

Nutrition for the Orthopedic Surgical Patient- Joints

Proper, healthy nutrition pre and post-surgery is key to healing and recovery. The body has increased nutrient needs after surgical procedures such as a joint replacements or revisions.

Protein Needs:

At least 5 days before and for 2 weeks after your procedure, you should consume at least **80 grams of protein daily**. This likely means increasing your current protein intake 1 ½ - 2 times your current consumption.

Below is a list of protein sources that are high biological proteins, meaning they have high concentrations of amino acids and are readily digested.

- Eggs
- Milk, Yogurt, Cheese
- Chicken, Beef, Pork, Fish
- Soybeans, Soy Milk
- Nuts, Nut butters (peanut butter, almond butter)
- Protein Drinks/Shakes (Whey or soy protein isolate)

Water and Fiber Needs:

Both water and fiber needs increase pre and post-op. This will assist with healing and prevent constipation that often results from medications used for surgery and pain control.

Water consumption should be ½ to 1 gallon per day for the average patient- *provided you are not on a water restrictive diet for other health conditions.*

Fiber can assist with avoiding constipation by consuming 3-4 servings of fresh fruits and vegetables with each meal; especially those with skin (grapes, celery, apples, cucumbers). Be sure to drink plenty of water when you increase fiber intake; otherwise you may experience painful constipation. Recommended fiber intake for most patients is 25-35 grams/day.

Body Weight and Weight

Management:

Maintaining or trending toward a normal body weight will improve success of joint replacements or revisions. If you are at a healthy body weight, maintaining this weight is important. If you are overweight or obese, it will be important to start losing weight prior to surgery and continue to lose weight after surgery. For optimal surgical success, trend weight down toward normal BMI.

Following a healthy diet, setting weight loss goals, and tracking your food intake will help you with weight loss. Keep a food diary or journal to monitor your daily food and beverage

intake. A list of weight loss tips is attached.

Special Notes for Diabetic Patients:

It is very important to maintain your blood sugars as close to 100 as possible. After surgery, blood sugars are normally higher due to stress of surgery and medications. If you have hyperglycemia or uncontrolled blood sugar prior to surgery, it may be difficult to have post-operative glycemic control.

Continue or start making smart food choices that are consistent with diabetic diet guidelines before and after surgery. ***Avoid concentrated sweets such as: fruit juice, soda, corn syrup, honey, jelly, candy, all simple carbohydrates, etc.***

Many patients will require insulin or other medications to manage elevated blood sugar after surgery. This does not mean your home medications will change, but the doctor will manage and treat elevated blood sugars while you are in the hospital in order to provide the greatest chance of healing and minimize infections.

Please review the attached handouts for a list of high protein foods and weight loss tips.

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General Tips

- Eat at least three times per day.
- Pay attention to your body. When you feel like you have had enough to eat, stop. Quit before you feel full, stuffed, or sick from eating. You can have more if you are really hungry.
- If you still feel hungry or unsatisfied after a meal or snack, wait at least 10 minutes before you have more food. Often, the craving will go away.
- Drink plenty of calorie-free drinks (water, tea, coffee, diet soda). You may be thirsty, not hungry.
- Pick lean meats, low-fat or nonfat cheese, and fat-free (skim) or low-fat (1%) milk instead of higher-fat/higher-calorie choices.
- Get plenty of fiber. Vegetables, fruits, and whole grains are good sources.
- Cut back on sugar. For example, drink less fruit juice and regular soda.
- Limit the amount of alcohol (beer, wine, and liquor) that you drink.
- Keep all food in the kitchen. Eat only in a chosen place, such as at the table. Don't eat in the car or the bedroom or in front of the TV.

Food Preparation

- Plan meals ahead of time.
- Try cooking methods that cut calories:
- Cook without adding fat (bake, broil, roast, boil).
- Use nonstick cooking sprays instead of butter or oil. You can also use wine, broth, or fruit juice instead of oil when cooking.
- Use low-calorie foods instead of high-calorie ones when possible.
- Cook only what you need for one meal (don't make leftovers).
- Cook when you are not hungry. For example, cook and refrigerate tomorrow's dinner after you have finished eating tonight.
- Make fruits, vegetables, and other low-calorie foods part of each meal.
- Drink water while you cook.

Mealtimes

- Drink a glass of water before you eat. Drink more during meals.
- Use smaller plates, bowls, glasses, and serving spoons.
- Do not put serving dishes on the table. This will make it harder to take a second portion.
- Put salad dressing on the side instead of mixing it with or pouring onto your salad. Then dip your fork into the dressing before you spear a bite of salad.
- Eat slowly. Take a few 1-minute breaks from eating during meals. Put your fork down between bites. Cut your food one bite at a time.
- Enjoy fruit for dessert instead of cake, pie, or other sweets.
- Leave a little food on your plate. (You control the food; it doesn't control you.)
- Remove your plate as soon as you've finished eating.

Snacking

Snacking can be part of your plan for healthy weight loss. You can eat six times per day as long as you plan what to eat and don't eat too many calories.

- Plan ahead. Be sure to have healthy snacks on hand. If the right food is not there, you may be more likely to eat whatever is available, such as candy, cookies, chips, leftovers, or other "quick" choices.
- Keep low-calorie snacks in a special part of the refrigerator. Good choices include the following:
 - Reduced-fat string cheese, low-calorie yogurt, and fat-free milk.
 - Washed, bite-size pieces of raw vegetables, such as carrots, celery, pepper strips, cucumbers, broccoli, and cauliflower. Serve with low-calorie dips.
 - Fresh fruit.

Eating and Emotions

Do you use eating to deal with feelings other than hunger, such as boredom, being tired, or stress? If you eat for these reasons, here are some other things you can try:

- Call a friend for support.
- Use inspirational quotes to help you avoid the temptation to eat.
- Take a warm bath or shower.
- Listen to music or a relaxation CD.
- Take a walk.
- Try activities that keep you from eating. For example, it's hard to eat while you're exercising. If you are gardening, you probably won't eat while your hands are covered in soil.

High Protein (more than 4 g per serving)

Food	Serving	Protein (g)
Bacon	2 slices	6
Bagel, 4": egg, raisin, or onion	1 each	9
Beans: lima, kidney, baked, or garbanzo, canned	½ cup	6-7
Beans: white, navy, or great northern, canned	½ cup	9
Beef, ground sirloin	1 oz	9
Beef, top round	1 oz	10
Cereal, breakfast, higher protein	½ cup	4-6
Cheese, most types	1 oz	7
Cheese, cottage, low fat	½ cup	15.5
Cheese, ricotta	½ cup	14
Chicken breast	1 oz	9

Dried beans and peas	½ cup	6-9
Egg substitute	¼ cup	7.5
Egg, whole or hard-boiled, large	1 each	6
Fish, fillet or steak	1 oz	6.5-7.5
Lamb	1 oz	8
Lentils	½ cup	9
Lunch meat: ham, turkey, chicken	1 oz	3-4
Milk, all types	1 cup	8
Milk, evaporated, canned	½ cup	8.5
Milk, fat-free dry solids	? cup	8
Muffin, English	1 each	5
Nuts: cashews, walnuts, mixed	1 oz	4-5
Nuts: peanuts, pistachios, almonds	1 oz	6
Peanut butter	2 Tbsp	8
Pork tenderloin	1 oz	9
Sardines	1 oz	7
Sausage, patty	1 oz	5
Seeds, pumpkin	1 oz	9.5
Seeds, sunflower	1 oz	5.5
Shellfish or crab	1 oz	5.5
Soy milk	1 cup	8-11
Soybeans	½ cup	14
Tofu, firm	¼ cup	5
Tuna, canned, drained	1 oz	7
Turkey	1 oz	8
Veggie or soy patty	1 each	11
Yogurt	8 oz	8-13

Sources: 1. US Department of Agriculture Agricultural Research Service. USDA National Nutrient Database for Standard Reference and Nutrient Data Laboratory; NutritionData.com. Nutrition Facts and Information. 2. Academy of Nutrition and Dietetics. www.eatright.org