<ul style="list-style-type: none"> • Butter • Margarine • Mayonnaise • Whipping cream • Coffee cream • Gravy 	<ul style="list-style-type: none"> • Bacon • Nuts • Deep-fried, crispy foods
Drinks	<ul style="list-style-type: none"> • Protein supplements • High calorie and high protein drinks • Fruit and vegetable juices • Tea • Coffee 	<ul style="list-style-type: none"> • Carbonated (fizzy) drinks

Recipes for high calorie and high protein drinks:

tbsp – tablespoons
tsp – teaspoons

Vanilla Milkshake

Serving size: 1 cup

Ingredients	Nutrition information
<ul style="list-style-type: none"> • ½ cup vanilla ice cream • ½ cup whole milk • 1 tbsp skim milk powder • 1/8 tsp vanilla extract 	<p>Calories: 227 per cup</p> <p>Protein: 8 grams</p> <p>Carbohydrates: 24 grams</p> <p>Fat: 11 grams</p>

Chocolate Milkshake

Serving size: 1 cup

Ingredients	Nutrition information
<ul style="list-style-type: none"> • ½ cup chocolate ice cream • ½ cup whole milk • 1 tbsp and 1 tsp skim milk powder • 1 tbsp chocolate syrup 	<p>Calories: 286 per cup</p> <p>Protein: 9 grams</p> <p>Carbohydrates: 40 grams</p> <p>Fat: 11 grams</p>

Swiss Miss® Drink

Serving size: 1 cup

Ingredients	Nutrition information
<ul style="list-style-type: none"> • 1 cup vanilla ice cream • ¼ cup and 2 tbsp whole milk • 1 package (1/3 cup) Swiss Miss® mix • 3 tbsp eggnog mix* 	<p>Calories: 630 per cup</p> <p>Protein: 12 grams</p> <p>Carbohydrates: 96 grams</p> <p>Fat: 23 grams</p>

*You can also use egg custard mix or Carnation Breakfast Essentials® instead of eggnog mix.

Peanut Butter Milkshake

Serving size: 1 cup

Ingredients	Nutrition information
<ul style="list-style-type: none">• ½ cup vanilla ice cream• ½ cup heavy whipping cream• 2 tbsp smooth peanut butter• 3 tbsp chocolate syrup	Calories: 883 per cup Protein: 15 grams Carbohydrates: 61 grams Fat: 67 grams

Creamy Milkshake

Serving size: 1 cup

Ingredients	Nutrition information
<ul style="list-style-type: none">• ½ cup vanilla ice cream• 1/3 cup heavy whipping cream• 2 tbsp eggnog mix*• 1 tbsp sugar	Calories: 712 per cup Protein: 8.3 grams Carbohydrates: 70 grams Fat: 39 grams

*You can also use egg custard mix or Carnation Breakfast Essentials® instead of eggnog mix.

Tips for making milkshakes:

- If any of these drinks are too thick, thin them with milk.
- Avoid blending the drinks with whipping cream too much, because they may become too thick.
- You can use supplements such as Ensure® Plus, BOOST Plus®, or Glucerna® as liquid substitutes in the milkshakes.

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