## **Diet After Nissen Fundoplication Surgery**

This diet information is for patients who have recently had Nissen fundoplication surgery to correct reflux disease or to repair various types of hernias, such as hiatal hernia and intrathoracic stomach. This diet may also be used for other gastrointestinal surgeries, such as Heller myotomy and repair of achalasia. The diet will help control diarrhea, excess gas and swallowing problems, which may occur after this type of surgery.

#### **Keeping Your Stomach from Stretching**

- Eat small, frequent meals (six to eight per day). This will help you consume the majority of the nutrients you need without causing your stomach to feel full or distended.
- Drinking large amounts of fluids with meals can stretch your stomach. You may drink fluids between meals as often as you like, but limit fluids to 1/2 cup (4 fluid ounces) with meals and one cup (8 fluid ounces) with snacks.
- Sit upright while eating and stay upright for 30 minutes after each meal. Gravity can help food move through your digestive tract. **Do not lie down after eating.** Sit upright for 2 hours after your last meal or snack of the day.
- Eat very slowly. Take your time when eating.
- Take small bites and chew your food well to help aid in swallowing and digestion.
- Avoid crusty breads and sticky, gummy foods, such as bananas, fresh doughy breads, rolls and doughnuts. These types of foods become sticky and difficult to swallow.
- Toasted breads tend to be better tolerated.
- Lastly, if you eat sweets, consume them at the end of your meal to avoid a group of symptoms
  referred to as "dumping syndrome". This describes the rapid emptying of foods from the
  stomach to the small intestine. Sweetened beverages, candy and desserts move more rapidly
  and dump quickly into the intestines. This can cause symptoms of nausea, weakness, cold
  sweats, cramps, diarrhea and dizzy spells.

#### **Avoiding Gas**

- Avoid drinking through a straw. Do not chew gum or tobacco. These actions cause you to swallow air, which produces excess gas in your stomach. Chew with your mouth closed.
- Avoid any foods that cause stomach gas and distention. These foods include corn, dried beans, peas, lentils, onions, broccoli, cauliflower and any food from the cabbage family.
- Avoid carbonated drinks, alcohol, citrus and tomato products.

#### When will I be able to eat a soft diet?

After Nissen fundoplication surgery, your diet will be advanced slowly by your surgeon. Generally, you will be on a clear liquid diet for the first few meals. Then you will advance to the full liquid diet for a meal or two and eventually to a Nissen soft diet.

Please be aware that each patient's tolerance to food is different. Your doctor will advance your diet depending on how well you progress after surgery.

#### **Clear Liquid Diet**

The first diet after surgery is the clear liquid diet. It includes the following liquids:

- Apple juice
- Cranberry juice
- Grape juice
- Chicken broth
- Beef broth
- Flavored gelatin (Jell-O<sup>®</sup>)
- Decaf tea and coffee
- Caffeinated beverages are permitted based on tolerance
- Popsicles
- Italian ice

Carbonated drinks (sodas) are not allowed for the first six to eight weeks after surgery. After this time you can try them again in small amounts.

#### **Full Liquid Diet**

The full liquid diet contains anything on the clear liquid diet, plus:

- Milk, soy, rice and almond (no chocolate)
- Strained creamed soups (no tomato or broccoli)
- Vanilla and strawberry-flavored ice cream
- Sherbet
- Blended, custard styled or whipped yogurt (plain or vanilla only)
- Vanilla and butterscotch pudding (no chocolate or coconut)
- Nutritional drinks including Ensure<sup>®</sup>, Boost<sup>®</sup>, Carnation Instant Breakfast<sup>®</sup> (no chocolate-flavored)

Note: Dairy products, such as milk, ice cream and pudding, may cause diarrhea in some people just after surgery. You may need to avoid milk products. If so, substitute them with lactose-free beverages, such as soy, rice, Lactaid® or almond milks.

# Post-Operative Diet- Nissen Fundoplication

Food Category	Foods to Choose	Foods to Avoid
Beverages	<ul> <li>Milk, such as, whole, 2%, 1%, non- fat, or skim, soy, rice, almond</li> <li>Caffeinated and decaf tea and coffee</li> <li>Powdered drink mixes (in moderation)</li> <li>Non-citrus juices (apple, grape, cranberry or blends of these)</li> <li>Fruit nectars</li> <li>Nutritional drinks including Boost<sup>®</sup>, Ensure<sup>®</sup>, Carnation Instant Breakfast<sup>®</sup></li> </ul>	<ul> <li>Chocolate milk, cocoa or other chocolate-flavored drinks</li> <li>Carbonated drinks</li> <li>Alcohol</li> <li>Citrus juices like orange, grapefruit, lemon and lime</li> </ul>
Breads	<ul> <li>Pancakes, French toast and waffles</li> <li>Crackers (saltine, butter, soda, graham, Goldfish<sup>®</sup> and Cheese Nips<sup>®</sup>)</li> <li>Toasted bread</li> </ul>	<ul> <li>Untoasted bread, bagels, Kaiser and hard rolls, English muffins</li> <li>Crackers with nuts, seeds, fresh or dried fruit, coconut, or highly seasoned, such as garlic or onion-flavored</li> <li>Sweet rolls, coffee cake or doughnuts</li> </ul>
Cereals	<ul> <li>Well cooked cereals, such as oatmeal (plain or flavored)</li> <li>Cold cereal (Cornflakes®, Rice Krispies®, Cheerios®, Special K® plain, Rice Chex® and puffed rice)</li> </ul>	<ul> <li>Very coarse cereal, such as bran, shredded wheat</li> <li>Any cereal with fresh or dried fruit, coconut, seeds or nuts</li> </ul>
<b>Desserts</b> Eat in moderation. Do not eat desserts or sweets by themselves.	<ul> <li>Plain cakes, cookies and cream- filled pies</li> <li>Vanilla and butterscotch pudding or custard</li> <li>Ice cream, ice milk, frozen yogurt and sherbet</li> <li>Gelatin made from allowed foods</li> <li>Fruit ices and popsicles</li> </ul>	<ul> <li>Desserts containing chocolate, coconut, nuts, seeds, fresh or dried fruit, peppermint or spearmint</li> </ul>
Eggs	<ul> <li>Poached, hard boiled or scrambled</li> </ul>	<ul> <li>Fried eggs and highly seasoned eggs (deviled eggs)</li> </ul>

Fats Eat in moderation.	<ul> <li>Butter and margarine</li> <li>Mayonnaise and vegetable oils</li> <li>Mildly seasoned cream sauces and gravies</li> <li>Plain cream cheese</li> <li>Sour cream</li> </ul>	<ul> <li>Highly seasoned salad dressings, cream sauces and gravies</li> <li>Bacon, bacon fat, ham fat, lard and salt pork</li> <li>Fried foods</li> <li>Nuts</li> </ul>
Fruits	<ul> <li>Fruit juice</li> <li>Any canned or cooked fruit except those listed in the AVOID column</li> </ul>	<ul> <li>ALL fresh fruits, such as citrus, bananas and pineapple</li> <li>Canned pineapple</li> <li>Dried fruits, such as raisins, berries</li> <li>Fruits with seeds, such as berries, kiwi and figs</li> </ul>
Meat, Fish, Poultry, and Dairy Products	<ul> <li>Meats may be ground, minced or chopped to ease swallowing and digestion</li> <li>Tender, well cooked and moist cuts of beef, chicken, turkey and pork</li> <li>Veal and lamb</li> <li>Flaky, cooked fish</li> <li>Canned tuna</li> <li>Cottage and ricotta cheeses</li> <li>Mild cheese, such as American, brick, mozzarella and baby Swiss</li> <li>Creamy peanut butter</li> <li>Plain custard or blended fruit yogurt</li> <li>Moist casseroles, such as macaroni &amp; cheese, tuna noodle</li> <li>Grilled or toasted cheese sandwich</li> </ul>	<ul> <li>Tough meats with a lot of gristle</li> <li>Fried, highly seasoned, smoked and fatty meat, fish or poultry, such as frankfurters, luncheon meats, sausage, bacon, spare ribs, beef brisket, sardines, anchovies, duck and goose</li> <li>Chili and other entrees made with pepper or chili pepper</li> <li>Shellfish</li> <li>Strongly flavored cheeses, such as sharp cheese, extra sharp cheddar, cheese containing peppers or other seasonings</li> <li>Crunchy peanut butter</li> <li>Any yogurt with nuts, seeds, coconut, strawberries or raspberries</li> </ul>
Potatoes and Starches	<ul> <li>Peeled, mashed or boiled white or sweet potatoes</li> <li>Oven-baked potatoes without skin</li> <li>Well cooked white rice, enriched noodles, barley, spaghetti, macaroni and other pastas</li> </ul>	<ul> <li>Fried potatoes, potato skins and potato chips</li> <li>Hard and soft taco shells</li> <li>Fried, brown or wild rice</li> </ul>
Soups	<ul> <li>Mildly flavored meat stocks</li> <li>Cream soups made from allowed foods</li> </ul>	<ul> <li>Highly seasoned soups and tomato based soups, cream soups made with gas producing vegetables, such as broccoli, cauliflower, onion, etc.</li> </ul>

Sweets and Snacks Use in moderation and do not eat large amounts of sweets by themselves.	<ul> <li>Syrup, honey, jelly and seedless jam</li> <li>Plain hard candies and plain candies made with allowed ingredients</li> <li>Molasses</li> <li>Marshmallows</li> <li>Other candy made from allowed ingredients</li> <li>Thin pretzels</li> </ul>	<ul> <li>Jam, marmalade and preserves</li> <li>Chocolate in any form</li> <li>Any candy containing nuts, coconut, seeds, peppermint, spearmint or dried or fresh fruit</li> <li>Popcorn, potato chips, tortilla chips</li> <li>Soft or hard thick pretzels, such as sourdough</li> </ul>
Vegetables	<ul> <li>Well cooked soft vegetables without seeds or skins, such as asparagus tips, beets, carrots, green and wax beans, chopped spinach, tender canned baby peas, squash and pumpkin</li> </ul>	<ul> <li>Raw vegetables, tomatoes, tomato juice, tomato sauce and V-8<sup>®</sup> juice</li> <li>Gas producing vegetables, such as broccoli, Brussel sprouts, cabbage, cauliflower, onions, corn, cucumber, green peppers, rutabagas, turnips, radishes and sauerkraut</li> <li>Dried beans, peas and lentils</li> </ul>
Miscellaneous	<ul> <li>Salt and spices in moderation</li> <li>Mustard and vinegar in moderation</li> </ul>	<ul> <li>Fried or highly seasoned foods</li> <li>Coconut and seeds</li> <li>Pickles and olives</li> <li>Chili sauces, ketchup, barbecue sauce, horseradish, black pepper, chili powder and onion and garlic seasonings</li> <li>Any other strongly flavored seasoning, condiment, spice or herb not tolerated</li> <li>Any food not tolerated</li> </ul>

### Sample Menu

Breakfast	<ul> <li>1/2 cup canned fruit (non-citrus)</li> <li>1/2 to 3/4 cup cereal</li> <li>1 small pancake</li> <li>1 tsp. margarine</li> <li>1 tsp. jelly</li> <li>1/2 cup 2% milk</li> <li>1 tsp. sugar</li> </ul>
Mid-Morning Snack	<ul> <li>2 graham crackers</li> <li>1 T creamy peanut butter</li> <li>1 tsp. jelly</li> <li>1 cup tea</li> </ul>
Lunch	<ul> <li><sup>1</sup>/<sub>2</sub> cup tuna salad (no raw vegetables)</li> <li>3 to 4 saltine crackers</li> <li><sup>1</sup>/<sub>2</sub> cup canned peaches</li> <li><sup>1</sup>/<sub>2</sub> cup fruit juice (non-citrus)</li> <li>1 tsp. mayonnaise</li> </ul>
Mid-Afternoon Snack	<ul> <li>4 saltine crackers</li> <li>1 T cream cheese</li> <li>1 cup 2% milk</li> </ul>
Dinner	<ul> <li>3 oz. roasted chicken (finely ground) with sauce</li> <li>½ cup cooked white rice</li> <li>¼ cup cooked carrots</li> <li>½ cup canned pears</li> <li>1 tsp. margarine</li> <li>½ cup tea</li> <li>1 tsp. sugar</li> </ul>
Evening Snack	<ul> <li>¼ cup cottage cheese</li> <li>½ cup applesauce</li> <li>½ cup 2% milk</li> </ul>

**Please note:** You will need extra fluids throughout the day to meet your fluid needs.