

## Nutrition Guidelines for Surgery Recovery

Research has shown people who are well nourished and eat healthy foods before and after surgery recover more quickly and are less likely to have complications. We recommend an anti-inflammatory (“Mediterranean”) style diet and increased protein intake to optimize recovery. Controlling your blood glucose also will positively impact your recovery. Please call the Clinical Nutrition Department if you have any questions.

### Pre and Post Surgery Protein Goal: 100-125 grams daily

- Increase your protein intake for 2-4 weeks prior to surgery.
- Continue increased protein intake for 4 weeks after surgery.
- If you are unable to meet your protein needs through meals/snacks, choose a high protein supplement 1-2 times per day. Suggested supplements are listed below or look for comparable store brand options which may be lower cost.

Supplement Name	Calories/serving	Protein/serving
Ensure High Protein	160 calories	16 grams
Boost High Protein	240 calories	20 grams
Ensure Max / Boost Max	150-160 calories	30 grams
Premier Protein	160 calories	30 grams
Carnation Breakfast Essentials Light Start (Packet mixed with 1 cup skim milk)	150 calories	13 grams
Glucerna Shakes	180-220 calories	10 grams

### Steps to get you started:

- Choose more plant-based foods, such as fruits, vegetables, whole grains, beans, and nuts.
- Choose healthy fats like those found in olive oil, nuts, peanuts, avocados, and fish.
- Choose lean protein sources like fish, poultry, and beans more often than red meat.
- Have a serving of protein at each meal/snack.
- Enjoy yogurt and small portions of low fat cheese daily.
- Use herbs and spices instead of salt to flavor foods.



# HEALTHFUL EATING MEDITERRANEAN STYLE

<b>Food Groups &amp; Servings</b>	<b>Examples:</b>	
<b>Whole Grains</b> 4-6 servings per day	1 slice whole wheat bread ½ whole wheat English muffin or bagel 6-inch whole wheat pita or whole wheat tortilla ½ large whole grain bun or 1 small whole grain roll 6 whole grain crackers ½ cup cooked oatmeal or ¾ cup whole grain cereal 1/3 cup cooked whole wheat pasta, brown rice, quinoa, or barley	
<b>Fruits and Vegetables</b> 3 servings of fruit & 4 or more servings of vegetables per day	1 small-sized piece of fresh fruit ½ banana 15 grapes 1 cup melon, berries, or pineapple corn, ½ cup canned fruit ¼ cup dried fruit	1 cup raw leafy veggies ½ cup cooked veggies 1 small potato (3 oz.) ½ cup mashed potatoes, or peas
<b>Legumes and Nuts</b> 1-3 servings per day  **Protein source	2 Tbsp. Sunflower or sesame seeds (3 grams protein) 2 Tbsp. peanut butter or almond butter (7 grams protein) ¼ cup walnuts, pecans, unsalted almonds & peanuts (4-8 grams protein) ½ cup beans (black, kidney, garbanzo, refried, etc.), split peas or lentils (7-11 grams protein)	
<b>Low-fat Dairy Products</b> 1-3 servings per day  **Protein source	1 cup of low-fat, skim or soy milk (8 grams protein) 4-6 oz. low fat Greek yogurt (18 grams protein) 1 oz. low-fat cheese (7 grams protein) ½ cup low-fat cottage cheese (14 grams protein)	
<b>Fish or shellfish</b> 2-3 servings / week  **Protein source	3 ounces (about the size of a deck of cards) (22 grams protein) ½ can (3 oz.) tuna packed in water Choose fatty fishes like salmon, herring, sardines, or mackerel often. Bake, sauté, broil, roast, grill or poach your fish.	
<b>Poultry, if desired</b> 1-3 servings / week  **Protein source	3 ounces (about the size of a deck of cards) (28 grams protein) Bake, sauté, stir fry, roast or grill the poultry you eat, and eat it without the skin. 1 egg (6 grams protein)	
<b>Healthy fat</b> 4-6 servings per day	1 tsp. olive or canola oil 2 tsp. margarine made with olive oil 2 tbsp. of olive oil based salad dressing	1/8 of an avocado 1 tsp mayo made with olive oil

## SAMPLE MEAL PLANS

**To meet your protein goals, add 2-3 snacks and/or 1-2 nutrition supplements between your meals. See snack ideas on the next page.**

**Carbohydrate counts are included for patients with diabetes.**

Day	Breakfast	Lunch	Dinner
<b>Monday</b>	1 cup oatmeal <b>2 tbsp. nuts</b> 1 apple <b>1 cup skim or soy milk</b>  19gm protein 60gm carb (4serv)	<b>3 oz. lean turkey w/ 1 oz. low fat cheese</b> on 2 slices wheat bread w/ ½ avocado & olive oil mayo 1 cup baby carrots 1 cup grapes  39gm protein 45gm carb(3serv)	<b>4 oz. grilled fish w/</b> olive oil 1 medium sweet potato 1 cup sautéed vegetables in 1 tbsp. olive oil 1 cup mixed fruit  34gm protein 45gm carb(3serv)
<b>Tuesday</b>	Breakfast parfait w/ <b>4-6 oz. Greek yogurt</b> 1 cup strawberries or blueberries 1 cup high-fiber cereal  21gm protein 60gm carb(4serv)	<b>2 oz. tuna, packed in water</b> ½ whole wheat pita pocket 1 tbsp. mayo made w/ olive oil w/ lettuce & tomato 1 apple <b>6 oz. light yogurt</b>  22gm protein 45gm carb(3serv)	Chicken kabobs w/ <b>4 oz. chicken breast</b> , onions, peppers, cherry tomatoes brushed w/ olive oil, grilled on skewers; <b>2 tbsp. hummus</b> in 1 whole-wheat pita pocket w/ 1 cup pineapple  45gm protein 45gm carb(3serv)
<b>Wednesday</b>	<b>Omelet w/ 2 eggs</b> ¼ cup chopped tomatoes 1 cup fresh spinach 2 tbsp. olive oil <b>2 tbsp. low fat cheese</b> 1 slice whole wheat toast 1 tbsp. olive oil margarine 1 cup raspberries  22gm protein 30gm carb(2serv)	Chicken salad ( <b>2 oz. chicken breast</b> , celery, onion w/ 1 tbsp. olive oil mayo) w/ side salad & olive oil dressing 1 whole wheat bun 1 large apple  22gm protein 45gm carb(3serv)	<b>3 oz. sautéed shrimp w/ 2 tbsp.</b> olive oil, garlic, chopped onion, peppers, & asparagus mixed w/ 1 cup quinoa cooked in chicken broth 1 cup cantaloupe  32gm protein 60gm carb(4serv)
<b>Thursday</b>	1 whole wheat English muffin <b>1 tbsp. almond or peanut butter</b> 1 cup blueberries <b>1 cup skim or soy milk</b>  16gm protein 60gm carb(4serv)	2 cups salad greens w/ diced carrots, tomatoes, ½ cup rinsed <b>beans</b> , <b>2 oz. diced chicken</b> , <b>3 tbsp. walnuts</b> , & 2 tbsp. dried cranberries w/ 2 tbsp. olive oil & 1 tbsp. balsamic vinegar <b>6 oz. Greek yogurt w/ 1 c berries</b>  47gm protein 60gm carb(4serv)	1 cup whole wheat pasta w/ 2 tbsp. olive oil, 2 cloves garlic, basil, <b>4 oz. grilled chicken</b> , 1 cup spinach, & ½ cup canned diced tomatoes 1 cup mixed green salad 1 tbsp. light salad dressing  46gm protein 45gm carb(3serv)
<b>Friday</b>	1 cup high-fiber cereal <b>2 tbsp. walnuts</b> 2 tbsp. raisins <b>1 cup soy or skim milk</b>  13gm protein 60gm carb(4serv)	<b>3 oz. grilled chicken breast</b> 1 whole wheat bun ½ avocado, lettuce, tomato 1 tbsp. mayo made w/ olive oil <b>2 tbsp. hummus w/</b> baby carrots 1 cup cantaloupe  34gm protein 45gm carb(3serv)	<b>4 oz. turkey breast</b> ½ cup mashed potatoes 1 cup fresh green beans w/ 1 tsp olive oil & <b>slivered almonds</b> 1 whole wheat roll <b>1 cup skim or soy milk</b>  42gm protein 45gm carb(3serv)

**BOLD= high protein foods**

\*Drink water, tea, coffee or other non-calorie beverages

## SNACK IDEAS

**Choose 2-3 snacks and/or 1-2 nutrition supplements in addition to meals to meet your protein goals.**

<b>2 oz. tuna packed in water</b> mixed with 2 tsp. olive oil mayo 6 whole grain crackers 19gm protein 15gm carb(1serv)	1 apple <b>2 tbsp. peanut butter</b> 7gm protein 15gm carb(1serv)	<b>½ cup low-fat cottage cheese</b> ½ cup pineapple chunks (juice packed if using canned) 14gm protein 15gm carb(1serv)
<b>6 oz. low fat yogurt</b> 1 cup berries <b>¼ cup almonds</b> 13gm protein 30gm carb(2serv)	1 cup grapes <b>Low fat string cheese</b> 7gm protein 15gm carb(1serv)	<b>Low fat string cheese</b> 6 whole grain crackers 10gm protein 15gm carb (1serv)
<b>1/3 cup hummus</b> 1 cup cucumber slices 8 baby carrots 8gm protein 15gm carb(1serv)	<b>2 tbsp. peanut butter</b> Celery sticks 7gm protein 0gm carb (0serv)	<b>1 hardboiled egg</b> 1 small banana 6gm protein 15gm carb (1serv)
½ cup grapes <b>½ cup low-fat cottage cheese</b> 14gm protein 15gm carb(1serv)	½ whole-wheat pita filled w/ <b>¼ cup fat-free ricotta cheese</b> mixed w/ <b>1 tbsp. peanut butter</b> & honey; sprinkle with 1 tsp. raisins 12gm protein 30gm carb(2serv)	<b>4-6 oz. Greek yogurt</b> ¼ cup low-fat granola 20gm protein 30gm carb (2serv)
<b>¼ cup almonds</b> 1 cup fresh cherries 8gm protein 15gm carb(1serv)	1 granola bar <b>1 cup milk or soy milk</b> 12gm protein 30gm carb (2serv)	<b>2 tbsp. peanut butter</b> 3 graham cracker squares 9gm protein 15gm carb (1serv)
<b>2 oz. lean turkey w/ ½ oz. low fat cheese on</b> 1 slice wheat bread w/ ¼ avocado 22gm protein 15gm carb(1serv)	<b>4-6 oz. Greek yogurt</b> <b>¼ cup walnuts</b> 1 cup raspberries 23gm protein 30gm carb(2serv)	<b>1 cup milk OR</b> <b>1 Nutrition Supplement</b>  Milk: 8gm protein 15gm carb (1serv) Protein and carbohydrate content of supplements will vary.

### Clinical Nutrition Offices

DePaul Hospital	314-344-7961
St. Clare Hospital – Fenton	636-496-2543
St. Joseph Hospital – Lake St. Louis	636-625-5424
St. Joseph Hospital – St. Charles	636-947-5156
St. Mary's Hospital – St. Louis	314-768-8891

