

# Nutrition Information after Hiatal Hernia Repair

Patient Education

## Diet Advancement

Days 1-14      Liquids Only  
Days 15-21     Pureed/Smooth Texture  
Days 22+       Regular food as tolerated. If you are having difficulty with regular foods, please resume liquids or smooth texture until you are ready to advance.

### **Goal 1: Hydration Fluids**

- Throughout your diet advancement, hydration fluids are your top priority.
- 64 ounces or more per day
- Hydration fluids include water and anything that is diet, decaf, and non-carbonated, such as Crystal Light, PowerAde Zero, Vitamin Water Zero, decaf coffee, decaf tea, and grocery store bouillon or broth.

### **Goal 2: Protein**

- 60-80 grams or more per day as able

## What to Expect With a Hiatal Hernia Repair

- Liquids may feel like they are “backing up.” This is called dysphagia and can be caused by swelling around the stomach and esophagus which causes discomfort and/or pain when swallowing. Also the esophagus moves things through more slowly right after surgery. It may cause feelings similar to chest pain (like something is sitting on your chest) or a feeling like something is stuck (such as a pill going down sideways).
- The severity of pain gradually diminishes over time. Most patients experience only minimal discomfort after 6-8 weeks.
- Feeling of fullness will occur very fast. This can occur after only a few sips. Swallowed air, using a straw or carbonation can cause gas to get trapped in your stomach. This will cause a feeling of extreme fullness or pain. This air will eventually pass through the intestines as gas. Tips:
  - o Room temperature/warm liquids are typically better tolerated
  - o Chewable or Liquid vitamins/medications are better tolerated
  - o Heavier liquids such as jello/pudding/cream soups are typically better tolerated
  - o Do not gulp, take small sips
  - o Do not use any carbonated beverages
  - o Try taking a hot shower if you are experiencing significant tightness in the lower chest, it may help relax those muscles

## Days 1-14: Liquids Only Protein Ideas

For two weeks, you are on a liquid only diet. You may use protein powders, drinks, milk, GHP bouillon, GHP broth, and GHP cream soups. Specific ideas are listed below.

Protein Powders: Whey Protein Isolate, Soy, Egg, Rice, and Pea Protein Powders  
Look for **Whey Protein Isolate**. "Isolate" is the key word. If the ingredient list says "Whey Protein Concentrate" or "Whey Protein Blend," you are not absorbing all of the protein.

<b>Milk (1 cup)</b>	<b>CALORIES</b>	<b>PROTEIN</b>
Fairlife, Fat Free / 2%	80 / 120	13
Silk Protein Nut Milk	130	10
Skim / 2%	90 / 130	8
Soy Milk, Original / Light	110 / 60	8 / 6

### **PROTEIN DRINKS**

Core Power, Regular or Elite	Isopure
Vega**	OWYN **
Muscle Milk, Genuine Protein Shake or Pro Series	Orgain **
Protein2O	Gatorade Zero with Protein
Premier Protein/Premier Clear	Quest

**BROTH/SOUP:** GHP Bouillon, GHP Soup (cream only), or bone Broth (from the grocery store)

## Days 15-21: Pureed/Smooth Texture Protein Ideas

In addition to liquids, you may now have pureed/smooth texture foods. Specific ideas are listed below.

### High Protein Foods

Greek Yogurt	Plain or Blended varieties, 15 g carbs or less
Cottage Cheese	Does not need to be blended, "Chew 22"
Ricotta Cheese	Whole milk, part-skim, light
Sugar-Free Pudding	Make with milk, add protein powder to increase protein
Hot Cereals	Smooth texture such as cream of wheat or grits Make with milk to increase protein Make thinner than normal, run off the spoon
Cream Soups	From grocery store, Cream of Mushroom, Cream of Broccoli, Cream of Chicken, etc. Add canned chicken for more protein and BLEND until smooth
Baby Food Dinners	Stage 2, meats only
Hummus	May put on a cracker – GHP or Saltine cracker
Refried Beans	Mix with beef/chicken or salsa and BLEND until smooth May use Campbell's Cheese Soup May put on a cracker – GHP or Saltine or Soda Crackers
Pureed Meats	Canned chicken, tuna, seafood, hardboiled egg salad, tofu Add broth, gravy, mayo, Greek yogurt (plain), hummus, or avocado/guacamole and BLEND until smooth May put on a cracker – GHP or Saltine cracker

#### Vegetables

Mashed Potatoes or Sweet Potatoes	Make with milk, add dry milk powder or unflavored protein powder to increase protein
Non-starchy Vegetables	Very well cooked and BLENDED until smooth Broccoli, cauliflower, green beans, zucchini, carrots
Legumes – Beans/Peas/Lentils	Beans, chili, split pea soup, or lentil soup BLENDED until smooth

#### Fruit

Applesauce	Unsweetened
Protein Smoothie	Any fruit can be used if BLENDED into a protein smoothie Use milk, Greek yogurt, protein powder, etc. to increase protein in smoothie

## Savory Pureed Recipes

### Pureed Chicken Stew (35 g protein)

1 cup chicken, cooked and cubed (or canned chicken)

1/4 cup mixed vegetables cooked

1/4 cup chicken broth (GHP broth for more protein)

Heat over medium high heat, stirring occasionally, until desired temperature.

Transfer to blender or food processor and blend until smooth. Use caution when blending hot ingredients!

### Protein Power Gravy (38 g protein)

1 cup chicken, cooked and cubed (or canned chicken)

1/2 cup chicken gravy

1/3 cup dried milk powder

Milk to thin to desired consistency.

Heat over medium high heat, stirring occasionally, until desired temperature.

Transfer to blender or food processor and blend until smooth. Use caution when blending hot ingredients!

### Pureed Spicy Mexican Fiesta (20 g protein)

1/2 cup refried beans

1/2 cup ground taco meat

2 Tbsp sour cream

2 Tbsp salsa

Transfer to blender or food processor and blend until smooth. Heat as desired.

### Pureed Beans and Salsa (27 g protein)

1/2 (15 oz) can pinto beans

2 Tbsp salsa of choice

1 Tbsp chicken broth

1/2 scoop unflavored protein powder

Combine all ingredients in saucepan.

Heat over medium high heat, stirring occasionally, until desired temperature. Transfer to blender or food processor and blend until smooth. Use caution when blending hot ingredients!

**Tuna Casserole (22 g protein)**

2 ounces canned tuna

1/4 cup mashed potatoes

1/4 cup cream of mushroom soup or GHP cream of mushroom soup (prepared)

2/3 cup milk

Combine all ingredients in saucepan.

Heat over medium high heat, stirring occasionally, until desired temperature.

Transfer to blender or food processor and blend until smooth. Use caution when blending hot ingredients! Pour into baking dish. Bake at 350°F for 30 minutes.

**Shepard's Pie (16 g protein)**

2 ounces cooked ground turkey

1/4 cup mashed potatoes

2 Tbsp canned carrots

1/2 cup chicken broth

1/4 cup turkey gravy

Combine ground turkey, carrots, chicken broth or cream of chicken soup in blender or food processor and blend until smooth. Pour into baking dish. Top with mashed potatoes. Bake at 350°F for 30 minutes or until desired temperature. Add turkey gravy.

**Cheesy Potatoes (20 g protein)**

1/2 cup GHP mashed potatoes

1/4 cup Campbell's Cheese Soup/Queso sauce

1/2 cup milk

Combine all ingredients in saucepan.

Heat over medium high heat, stirring occasionally, until desired temperature.

Transfer to blender or food processor and blend until smooth. Use caution when blending hot ingredients!

Put dollop of plain Greek yogurt on top as high protein "sour cream." (optional)

**Ricotta Bake (42 g protein)**

1 cup cottage cheese or ricotta cheese

1/2 cup marinara or spaghetti sauce

1/2 c parmesan cheese (from shaker, not shredded)

1 egg, well beaten

1 tsp Italian seasoning

Salt and pepper to taste

Be sure ingredients are mixed thoroughly.

Bake at 400°F for 30 minutes or until set.

**Chicken and Potatoes (16 g protein)**

2 ounces cooked chicken

1/4 cup mashed potatoes

1/4 cup chicken gravy

1/2 cup chicken bouillon

Combine all ingredients in saucepan.

Heat over medium high heat, stirring occasionally, until desired temperature.

Transfer to blender or food processor and blend until smooth. Use caution when blending hot ingredients!

**Cheesy Chili (11 g protein)**

1/2 cup meat chili

1/4 cup queso sauce

Heat over medium high heat, stirring occasionally, until desired temperature.

Transfer to blender or food processor and blend until smooth. Use caution when blending hot ingredients!

**Pork Stew (13 g protein)**

2 ounces lean cooked pork

1/4 cup sweet potato, peeled and diced

1/8 cup apple, peeled and diced

1/2 cup vegetable bouillon

1/4 cup pork gravy

Pinch dried sage

Combine sweet potato, apple, and vegetable bouillon in saucepan.

Simmer until sweet potato and apple are tender.

Transfer to blender or food processor with pork and blend until smooth. Use caution when blending hot ingredients!

**White Fish Pate (12 g protein)**

2 ounces any white fish (unbreaded and cooked)

1/8 cup milk

1 Tbsp melted butter

1/8 cup canned carrots

1/8 cup mashed potatoes

Broth to desired consistency

Transfer to blender or food processor. Add all ingredients and blend until smooth. Use caution when blending hot ingredients!

**Creamy Cauliflower Puree (6 g protein)**

1/2 head cauliflower

2 cloves of garlic

1/4 cup buttermilk

1 tsp extra virgin olive oil

1/2 tsp salt

1/4 tsp garlic powder

1/4 tsp black pepper

Cook cauliflower and garlic (microwave/steam) under very tender. Transfer to blender or food processor. Add all ingredients and blend until smooth. Use caution when blending hot ingredients!

**Pureed Classic Egg Salad (14 g protein)**

2 hard-boiled eggs

1 Tbsp mayonnaise

1 Tbsp plain Greek-style yogurt

1 tsp pickle juice (optional)

Salt and pepper to taste

Chop eggs and place in food processor. Add mayonnaise, pickle juice and yogurt to eggs and blend until smooth.

# Protein Smoothie Recipes

## **Fruit Smoothie (20 g protein)**

1/2 container (5.3 oz) plain Greek Yogurt  
1/2 scoop vanilla protein powder  
1/2 cup frozen milk cubes  
1/2 cup fruit (berries, peach, orange, pineapple, etc.)  
Place all ingredients in blender and blend until smooth.

## **Chocolate Peanut Butter Smoothie (19 g protein)**

1 small banana  
1/2 scoop chocolate protein powder  
2 Tbsp PB2 powder or smooth peanut butter  
1/2 cup frozen milk cubes  
Place all ingredients in blender and blend until smooth.

## **PB & J Smoothie (25 g protein)**

1/2 container (5.3 oz) plain Greek Yogurt  
1/2 cup milk  
1/2 scoop vanilla protein powder  
1/2 cup frozen berries (raspberries, strawberries, or blueberries)  
2 Tbsp PB2 Powder or smooth peanut butter  
Place all ingredients in blender and blend until smooth.

## **Banana Bomb Smoothie (24 g protein)**

1 small frozen banana  
1/2 container (5.3 oz) plain Greek Yogurt  
1/2 cup milk  
1/2 scoop vanilla or chocolate protein powder  
Place all ingredients in blender and blend until smooth.

## **Banana-Blueberry Green Smoothie (18 g protein)**

1 cup dark leafy greens (spinach, kale, chard)  
1 small banana  
1/2 cup blueberries  
1/2 tsp cinnamon  
1/2 cup milk  
1/2 scoop vanilla or chocolate protein powder  
Place all ingredients in blender and blend until smooth.

## **Tropical Berry Smoothie (21 g protein)**

1/4 cup fresh or unsweetened frozen strawberries  
1/4 cup fresh or unsweetened frozen mango  
1/4 cup fresh or unsweetened pineapple  
1/4 cup milk  
1/4 cup Greek yogurt  
1/2 scoop protein powder  
Place all ingredients in blender and blend until smooth.

## Days 22+: Regular food as tolerated

At this point, you may begin introducing regular foods as tolerated. Make sure to include protein at all meals and snacks. Specific high protein foods are listed below.

### DAIRY

<b>Milk (1 cup)</b>	<b>CALORIES</b>	<b>PROTEIN</b>
Fairlife, Fat Free	80	13
Fairlife, 2%	120	13
Silk Protein Nut Milk	130	10
Skim	90	8
2%	130	8
Soy Milk, Original	110	8
Soy Milk, Light	60	6

<b>Greek Yogurt (5.3 oz)</b>	<b>CALORIES</b>	<b>PROTEIN</b>
Any brand, 15 g of sugar or less	150	15

<b>Cheese (1 oz)</b>	<b>CALORIES</b>	<b>PROTEIN</b>
Cottage Cheese (1/2 cup)	90	13
Parmesan	120	11
Swiss	105	8
String Cheese	80	8
Mozzarella	80	8
Cheddar	115	7
American	105	5
Ricotta, Part-Skim, 1/4 cup	80	5

### POULTRY

<b>Chicken/Turkey (cooked, 1 oz)</b>	<b>CALORIES</b>	<b>PROTEIN</b>
Chicken, white meat	50	9
Turkey, white meat	40	9
Turkey, dark meat	50	8
Chicken, dark meat	60	8

<b>Eggs/Egg Substitutes</b>	<b>CALORIES</b>	<b>PROTEIN</b>
1 Large Whole Egg	75	6
Egg Whites—2 whites	32	6
Egg substitutes – 1/4 cup	32	6

**FISH/SEAFOOD**

<b>Fish (cooked, 1 oz)</b>	<b>CALORIES</b>	<b>PROTEIN</b>
Anchovies	50	9
Tuna	38	8
Cod	30	7
Halibut/Catfish	40	7
Perch/Flounder/Sole/Pollock	30	7
Swordfish	35	7
Tilapia	30	7
Whitefish/Trout	50	7
Sardines	60	7
Lobster	30	7
Salmon	50	6
Crabmeat	30	6
Shrimp	30	6
Clams	40	4

**RED MEAT**

<b>Lean Cuts (cooked, 1 oz)</b>	<b>CALORIES</b>	<b>PROTEIN</b>
Venison	45	9
Steak, loin or round cuts	55	8
Roast Beef	50	8
Liver	50	8
Veal	60	8
Pork, tenderloin	50	8
Ground Beef, 90% lean	60	7
Ground Beef, 95% lean	50	7
Lamb	50	7
Ham, extra lean (5%)	40	6
Beef Jerky	80	10



## **PLANT-BASED PROTEIN**

<b>Legumes – Beans/Peas/Lentils (cooked, ½ cup)</b>	<b>CALORIE S</b>	<b>CARBS (Fiber)</b>	<b>PROTEIN</b>
Soybeans	155	9	15
Lentils	115	20	9
Garbanzo Beans (chickpeas)	150	25	8
Tofu, extra firm	80	2	8
Edamame	95	8	8
Navy Beans	130	24	7
Kidney Beans	110	20	7
Refried Beans	120	18	7
Pinto Beans	100	18	6
Black Beans	100	18	6
Baked Beans, Zero Sugar Added	110	26	7
Black Bean or Bean soup	120	13	6
Green Peas	70	12	4
Black Eyed Peas	80	17	3

<b>Nuts (1/4 cup), Seeds &amp; Peanut Butter (2 Tbsp)</b>	<b>CALORIE S</b>	<b>FAT (Healthy fat)</b>	<b>PROTEIN</b>
Pumpkin Seeds	180	15	10
Hemp Hearts/Seeds (3 Tbsp)	180	15	10
Peanut Butter (2 Tbsp)	188	16	8
Almonds	205	18	8
Peanuts, dry roasted	165	14	7
Sunflower Seeds	200	16	6
Brazil Nuts/Macadamias	230	24	5
Cashews	195	16	5
Walnuts	150	19	5
PB2	60	1.5	6
Pecans	170	17	3

## Fiber - Complex Carbohydrates

Fiber, also known as complex carbohydrates, work to keep you full and aids in digestion. There are two types of fiber, soluble and insoluble. **Soluble** fiber absorbs water, which slows digestion and makes you feel fuller longer. **Insoluble** fiber does not absorb water. It adds bulk and helps keep digestion regular. A diet rich in fiber has been shown to protect against heart disease, reduce the risk of colon cancer, control blood sugar, and reduce cholesterol. Fiber is also fermented by gut bacteria, which improves immune, digestive, and overall health. The recommended daily intake of fiber is 25 to 35 grams.

### Non-Starchy Vegetables (1-4g of dietary fiber/serving)

Alfalfa sprouts	Beet greens	Radishes
Artichoke	Collard greens	Rutabaga
Asparagus	Dandelion greens	Sauerkraut
Bamboo shoots	Kale	Snow peas or pea pods
Beans: Italian/green/yellow	Mustard greens	Spaghetti squash
Bean sprouts	Turnip greens	Spinach
Broccoli	Jicama	Summer squash
Brussels sprouts	Kohlrabi	Spaghetti squash
Cabbage	Leeks	Swiss chard
Carrots	Leaf lettuce	Tomato
Cauliflower	Romaine lettuce	Turnips
Celery	Mushrooms	Water chestnuts
Chinese cabbage	Okra	Watercress
Cucumber	Onions	Zucchini
Eggplant	Parsley	
Green onions or scallions	Peppers, all varieties	

### Starchy Vegetables (1-3g of dietary fiber/serving)

Potato/Sweet potato	Corn	Parsnips
Plantains	Peas	Winter squash

### Legumes (4-10g of dietary fiber/serving)

Navy beans	Kidney beans	Black eyed peas
Pinto beans	Baked beans	Lentils
Black beans	Green peas	Garbanzo beans

### Fruit (1-5g of dietary fiber/serving)

Apple	Honeydew melon	Plums
Orange	Watermelon	Pineapple
Banana	Peach	Mango
Blueberries	Grapefruit	Papaya
Strawberries	Kiwi	Pear
Raspberries	Grapes	
Cantaloupe	Cherries	

### Whole Grains (4-12g of dietary fiber/serving, varies widely)

Oats – oatmeal, oat bran, steel cut oats

Whole grain breads, pastas, and rice

Read ingredients! Make sure “whole wheat” or “whole grain” is the first ingredient listed

# Healthy Fat

Our bodies need fat. Body fat protects organs from injury, provides insulation, helps the body to regulate temperature, and regulates hormones. Dietary fat aids in the absorption of vitamins, increases satiety, and provides energy. There are different types of fat. **Monounsaturated** and **polyunsaturated** are considered the “good fats” because they are good for your heart, cholesterol, and overall health. **Saturated** fat should be limited.

## **Monounsaturated Fat - Good**

Avocado  
Olives  
Almonds  
Cashews  
Peanuts  
Olive oil  
Canola oil  
Peanut oil  
Sesame oil  
Sunflower oil

## **Polyunsaturated Fat - Good**

Fatty fish (salmon, tuna, herring, sardines)  
Walnuts  
Flaxseed  
Chia seeds  
Tahini/sesame seeds  
Soybean oil  
Corn oil  
Safflower oil  
Sunflower seeds  
Pumpkin seeds

## **Omega-3 and Omega-6 Fatty Acids**

Omega-3 and Omega-6 are the two polyunsaturated fatty acids that are essential, which means our body cannot make them and they must be obtained through diet. The typical American diet has enough Omega-6, but not enough Omega-3 because there are limited sources. Omega-3 fatty acids have anti-inflammatory properties and have been shown to lower blood lipids, promote heart health, and reduce risk of cognitive decline as we age.

## **Omega-3 Fatty Acids in Food**

- ALA (from plants) – Flaxseeds, walnuts, canola oil
  - EPA (from animals) – Fatty fish such as salmon, anchovies, sardines, herring
- DHA (from animals) – Fatty fish such as salmon, anchovies, sardines, herring