UW Medicine UNIVERSITY OF WASHINGTON MEDICAL CENTER

Gastrectomy Diet

Nutrition guidelines

This handout gives eating guidelines after having a gastrectomy.

Eating After Your Surgery

During your surgery, your surgeon removed part or all of your stomach. For at least the first 4 to 6 weeks after your surgery, you will be able to eat and drink only soft foods.

It is common to quickly feel full after this surgery. You may also have *dumping syndrome*, when food moves into the intestines too fast, causing diarrhea or discomfort (see page 4).

The guidelines in this handout will help you get the calories and nutrients your body needs during your recovery time.

Getting Started

During your hospital stay after surgery, you will start with a Clear Liquid Diet then move to a Full Liquid Diet. You will eat and drink clear and full liquids such as broth, tea, water, gelatin, milk, yogurt, pudding, ice cream, milkshakes, creamy soups, and protein drinks.

When you leave the hospital, you should be ready to start eating a Soft Diet. This means you will be able to eat and drink soft, moist foods.

If moist, soft, solid foods are too hard to swallow, or you have nausea and belly discomfort after eating, go back to the Full Liquid Diet. When you are ready, try eating soft, moist foods again.

For Best Results

- Eat and drink slowly.
- Cut your food into small pieces. Chew it well.
- Stop eating when you feel full. At first, you may be able to eat only about ½ cup of food at a time.
- Instead of eating 3 large meals, eat 5 to 6 small meals a day.



Eat 5 to 6 small meals during the day instead of 3 large meals.

• Drink plenty of liquids between meals. Aim for 8 to 10 cups of liquid each day. One cup equals 8 ounces.

- Focus on eating foods that are high in calories, protein, and nutrients. This diet will help your wound heal and prevent muscles loss. It will also help you maintain your weight.
- If you have diarrhea, nausea, bloating, weakness, and sweating, you may have *dumping syndrome* (see page 4). If you have these symptoms:
 - Avoid foods that are high in sugar, fat, and *lactose* (the sugar that naturally occurs in dairy products).
 - Try not to drink anything 30 minutes before or after a meal.
- Do not lie down right after a meal. Wait at least 30 minutes before reclining. This gives your food time to settle and will help prevent *reflux* (when stomach acid rises into your esophagus and causes heartburn).

Jejunostomy Tube

You may go home with a *jejunostomy tube* (j-tube) to provide extra liquid nutrition while you are not able to eat very much solid food. During your hospital stay, we will teach you how to use this feeding tube.

We will also arrange for you to meet with a home infusion company. This company will deliver the j-tube supplies you need (nutritional formula and pump) when you go home. Your doctor and dietitian will work together to decide when you no longer need the j-tube.

Soft Diet

| Food Group | OK to Eat and Drink | Do NOT Eat or Drink |
|---|--|---|
| Meats and Other Proteins (2 to 3 oz. portions) Chop meat into pea-sized pieces and add sauce, broth, or gravy for moisture. | Tender moist fish, baby shrimp, crab, lobster, chopped chicken; ground meat with gravy or sauce; meat loaf, meat balls, canned chicken, deli turkey or ham; tuna, cottage cheese, tofu; soft-cooked, scrambled, sliced hard boiled or deviled eggs; moist casseroles with finely ground or chopped meat; tuna or egg salad with no coarse ingredients; moist macaroni and cheese, plain or flavored yogurt; thinly sliced cheese | Clams, mussels, oysters, prawns, roast beef, pork or lamb, steak or chops; salami, pastrami, hot dogs, sausage, bacon*, casseroles with rice or other grains, crunchy casseroles, cheese cubes (OK if melted in foods), sandwiches, pizza; peanut butter and other nut butters (OK in smoothies); yogurt with fruit chunks *OK to eat meats if they are pureed |

| Food Group | OK to Eat and Drink | Do NOT Eat or Drink |
|---|---|--|
| Breads and Cereals | Cooked or dry cereal moistened with milk such as cream of wheat or rice, instant oats or grits, Cheerios, Rice Krispies, Special K | Breads, rolls, crackers; whole grain, high-fiber dry or cooked cereals; oatmeal (quick or steel-cut); cereals with dried fruits, nuts, or seeds (such as Raisin Bran or All-Bran) |
| Starches | Peeled, well-cooked, moist potatoes, peeled potatoes in sauces; well-cooked pasta in sauce, cut into small pieces; hummus, canned refried beans | Potato chips, potato skins, fried potatoes, rice, corn, whole beans such as pinto, black, kidney |
| Vegetables | Vegetable juices; cooked vegetables that are soft enough to be mashed with a fork (such as carrots, beets, squash, or green beans) | Raw or fried vegetables, salad, whole kernel corn, peas, dried beans, spinach, celery, cooked vegetables that create gas (such as broccoli, cabbage, Brussels sprouts) |
| Fruits | Fruit juices, cooked or canned fruits without seeds or skin (peaches, pears, mandarin oranges); ripe bananas, melon, mango, papaya | All other fresh, frozen, or dried fruits or fruits with seeds or skins (apples, berries, oranges, pineapple, pomegranate) |
| Drinks 64 ounces a day | All OK except carbonated drinks | Carbonated drinks: soda pop, sparkling water, beer; chia seed drinks |
| Soups | Soups made with allowed ingredients that are easy to chew: chicken noodle, tomato, blended cream soup, blended split pea soup, canned stew | Avoid soups with large chunks of meat or vegetables |
| Sweets and Snacks Avoid all of these foods if they cause dumping syndrome | Sugar-free desserts: pudding, custard, ice cream, sherbet, fruit ice, frozen yogurt, gelatin made with allowed food, popsicles, milkshakes, smoothies Sugar-free candy, sugar substitutes such as Nutrasweet, Splenda, Equal, or sorbitol | Cookies, pies, or any dessert with a crust or that contains nuts, shredded coconut, or dried fruit; bread or rice pudding, nuts, chewy candy such as caramels or licorice, hard candy, popcorn, sticky foods, hot or spicy foods |
| Fats and Condiments | Butter, margarine, salad dressing, mayonnaise, gravy, sour cream, whipped toppings, oils; mild spices, ketchup, mustard, barbeque sauce | Chunky condiments such as salad dressings with seeds, fruit, or vegetables; cream cheese with fruit or vegetable pieces; pickles |
| Pre-made Protein Drinks | Ensure, Boost, Glucerna, Carnation Instant Breakfast, Slimfast | If dumping syndrome is a problem, try using products made for people with diabetes |

What is dumping syndrome?

After a gastrectomy, food and fluids move through your digestive system more quickly than usual. Dumping syndrome occurs when food enters your intestines too fast.

If you have dumping syndrome, you may feel flushed, weak, or dizzy within several minutes after eating. Other symptoms include belly cramps, nausea, and diarrhea.

Eating too much at a time or eating foods that contain added sugars or a lot of fat may also cause dumping syndrome. Sugars in food can quickly pull water from the body into the intestine. This can cause cramps, pain, nausea, low blood sugar, dizziness, and weakness.

Preventing Dumping Syndrome

Some diet changes may help reduce your symptoms of dumping syndrome. How well each change works varies from person to person. Try these tips to find which ones work for you:

- Eat 5 to 6 small meals a day instead of 3 larger meals.
- **Do NOT eat solid food and drink liquids at the same meal.** Drink liquids at least 20 to 30 minutes after you eat solids.
- **Limit or avoid sugars.** Do **not** eat sugar, syrup, honey, drinks with sweetening, or desserts that contain sugar. Fruit juices may be easier to digest if you drink them in small amounts or dilute them with water.
- **Limit or avoid foods that contain lactose.** Milk is high in a sugar called *lactose*. Try soy, rice, or almond milk instead. Yogurt, cottage cheese, hard cheeses, and most other dairy products are lower in lactose than milk.
- Limit or avoid fried foods, butter, gravy, and cream sauces.

Vitamin and Mineral Supplements

After a gastrectomy, it can be hard for the body to absorb vitamins and minerals such as iron, calcium, vitamin D, and vitamin B12. Your dietitian will work with you to decide what doses of these vitamins you will need after your surgery.

Calorie and Protein Needs

| • | You need to eat calories a day. |
|---|---|
| • | Every day, you will need to eat grams of protein. This equals |
| | protein servings. |

High-Quality Protein Foods

Below is a list of common foods rich in high-quality protein. Unless listed otherwise, each food amount listed contains 7 grams of protein, and is equal to **1 protein serving**:

- 1 oz. cooked fish, poultry, or lean ground meat
- 1 egg or ½ cup liquid egg substitute
- 1 oz. cheese (melted)
- 1 cup milk (skim, 1%, 2%, or whole)
- 1 cup yogurt
- ½ cup canned tuna or salmon
- 1 cup pudding
- 3 oz. tofu
- Protein powders (serving size depends on the protein content of each brand)
- Nutritional supplement drinks (serving size depends on the protein content of each brand)

Boosting Calories

After surgery, your body needs more calories for healing. Here are some easy ways to add calories to your diet:

- Instead of eating 3 large meals a day, eat smaller meals more often, or divide meals in half. For example, have an egg for breakfast and have some canned fruit and cooked cereal for a midmorning snack.
- Add butter or margarine to hot cereal, eggs, cooked vegetables, mashed potatoes, pasta, and soups.
- Use gravies and sauces on meats and vegetables. You can find a variety of sauce mixes at the grocery store.
- Use sour cream on fruits, meats, cream soups, and baked potatoes.
 Add it to sauces, scrambled eggs, and omelets.
- Use mayonnaise or salad dressing on meats and eggs.
- Add avocados or mild guacamole to egg dishes, meats, vegetables, or cottage cheese.
- Use whipped cream on canned fruit, pudding, or Jell-O.

Boosting Protein

After surgery, your body needs more protein for healing. Here are some ways to add protein to your diet:

- Use milk, Fortified Milk (see recipe below), evaporated milk, or cream instead of water to cook hot cereal or to make instant cocoa, canned soup, custard, and pudding.
- Add pureed or chopped meat to scrambled eggs, omelets, or soups.
 For example, add chopped chicken to cream of chicken soup, pureed ham to split pea soup, or ground beef to tomato soup.
- Add chopped, hard-cooked eggs to sauces, soups, casseroles, or chicken or tuna salad.
- Add grated cheese to cooked vegetables, sauces, soups, and more.
- Try eating a snack of cottage cheese with avocado or canned fruit.

Recipes for High-Calorie, High-Protein Drinks

You can make these drinks at home to supplement your diet. Change the flavors to suit your own tastes. You may also use pre-made highcalorie, high-protein drinks. If you cannot tolerate lactose, use soy milk, rice milk, or almond milk instead of cow's milk.

Fortified Milk

Makes 4 servings

Blend until smooth:

- 1 quart regular whole milk
- 1 cup powdered milk

Chill. Use in place of regular milk for cooking or in special drinks.

Per 8 oz. serving: 265 calories, 18 grams protein (2½ protein servings)

Breakfast in a Glass

Blend until smooth:

- ½ cup whole milk or Fortified Milk
- ¼ cup orange or pineapple juice
- ¼ cup liquid egg substitute
- ½ banana
- 1 teaspoon sugar

Per 10 oz. serving: With whole milk: 210 calories, 10 grams protein; with Fortified Milk: 270 calories, 15 grams protein (2 protein servings)

Egg Nog

Blend until smooth:

- 1 cup whole milk or Fortified Milk
- ¼ cup liquid egg substitute
- ½ teaspoon sugar

Per 10 oz. serving: With whole milk: 210 calories, 14 grams protein; with Fortified Milk: 320 calories, 25 grams protein (3½ protein servings)

High-Protein Shake

Blend until smooth:

- ½ cup whole milk
- 1 cup ice cream
- 1 package Carnation Instant Breakfast

Per 12 oz. serving: 340 calories, 10 grams protein (1½ protein servings)

Basic Banana Smoothie

Blend until smooth:

- 1 cup vanilla 2% low-fat yogurt
- 1 frozen banana
- 3 ice cubes

Makes 1 serving: 300 calories, 12 grams protein (2 protein servings)

Yogurt Shake

Blend until smooth:

- ½ cup whole milk or Fortified Milk
- ¼ cup fruit yogurt
- ¼ cup soft fresh or canned fruit.

Per 8 oz. serving: With whole milk: 225 calories, 8 grams protein (1 protein serving); with Fortified Milk: 310 calories, 13 grams protein (2 protein servings)

Peanut Butter Smoothie

Blend until smooth:

- 1 cup 2% low-fat milk
- 2 tablespoons peanut butter
- 1 frozen banana

Makes 1 serving: 415 calories, 17 grams protein (2½ protein servings)

Sample Menus

| Day 1 | Day 2 | Day 3 |
|---|--|--|
| Breakfast ½ cup cooked cereal ½ cup milk | Breakfast 1 scrambled egg with 1 oz. cheese added | Breakfast Fruit smoothie with ½ cup yogurt, blended with peaches or banana |
| Snack 1 oz. thinly sliced turkey breast | Snack ½ banana ½ cup yogurt | Snack 1 oz. thinly sliced cheese |
| Lunch ½ cup pea soup 1 cup milk or fruit juice Snack 1 deviled egg | Lunch ½ cup tuna casserole 1 cup milk or fruit juice Snack 1 pudding cup | Lunch ½ cup macaroni and cheese 1 cup milk or fruit juice ½ cup applesauce Snack 6 oz. to 8 oz. yogurt |
| Dinner ½ chicken breast marinated in teriyaki sauce ½ cup cooked carrots 1 cup milk or fruit juice | Dinner ½ cup pasta with meat sauce 1 tablespoon grated parmesan cheese ½ cup cooked zucchini 1 cup milk or fruit juice | Dinner 2 oz. meatloaf ½ cup mashed potatoes 1 teaspoon butter or margarine 1 teaspoon sour cream 1 cup milk or fruit juice |
| Snack % cup cottage cheese % cup canned fruit | Snack 1 can Glucerna or Ensure | Snack ½ cup dry cereal or instant oatmeal made with milk ½ cup milk or yogurt |

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

| Registered Dietitian: |
|-----------------------|
| Phone: |