

NUTRITIONAL GUIDELINES FOLLOWING NISSEN FUNDOPLICATION

A fundoplication is used to treat gastro-esophageal reflux disease (GERD).

Symptoms of severe heartburn occur because the base of the esophagus (sphincter) is too loose to keep food from coming out of the stomach.

The surgery tightens the muscle to reduce symptoms.

To ensure proper healing and avoid stretching a special diet has been designed for 2-3 weeks post-surgery.

Your diet will progress through the following stages:

- Day 1-3 clear fluid diet
- Day 4-6 full fluid diet
- Day 7-21 pureed (blender diet)
- Day 22 slowly transition to a soft/moist diet

Please be aware that everyone's tolerance is different and your Doctor may have you advance more slowly, depending on your progress.

GENERAL GUIDELINES

- Always sit upright while eating or drinking
- Remain sitting upright for 30-60 minutes after eating a meal or snack
- Do not eat 2 hours before bed
- Eat small frequent meals (6-8 per day)
- Take small bites, eat slowly and chew well with mouth closed
- Avoid using straws
- Avoid chewing gum
- Avoid carbonated beverages
- Sip fluids/ do not gulp
- Prepare foods so that they are moist, soft and easy to swallow
- Avoid foods which cause stomach gas
- Eat sweets and desserts at end of your meal to reduce rapid stomach emptying
- Limit fluid volumes to no more than ½ cup with meals and to 1 cup with snacks

CLEAR FLUID DIET

| FOOD GROUPS | FOODS TO CHOOSE | FOODS TO AVOID |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Milk and milk products | none | all |
| Fruits | clear juices: NO PULP (apple, cranberry and grape are okay) | all juices containing pulp, nectars, prune juice, tomato or vegetable juices |
| Soups | bouillon, consommé | all other soups |
| Desserts | clear gelatin popsicles | all others |
| Beverages (other) | coffee, tea, crystal fruit drinks, sports drinks clear nutritional supplements (such as boost fruit beverage) water | all others including milk, cream, cocoa, chocolate popsicles carbonated beverages |
| Sweets | honey, sugar | all others |

FULL FLUID DIET

| FOOD GROUPS | FOODS TO CHOOSE | FOODS TO AVOID |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Milk and milk products | all milk beverages : including chocolate milk, buttermilk, milkshakes (without pieces) yogurt (no pieces, plain or flavoured) hot chocolate or cocoa, soy, rice or almond beverage | products with added nuts, seeds, pieces of fruit |
| Cereals | cream of wheat | all others with pieces of fruit, nuts or seeds |
| Fruits and Vegetables | fruit or vegetables juices without pulp | all others |
| Soups | bouillon, consommé, streamed cream soup, pureed soups | all others |
| Desserts | puddings, fruit whips, custards, yogurt, plain gelatin, ice cream, ice milk, popsicles, sherbet | all others made with coconut, fruit, nuts, seeds rice or tapioca puddings |
| Beverages | crystal fruit drinks, sports drinks, coffee, tea, water nutritional supplements such as ensure, boost | all others |
| Sweets | honey, sugar, plain hard candy | all others |
| Seasonings | ground seasonings as tolerated | |

SOFT/MOIST DIET

| FOODS GROUPS | FOODS TO CHOOSE | FOODS TO AVOID |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Milk and milk products | cheese, cottage cheese, custard, ice cream, milk (all types), milkshakes and smoothies, yogurt (no seeds, chunks/ may be frozen) | products with added nuts, dried fruits or granola (example yogurt parfait or heavenly hash ice cream) Stringy cheeses |
| Breads and grains | bread lightly toasted cereals: hot cereal and cold-well soaked in milk soft noodles or pasta moist rice plain crackers (soaked in soup) pancakes, waffles | bread (dry/hard, fresh doughy, bagels, pita, muffins, tortilla, taco shells) dry/course cereal such as bran flakes, shredded wheat , fried/wild or brown rice |
| Meats and meat alternatives | eggs(soft cooked), fish (not fried), finely chopped or minced chicken, turkey, beef, pork or veal add gravy/sauce Smooth peanut butter, tofu canned or flaked meats or fish soft moist casseroles tender stews | deep fried items, tough/stringy meats (i.e. spare ribs), legumes (kidney beans, lentils,) hot dogs, sausages, lunch meats, duck, goose crunchy peanut butter shellfish, sardines(fish with bones), anchovies |
| Fruits | fruit juices(non-citrus) or nectars canned fruits (all types), applesauce, soft fresh peeled fruits(skin, seeds and membrane removed) | citrus fruits/juices dried fruits (raisins, currants) hard textured fruits (coconut) fruits with seeds/skins (berries) pineapple, rhubarb |
| Vegetables | canned vegetables, well cooked vegetables (no skins) | raw vegetables/tough stringy (asparagus, corn, celery, cabbage, spinach) gassy (broccoli, brussel sprouts, radish, turnip) |
| Soups | all types | highly seasoned soups/onion |
| Fats/oils | butter, margarine, cream cheese (plain), sour cream, gravy | bacon, nuts, seeds |
| Other | seedless jam or jelly gelatin (jello), marshmallows, popsicles, sherbet, sorbet, gelato nutritional supplements (see list provided) tea/coffee | alcohol, carbonated beverages chocolate, cake, cookies, donuts, muffins, pastries, candy, toffee, licorice or gum, coconut, pickles, olives, popcorn, potato chips, pretzels, cheezies |

NUTRITIONAL SUPPLEMENTS

If you are unable to increase your calories and protein adequately through your food intake, a commercial nutritional supplement may help. These may be found at your local pharmacy or grocery stores

Powdered Mixes (mix with milk to drink):

Carnation Breakfast Essentials
Slim Fast

Clear, fruit-flavoured beverages:

Boost fruit beverage

Low Lactose-free, milk-like beverages:

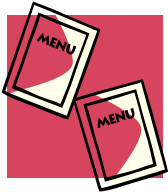
Boost, Boost High Protein, Boost Plus
Ensure, Ensure Plus, Ensure–High Protein, Ensure/fibre, Ensure pre-biotics, TwoCal HN
Boost Diabetic, Glucerna (for individuals with Diabetes)
Resource, Resource Plus, Resource 2.0
President’s Choice Ultrashake, President’s Choice Ultrashake Plus
Truly Nutrition Supplement, Truly Nutrition Supplement Plus (Zeller’s)
Life’s Super Shake, Life’s Super Shake Plus (Shopper’s Drug Mart)
Equate Nutritional Shake, Equate Nutritional Shake Plus, Equate Nutritional Shake–High Fibre,
Equate Nutritional Shake–High Protein (Walmart)
Equate Meal Replacement, Equate Meal Replacement Plus, Equate Meal Replacement–High
Fibre, Equate Meal Replacement–High Protein (Walmart)
WellQuest, WellQuest Plus (Henderson’s Pharmacy; Fonthill Pharmacy)
Rexall, Rexall Plus Calories (Pharma Plus Drugmart)

Puddings

Boost pudding
Ensure pudding

Protein powders

Resource Beneprotein



SAMPLE MENU SOFT /MOIST DIET

| | |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Breakfast | ½ cup canned fruit (non citrus) 1 cup cereal ½ cup low fat milk 1 soft cooked egg 1/2 cup decaf tea or coffee |
| Morning snack | ½ cup pudding 1 cup water |
| Lunch | 1 ½ cups macaroni and cheese ½ cup soft cooked canned green beans ½ cup canned peaches 1 -2 tsp margarine ½ cup water |
| Afternoon snack | ½ cup yogurt (no seeds) 1 cup water |
| Supper | 1 cup soup 3 oz. finely ground chicken/gravy ½ cup soft rice or mashed potatoes ½ cup carrots 1-2 tsp margarine ½ cup applesauce ½ cup milk |
| Evening snack | ¼ cup cottage cheese 4 plain soda crackers 1 cup low fat milk |

HIGH PROTEIN RECIPES

High protein milk

Ingredients

1 cup milk whole or 2%
4 tablespoons skim milk powder

Directions

Add skim milk powder to milk and mix until dissolved. Refrigerate overnight.
Try adding flavourings: vanilla extract, chocolate or strawberry syrup, and coffee.

Power Shake

Ingredients

1 cup high protein milk
½ cup ice cream
½ tsp vanilla extract
2 Tbsp. butterscotch, chocolate or strawberry syrup

Directions

Mix ingredients together in a blender. Makes 1 serving.

Prepared by NHS Dietitians, 2019

Adapted from:

- Manual of Clinical Dietetics, 2000
- Hamilton Health Sciences, 2009
- Capital Health Edmonton, 2005
- University of Pittsburgh Medical Center, 2016
- University Virginia Medical Center, 2011
- Keystone Surgical Associates, 2019
- Ottawa General Thoracic Division, 2019



Registered Dietitian: _____

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HOW ARE WE DOING?

You can provide feedback
or suggestions for
Niagara Health Clinical
Nutrition services at:

www.niagarahealth.on.ca/en/clinical-nutrition