



Nutrition Session 4

Nutrition Around Surgery

What to Eat Before and After Surgery



Welcome

- Ayanna Smart, RD
- Work with seniors recovering from illness and major health issues that may involve surgery



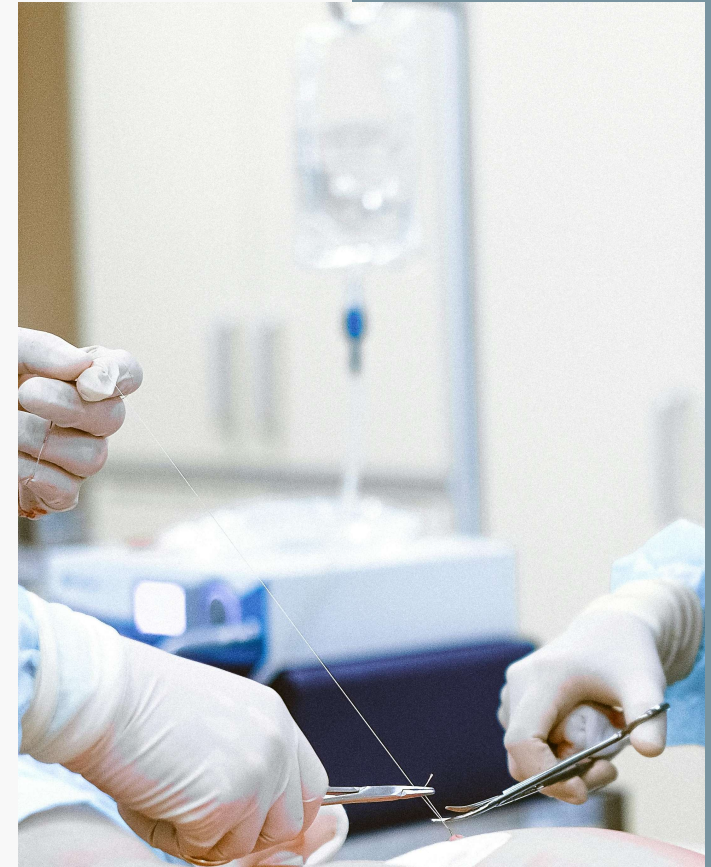
Ayanna Smart

Registered Dietitian



Today's Session

- What to eat before and after surgery
 - New guidelines around surgery and nutrition
- Nutrition in common surgeries
 - Joint Replacements
 - Heart Surgery
 - Dental Procedures
 - Gall Bladder Surgery



Nutrition for all surgery



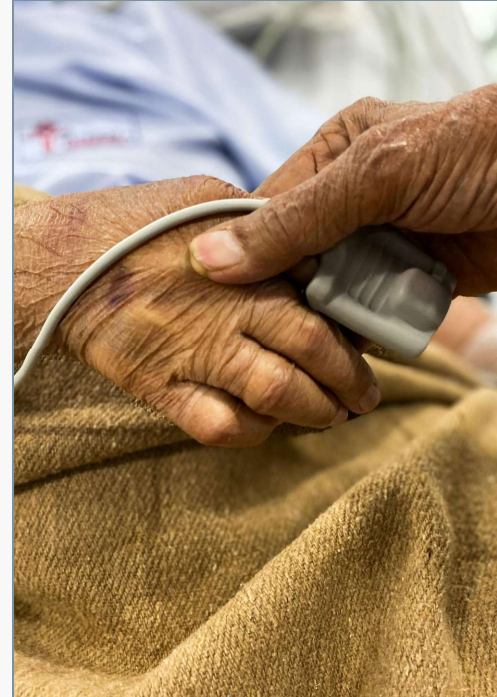
Why is Nutrition Important for Surgery?

- Surgery is a controlled injury
- Your body sees it as trauma and must heal from it
 - Uses energy and nutrients to:
 - Repair tissue
 - Fight off infection
 - Rebuild strength



Why is Nutrition Important for Surgery?

- Healing is more difficult if nutrition is poor
- Malnutrition before surgery is strongly linked to complications:
 - Delayed wound healing
 - Post operative infections
 - Longer hospital stays



Why is Nutrition Important for Surgery?

- Nutritional prehabilitation may reduce post-op complications and shorten hospital stays.
- Benefits are even more noticeable in older, frail patients



When does nutrition play a role?

- Before surgery
 - Prehabilitation
- Immediately after surgery
 - The acute healing phase
- Long-term recovery
 - Especially important for older adults who are prone to lose strength easily



Eating well before surgery

- Overall good nutritional status contributes to better surgical outcomes
- Preparing the body for surgery includes eating well



Eating well before surgery

- That means:
 - Maintaining or gaining weight if underweight
 - Eating enough protein (e.g., eggs, beans, fish)
 - Getting enough calories every day

The Plate Model

- Half plate: Vegetables and fruits
 - One quarter: Whole grains
 - One quarter: Protein foods
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- Protein is necessary for wound healing



Pre-surgery Nutrition

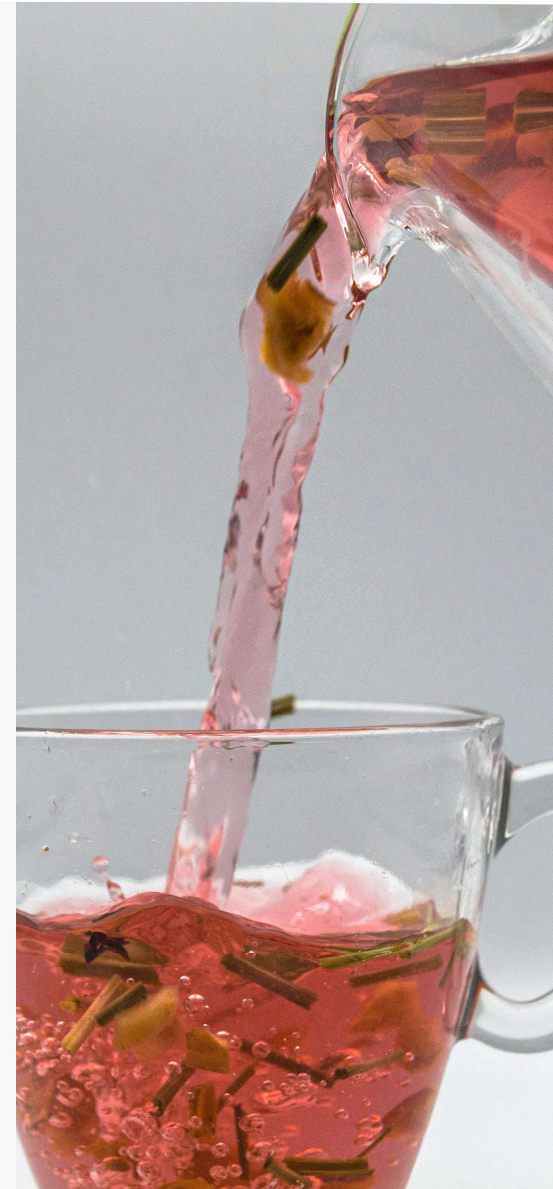
Traditional

- No food after midnight before surgery
- Was put in place to prevent aspiration during anesthesia



Pre-surgery Nutrition

- For most patients pre-operative fasting is not needed
- Recent guidelines allow clear fluids up to 2 hours before surgery unless otherwise directed
- May be allowed to drink clear juice or broth a few hours before surgery



Nutrition Immediately After Surgery

- We now recommend clear liquids within hours after surgery in most patients
- Normal food on the first or second day after surgery leads to shorter length of stay

Nutrition Well After Surgery

- After surgery, there is more protein breakdown, higher energy needs, and increased risk of inflammation
- People may not feel like eating due to:
 - Pain or nausea
 - Medications
 - Constipation
 - Fatigue
 - Swallowing difficulty

Nutrition Well After Surgery

This combination puts older adults who have had surgery at high risk of unintentional weight loss, which can lead to slower wound healing, increased falls, infections, and reduced independence.

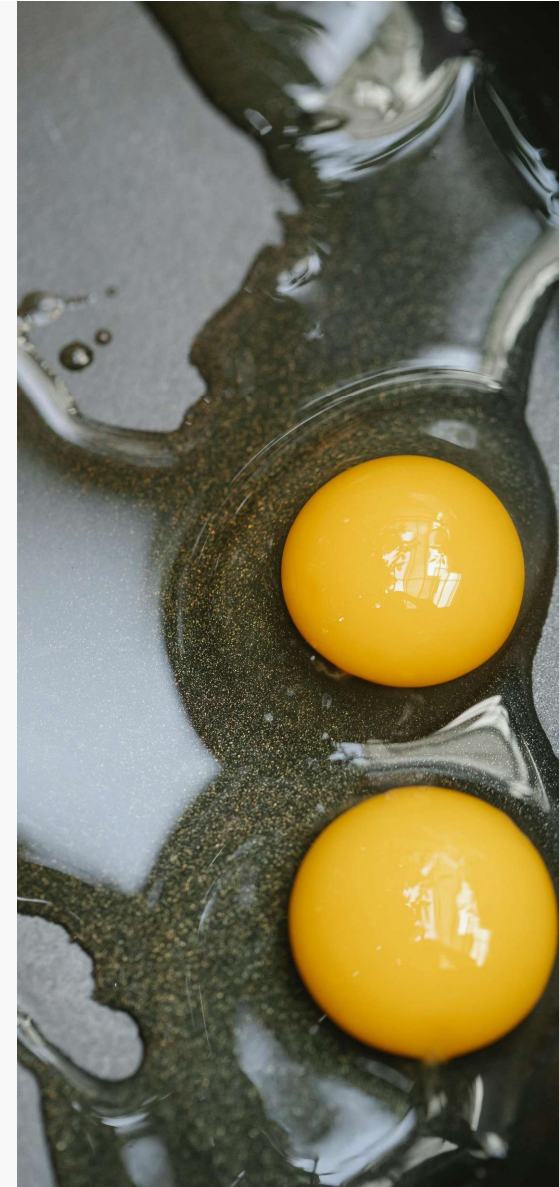
Nutrition Well After Surgery

- Small but frequent meals
- High-protein snacks
- Easy-to-eat foods like puddings, soups
- Soft foods
 - Ideal for when fatigue, difficulty chewing or when appetite is low

Nutrition Well After Surgery

If you or your loved one are not eating well after surgery, try more nutrient-dense options

- Add more meat or egg to dishes
- Have protein at all meals
- Eat small meals more often rather than 3 larger meals during the day

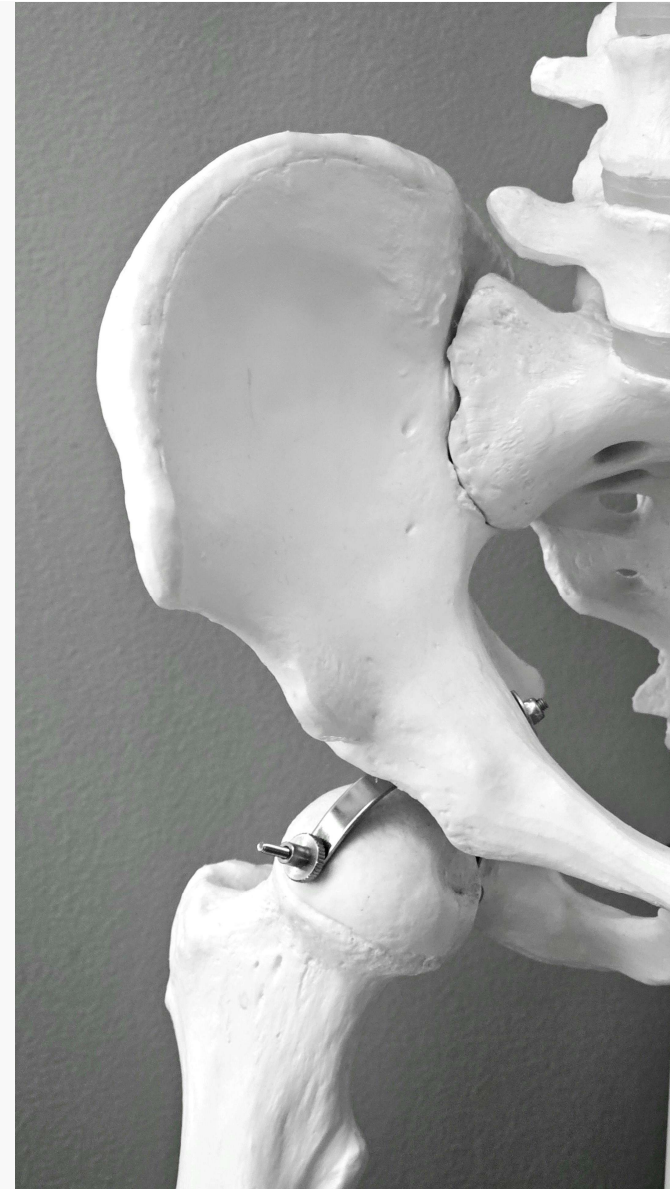


Specific Surgeries



Joint Surgeries

- Joint surgeries include knee and hip replacements and spinal fusions
 - Done to restore mobility and reduce pain
 - Recovery process can be long
 - Nutrition critical to preserving strength and avoiding complications



Joint Surgeries

- Protein
 - Aim for 1.2 to 1.5 grams of protein per kilogram of body weight daily
 - 84–105g daily for someone 155 lbs
 - One egg: 6–7g of protein
 - Cup of beans: 15g protein
 - 1/2 of a chicken thigh: 15–20g protein



Joint Surgeries

- Calcium and vitamin D help with bone healing.
 - Yogurt, milk, or fortified plant milks
 - Fish with soft bones like sardines or mackerel
 - Egusi soup with added leafy greens



Joint Surgeries

- Anti-inflammatory foods support more rapid wound healing
 - Foods high in omega-3s (like mackerel and flaxseed)
 - Foods rich in antioxidants
 - Fruits and vegetables (tomatoes, carrots, berries)
 - Nuts and oils



Coronary Bypass Surgery

- Heart surgery is a major operation
- Nutrition plays a role in both short-term healing and long-term heart health



Coronary Bypass Surgery

Nutrition Tips for Coronary Bypass Recovery:

- Energy needs 25–30 calories/kg body weight in recovery.
 - For a 155 lb person, that's about 1750–2100 calories
 - Protein needs are, again, 1.2–1.5g protein/kg = that's 84–105 g daily for someone who weighs 155 lbs



Heart Healthy Diet

- Lots of vegetables and fruits
- Whole grains
- Nuts, seeds and legumes
- Lean meats
- Less fats/oils
- Less sodium
- Fewer sweets



How much to eat (Vegetables)

- If you weigh 155 lbs, 4-5 servings of vegetables daily
- One serving of vegetables:
 - 1 cup of leafy vegetables or half a cup of raw or cooked vegetables
 - Aim for soups and stews with lots of spinach, okra, garden eggs, ayoyo, cocoyam leaves, tomatoes



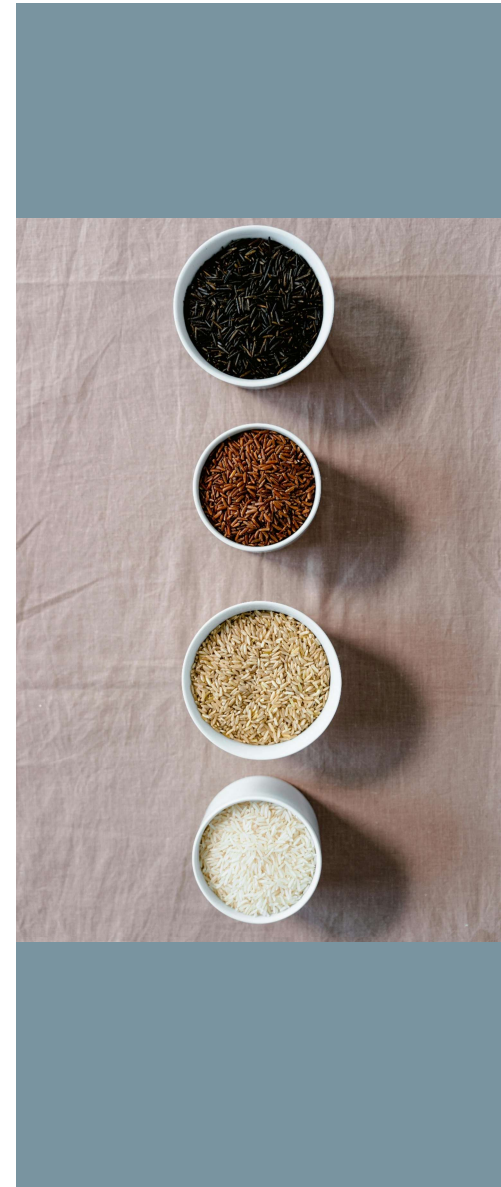
How much to eat (Fruits)

- If you weigh 155 lbs: 4-5 servings of fruits daily
 - One serving is 1 medium sized fruit



How much to eat (Whole Grains)

- If you weigh 155 lbs: 6-8 servings of whole grains daily
- One serving:
 - A ½ cup rice, ½ cup Fufu, one slice whole grain bread



How much to eat (Meat, Fish, Eggs)

- If you weigh 155 lbs: 6 servings a day
 - One serving is 1 oz beef, pork, goat, lamb, chicken, turkey, tripe, fish and other seafood, or one egg.
- Wash or soak salted fish to reduce salt before adding to dishes



How much to eat (Dairy)

- If you eat dairy:
 - If you weigh 155 lbs: 2-3 servings a day
 - One serving is
 - 1 cup of milk
 - 1 cup of yogurt
 - 1 ½ ounces of cheese



How much to eat (Nuts, Legumes)

- If you weigh 155 lbs: 4-5 servings a week
 - One serving is:
 - 1/3 of a cup of nuts (unsalted)
 - 2 tablespoons of peanut butter
 - ½ cup of cooked beans or lentils



How much to eat (Fats and Oils)

- If you weigh 155 lbs: 2-3 servings daily
- One serving is
 - 1 teaspoon of margarine
 - 1 teaspoon of vegetable oil, palm oil, coconut oil, shea butter, peanut oil
 - 2 tablespoons of salad dressing



How much to eat (Sugar and Salt)

- Sweets
 - If you weigh 155 lbs: 5 or fewer servings a week
 - One serving is
 - 1 tbsp sugar, 1 tbsp jelly or jam, ½ cup sorbet
- Sodium (salt)
 - 2000 mg per day



Putting it into practice

- Make a common meal (like be any starch and a soup with some meat) more heart friendly:
 - Load up the soup with more vegetables
 - Remember ½ a cup of rice or fufu is one serving.
 - If you have 5-6 servings a day, 1 cup is enough.
 - Trim visible fat off the meat
 - Use less salt and more spices.
- Have fruits and occasionally nuts as snacks



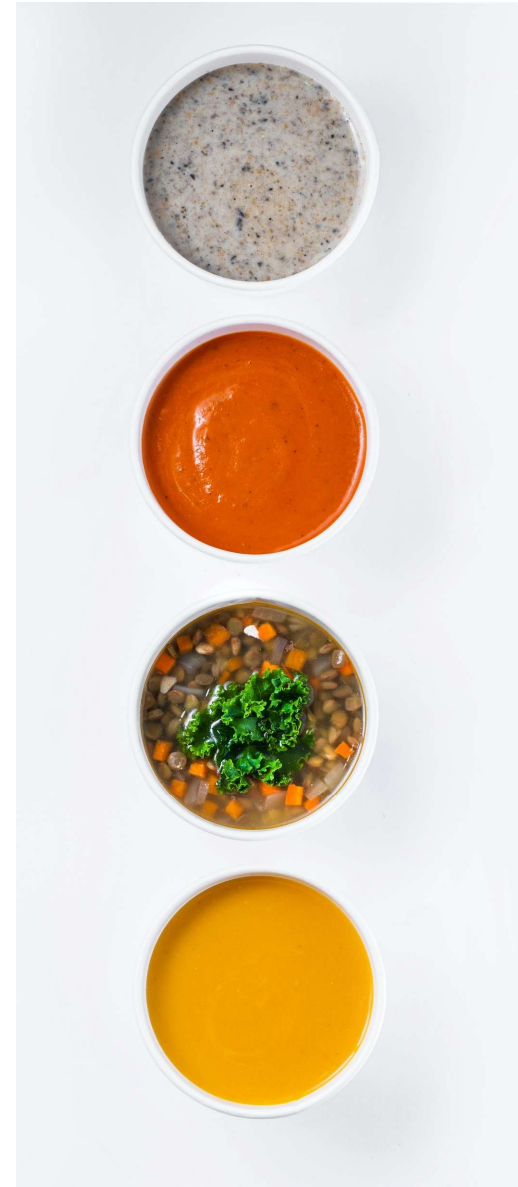
Dental Surgeries

- Dental surgeries and procedures include
 - Root canals
 - Denute fitting
 - Implants
- After dental procedures, soft foods can be essential



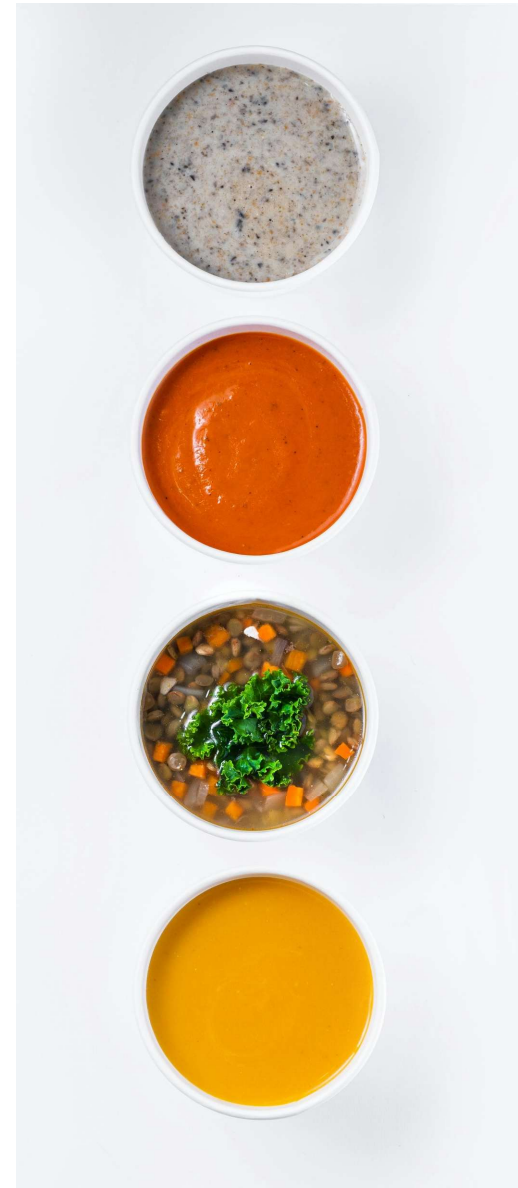
Dental Surgeries

- Soft foods can be very helpful after dental surgery
 - Avoid sticky, crunchy, or fibrous foods early on
 - Cold options (e.g. chilled mashed fruit) for comfort
- How to make soft foods:
 - Cook foods until soft
 - Cut food into small pieces
 - Use broth or sauce to keep food moist and easy to swallow



Dental Surgeries

- Pureed Foods
 - Use a blender or food processor to puree foods.
 - Add liquid to food as you blend until it is moist, soft and pudding-like.
 - Do not use water
 - If pureeing savory foods, try using stock, gravy or melted butter or margarine
 - If pureeing fruit, try using juice



Gallbladder Surgeries

- Common in people with gallstones or inflammation of the gallbladder
- Gallbladder stores bile, which helps digest fats
- If removed, bile drips continuously into the digestive tract, not released in a controlled way
- Can lead to difficulty digesting fat, diarrhea, or stomach upset



Gallbladder Surgeries

Gallbladder Surgery Recovery:

- First 1–2 weeks
 - Start with low-fat meals.
 - Try:
 - Plain rice with stewed vegetables
 - Boiled yam or plantain with light okra soup



Gallbladder Surgeries

Gallbladder Surgery Recovery:

- First 1–2 weeks:
 - Avoid greasy, creamy, or fried foods:
 - Fried fish, meat pies, fried plantain
 - Heavy palm oil-based dishes like egusi with lots of oil
 - High-fat snacks like pastries and sausage rolls



Gallbladder Surgeries

Gallbladder Surgery Recovery at 2–4 weeks:

- Start with small amounts of fats (nuts, some oil in soup)
- Monitor for symptoms
 - Bloating, cramps, loose stools
 - Back off on fat intake
 - Keep hydrated
 - Add more fiber slowly
 - Eat smaller meals more often (4–6 small meals daily)



Gallbladder Surgeries

Gallbladder Surgery Recovery, Long-term:

- Most people can eat a regular diet
- Some will do better with lower-fat meals long-term
- Focus on:
 - Less added fats/ oils
 - Grilled or stewed lean meats
 - Protein from legumes like beans and lentils
 - Vegetables and whole grains



Long Term Recovery



Long Term Recovery and Meal Planning

- Long-term recovery depends on nutrition
- Older adults may struggle after surgery
 - Unintended weight loss
 - Fatigue
 - Reduced mobility
- Daily good nutrition will support recovery



Long Term Recovery and Meal Planning

- Eat balanced meals using the plate model
- Aim for 1.2–1.5g protein/kg per day
 - Use protein-rich staples like:
 - Eggs (6–7g each)
 - Beans (15g per cup)
 - Fish, chicken, or groundnut stews (15–25g per serving)



Meal Planning Tips

- Rotate 3 core breakfast options, 3–4 easy lunches, and 4 dinner combinations
- Batch-cook favourite meals to freeze and reheat
- Make hydration easy
 - Keep a water bottle nearby
 - Try light soups, fruit juice
- Try snacks between meals if it is hard to eat enough
 - Add protein like peanut butter, yogurt, eggs

Recap

- Nutrition before surgery helps healing and reduces complications
- After surgery, protein and energy needs are higher
- Long-term nutrition is also crucial to long term recovery



Thank You



- Thank you for being here!
- Next session:
 - Soft Food Diets
 - July 2nd

