# Prehab: Eating Well Before Surgery

# What is prehab?

Prehabilitation or prehab is what you do before surgery to get ready for surgery.

Prehab includes:



**Eating Well** (nutrition for before and after surgery, symptom management)

**Moving Well** (physical activity and exercise, getting your home ready for after surgery)

**Living Well** (healthy lifestyle, like managing tobacco and alcohol use)

**Feeling Ready** (managing stress and coping with change, organizing income replacement, benefits, and medication supports)

The information in this handout is on Eating Well (nutrition). To learn more about Moving Well, Living Well, and Feeling Ready, check out:

Alberta Health Services

• Prehabilitation

MyHealth Alberta

- Getting ready for your surgery
- Your before surgery checklist

# Benefits of eating well

Eating well before surgery can help you:

- feel stronger and have more energy
- go home sooner from hospital
- have lower risk of infection after surgery
- heal and recover faster
- reduce your risk of complications from surgery

Small changes each day will build-up to help you get stronger and healthier.

The skills you learn before surgery can be used after to help you continue to heal and be healthy.

#### Nutrition for prehab

To prepare your body for surgery, it needs to get enough nutrition. For prehab, this includes:

- protein
- fluids
- iron
- omega-3 fats
- vitamins and minerals

Eating well and getting enough nutrition can help you get back to your daily routine quicker after surgery.

## Eat protein foods

Protein helps you build and keep muscle. There are animal and plant-based sources of protein. Protein foods from animal sources are higher in protein than plant-based sources. But all sources can help you get enough protein each day.

Animal-based protein foods include:

- eggs, fish, shellfish, poultry, meat, and wild meat
- milk, cheese, and Greek or Icelandic yogurt
- protein powders made from whey or casein

Plant-based protein foods include:

- soy foods, like tofu and fortified soy beverage
- lentils, beans, and peas
- nuts and seeds
- protein powders made from soy, rice, or hemp

See the **Protein supplements** section for more details on protein powders.

To learn how much protein is in different foods, check out <u>ahs.ca/NutritionHandouts</u> and search "protein".



#### Amount and timing of protein

# Eat a meal that has about 25–30 grams (g) protein 4 times each day.

This helps to:

- · build strength, and
- keep the muscle you get from exercising.

Having protein throughout the day allows your body to use it best.



Check out page 4 for sample meals that have 25–30 g protein per meal or snack.

#### **Nutrition Facts tables**

Food labels give you information to help you compare foods and make healthier choices.

For foods that have a label, you can use the Nutrition Facts table to see how many grams of protein are in 1 serving of that food.

This Nutrition Facts table is from the <u>Chocolate</u>, <u>Peanut Butter</u>, <u>& Banana Smoothie</u> recipe.

	Nutrition Facts	5	
$\rightarrow$	Per1 cup (250 mL)		$\square$
	Calories 390	% Daily Value*	
Serving size	Fat 13 g	17 %	
	Saturated 2.5 g +Trans 0 g	13 %	
	Carbohydrate 61 g Fibre 7 g Sugars 16 g	25 % 32 %	
Amount of	Protein 12 g		
	Cholesterol 5 mg		
	Sodium 190 mg	8%	
protein in	Potassium 740 mg	15 %	
that serving	Calcium 174 mg	15 %	
	Iron 3 mg	15 %	
	*5% or less is <b>a little</b> , 15%	6 or more is <b>a lot</b>	

To learn about protein-rich foods that don't have a label, check out <u>ahs.ca/NutritionHandouts</u> and search "protein".

#### **Recipes for protein foods**

For recipes that are rich in protein, check out:

- <u>ahs.ca/MoreProteinRecipes</u>
- Myhealth.alberta.ca
  - Search: <u>High-calorie and high-protein</u> <u>recipes</u> for recipes and to watch videos of dietitians making the recipes.





Check out the Program Guide at <u>ahs.ca/SHCWellness</u> for hands-on and demonstration Wellness Kitchen classes.

#### **Protein supplements**

Protein supplements come in different forms:

- powders
- drinks
- bars
- puddings

If you are in a rush or have a low appetite, a protein supplement can help you get enough to reach your daily protein goals.

Look for protein supplements:

- with at least 10 g protein per serving
- made from:
  - whey
  - casein
  - soy
  - a mixture of "plant-based" or "vegan" proteins

Some protein powders are unflavored. You can blend unflavored protein powder into smoothies, or add it to mashed potatoes or cream soups, pudding, or yogurt.

Store-brand protein powders usually have as much nutrition as brand name products but may cost less.

# Drink enough fluids

You need enough fluids each day to help support body functions like sweating, pooping, and temperature regulation. Water is the best source of fluid.

Drinking enough fluids each day may also help:

- fight infection
- heal your bones, muscle tissues, and skin
- lubricate your joints
- prevent constipation
- prevent dehydration

Age (Years)	Recommended amount of fluid to drink daily		
	Females	Males	
2–3	4 cups (1 L)		
4–8	5 cups (1.2 L)		
9–13	6 cups (1.6 L)	7 cups (1.8 L)	
14–18	7 cups (1.8 L)	10 cups (2.6 L)	
18–64	9–12 cups (2.25–3 L)		
65+	6–8 cups (1.5–2 L)		

You may need more fluids daily. Drink more fluids after being active or when it's hot outside. Sip on fluids during the day even when not thirsty.

Fluid includes water, milk, fortified soy beverage, smoothies, coffee, tea, soup, and broth.



# Eat more foods with iron

Your body needs iron to carry oxygen in your blood throughout your body. Without enough iron, you will tire more easily and be less able to fight infections.

Many foods rich in iron are also foods higher in protein.

Animal-based food sources of iron include:

- beef, bison, elk goat, lamb
- pork, wild boar oysters
- chicken, duck, turkey egg yolks

Plant-based iron foods include:

- beans. lentils firm tofu
- chickpeas

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If you are worried you are not getting enough iron, talk to your healthcare team before taking an irononly supplement.

To learn about iron and your health, check out ahs.ca/NutritionHandouts, and search "iron".

# Eat omega-3 fats

Omega-3 fats are healthy fats. It's important to get them from food because our bodies can't make them.

Omega-3 fats help your body:

- prevent blood clots
- reduce blood pressure
- reduce inflammation (swelling) •
- keeps blood vessels (arteries) from becoming stiff

All fish have some omega-3 fats, but fatty fish are the best sources:

- Arctic char mackerel
- sardines
- herring salmon •

trout

Fish is also higher in protein.

Plant sources of omega-3 fats include:

kelp

- seaweed (wakame)
- oils (canola, flaxseed, soybean, walnut)
- soybean products •
- (tempeh, tofu) seeds (chia, flax, hemp) •
  - walnuts

# Sample meals

The following sample meals are based off high protein recipes. Each meal has between 25-30 g protein.

Day 1	Day 2	Day 3		
Meal 1 (breakfast)				
<ul> <li>Western Omelet</li> <li>With 1 slice whole wheat toast</li> </ul>	<ul> <li>High Protein Pancakes</li> <li>Top with strawberries and</li> <li>Greek yogurt</li> </ul>	Cinnamon Apple Oatmeal		
Meal 2 (lunch)				
<ul> <li>Chicken Lettuce Wraps With raw carrots</li> </ul>	Salmon and Ricotta Toast With mixed vegetables	<ul><li>Tuna Melt Stuffed Tomatoes</li><li>Colourful Pasta Salad</li></ul>		
Meal 3 (supper)				
<ul> <li>Curry Fish Tacos</li> <li>Top with coleslaw</li> </ul>	<ul> <li>Egg Drop Soup With ½ cup (125 mL) fortified soy beverage</li> </ul>	<ul> <li>Sweet Potato Enchiladas With green beans</li> </ul>		
Meal 4 (end-of-day snack)				
<ul> <li>Cinnamon French Toast Top with mixed berries</li> </ul>	Smoothie Bowl With 1 cup (250 mL) milk	Tuna Black Bean Salad		

Recipes from: <u>The High Protein Cookbook for Muscle Health During Cancer Treatment</u>. Note: These high-protein recipes are non-specific to cancer treatment.

# Get enough vitamins and minerals

Eating well and taking a daily multivitamin supplement can help you get what you need for prehab. Look for one with iron, selenium, vitamin A, vitamin C, and zinc.

Ask your healthcare team:

- If a multivitamin supplement is right for you.
- How soon before surgery you need to stop taking your multivitamin supplement.
- When you can start taking it again after surgery.

Some vitamins and minerals do not mix well with anaesthesia or certain medications.

#### Talk to a pharmacist

Some medications need to be taken separately from vitamin and mineral supplements.

If you are taking medication, talk to your pharmacist about the best approach for you.

### For more support

• Talk to your healthcare team.

- Call Health Link at 811 and ask to talk to a dietitian or complete a <u>self-referral form</u> on ahs.ca/811.
- Visit <u>ahs.ca/Nutrition</u>.
- Call, text, or chat with 211 Alberta (<u>ab.211.ca/</u>) to find out about financial benefits, programs, and services.

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