



Nutrition Guide for
Strength and Recovery
Post-Surgery or Injury



Dr. Amber Ferrand, PT, DPT
Erika R. Lackey, PTA



After surgery or injury, you can expect a variety of changes that will occur within your body, including swelling, loss of muscle mass, potential decrease in bone density, and maybe loss of sleep, depending on your surgical procedure. One way you can affect your healing process is through nutrition. What goes into your body can either expedite or hinder your healing time and road to recovery. So, what do I need to do to get back on my feet and back to an active lifestyle?

Here are some of the essential nutrients you will need to aid in a faster recovery:

Macronutrients

Nutrients	It helps your body with:	Common Foods	Daily Intake
Protein	Healing, Tissue Repair and Re-Growth	Meat, poultry, fish, eggs, cheese, legumes, soy products, nuts, seeds	1.0-1.7 grams per kg of body weight
Carbohydrates	Energy for healing and preventing protein/muscle breakdown	Fruits, vegetables, legumes, breads, cereals, rice, pasta, grains	5-6 grams per kg of body weight for strength/power athletes
			8-10 g per kg of body weight for endurance athletes
Fats (Lipids)	Absorption of Fat-Soluble Vitamins, Immune Response, Energy	Oils, nuts, seeds, avocado, salad dressings, margarine, butter	44-78 grams total, based on 2,000 calorie diet

Tips for success:

- ✓ Further reduce **muscle atrophy** by:
 - Increasing your lean protein intake to 4-6 servings of 20-25 grams per sitting each day, and consuming them every 4 hours
 - Some great sources include: **turkey, fish, nuts**
- ✓ Make sure you are eating good sources of fiber, as some of the pain medications you take after surgery can cause constipation.
- ✓ Eat as many **nutrient-rich foods** as you can to provide the calories you need.

Vitamins and Minerals

Vitamins/ Minerals	It helps your body with:	Common Foods	Daily Intake
Vitamin A	Wound healing and growth, maintenance of skin	Carrots, sweet potatoes, dark yellow or green leafy vegetables (i.e., spinach or broccoli), milk, cheese, liver, egg yolk	5,000 IU
Vitamin C	Building connective tissue, essential nutrient for healing	Citrus fruits, strawberries, tomatoes, sweet peppers, greens, raw cabbage, melon, grapefruit, guava, broccoli, onions	60-120 mg
Vitamin D	Bone healing and calcium absorption	Fortified milk, butter, fortified cereals, liver, fatty fish (i.e., swordfish, tuna, salmon, mackerel), egg yolk; Sun exposure in moderation (about 10 min)	2,000-5,000 mg
Vitamin E	Antioxidant/disease-fighting properties (do not take before surgery)	Vegetable oils, beef, liver, milk eggs, butter, leafy greens, fortified cereals	30 IU
Vitamin K	Wound healing response and blood clotting	Green leafy vegetables, fatty fish, liver, vegetable oils, broccoli, asparagus	80 g for Men 65 g for Women
Calcium	Building/maintaining bones and muscle contraction	Milk, cheese, soy products, turnip and mustard greens, cottage cheese, kale, broccoli, almonds	1,500 mg
Zinc	Wound healing, component of enzymes	Meat (i.e., beef, veal, lamb, pork), liver, oysters, black-eyed peas, white beans	15 mg
Iron	Forming hemoglobin and carrying oxygen	Liver, beef, lamb, pork, veal, clams, oysters, fortified cereals, legumes, dried fruits	18 mg for Men 15 mg for Women

Tips for success:

- ✓ Further reduce **inflammation** by:
 - Maintaining a good balance of Omega 3's and 6's, through fish and shrimp consumption
 - 3-9 Grams of fish oil per day
 - Eating many fruits and vegetables that are rich in Vitamin A, C, and D – **see above for recommendations**
- ✓ Vitamin c and Zinc are superstars when it comes to healing!
 - Vitamin C is essential when making a protein called collagen which is needed for repairing **tendons, ligaments, and healing surgical wounds.**
 - They are also important in preventing infection after your surgery!
- ✓ Calcium and Vitamin D are nutrients associated with **healthy** bones, so make sure you are increasing your daily intake, especially if your surgery or injury involves the bone.



How much water should I be drinking?

It is important that your body is getting the appropriate fluids and hydration it needs in order to aid in proper healing. Make sure you get at least 8 cups of water or non-Caffeinated beverages every day. You may need to increase your intake depending on the type of medication you are taking or the extent of your injury. Remember, **do not** wait until you're thirsty. By then, you're already dehydrated!!

Helpful Hints

- ✓ Make sure you are getting plenty of sleep and rest, as this can greatly affect your healing (between 7-8 hours per night).
- ✓ If you are having difficulty sleeping, melatonin (3-5 mg) or magnesium supplements (200-400mg) can be taken prior to going to bed, which may help in better sleeping habits.
- ✓ Limit caffeine, alcohol, and tobacco use at this time, as this can delay healing.
- ✓ Always stick to dietary guidelines recommended by your doctor, and refer to your physician if you have any questions about dietary restrictions for secondary health reasons, such as food allergies or diabetes.
- ✓ Although you might be immobile and are worried about weight gain, **do not** decrease your caloric intake, as your body needs a **greater** amount of

energy from nutritious foods to fuel the healing process. If your overall energy and protein needs are not met, body tissues, such as muscles and ligaments, will begin to breakdown, which will **compromise healing** and may prolong your recovery period.



- ✓ Your body requires more protein and calcium during this time, so take careful note of the daily recommendations and food sources listed above.
- ✓ Stay hydrated and drink plenty of water!
- ✓ Continue to eat **well-balanced meals** and a wide variety of foods to obtain all the nutrients your body needs for necessary healing to occur.

We wish you all the best here at
South Texas Bone and Joint
as you begin your journey to
a full recovery!!

