

Patient & Family Guide

# Healthy Eating After Your Transplant



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# **Healthy Eating After Your Transplant**

Making healthy eating choices after your transplant can help control your weight, blood cholesterol, and blood pressure. Eating healthy can also help control your blood glucose (blood sugar) if you have diabetes.

# Tips for healthy eating

# 1. Eat less fat

- Limit these foods to 3 to 4 tsp a day:
  - Margarine
  - > Butter
- Choose low fat snacks like:
  - > Fruit
  - › Vegetables
- Enjoy a mix of:
  - $\rightarrow$  Fish
  - Poultry (like chicken and turkey)
  - > Lean meats (like beef sirloin or skinless chicken breasts)

Limit these protein foods to 2 servings a day. One serving is the size of a deck of cards (3 ounces or 90 grams).

- Eat fish 2 to 3 times a week instead of meat.
- Do not eat deep fried foods.
- Limit store-bought baked goods like:
  - Muffins > Biscuits
- Avoid "ready to serve" meals like frozen dinners.
- Choose low fat milk products. Look for products that are skim or have 1% milk fat (M.F.).
- Cut down on foods that have saturated and trans fats. These kinds of fats can raise your blood cholesterol levels. Saturated fat is usually solid at room temperature. Trans fats are made when an oil is changed to a spreadable form of fat through hydrogenation.

> Plain popcorn

Croissants

> Cookies

Salad dressing

> Oil

Jam

Honey

- Some foods that are sources of saturated and trans fats are:
  - Fatty cuts of meat
  - Organ meats (like liver, kidney, and heart)
  - Poultry skin
  - › Lard
  - > Butter
  - > Full fat milk products
- Replace saturated fat with unsaturated fats like:
  - › Canola oil

› Non-hydrogenated margarine

Olive oil

#### 2. Eat less salt (sodium)

- Too much sodium can make your body hold on to extra fluid. This can:
  - cause swelling in your hands, legs, and feet.
  - > make your heart work harder.
- Read food labels. Any food that has 10% Daily Value (DV) or more of sodium is too high.
- Do not eat or drink:
  - Canned soups
  - Dried soups

 Vegetable juices (like V8<sup>®</sup> juice, Clamato<sup>®</sup>, or tomato juice)

- Canned gravy
- **Do not** add salt or sea salt during cooking or when you are eating.
- Do not use salt substitutes (like NoSalt<sup>®</sup>, Nu-Salt<sup>™</sup>, or Half Salt<sup>™</sup>).
- **Do not** use seasoned salts like onion salt or garlic salt. Use onion powder or garlic powder instead.

#### 3. Eat less sugar

- Eat less sweets, like:
  - Sugar
  - Non-diet pop
  - > Desserts

- › Palm oil
- Coconut oil

› Cocoa butter

- > Shortening
- Hydrogenated margarine
- > Store-bought baked goods

• Drink water instead of pop or juice. Pop and fruit juice may raise your blood glucose (blood sugar) levels. Drinking diet pop and diet fruit juice is OK, but try to drink water as your first choice.

#### 4. Eat protein with each meal and snack

- Protein is important for healing and preventing infection during the first 8 weeks (2 months) after surgery.
- Good sources of protein are:
  - Poultry
     Meat
  - FishEggs
  - Nut butters (like peanut or almond butter)
  - > Milk products (like milk, yogurt, cheese, and cottage cheese)

#### 5. Eat more fibre

- Enjoy these foods every day to get more fibre:
  - > Whole grain breads and cereals
    > Fruit
  - Vegetables

The fibre in these foods keep you feeling full longer. This may help you keep a healthy weight.

- Eat foods like:
  - Oat bran breads and cereals
  - > Dried peas, beans, and lentils

The fibre in these foods may help to lower your cholesterol levels and control your blood glucose levels.

#### 6. Keep a healthy weight

- You can reach and keep a healthy weight by eating less fat and staying active.
- Losing weight may improve your blood cholesterol levels and blood pressure. Your health care team will talk with you about whether losing weight is right for you.
- Check with your primary health care provider (family doctor or nurse practitioner) before starting an exercise program.

## Make healthy food choices

## Fruits and vegetables

Buying fresh fruits and vegetables in season can save you money.

### **Best choices**

- Fresh or frozen fruits and vegetables
- Fruit canned in water
- Canned vegetables, vegetable juices, and soups with no added salt
- Avocados
- Homemade vegetable soups with low salt ingredients, and the fat skimmed from the broth

## Choose sometimes

- Canned vegetables with added salt, drained and rinsed
- Unsweetened fruit juice
- Fruit canned in syrup or juice

## Avoid

- Deep fried foods
- Vegetables in cream or cheese sauces
- Sweetened fruit juices and drinks

## **Grain products**

Choose whole grains more often. Add wheat bran, oat bran, or flax seeds (ground or whole) to muffins and casseroles for added fibre.

#### **Best choices**

- 100% whole grain breads, bagels, pita bread, and English muffins with 2 or more grams of fibre a slice
- 100% whole grain cereals with:
  - › 4 grams or more of fibre a serving.
  - > 8 grams or less of sugar a serving.
- Homemade hot cereals (like oatmeal and Cream of Wheat<sup>®</sup>)
- Whole grain, unsalted crackers, crispbreads, rye crisps, and Melba toast with: > no trans fats.
  - > 2 grams or less of saturated fat a serving.
- Whole grain pasta, brown, or wild rice
- Quinoa, barley, bulgur

#### **Choose sometimes**

- Homemade muffins
- Instant hot cereals
- White pasta and rice
- White bread, rolls, and bread sticks
- Low fat granola bars. Check the label for:
  - > No trans fats
  - > 2 grams or less of saturated fat
- Low fat cookies. Check the label for:
  - > Serving size
  - > 3 grams or less of fat

- > 3 or more grams of fibre a serving
- 0.3 grams or less of saturated fat
- > 5% or less DV for fat

#### Have 1 serving a day.

Note: Some cookies have a large serving size. For example: Honey Maid graham crackers list 8 wafers as a serving, which has 0.4 grams of saturated fat. A smaller serving of 4 wafers has 0.2 grams of saturated fat.

#### Avoid

- Garlic, egg, or cheese breads or buns
- Granola type cereals
- Store-bought muffins and doughnuts
- Sugary cereals
- Cookie, muffin, and cake mixes
- Frozen pancakes and waffles
- Pre-packaged rice mixes, pasta side dishes, and stuffing
- Chow mein noodles
- Snack crackers
- Regular granola bars

## Milk products

Read labels for milk fat (M.F.).

#### **Best choices**

- Skim, 0.5%, or 1% milk
- Low fat hard cheese (7% M.F. or less)
- Low fat cottage cheese (1% M.F. or less)
- Soy or veggie cheese. Cheese is high in sodium. You may need to limit how much you eat to avoid both sodium and fat.
- Plain, low fat yogurt (1% M.F. or less)
- Greek yogurt (1% M.F. or less)
- Evaporated skim milk
- Fat free sour cream
- Fortified (has added vitamins and minerals) low fat soy and almond drinks

#### **Choose sometimes**

- 2% milk
- Chocolate milk
- Cheese with 8 to 20% M.F.
- 2% evaporated milk and condensed milk
- 2% cottage cheese, sour cream, or yogurt
- Buttermilk
- Low fat cream cheese
- Ice cream, ice milk, frozen yogurt (4% M.F. or less)

## Avoid

- Whole milk (3.3% M.F.)
- Full fat sour cream
- Regular fat hard cheese or cheese slices (more than 20% M.F.)
- Regular fat evaporated milk
- Regular fat cream cheese
- Regular fat or creamed cottage cheese
- Yogurt (4% M.F. or more)
- Ice cream, ice milk, frozen yogurt (more than 4% M.F.)

### Meat and alternatives

To get more fibre and cut down on fat, try:

- adding chickpeas to salads.
- adding beans to casseroles.
- adding lentils to soups or stews.

## **Best choices**

- Dried legumes (like chickpeas, kidney beans, soybeans, navy beans, and lentils), soaked and cooked in a liquid according to package directions
- Canned legumes with no salt added
- Fresh or frozen fish 2 or more times a week instead of meat
- Shellfish
- Fish or seafood canned in water (like tuna, salmon, and clams). Check the label for lower sodium (see page 2).
- Skinless chicken or turkey
- Nut butters with no added sugar or salt (peanut, almond)
- Lean and extra lean ground chicken or turkey
- Wild game (like venison, rabbit, and moose)
- Egg whites, egg substitutes
- Tofu
- Unsalted nuts and seeds

## Choose sometimes

- Peanut butter with added sugar and/or salt
- Egg yolks (limit to 3 a week)
- Canned beans and lentils
- Lean beef, pork, ham (limit to 3 times a week)

#### Avoid

- Duck and goose
- Fatty meats (like prime rib, T-bone, and spare ribs)
- Organ meats (like liver, kidney, and heart)
- Packaged, breaded meat, fish, or poultry
- Regular and medium ground beef
- Processed meats and deli meats (like pepperoni, salami, wieners, sausages, bologna, bacon, cold cuts, and canned meats)
- Fish canned in oil
- Smoked fish
- Chicken wings
- Poultry skin
- Deep fried foods
- Salted nuts and seeds

## Other foods to avoid

- Potato chips
- Buttered and microwave popcorn
- Coffee cream and blend
- Whipping cream

#### Limit to 1 small serving of one of these foods once a week:

- Croissants, danishes, sweet rolls, tea biscuits
- Store-bought muffins and doughnuts
- Cookie, muffin, and cake mixes
- Packaged cookies with 4 grams or more total fat a serving.
- Cake, pies, cookies
- Doughnuts
- Cheesecake

## Reading food labels

- Read the ingredients list. The ingredient with the highest amount is **listed first**. The ingredient with the lowest amount is **listed last**.
- Avoid products that:
  - > list saturated fat or salt in the **first 3 ingredients**.
  - > list many fat and salt ingredients.

#### Example: Onion crackers

**Ingredients:** Enriched flour, vegetable oil, shortening, beef tallow, palm oil (may contain coconut oil), onion powder, salt, sugar...

There are 5 fats listed. 4 of the fats listed are saturated fats. This cracker is not a good choice for people who have had a transplant. Choose a different cracker.

- Food labelled **cholesterol free** or **trans fat free** may still contain other kinds of fat.
  - For example, cholesterol-free French fries with no trans fats may still have lots of fat.
- Sometimes food will be called **light** or a **light version** of something. This **does not** always mean the food is low in fat or calories.
  - It may mean that the food is light in colour, flavour or texture. Read the whole label closely.
- Read the **Nutrition Facts table** to learn:
  - > the amount of fat in a serving size.
  - > the amount of sodium in a serving size.
  - > the amount of fibre and calories in a serving size.
- Remember, if you eat a double serving size, you have also eaten double the amount of nutrients.

• The Nutrition Facts table also gives the % Daily Value (DV) of many ingredients. **Example:** Compare these packages of cookies:

%Daily Value

11 % 8 % 0 %

> 4% 8% 0%

> 0% 0% 0%

Nutrition Facts Valeur nutritive Per 3 biscuits (29 g) / par 3 biscuits (29 g)		Nutrition Facts Valeur nutritive Per 3 biscuits (29 g) / par 3 biscuits (29 g)		
Amount Teneur %	%Daily Value valeur quotidienne	Amount Teneur	%D: %valeur qu	
Calories / Calories 140		Calories / Calorie	<b>s</b> 160	
Fat/Lipides5g	8 %	Fat / Lipides 7 g		
Saturated / saturés 0.4 g + Trans / trans 0 g	2 %	Saturated / saturés 1.5 g + Trans / trans 0 g		
Cholesterol / Cholestérol 0	mg 0%	Cholesterol / Cholestérol 0 mg		
Sodium / Sodium 85 mg	4 %	Sodium / Sodium 105 mg		
Carbohydrate / Glucides 21	g <b>7</b> %	Carbohydrate / G	ilucides 23 g	
Fibre / Fibres 2 g	8 %	Fibre / Fibres 0 g		
Sugars / Sucres 7 g		Sugars / Sucres 7	g	
Protein / Protéines 2 g		Protein / Protéines 2 g		
Vitamin A / Vitamine A	0 %	Vitamin A / Vitamine	A	
Vitamin C / Vitamine C	0 %	Vitamin C / Vitamine C		
Calcium / Calcium	0 %	Calcium / Calcium		
Iron / Fer	0 %	Iron / Fer		

- > A food serving with **5% DV or less** of a nutrient is **low** in this nutrient.
- > A food serving with **10% DV or more** of a nutrient is **high** in this nutrient.
- Try to choose foods that are low in fat and sodium and high in fibre as much as you can.

The lower fat cookie on the left is the better choice. It has 2 grams of fibre a serving and has less sodium.

#### Make your recipes healthy

- Replace high fat ingredients with lower fat ones.
  - > Use fat free or low fat yogurt and sour cream.
  - > Use fat free or low fat mayonnaise and salad dressings.
- Choose unsaturated fats.
  - > Use non-hydrogenated margarine or oil (like canola or olive oil), instead of butter, lard, or shortening.

- Use less of the high fat ingredients.
  - > Use less meat, eggs, or cheese than the recipe calls for.
  - > Use only part of the fat that the recipe calls for (if it calls for <sup>3</sup>/<sub>4</sub> of a cup, use only <sup>1</sup>/<sub>2</sub> or <sup>1</sup>/<sub>3</sub> cup).
  - In muffin recipes that call for more than ½ cup of oil, replace half the oil in the recipe with one of these foods:
    - Fruit juice

› Yogurt

- Applesauce
- Remove the fat.
  - > Trim off any fat you can see and remove any skin.
  - Put gravies, soups, or stews in the fridge until the fat rises to the top of the pot, then skim it off.
- Change the cooking method.
  - > Steam, broil, boil, roast, BBQ, or microwave without adding fat.
  - > Sauté with water, juice, or broth.
  - > Use vegetable cooking sprays.

## **Recipe resources**

Check bookstores and a public library near you for these cookbooks.

#### For low fat, high fibre recipes:

- Great Food Fast, by Bev Callaghan and Lynn Roblin
- Simply Great Food: 250 Quick, Easy and Delicious Recipes, by Patricia Chuey, MSc, RD, Eileen Campbell and Mary Sue Waisman, MSc, RD.
- Cook!, by Mary Sue Waisman, MSc, Rd.

#### For low salt and no salt recipes:

- Hold the Salt!, by Maureen Tilly.
- Hold That Hidden Salt!, by Maureen Tilly.

#### More information

#### Heart and Stroke Foundation of Canada

> www.heartandstroke.com

#### **Dietitians of Canada**

> www.dietitians.ca

#### Dietitians of Canada – For the Public

> www.unlockfood.ca

**Note:** When looking for information online, non-profit agencies like the Heart and Stroke Foundation of Canada, and Dietitians of Canada are reliable resources. You can visit these websites for helpful, correct nutrition information.

## Safe food handling

- The anti-rejection treatment you need after your transplant lowers your immune system and can raise your risk of getting food poisoning.
- It is very important to follow safe food handling, cooking, and storage guidelines. Doing this will help you avoid food poisoning.
- Wash your hands often. If you have touched raw chicken or eggs, wash your hands before touching anything else.
- Check food for signs that it might be spoiled (like changes in colour, bad smells, or damaged cans or packaging).
- If your food has a best before date, only eat the food if the best before date has not come yet.
- **Do not** eat raw or undercooked meat, poultry, fish, seafood, and sushi.
- **Do not** eat unpasteurized milk, cheese, yogurt, juices, and ciders.
- **Do not** eat sprouts (like alfalfa or bean sprouts).
- Wash **all** raw fruits and vegetables.

#### More information

To learn more about how to cook and eat food safely when you have a weakened immune system, you can read this booklet from the Government of Canada: **Safe Food Handling for Immunocompromised Individuals** 

 www.canada.ca/content/dam/canada/health-canada/migration/healthycanadians/alt/pdf/eating-nutrition/healthy-eating-saine-alimentation/ safety-salubrite/vulnerable-populations/immune-immunitaire-eng.pdf

## Eating out

- Choose a restaurant that cooks food in many ways (not just by deep frying).
- Ask how a menu item is cooked or made.
- Ask what kind of fats the restaurant uses for sautéing.
- Know what the words restaurants use mean. For example, sauces like béchamel sauce, béarnaise sauce, and hollandaise sauce are high in fat.
- Ask for sauces on the side and use just a little, or leave them off.
- Limit added fat (like butter, margarine, or oil).
- Try not to use margarine or butter on your bread.
- Ask for toast and sandwiches without margarine or butter.
- Replace margarine or butter on your vegetables with lemon juice.
- Trim the fat from meat and remove the skin from poultry.

#### Salads

- Salads are a good choice, but some kinds (like Caesar salad, chicken salad, potato salad, and pasta salad) may be high in fat and salt.
- If you are adding chicken or seafood to a salad, make sure it is **grilled** instead of deep fried.
- Salad dressing can be high in both salt and fat. Ask for fat free or low fat salad dressing on the side and use only a little.
- Ask if your salad can be dressed with olive oil and vinegar, or ask if the waiter can bring you olive oil and vinegar.

#### Fast food

- It is OK to eat fast foods sometimes (but not often) if you choose:
  - A small hamburger (single meat patty)
  - > A grilled chicken burger that is not breaded
  - A small sandwich with meat, fish, or chicken that is the size of a deck of cards
  - › A 6-inch sub
- For your side, have a salad instead of French fries.

#### Subs and sandwiches

- Choose plain, sliced chicken, turkey, or beef.
- Add lots of vegetables.
- Skip the cheese and mayonnaise and ask for fat free or low fat dressing.
- It is better to make some foods (like pizza, garlic bread, and lasagna) at home so you can use low fat, low salt ingredients.

## Bone health

- Some of the medications you will take after your transplant may put you at a higher risk of osteoporosis (a condition that makes your bones brittle and easier to break).
- You need to get enough calcium and vitamin D from the foods you eat for your bones to stay healthy.
- To keep your bones strong, you will need **1000 to 1200 mg of calcium** and **800 to 2000 IU (international units) of vitamin D** a day.

#### Calcium

- Each of these servings from the list of 'Milk and alternatives' has about 300 mg of calcium:
  - > 1 cup (250 ml) cow's milk
  - > 1 cup calcium fortified or enriched soy, rice, or almond drink
  - > 1.5 oz (50 grams) Swiss, cheddar, or mozzarella cheese
  - > 1 cup fat free or low fat yogurt
  - > 1 cup orange juice enriched with calcium
- You may need calcium supplements if you do not get enough calcium from your food to provide 1000 to 1200 mg a day.

#### Vitamin D

- You will need to take a vitamin D supplement.
- The food with the highest amount of vitamin D is fish.
- Salmon, mackerel, trout, and herring have the most vitamin D (150 to 350 IU of vitamin D in a 2 ½ ounce serving).
- Fortified drinks (like cow's milk, soy milk, rice milk, and almond milk) have about **100 IU** of vitamin D in a cup (**250 ml**).
- **Do not** have more than **4000 IU** vitamin D from food and supplements combined a day.

#### Your dietitian recommends for you:

- \_\_\_\_\_ IU vitamin D, \_\_\_\_\_ times(s) a day
- \_\_\_\_\_ mg calcium tablet, \_\_\_\_\_ time(s) a day with a meal

What are your questions?

Please ask. We are here to help you.

Questions for my health care team:

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

> Find this pamphlet and all our patient resources here: https://library.nshealth.ca/Patients-Guides

Connect with a registered nurse in Nova Scotia any time: Call 811 or visit: https://811.novascotia.ca

*Prepared by:* Nutrition and Food Services *Designed by:* Nova Scotia Health Library Services

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