

ARTHRITIS & SPORTS

Orthopaedics • Physical Therapy • Wellness

Nutrition Recommendations Post-Surgery

Healing and recovery are vital to any successful surgery. When we reduce inflammation, it allows the body to begin to heal and repair itself. There are medications that help manage inflammation, but you can also help your body by feeding it the right foods. Here are some things to focus on when trying to reduce inflammation in the body post-surgery:

<p>Vitamin C helps make connective tissue (collagen) and health surgical wounds.</p> <ul style="list-style-type: none">• Vegetables: bell peppers, dark leafy greens, broccoli, baked potato, brussel sprouts• Fruit: citrus, kiwi, strawberries, lemon	<p>Antioxidants reduce free radicals (which can cause damage to cells) produced by surgery.</p> <ul style="list-style-type: none">• Berries: goji, blueberries, strawberries, elderberries, blackberries• Vegetables: kale, peppers, spinach, tomatoes• Nuts/beans
<p>Lean Protein helps your body create the scar tissue that will repair your incision post-surgery. Try to have a small amount with each meal.</p> <ul style="list-style-type: none">• Fish/seafood• Chicken/turkey• Eggs• Milk, cheese, yogurt, kefir• Soy products• Quinoa• Rice/beans• Nuts/seeds• Lentils/peas• Pasta (edamame, black bean)	<p>Probiotics strengthen your immune system. They also help to protect your stomach if you are on antibiotics after surgery</p> <ul style="list-style-type: none">• Yogurt/kefir• Kombucha tea• Miso soup• Soy milk• Sauerkraut• Pickles
<p>Calcium & Vitamin D team up to help strengthen your bones.</p> <ul style="list-style-type: none">• Milk, cheese, yogurt• Fortified orange juice• Canned salmon or sardines (with bones)• Tofu• Leafy greens (spinach, collard greens)• Almonds	<p>Zinc speeds up recovery and aids in wound healing.</p> <ul style="list-style-type: none">• Oysters• Nuts• Dark poultry• Fortified cereals• Dairy• Beans
<p>Fiber helps relieve constipation caused by pain killers.</p> <ul style="list-style-type: none">• Prunes/prune juice• Legumes• Fruit• Oatmeal, bran cereal• Ground flax seed	<p>Important Note: When increasing protein and fiber consumption, you should also increase water intake. It is recommended to drink 8-10 cups per day.</p>

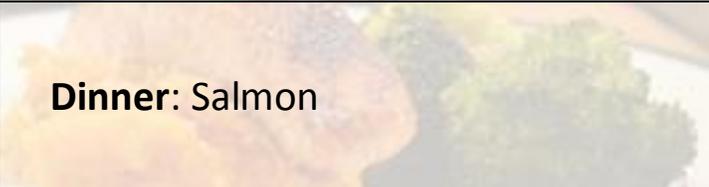
ARTHRITIS & SPORTS

Orthopaedics • Physical Therapy • Wellness

Post-Surgery Anti-Inflammation Sample Menu

Approximately 1800 calories - 45% carbohydrates - 30% fat - 25% protein - 30 grams fiber

This is a sample menu. You may need more or less calories or different combinations of food depending on your personal health. Schedule an appointment with the Dietitian for customized recommendations. (703) 349-5100

 Breakfast: Oatmeal	<ul style="list-style-type: none">• ¾ cup rolled oats• ¾ cup reduced fat milk• 2 tablespoons slivered almonds• 1 cup sliced strawberries
 Snack	<ul style="list-style-type: none">• 8 ounces low fat plain greek yogurt• ½ cup blueberries
 Lunch: Chicken Spinach Salad	<ul style="list-style-type: none">• 2 cups spinach• 4 ounces cooked chicken breast• ½ cup cherry tomatoes• ¼ avocado• 1 ounces crumbled goat cheese• 2 tablespoons balsamic vinaigrette• Whole grain dinner roll
 Snack	<ul style="list-style-type: none">• 1 cup grapes• Cheese stick• 1 ounce pretzels
 Dinner: Salmon	<ul style="list-style-type: none">• 4 ounces baked salmon• ½ baked sweet potato• 1 teaspoon butter• 2 cups steamed broccoli

Other tips:

- Drink water to help with digestion & move anesthesia through the body
- Eat small frequent meals to help with constipation
- Avoid / Decrease your consumption of the following, which cause / increase inflammation in the body: sugar, saturated fat, processed carbohydrates, alcohol

ARTHRITIS & SPORTS

Orthopaedics • Physical Therapy • Wellness

Sarcopenia and Diet

Sarcopenia is the loss of lean muscle mass that occurs during the aging process. Sarcopenia starts at age 40 and accelerates greatly after age 75. After age 30, people lose 3%-8% of their muscle mass each decade. Between 35% and 45% of people over age 65 have sarcopenia.

As we age, sarcopenia makes it much more difficult to perform activities of daily living, such as cleaning and grocery shopping. In addition, sarcopenia puts us at risk for falls and other accidents. Osteoporosis and sarcopenia are linked, because without enough muscle, our bones are not put under the mechanical stress necessary to keep them healthy. People who have lost a large amount of muscle do not recover from trauma, illness, or surgery as quickly as those who have more muscle mass.

The following suggestions may help prevent sarcopenia:

- **Exercise:** Include 30-60 minutes of moderate-intensity exercise every day (recommended amount but consult your doctor). Strength/resistance training is of particular importance.
- **Protein:** It is important to make sure you have enough protein in your diet, and to eat a well-rounded diet with plenty of variety. Research suggests eating at least 0.8 grams of protein per kilogram of body weight. However, when wounds are present, your body needs more protein to heal (1.2 – 1.5 grams of protein per kilogram of body weight). If you cannot consume enough protein in your diet, consider purchasing a protein powder rich in whey protein.
** to calculate your weight in kilograms, divide your weight in pounds (lb) by 2.2*
- **Daily calories:** Many older people do not eat as much food as they should. Adequate caloric intake helps “spare” proteins. If you have a loss of appetite or other issues leading to a decrease in intake, please talk to your dietitian or physician.
- **Hormonal imbalances:** Some older adults suffer from hormonal imbalances, such as decreased testosterone, which can lead to muscle loss. Talk to your physician about hormone testing and replacement.
- **Vitamin D:** Consume enough foods that are rich in vitamin D, including:
 - Fish-liver oils
 - Fish (herring, salmon,
 - Fortified orange juice
 - Fortified milk/cereal
 - canned sardines)
- **Creatine and conjugated linoleic acid:** Consider supplementing your diet with creatine and/or conjugated linoleic acid, which may help to increase gain of muscle mass in people who are following a strength-training regimen. It is important to talk to your registered dietitian or doctor before beginning any supplementation.
- **Omega-3 fatty acids:** Omega-3 fatty acids help protect your bone health and prevents inflammation associated with aging. Sources include:
 - Fish (mackerel, salmon,
 - Oil (olive, canola, peanut,
 - Wheat germ
 - mullet, herring, lake trout,
 - walnut)
 - Butternuts/walnuts
 - tuna, sardines, anchovies)
 - Soybeans

For more information, we suggest reading the article *The Power of Protein in Wound Healing*, written by Ellen Mackay and published in the Spring 2019 edition of Wound Care Canada → <https://bit.ly/2kiC5Ag>