



Nutrition plays a crucial role in determining the risk of complications and recovery time in orthopedic surgery. A 2019 study highlighted that tailored preoperative nutrition management resulted in a significant 28% reduction in complications. Considering factors such as age, weight, lab results, risk of malnutrition, and metabolic conditions like diabetes, personalized nutritional strategies are essential. Therefore, it is suggested for patients to meet with the dietitian before surgery. Such interventions can facilitate weight management for patients undergoing lower extremity joint procedures, address malnutrition to enhance healing, stabilize blood sugar levels to prevent wound complications, and bolster immune function to promote overall health throughout the surgical process. Below are some general healthy eating guidelines on preoperative nutrition.

EAT A BALANCED DIET

Consume a balanced diet that includes a variety of nutrient-dense foods prior to surgery. Include colorful fruits, vegetables, whole grains, lean proteins, and healthy fats. Diversifying your diet helps ensure adequate macronutrient and micronutrient levels in the body and proper immune function.

MEET ENERGY NEEDS

Make sure you are consuming enough calories to meet your body's energy requirements. Starting a restrictive diet too close to surgery can be harmful. Caloric needs may vary depending on factors such as age, gender, body size, activity level, and underlying health conditions. Consult with your registered dietitian to determine your specific calorie needs.

INCREASE PROTEIN INTAKE

Protein is essential for wound healing, tissue repair, and immune function. Aim to consume sufficient protein from sources such as lean meats, poultry, fish, eggs, dairy products, legumes, and plant-based protein sources like tofu and tempeh. Make sure at least a quarter of your plate is a quality protein source.

ADEQUATE FIBER INTAKE

Adequate fiber intake leading up to surgery can help maintain regular bowel movements. Include high fiber foods such as whole grains, fruits, vegetables, legumes, and nuts in your diet. Women should aim for 25 grams per day while men should aim for 38 grams. Always follow any dietary instructions given by your healthcare team depending on the type of surgery.

HYDRATION NEEDS

Meet fluid needs to stay hydrated prior to surgery. Proper hydration supports optimal bodily functions, including circulation, digestion, and cellular activities. Adequate hydration promotes tissue elasticity. Water is the best choice, but you can also consume hydrating foods like fruits and vegetables.

IRON AND VITAMIN C

If you have low iron levels or are at risk of iron deficiency, focus on consuming iron rich foods such as lean meats, poultry, fish, fortified cereals, beans, and dark leafy greens. Pair iron rich foods with a source of vitamin C (e.g., citrus fruits, strawberries, bell peppers, broccoli, and tomatoes) to enhance absorption. Adequate iron levels could increase hemoglobin levels and postoperative outcomes.

AVOID ALCOHOL AND CAFFEINE

Limit or avoid alcohol and caffeine intake before surgery, as they can interfere with anesthesia, hydration, and healing processes. Follow any specific instructions provided by your healthcare team regarding the consumption of these substances.

FOLLOW PREOPERATIVE FASTING GUIDELINES

Follow the preoperative fasting guidelines, if any, provided by your healthcare team to ensure an empty stomach before surgery. It is important to comply with these guidelines to minimize the risk of complications during anesthesia.