

Healthy eating for stroke prevention

Healthy eating can help you reduce 2 major risk factors for stroke:

1. High blood fats (cholesterol and triglycerides)
2. High blood pressure



This handout will help you choose healthy foods to help lower these risk factors for stroke.

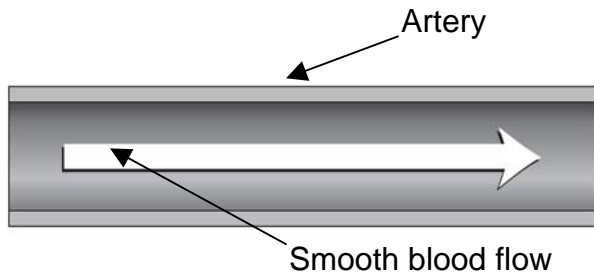
Name: _____

Dietitian/Dietetic Assistant: _____

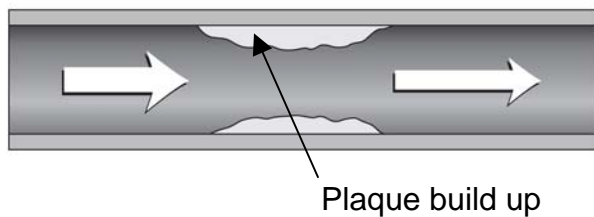
Telephone: _____ Ext. _____

Why are high blood fats a risk for stroke?

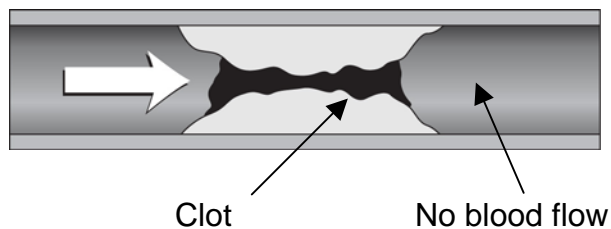
Blood fats are also called blood lipids. High blood fats, such as cholesterol and triglycerides, can cause plaque to build up in your arteries and block the blood flow to your brain. This may lead to a stroke.



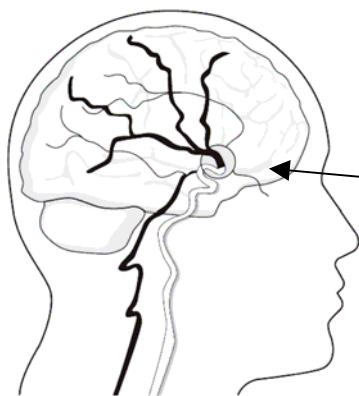
Normal Artery – The blood flows through easily.



Damaged Artery – Plaque starts to build up and narrows the artery.



Blocked Artery – Over time, the flow of blood becomes sluggish and causes blood clots to form which block the artery. A stroke happens when oxygen cannot reach your brain due to a blocked artery.



A blood clot in the artery blocking the flow of blood to the brain.

What is blood cholesterol?

Cholesterol is a waxy, fat-like substance in your blood. It is made in your body by the liver. Our bodies need small amounts of cholesterol for many body functions.

There are 2 types of cholesterol in your blood:

1. High Density Lipoprotein (HDL) Cholesterol – GOOD cholesterol

HDL takes blood cholesterol back to your liver where it can be removed from your body. High levels are healthy for you (more than **1.55 mmol/L**). You can increase your HDL by:

- stopping smoking
- exercising regularly
- eating less trans fat

2. Low Density Lipoprotein (LDL) Cholesterol – BAD cholesterol

LDL leaves blood cholesterol in the walls of your arteries, causing them to narrow over time. High levels can increase your risk of having a stroke. Normal levels are less than **2.0 mmol/L**.

You can decrease your LDL by eating less high fat foods, especially foods high in saturated fat and trans fat.

See information on pages 5 to 7 for more information about fats in your diet.

What are triglycerides?

Triglycerides are another type of fat found in the blood. High triglyceride levels in your blood increase your risk of having a stroke. Normal levels are less than 1.7 mmol/L. You can decrease your triglycerides by:

- eating fewer foods and drinks that are high in sugar
- drinking less or no alcohol
- maintaining a healthy weight
- exercising regularly
- maintaining target blood sugar levels (if you have diabetes)

Why is high blood pressure a risk for stroke?

Around 9 out of 10 Canadians will develop high blood pressure. High blood pressure damages your blood vessels. This can cause plaque to build up in your arteries or can make them burst. High blood pressure is a major risk for stroke.

What should your blood pressure be*?

Most adults	Less than $\frac{140}{90}$ mm Hg
Adults with diabetes or kidney disease	Less than $\frac{130}{80}$ mm Hg

*Reference: 2008 Canadian Hypertension Education Program Recommendations

Healthy eating

Healthy eating means choosing fewer fats and eating less salt in your diet.

Healthy fats

The types of fat and amount of fat you eat can affect your blood cholesterol levels.

Healthy fats are the **unsaturated fats** in your diet. They include:

- ✓ Monounsaturated fat
- ✓ Polyunsaturated fat – especially omega-3 fat

These fats do not raise your blood cholesterol levels. They can help lower LDL cholesterol. Eat foods that have unsaturated fats more often.

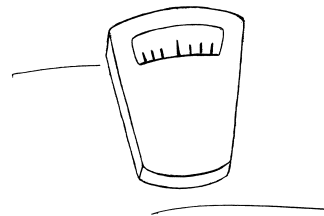
Foods that have unsaturated fats include:

- olive, canola, soybean, peanut, corn, sunflower, safflower, flax seed oil and other vegetable oils
- soft non-hydrogenated margarines
- nuts and seeds
- avocados
- fatty fish such as mackerel, herring, trout, salmon and sardines

Did you know?

1 teaspoon of fat has 45 calories.

Eating too much fat, even if it is healthy fat, adds a lot of calories to your diet and can lead to weight gain.



Unhealthy fats

Unhealthy fats are:

- ✗ Saturated fat
- ✗ Trans fat

These fats can raise your bad LDL cholesterol. Trans fat can also decrease your good HDL cholesterol. A healthy diet is low in saturated fat and trans fat.

Saturated fat is found in:

- high fat processed meats such as sausage, bologna, salami and hot dogs
- fatty meats such as prime rib and regular ground beef
- full fat dairy products such as whole milk, high fat cheese, cream, and butter
- coconut, palm, palm kernel oil
- lard

Trans fat is found in:

- shortening
- margarines made with partially hydrogenated oils
- commercial (store-bought) baked goods
- fast foods, deep fried foods and foods made with shortening or partially hydrogenated oils
- snack foods such as chips

Overall, eat less of **all** types of fat in foods
and add less fat to cooking.

Use these cooking methods to help reduce fat in your food:

- bake
- broil
- grill
- steam
- barbeque
- poach
- microwave
- use a non-stick pan

Will the cholesterol in my diet raise my blood cholesterol?

The cholesterol in food can raise blood cholesterol in some people. But saturated and trans fats have a bigger impact on your blood cholesterol.

For a healthy diet, limit the amount of the cholesterol in your food.

Foods that are high in cholesterol include animal foods such as:

- egg yolks
- untrimmed or marbled meat
- poultry (such as chicken or turkey) with skin
- organ meats
- high fat milk products

Eat these foods less often.

Salt or sodium

Why do I need to eat less salt or sodium?

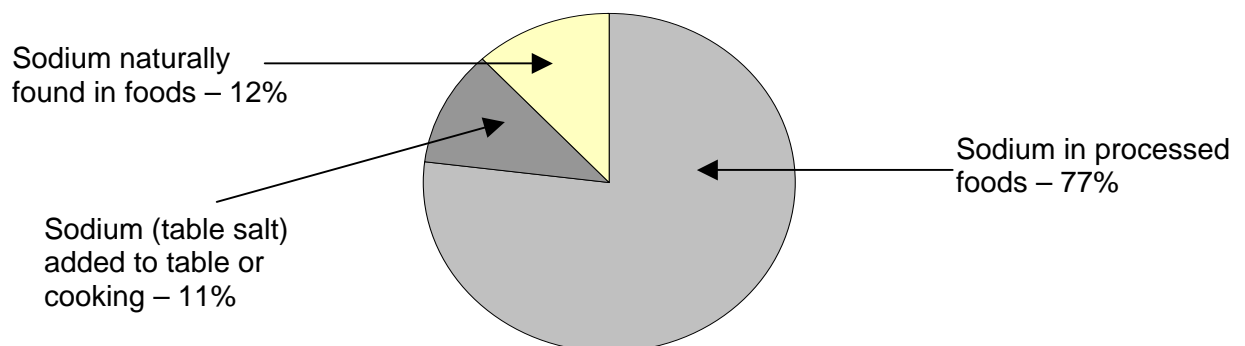
Eating too much salt or sodium can raise your high blood pressure. It is very important to limit the amount of salt or sodium in your diet to 2300 mg or less a day.

What is the difference between salt and sodium?

Table salt contains a mineral called sodium. It is a source of sodium in our diets.

However, most of the sodium people eat is hidden in processed foods. Some foods may be high in sodium and not even taste “salty”.

Sources of sodium in our diet



Did you know?

1 teaspoon of salt has **2300 mg sodium**
(your whole day's worth!)

Ways to reduce salt or sodium include:

- ✓ Eat fewer processed or convenience foods that are high in salt or sodium:
 - canned soups
 - spaghetti or tomato sauce
 - processed cheese
 - soy sauce
 - pickles
- ✓ Eat less cured and processed meats:
 - sausage
 - bacon
 - hot dogs
 - high fat deli meats such as bologna
 - ham
- ✓ Take the salt shaker off the table. Try seasoning your foods with herbs, spices and lemon juice instead
- ✓ Do not use salt in cooking
- ✓ Replace onion, garlic and celery salt with the fresh product or powder
- ✓ Eat at fast food restaurants less often

Always read the **Nutrition Facts** table on your food labels for the amount of sodium in your food and choose foods with low sodium.

See page 10 to learn how to read food labels.

Reading the food label

Read the food label to help you choose healthier foods.

1. Read the Nutrition Facts table.
2. Look at the serving size at the top. Compare this amount to the amount that you eat.
3. Look at the grams of fat and milligrams of sodium. Choose foods with less fat and sodium more often.

Soup #1

Nutrition Facts	
Per 250 mL	
Amount	% Daily Value
Calories 100	
Fat 1 g	2%
Saturated 0.4 g + Trans 0 g	2%
Cholesterol 15 mg	
Sodium 480 mg	18%
Carbohydrate 15 g	5%
Fibre 3 g	12%
Sugars 2 g	
Protein 6 g	

Soup #2

Nutrition Facts	
Per 250 mL	
Amount	% Daily Value
Calories 70	
Fat 1.5 g	2%
Saturated 0.2 g + Trans 0 g	1%
Cholesterol 0 mg	
Sodium 670 mg	28%
Carbohydrate 12 g	4%
Fibre 0 g	0%
Sugars 0 g	
Protein 2 g	

Soup #3

Nutrition Facts	
Per 250 mL	
Amount	% Daily Value
Calories 110	
Fat 2 g	3%
Saturated 0.5 g + Trans 0 g	3%
Cholesterol 15 mg	
Sodium 1000 mg	42%
Carbohydrate 16 g	5%
Fibre 1 g	4%
Sugars 1 g	
Protein 6 g	

Soup #1 is lower in sodium and fat.



Look for food products that have the Health Check™ symbol from the Heart and Stroke Foundation. This means the food product will help contribute to healthy eating for you and your family.

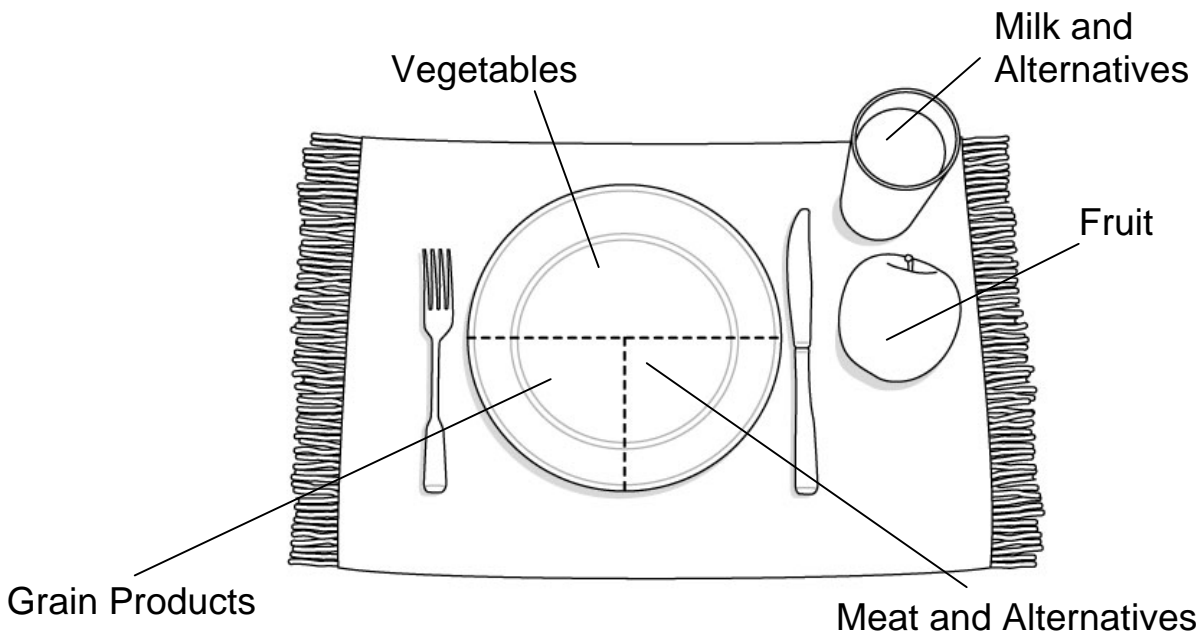
Food Recommended:	Food NOT Recommended:
<p>Vegetables and Fruit</p> <ul style="list-style-type: none"> • all fresh and frozen vegetables & fruit • drained low-sodium canned vegetables • canned fruit • low sodium or salt-free vegetable juice • all fruit juice 	<p>Vegetables and Fruit</p> <ul style="list-style-type: none"> • coconut • battered or deep fried vegetables • undrained canned vegetables • commercial tomato sauce • sauerkraut, pickles, pickled vegetables • canned vegetables or tomato juice
<p>Grain Products</p> <ul style="list-style-type: none"> • whole grain breads, cereals, pasta and rice • low fat snack foods such as air popped popcorn and low sodium pretzels • barley, quinoa, couscous, bulgur 	<p>Grain Products</p> <ul style="list-style-type: none"> • instant cereals • commercial baked goods, such as cakes, pies, donuts and croissants • snack foods such as potato chips and Cheezies
<p>Milk and Alternatives</p> <ul style="list-style-type: none"> • skim or 1% milk/yogurt/cottage cheese • lower fat cheese (less than 20% M.F.) • low fat ice cream (1% M.F.), frozen yogurt (2% M.F.), sherbet • fortified soy beverages 	<p>Milk and Alternatives</p> <ul style="list-style-type: none"> • full fat milk & dairy products • processed cheese slices • processed cheese spread (Cheez Whiz) • malted milk, milkshakes, buttermilk
<p>Meat and Alternatives</p> <ul style="list-style-type: none"> • fish, especially fatty fish such as salmon, mackerel and sardines • lean cuts of meat with visible fat trimmed off such as strip loin or round • skinless chicken or turkey • dried peas, beans and lentils • egg whites or substitutes • soy based meat alternatives such as tofu and textured vegetable protein (TVP) • unsalted nuts and peanuts 	<p>Meat and Alternatives</p> <ul style="list-style-type: none"> • deep fried chicken or battered fish • meat with visible fat • chicken or turkey with skin • organ meats: liver, kidney • regular luncheon meat, bacon, sausage or hot dogs • smoked, cured, salted, kosher or canned meat, fish, or poultry • more than 2 egg yolks each week • salted nuts and peanuts
<p>Fats and Oils</p> <ul style="list-style-type: none"> • soft, non-hydrogenated margarine • olive, canola, soybean, peanut, corn, sunflower, sunflower and flax seed oil • salad dressings such as oil and vinegar or low fat, low sodium • fat-free sour cream 	<p>Fats and Oils</p> <ul style="list-style-type: none"> • regular sauces and gravies • cream cheese, creamy salad dressings and full fat mayo • butter, cream, lard and shortening • coconut or palm oil
<p>Miscellaneous</p> <ul style="list-style-type: none"> • no added salt seasonings such as Mrs. Dash®, Club House No Added Salt • fresh or dried herbs and spices • soups, homemade • soups, low sodium 	<p>Miscellaneous</p> <ul style="list-style-type: none"> • sea salt, onion salt, garlic salt • monosodium glutamate (MSG) • canned soups, broth, boullions • packaged dried soups, broth, boullions

How to build a healthy meal

Healthy eating means enjoying a variety of foods from all 4 food groups in Eating Well with Canada's Food Guide:

- ✓ **Vegetables and Fruit** – Fill $\frac{1}{2}$ of your plate with a variety of vegetables. Eat a piece of fruit as dessert.
- ✓ **Grain Products** – Fill $\frac{1}{4}$ of your plate with whole grain products such as rice, pasta or breads.
- ✓ **Meat and Alternatives** – Fill $\frac{1}{4}$ of your plate with healthy, low fat meat and alternatives such as fish, legumes (peas, beans and lentils), tofu or small portions of lean meats.
- ✓ **Milk and Alternatives** – Have a glass of low fat milk or a small container of yogurt to complete your meal.

Building a healthy meal is simple! Use the picture below as a guideline to help you. Watch your portion sizes.



You can get a copy of **Eating Well with Canada's Food Guide** from Health Canada's website or by phone: www.healthcanada.ca/foodguide 1-800-622-6232 (1-800-O-Canada) or ask to see a **dietitian**.

Alcohol

Alcohol can increase your blood pressure and your risk for developing heart disease and stroke. To reduce your risk, limit your alcohol intake to 1 to 2 drinks a day (9 drinks a week for women, and 14 drinks a week for men).

One drink is:

- 1 bottle of beer (341 ml) beer
- 4 oz (120 ml) wine
- 1 ½ oz (45 ml) of liquor

Ask your doctor how much alcohol is right for you.

In summary ...

To reduce your risk of stroke, the most important changes that you can make in your diet are to:

- ✓ Eat a lower fat diet by limiting fat in food and added to cooking.
 - ✓ Limit saturated fat and trans fat. Choose healthy fats instead.
 - ✓ Reduce your salt or sodium intake.
-

My nutrition goals

1. _____
2. _____
3. _____

Risk factors for stroke

- high blood pressure
 - high blood fats
 - poor diet
 - atrial fibrillation
 - cigarette smoking
 - diabetes
 - little or no exercise
 - unhealthy body weight
 - drinking too much alcohol
-

More information

The Heart & Stroke Foundation of Canada

Hamilton Office: (905) 574-4105, www.heartandstroke.ca

Canadian Hypertension Education Program

www.hypertension.ca/chep

Hamilton Health Sciences Patient Education Library

For more detailed handouts about blood fats, omega-3 fats, salt and more!

www.hamiltonhealthsciences.ca

Dietitians of Canada: Eat Well, Live Well

www.dietitians.ca/eatwell

EatRight Ontario

Talk to a Registered Dietitian about nutrition and healthy eating.

1-877-510-5102, www.eatrightontario.ca

Eating Well with Canada's Food Guide

Get your copy of the food guide.

1-800-622-6232 (1-800-O-Canada), www.healthcanada.ca/foodguide

The American Stroke Association (United States)

www.strokeassociation.org

National Stroke Association (United States)

1-800-787-6537 (1-800-STROKES), www.stroke.org

The Cleveland Clinic (United States)

www.clevelandclinic.org

Canadian Stroke Network

www.sodium101.ca

Notes:



My results

My goals ...

Total Cholesterol: less than 4.2 mmol/L	LDL Cholesterol: less than 2.0 mmol/L
HDL Cholesterol: more than 1.55 mmol/L	Triglycerides: less than 1.7 mmol/L
Blood pressure: less than _____ (ask your doctor what your target is)	

Date	Total Cholesterol	HDL Cholesterol	LDL Cholesterol	Triglycerides	Blood Pressure

Notes: _____
