

Nutritional Optimization Before Surgery: Key Strategies for Better Recovery

Optimizing nutrition before surgery can significantly impact the body's resilience, healing capacity, and overall recovery time. A comprehensive guide based on Northwestern Medicine's four-step nutritional plan combines high-protein, high-carbohydrate foods, immunonutrition, and specific pre-surgical beverages.

1. High-Protein, High-Carbohydrate Diet (Start 2-4 Weeks Before Surgery)

A high-protein, high-carbohydrate diet provides the necessary building blocks for tissue repair and recovery two to four weeks before surgery. Protein supports wound healing and immune function, while carbohydrates supply energy to preserve muscle and organ function.

Tips for Building a Healthy Pre-Surgery Diet:

- **Increase Protein Intake:** Aim to include lean meats, fish, dairy, eggs, and plant-based proteins like beans and lentils.
- **Maintain Caloric Balance:** Ensure adequate caloric intake to support weight maintenance or healthy weight gain as required.
- **Hydrate Regularly:** Stay hydrated with water, milk, and unsweetened drinks.

Adding **protein-rich snacks** can also help increase daily intake without overwhelming meals. Examples include Greek yogurt, hard-boiled eggs, hummus with veggies, and cottage cheese with fruit

2. Immunonutrition (Start 7 Days Before Surgery)

Immunonutrition drinks contain specific amino acids and nutrients designed to boost immune function. Drinking them seven days before surgery can help prepare the body for surgical stress, improve resilience against infection, and aid faster recovery.

Recommended Immunonutrition Drinks:

- **Ensure Surgery Immunonutrition Shake**
- **IMPACT Advanced Recovery Drink**

The typical recommendation is one bottle twice daily, totaling 14 servings leading up to surgery. On the day before surgery, two drinks should be consumed. This targeted nutrition strengthens immune defenses, potentially reducing complications and enhancing recovery

3. Carbohydrate Loading (24 Hours Before Surgery)

Carbohydrate loading the day before surgery helps supply glucose to the muscles and organs, which sustains energy levels while the body is fasting. Studies have shown that this practice can stabilize blood sugar levels during surgery and reduce post-operative thirst and hunger.

Pre-Surgery Carbohydrate Drinks:

- **Ensure Pre-Surgery Clear Carbohydrate Drink**
- **ClearFast Pre-Op**

Recommended intake includes two bottles the night before surgery and one bottle 2-3 hours before surgery. This timing allows the carbohydrates to be metabolized and absorbed efficiently, providing an energy source that remains available during surgery.

4. Post-Operative Immunonutrition (1 Week After Surgery)

After surgery, resuming immunonutrition is essential for continued immune support and tissue repair. Drinking one bottle twice daily for a week helps maintain recovery momentum and reduces the risk of post-operative complications. This phase may be initiated while in the hospital and at home.

By following these four steps, patients can optimize their body's readiness for surgery, leading to faster recovery and improved surgical outcomes. Always consult with your healthcare team for personalized guidance, especially if managing conditions like diabetes or hypertension, which may require additional dietary adjustments