

You know firsthand how cancer can turn your life upside down. But you also know that it's treatable. And beatable. And most importantly, it is preventable.

A number of factors determine how healthy we are, and at the same time, can put our health at risk. In particular, cancer patients in the North face many challenges when it comes to their health and cancer care. That's why cancer prevention is so important.

Cancer Healthy Eating and Active Living (CANHEAL) was created to help reduce cancer risk in the North. The goal of CANHEAL is to provide patients and their families with useful information to prevent the occurrence and recurrence of cancer.

CANHEAL has put together this booklet to offer ways for you to live a healthy lifestyle to prevent cancer from striking again for you and your loved ones.

By developing healthy habits where we live, work and play, we have a much better chance of staying healthy and cancer-free.

Please read this booklet and try out the suggestions. Then try another. And another. Soon you will be living a healthy lifestyle!

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### WELCOME

CANHEAL is a collaborative project between Northern Health, the BC Cancer Agency, the Canadian Cancer Society and community stakeholders. It provides information, recommendations and ideas for patients to address risk factors that influence cancer risk including healthy eating, body weight, physical activity, tobacco use, alcohol use and sun safety.

CANHEAL can be used by survivors with treatment summaries, tumor specific information and surveillance plans from the BC Cancer Agency.

We encourage you to share this resource and its information with those you care about. We also hope you will be an ambassador for creating a healthy environment in your community. It is important to remember that it is easier for us, and those we love, to live a healthy life when our home, work and community environments support health and wellbeing.

It is our hope that CANHEAL will help equip you with the knowledge and inspiration to live in a way that makes you feel healthy and strong and in doing so, reduce your risk of cancer and the likelihood of other chronic illnesses.

Dr. Jaco Fourie  
Medical Lead Oncology, Northern Health



### CONGRATULATIONS

On behalf of the BC Cancer Agency, it gives me great pleasure to extend sincere congratulations to the team responsible for the development and implementation of this vitally important resource for Northern British Columbia.

The historically lower survival rates for cancer patients in the North have been attributed to a number of factors, including lifestyle, geography, and access when compared with other regions in the province. A partnership between Northern Health and the BC Cancer Agency (BCCA) was forged to address these issues through the opening of the BCCA Centre for the North, enhanced support for Communities Oncology Clinics and innovative collaborative efforts with care providers and populations throughout the region.

This manual is illustrative of this partnership and the joint commitment to enhance and promote healthy living for those at risk of cancer.

Fiona Walks  
Vice President, Safety, Quality and Supportive Care,  
BC Cancer Agency

*Did you know that more than 50% of cancers are preventable? What you eat, whether you smoke, your level of activity, and how you spend time in the sun are all lifestyle choices that can affect your chances of getting cancer and your chances of preventing it.*  
BC Cancer Agency



# QUIT SMOKING



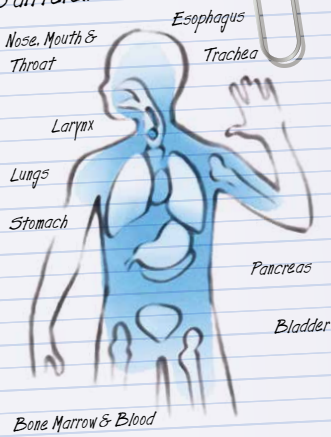
## ESSENTIAL FACTS

- There is no safe level of secondhand smoke exposure.
- Tobacco shortens your life and makes it less enjoyable.
- You have a role in a tobacco-free community.

Quitting smoking is one of the most important things you can do to improve your own health as well as those around you (through second- and third-hand smoke).

TOBACCO USE IS A COMPLEX ADDICTION. RESEARCH SHOWS THAT TOBACCO SHORTENS YOUR LIFE. IT IS RELATED TO 22 CHRONIC ILLNESSES OR DISEASES, AND SMOKING INCREASES CANCER RISK.

*Smoking increases your risk of 15 different cancers:*



*Smokeless tobacco is not a healthier option as it also causes cancer.*

### HOW IS SMOKING RELATED TO CANCER?

Smoking can cause cancer and block your body from fighting it. Poisons in cigarette smoke can weaken the body's immune system, making it harder to kill cancer cells. Poisons in tobacco smoke can damage or change a cell's DNA. DNA is the cell's "instruction manual" that controls a cell's normal growth and function. When DNA is damaged, a cell can begin growing out of control and create a cancer tumour.

### DOES QUITTING REALLY MAKE A DIFFERENCE?

Quitting smoking greatly lowers the risks for cancers of the lung, mouth, throat, esophagus and larynx. Within five years of quitting, your chance of cancer of the mouth, throat, esophagus, and bladder is cut in half. Ten years after you quit smoking, your risk of dying from lung cancer drops by half.

Quitting smoking is one of the most important things you can do to improve your own health as well as those around you (through second- and third-hand smoke).

### SMOKING AFFECTS NON-SMOKERS, TOO

If you are around people who smoke, you are exposed to second- and third-hand smoke, and you are at an increased risk for suffering from the health impacts of smoking.

People recognize second-hand smoke because they can see it in the air or smell it. Third-hand smoke refers to the chemicals that are in smoke that stay on all the surfaces that are exposed to tobacco smoke including floors, walls, tables and so forth. It also becomes embedded in fabrics and carpeting, and remains on hair, skin and clothing.

### RESOURCES

If you smoke, you've probably thought about quitting. It can be a challenge to quit and stay smoke-free, but there are resources to help. To learn about your options and tips for quitting, visit [www.quitnow.ca](http://www.quitnow.ca). Services include counselling by phone, text or email. For free nicotine patches or gum, call HealthLink BC at 8-1-1, or check with your pharmacist about coverage for medications to help you quit.

*This is DNA!*



*Tobacco is used by some First Nations for ceremony, for appreciation and in spiritual practices. The tobacco traditionally used for spiritual and cultural purposes is not the same as tobacco bought in stores (cigarettes, pipe tobacco, snuff or chewing tobacco, cigars, cigarillos, etc.)*

*KEEP TOBACCO USE TRADITIONAL.*



## Protect yourself and others from second- and third-hand smoke:

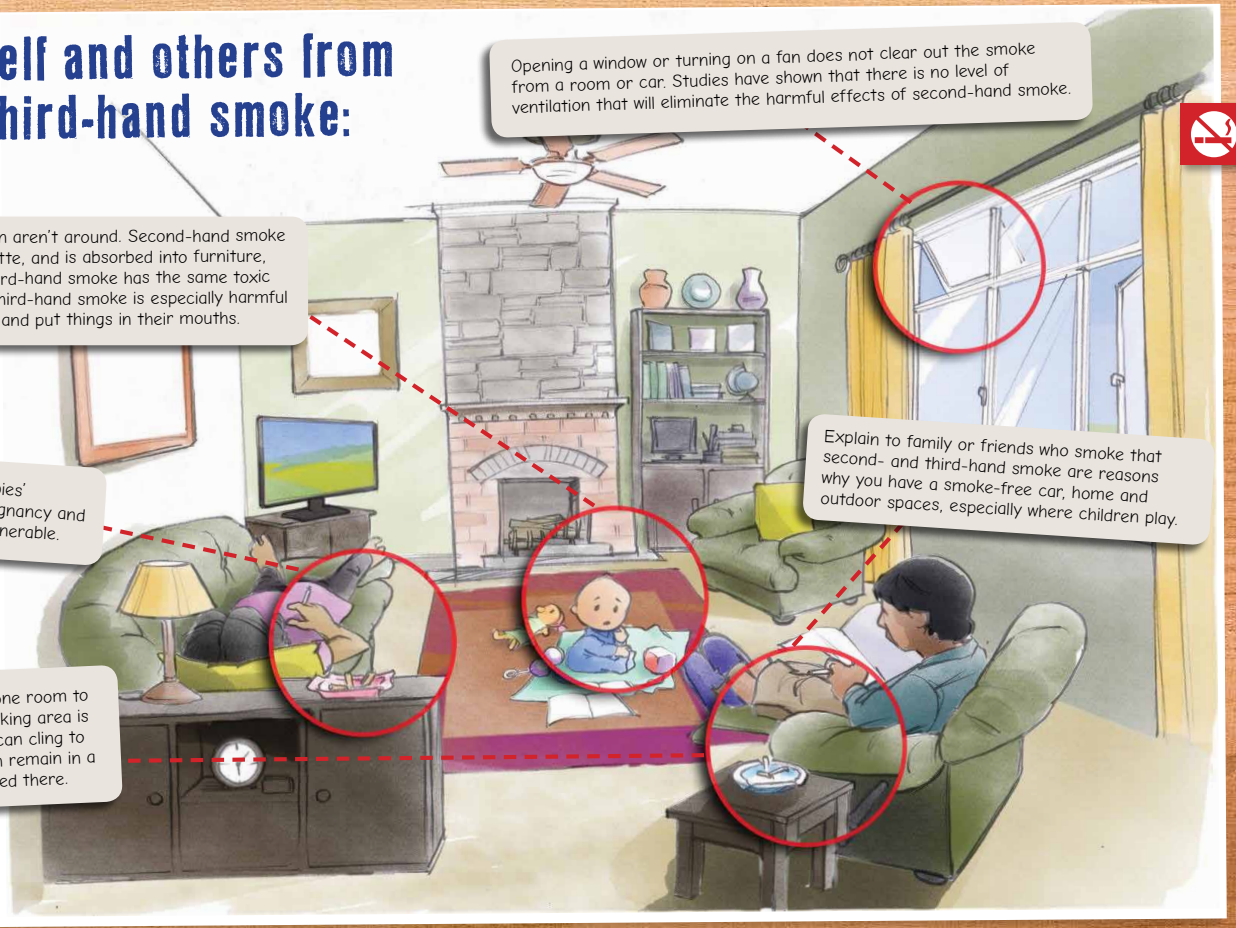
It is not safe to smoke when children aren't around. Second-hand smoke lingers long after you finish a cigarette, and is absorbed into furniture, carpets and other materials. This third-hand smoke has the same toxic chemicals as second-hand smoke. Third-hand smoke is especially harmful to babies as they crawl on the floor and put things in their mouths.

It is especially important to keep babies' environments smoke-free during pregnancy and after birth as their health is more vulnerable.

Second-hand smoke spreads from one room to another even if the door of the smoking area is closed. In addition, toxic chemicals can cling to rugs, curtains and furniture and can remain in a room long after someone has smoked there.

Opening a window or turning on a fan does not clear out the smoke from a room or car. Studies have shown that there is no level of ventilation that will eliminate the harmful effects of second-hand smoke.

Explain to family or friends who smoke that second- and third-hand smoke are reasons why you have a smoke-free car, home and outdoor spaces, especially where children play.



### WHAT KEEPS SMOKERS SMOKING?

Alcohol, caffeine and even chocolate can produce changes in our mood, so what's the difference with nicotine? Perhaps most important, nicotine passes into our brains much quicker than other substances. Nicotine enters your brain within 10 seconds of taking a puff on a cigarette. The nicotine in chewing tobacco and snuff is quickly absorbed because your mouth is filled with tiny blood vessels near the surface of your inner cheek and gums. Nicotine is highly addictive because it causes changes in your brain. Fortunately, some of these changes will be reversed right after you quit smoking and more will recover over time. The withdrawal of nicotine is hard. While quitting, nicotine replacement therapy is offered to ease withdrawal. While changes in the brain and body chemistry are a big part of addiction, they don't tell the whole story. Smoking is a learned behaviour. We begin to learn or associate things such as the way we hold or light a cigarette or take it out of the package with the pleasant feeling or sense of relief that it may bring.

We also associate tobacco with other things we enjoy, such as drinking coffee, alcohol, eating a good meal or having fun with friends. Because smoking often requires us to take a break from our daily duties, we may also associate smoking with the temporary relief of worry, tension, boredom or fatigue. Many people who use tobacco believe that it helps them or does something for them such as stress management or relaxation. As such, the addiction is also related to psychological, emotional and social cues.

Many people say they smoke more when they are under stress even though nicotine actually increases the signs of stress like heart rate, blood pressure and muscle tension.

But, with practice and preparation we can break old habits and learn new ways of getting the benefits we associate with smoking.

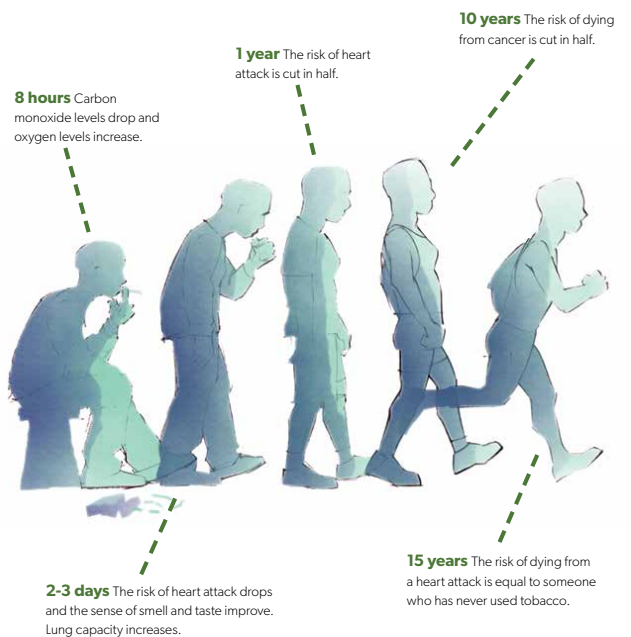
### QUESTIONS TO ASK YOURSELF ABOUT TOBACCO USE:

- What got you started in the first place?
- What purpose does tobacco serve in your life now?
- What does it cost you in terms of your health? Your social life? Your finances? In how you feel about yourself?
- What's happening when you feel like you need a smoke?
- How does your smoking affect those around you?
- How does other people's smoking affect you?
- What will it take to get rid of the problems this habit brings with it?

## Benefits of quitting tobacco

**IF YOU DO SMOKE, YOU ALREADY KNOW YOU SHOULD QUIT. HERE'S WHY:**

Regardless of how long you have smoked, there are immediate and long-term benefits to quitting. Most negative health impacts can be minimized and possible reversed by quitting.





Did you know?  
Nicotine enters  
your brain within  
10 seconds of  
taking a puff on  
a cigarette!

### NOT READY TO QUIT?

There are a number of things you can do to help reduce the impact of tobacco use if you are not yet ready to quit.

Protect your family, friends and loved ones from the second and third-hand smoke you create by using these strategies:

- Only smoke outside, with the door closed (ban smoking in your home).
- Keep a smoking jacket at your door to reduce the levels of third-hand smoke.
- Don't smoke when driving. Pull over and get out of your car if you need a smoke break.

### TRYING TO QUIT AND STAY TOBACCO-FREE?

Whatever your reason for quitting, there are many strategies and resources available to help you.

Try the following:

- Reduce your use of tobacco products a little bit each day or week.
- Switch to using nicotine products such as the patch or gum. (Nicotine is not a cancer-causing agent; it is the many additives in tobacco products that lead to the majority of health risks including cancer.)
- Have support by quitting with a friend, or set a quit date and ask family and friends to help support you to achieve that goal.

## IN YOUR COMMUNITY, YOU CAN:

- Advocate for no smoking in public places, and tobacco-free school zones and workplaces.
- Advocate for protecting workers from second-hand smoke (e.g., smoke-free homes for social workers, nurses and other professional caregivers that go in private home)
- Remind community members about the importance of being positive role models for young people regarding tobacco use, including decreasing sales of tobacco to young people.



Your thoughts on decreasing or extinguishing your tobacco use:

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### INFORMATION IN THIS SECTION GARNERED FROM THE FOLLOWING SOURCES:

- Northern Health Position on Tobacco Reduction (2012)  
[www.northernhealth.ca/AboutUs/PositionStatementsAddressingRiskFactors.aspx](http://www.northernhealth.ca/AboutUs/PositionStatementsAddressingRiskFactors.aspx)
- U.S. Department of Health and Human Services  
*A Report of the Surgeon General. How Tobacco Smoke Causes Disease: What It Means to You.*  
[www.cdc.gov/tobacco/data\\_statistics/sgr/2010/consumer\\_booklet/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/2010/consumer_booklet/index.htm)
- World Health Organization International Agency for Research on Cancer  
[www.monographs.iarc.fr/ENG/recentpub/mono89.pdf](http://www.monographs.iarc.fr/ENG/recentpub/mono89.pdf)
- U.S. Center for Disease Control and Prevention  
[www.cdc.gov/tobacco/data\\_statistics/sgr/2004/posters/benefits/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/2004/posters/benefits/index.htm)

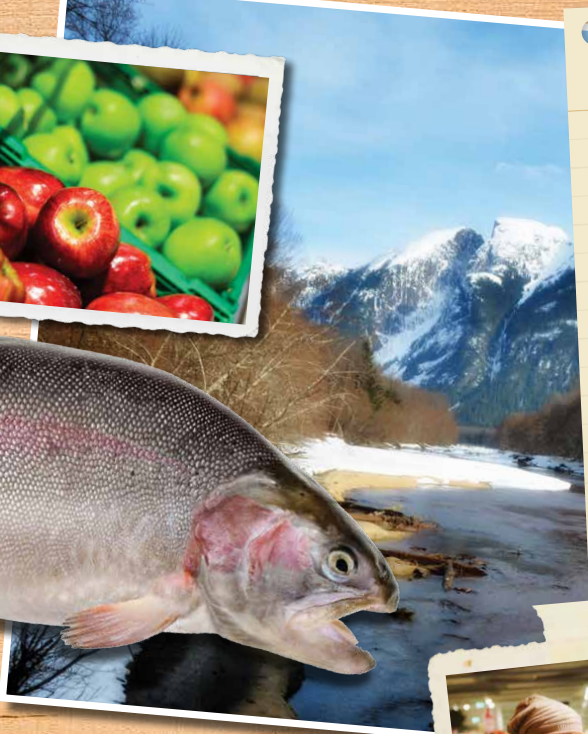
For more information, resources and support check out Quit Now, a provincial program designed to give you the support to quit.  
[www.quitnow.ca](http://www.quitnow.ca) Text: **QUITNOW** to **654321**

Call **8-1-1** :The 8-1-1 number connects you to HealthLink BC, which offers a range of health resources including quitting tobacco use.

- [www.facebook.com/QuitNowBC](http://www.facebook.com/QuitNowBC)
- [www.youtube.com/quitnowbc](http://www.youtube.com/quitnowbc)
- [www.twitter.com/quitnowbc](http://www.twitter.com/quitnowbc)



# HEALTHY EATING



Let food be your medicine and medicine be your food.  
- Hippocrates

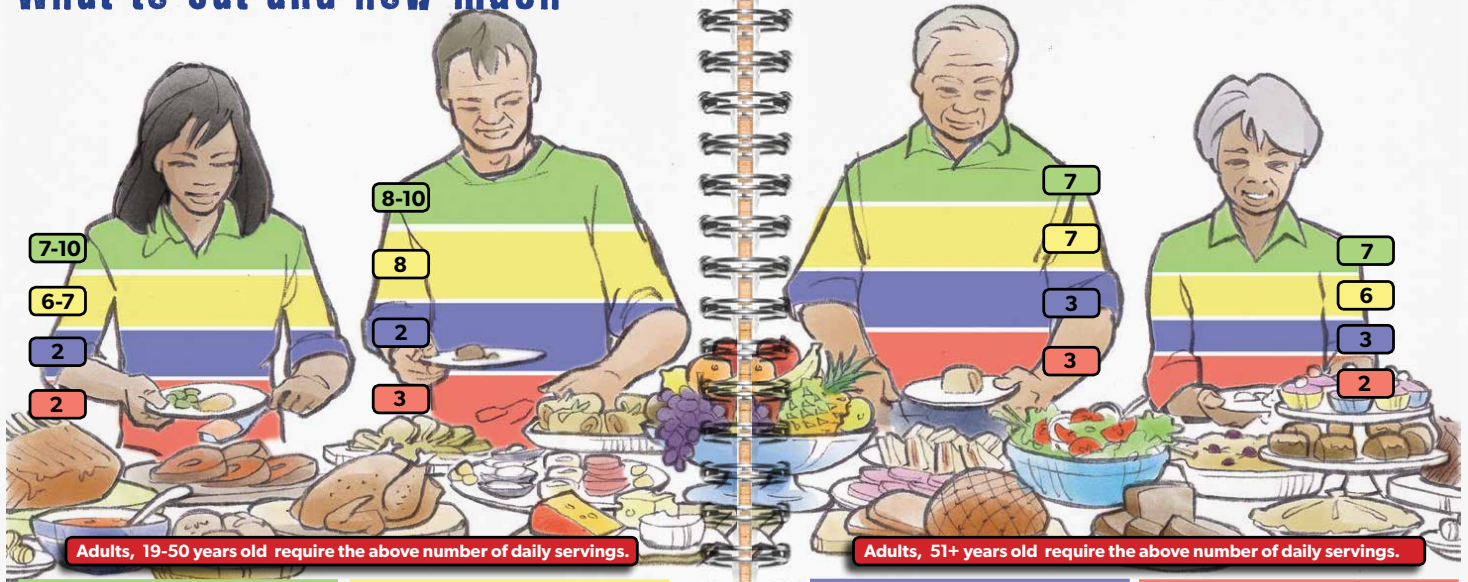
**ESSENTIAL FACTS**

- Good nutrition is not only essential to healthy living and growth, but it also helps to keep you disease-free, including many types of cancer.
- Healthy eating means eating enough, good-for-you, tasty food to supply energy for everyday living, and to promote short-term and long-term health.
- Eat a variety of real food every day from all four food groups (vegetables & fruit, grains products, milk & dairy alternatives, and meat & meat alternatives).





# What to eat and how much



## Fruits and Vegetables

1 cup leafy raw vegetables, wild plants, or salad  
 1 fruit (e.g., apple, peach, orange)  
 ½ cup fresh, frozen or canned vegetables, berries, fruit, or 100% juice

### Tips:

- Eat at least one dark green and one orange vegetable each day
- Choose fruits and veggies prepared with little or no added sugar, fat or salt
- Have fruit and veggies more often than juice

## Grain Products

1 slice of bread or ½ bagel  
 ½ pita or ½ tortilla  
 ½ cup cooked rice, pasta, or  
 ¾ cup hot cereal

### Tips:

- Make at least half your grain products whole grains each day (eat a variety of whole grains such as barley, brown rice, oats, quinoa.)
- Choose grain products that are low in fat, sugar or salt.

## Milk and Milk Alternatives

1 cup milk or fortified soy beverage  
 ½ cup of canned milk (evaporated)  
 ¾ cup yogurt  
 1 ½ oz. cheese

### Tips:

- Select lower fat milk, yogurts and cheeses (for cheese look for the percentage of milk fat [%MF] on the label and choose those with less than 20% [MF] milk fat)

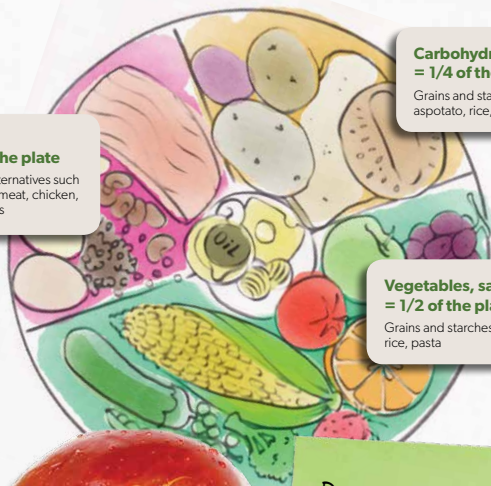
## Meat and Meat Alternatives

2 ½ oz or ½ cup of fish, poultry, lean meat or traditional game or wild meat  
 ¼ cup cooked beans/legumes  
 2 eggs  
 2 tbsps peanut butter

### Tips:

- Have meat alternatives such as beans, lentils and tofu more often.
- Select lean meat and alternatives prepared with little or no added fat or salt

# What does a healthy plate of food look like?



**Protein = 1/4 of the plate**

Meat and alternatives such as fish, lean meat, chicken, beans, lentils

**Carbohydrates = 1/4 of the plate**

Grains and starches such as potato, rice, pasta

**Vegetables, salad & fruit = 1/2 of the plate**

Grains and starches such as potato, rice, pasta



Research also shows that a diet high in fruit may reduce your risk of some cancers such as lung, stomach, mouth and throat.

## FRUITS AND VEGETABLES

Choose a mixture of fruits and vegetables every day. Variety is important for good health, so change up your choices as much as you can. Vegetables and fruits are:

- High in fibre (to keep your digestive system healthy)
- Low in fat and calories
- Excellent sources of vitamins, minerals and phytochemicals

## NON-STARCHY VEGETABLES AND CANCER RISK

Research shows that a diet high in non-starchy vegetables may reduce your risk of some cancers such as stomach, mouth and throat. Starchy vegetables include corn, potato and peas. Examples of non-starchy vegetables include:

- |               |            |
|---------------|------------|
| • Cabbage     | • Okra     |
| • Lettuce     | • Spinach  |
| • Carrots     | • Celery   |
| • Broccoli    | • Tomato   |
| • Eggplant    | • Radishes |
| • Cauliflower | • Beets    |

Other non-starchy vegetables, such as garlic, onions and leeks (allium vegetables), may also reduce the risk of stomach cancer. Garlic may protect against colorectal cancer.

## TIPS FOR ADDING FRUITS & VEGETABLES TO YOUR DIET:

- Have chopped-up vegetables and fruits as part of your snack (e.g., veggie sticks and low fat cheese, apple slices and natural peanut butter). Or, try dried fruit with nuts as a snack.
- Use lots of vegetables such as spinach, broccoli, mushrooms, tomatoes, peppers, and frozen peas in your soups, stews, lasagna, chili, pasta sauce, stir fry, etc.
- Enjoy veggie platters at parties, or make one for your family as an appetizer.
- Add fruit to your breakfast.
- Challenge yourself to try a new fruit or vegetable every month. Pick something at the grocery store; it can be fresh, frozen or canned, and try it out.

*Phytochemicals are naturally occurring substances found in plants. As part of a plant-based diet, phytochemicals may help to prevent cancer. Fruit, vegetables, whole grains and legumes (beans), for example, broccoli, brussel sprouts, garlic, onions and citrus fruits are rich sources of phytochemicals. To lower your risk of cancer, eat the recommended number of servings for vegetables and fruit, and whole grains.*

*BC Cancer Agency Breast Cancer Guide*

## CHOOSE WHOLE GRAINS

There are many types of grains, such as wheat, rice, oats, barley, corn, rye, quinoa and buckwheat. All of these can be either whole or refined depending on how the grain is processed after harvesting. If the whole seed is left intact, it is referred to as a whole grain. If it is processed where part of the seed is removed, it is a refined grain. Whole grains are higher in fibre and have more vitamins, minerals and nutrients.

Choose naturally occurring whole grains or foods made from whole grains as part of your daily diet. Look for:

- Cereals made with whole grains such as oats
- Many types of rice such as brown rice or wild rice
- Breads, bagels, English muffins and tortillas made with whole grains or with whole-wheat flour (Not all brown bread is made with whole grains; always check the ingredients.)
- Pastas made with whole grains
- Corn and popcorn

## LIMIT RED MEAT AND PROCESSED MEATS

Beef, pork, lamb, and goat are red meat. Red meat is a valuable source of protein, iron, zinc and vitamin B12. However, many of us eat much more of it than our bodies need, which can increase our risk of cancer.

If you eat red meat, choose the leanest meat, and trim any visible fat before cooking. Remember a serving is 3 ounces of cooked meat—smaller than a deck of cards. Choose poultry or fish more often and make up the rest of your meal with vegetables and whole grains.

Processed meats are those meats preserved by smoking, curing or salting, or by the addition of preservatives. Examples include ham, bacon, salami, hot dogs and sausages.

When meat is processed, cancer-causing substances can be formed. These substances damage cells in the body and research shows that eating processed meat increases the risk of colorectal cancer. When fish or meat is smoked, it is exposed to the smoke of a wood or charcoal fire. The foods absorb large amounts of the tar that comes off the smoke. These tars may contain cancer-causing compounds.

- Substitute sliced chicken or canned fish for processed lunch meats in your sandwiches.
- Try fish in tacos, ground turkey burgers or a chicken stir fry rather than beef.
- Try eating a meat-free meal at least once a week or challenge your family to try a meatless day (check out the Meatless Monday movement at [www.meatlessmonday.com](http://www.meatlessmonday.com)).

Try to limit the amount of red meat you eat to 3 servings a week.

Moose meat and other wild game meats are lower in fat than domestic meats such as beef, pork and chicken.

— BC Cancer Agency, First Nations Survivorship Care Plan

## TRY MEAT ALTERNATIVES

Beans, lentils and dried peas come from a type of plant called legumes. Common types include kidney beans, black beans, navy beans, and green, brown, yellow and orange lentils. Soybean, which is used to make tofu, is another type of legume. Chickpeas (or garbanzo beans) and split peas are commonly used dried peas.

BEANS, LENTILS AND DRIED PEAS ARE A NUTRITIOUS AND VERSATILE ALTERNATIVE TO MEAT. IN ADDITION TO PROVIDING A LOW-FAT SOURCE OF PROTEIN, THEY PROVIDE FIBRE AS WELL AS B VITAMINS, IRON AND CANCER-FIGHTING PHYTOCHEMICALS.

Most legumes are sold dried, canned and sometimes frozen. Dried beans need to soak before cooking so make sure you build in that prep time. Canned beans are easy and quick, but should be rinsed to remove excess sodium, or purchase "no sodium added" varieties.

Lentils don't require soaking and cook faster than most beans.

## TRY BEANS, PEAS AND LENTILS:

- In a breakfast burrito or wrap
- To top a salad such as with kidney beans or chickpeas
- As a dip such as hummus; use hummus as a sandwich filling
- To make a vegetarian chili using kidney beans, black beans and chickpeas
- To replace part of the meat in a spaghetti sauce with lentils or tofu
- In soups. Lentils make a great soup!







### FATS

Certain fats like omega 3 and omega 6 fatty acids are important to your diet because your body cannot make them, but they have many health benefits. Omega 3 fatty acids are essential, but you only need 1–2 g daily. You should be getting enough if you eat foods like fatty fish twice weekly and use canola oil for cooking. Eating large amounts of foods high in omega 3 fatty acids will not provide added benefit; it will only increase the total fat in your diet. **NOTE: Omega 6 fatty acids should ONLY be consumed in small quantities. In large quantities, they have been shown to be carcinogenic.**

Omega 3 fatty acids are highest in:

- Flaxseed and walnuts
- Flaxseed, canola and soybean oils
- Wheat germ
- Fatty fish such as salmon, trout, mackerel, herring, sardines and char

Omega 6 fatty acids are highest in:

- Corn, sunflower and soybean oils
- Sunflower, sesame, poppy and pumpkin seeds
- Wheat germ

Go for ground flaxseed over whole because the ground form is easier for your body to digest, which means you're more likely to get all the benefits. Try adding ground flaxseed to yogurt and fruit or into your muffin or pancake batter.

### THE SCOOP ON BUTTERS AND OILS

#### MARGARINE VS. BUTTER; WHAT'S THE DIFFERENCE?

Both butter and margarine can be included in a healthy diet when used in small quantities. They are both high in fat and calories. The difference is that butter and margarine contain different types of fat. Butter contains cholesterol and saturated fat. Hard margarines (the kinds sold in a brick) contain trans fatty acids. Soft margarines however contain mainly unsaturated fats and very little or no trans fatty acids. Therefore, a soft-tub margarine labelled as "non-hydrogenated" is a better choice than a hard margarine. Overall, whether you choose butter or soft-tub margarine, the most important thing is to limit how much you use.

#### WHAT KIND OF FAT SHOULD I USE FOR COOKING AND IN SALADS?

Vegetable oils are a better choice than hard fats such as butter, lard or shortening. Even in baking, oil is a better choice. See cookbooks and books on healthy eating for recipes for muffins, pizza crusts and breads that use small amounts of vegetable oil.

#### WHICH OIL IS BEST?

Olive oil is a good choice because it is high in monounsaturated fats with several health benefits and an appealing flavour. The flavour is richest in the "extra virgin" oil and is particularly tasty with salads.

Canola oil is another good choice that is high in monounsaturated fats. It also has the lowest amount of saturated fat and a good balance of omega 3 and omega 6 fatty acids. Canola oil is less expensive than olive oil so you may want to mix canola and olive oils for your cooking oil to get the advantages of both.

Flaxseed (linseed) oil and walnut oil are also good sources of omega 3 fatty acids. If you use one of these oils, buy a small quantity and store it in the refrigerator. It should keep for up to two months.

#### OILS FOR COOKING

Some oils can handle the heat, and some can't. An oil's smoke point is the temperature at which it will start to smoke and break down. When cooking oil starts to smoke, it can lose some of its nutritional value and give food an unpleasant taste.

#### HIGH-HEAT COOKING

- Use corn, soybean, peanut and sesame oils. They are good for frying and stir-frying.

#### MEDIUM-HEAT COOKING

- Use olive, canola and grapeseed oils. They have moderately high smoke points, making them good for sautéing.

#### FOR SALAD DRESSINGS AND DIPS

- Use oils with low smoke points, such as flaxseed, walnut, olive and canola oil.



## SALT AND SUGAR

Our bodies need some salt to help maintain a balance of water (hydration). Also, table salt is fortified with iodine, which is important for good thyroid health.

But in general, Canadians eat more salt than they need. Too much salt is linked to high blood pressure, which can lead to heart disease and stroke. Additionally, eating too much salt and salty food may increase your risk of stomach cancer.

Much of the salt we eat comes from processed food such as snack foods, bread, sauces, soups and cereal. We also often add salt to our food at the table or in cooking.

## REMEMBER A FOOD LABELED WITH 15% OR MORE OF YOUR % DAILY VALUE OF SODIUM IS CONSIDERED HIGH IN SALT!

Most Canadians also eat too much sugar. Sugars occur naturally in foods such as fruit, milk, honey and syrup. However, most of the sugar we eat has been added to food and drinks to make them taste sweet. Check the ingredients list to see if a food product is high in added sugar. If words like sugar, glucose, honey, corn syrup, fructose, maltose or dextrose are listed, sugar has been added. If you see one of these near the top of the list of ingredients, the product is high in sugar.

Foods and drinks with added sugar have lots of calories, but usually contain few nutrients. Eating a lot of these sugary foods makes it easy to eat more than you need and replace other more nutritious food choices which means, which means you are likely to put on weight.

Replacing sugar in foods such as cake, candies and soft drinks with artificial sweeteners may reduce calories, but it does NOT make them healthy foods.

## SNACK HEALTHY

Did you know that one snack-sized bag of corn chips (1 ounce) has the same number of calories as a small apple, 1 cup of whole strawberries, AND 1 cup of carrots with 1/4 cup of low-calorie dip? Try substituting these healthy snacks for a bag of chips, and you will have a satisfying snack with higher nutrition quality. (Centers for Disease Control and Prevention (U.S.))

## CALORIC DENSITY

The number of calories in a particular amount of food is called "calorie density" or "energy density." Look for low-calorie dense foods that do not pack a lot of calories into each bite, but that still keep you full.

INSTEAD OF...	TRY...
Fried chicken sandwich with 1 tbsp. mayonnaise = 599 calories	Grilled chicken salad with low-fat dressing, 2 cups lettuce, 2 oz. grilled chicken breast, 2 tbsp. light balsamic vinaigrette dressing = 198 calories
Cream-based soup, 1 cup mushroom bisque = 400 calories	Broth-based soup, 1 cup minestrone = 112 calories



BREAKFAST	LUNCH	DINNER
Cook oatmeal, oat bran, cornmeal or other hot cereal in milk instead of water.	Choose a whole grain bread, bun, or tortilla for your sandwich.	Wash and slice sweet potatoes, cauliflower, and onions tossed with canola oil and dried herbs. Bake until crisp.
Add sliced banana, chopped dried apricots and/or frozen berries to your cereal.	Add veggies to your sandwich: try romaine lettuce, tomato, cucumber, onion, or roasted veggies.	Add a dark green leafy salad to your meal - experiment with spinach, romaine and kale.
Try natural peanut butter on your whole grain toast or bagel for protein.	Slice leftover chicken or turkey, or mash leftover salmon or hard boiled eggs with a mixture of light mayo and plain yogurt.	Try quinoa, bulgur, brown rice, whole wheat pasta or another grain as a side or added to your green salad.
Add a couple tablespoons of wheat bran or ground flax and blueberries or sliced banana to your pancake batter.	Try a natural nut butter (peanut, almond, cashew, etc.) for a tasty sandwich filling.	Mix lean ground beef with ground turkey or ground moose when making hamburgers, meat balls or meatloaf.
Try back bacon or turkey bacon rather than side bacon or sausages.		To satisfy a sweet tooth, consider fruit salad or a baked fruit crisp.

## GROCERY SHOPPING TIPS

To prepare healthy menus, you need to have healthy ingredients on hand. When grocery shopping, focus on fresh and unprocessed foods. That means spending your time in the produce section, where you can stock up on fruits and vegetables. Look for whole grains and low-fat dairy products. And, don't linger in the snack food and candy aisles; avoid them if you can. Check out farmers' markets during the growing season to see what fresh local produce is available.

- Mayo Clinic

## GROCERY SHOPPING TIPS

### BEVERAGES

Many symptoms of fatigue, lightheadedness, bad taste, dryness in the mouth, and nausea can be due to dehydration. It is therefore important to drink enough fluids to remain hydrated.

### WHAT'S IN A DRINK?

Calories from drinks can really add up (not to mention the toll it can have on our wallets!). But there are plenty of ways to reduce the number of calories in what you drink.

### HEALTHY BEVERAGE CHOICES

At the coffee shop:

- At the coffee shop, request fat-free or low-fat milk instead of whole milk
- Forgo the extra flavouring; the flavour syrups used in coffee shops, like vanilla or hazelnut, are sugar-sweetened and add calories.
- Skip the whip. Whipped cream on top of coffee drinks adds calories and fat.
- Order a plain cup of coffee with fat-free milk and artificial sweetener, or drink it black.

### FOR STORE-BOUGHT SMOOTHIES:

- Order a small size.
- Ask for skim milk or low-fat yogurt.
- Hold the sugar. Ask that your smoothie be prepared without added sugar; fruit is already naturally sweet.

### GENERALLY:

- Choose water instead of sugar-sweetened beverages.
- For a quick, easy, and inexpensive thirst-quencher, carry a water bottle and refill it throughout the day.
- Don't stock the fridge with sugar-sweetened beverages. Instead, keep a jug or bottles of cold water in the fridge or cans of unflavored sparkling water.
- Serve water with meals.
- Make water more exciting by adding slices of lemon, lime, cucumber, or orange, or drink sparkling water.
- Add a splash of 100% juice to plain sparkling water for a refreshing, low-calorie drink.
- When you do opt for a sugar-sweetened beverage, go for the small size. Some companies now sell 8-oz. cans and bottles of pop, which contain about 100 calories.

Make drinking water delicious! Visit this blog for more tasty tips! <http://blog.northernhealth.ca/healthy-eating/naturally-flavoured-water-cheers-to-your-hydration/>

### SMOOTHIE RECIPE

- Handful of fresh spinach (or two cubes of frozen)
  - Handful of fresh or frozen berries
  - 1 banana (fresh or frozen)
  - Cup of low fat yogurt (such as plain Greek yogurt)
  - Water to desired consistency
- Blend together. This is just one recipe. Experiment with different fruits and combinations to find smoothies you enjoy!*

OCCASION	INSTEAD OF...	CALORIES	TRY...	CALORIES
Morning coffee shop run	Medium café latte (16 oz.) made with whole milk	265	Small café latte (12 oz.) made with fat-free milk	125
Lunchtime combo meal	20-oz. bottle of non-diet cola	227	Water or diet soda	0
Afternoon break	Sweetened lemon iced tea from a vending machine (16 oz.)	180	Sparkling water (naturally sweetened)	0
Dinnertime	A glass of non-diet ginger ale (12 oz.)	124	Water with a slice of lemon or lime or seltzer water with a splash of 100% fruit juice	0 calories for the water with fruit slice or 30 calories for seltzer water with 2 oz. of 100% orange juice.
Total beverage calories:		796		125-155

## HEALTHY EATING YEAR ROUND

In the North, we have lucky to have summers that provide lots of tasty and healthy foods from the land, river and sea. If we plan ahead, we can preserve this abundance for healthy and affordable eating all year. Additionally, foraging can provide an amazing connection to our environment and is an affordable way to help us eat nutritious food.

- Freeze raspberries, blueberries, and other picked fruit in the summer months for smoothies.
- Make a vegetable soup with summer produce and freeze it for cold winter evenings. Try freezing soup in a muffin pan, then popping the soup "discs" into a freezer bag for individual portions and minimized space in your freezer.
- Freeze fresh herbs in some canola oil in ice cube trays. Store them in a freezer bag, and use for flavourful cooking in the fall and winter.
- Dried fruit can be added to a mixture of unsalted nuts and seeds for a trail mix snack.





# The art of eating smart

The secret to changing your eating habits for the better is to plan ahead (a day or week in advance). Always shop with a list and remember to eat before you shop. Prepare your snacks for the following day in the evening and have them packed in containers ready to go.



## Eat Regularly

Eat breakfast, a morning snack, lunch, afternoon snack and dinner. Don't confuse planned snacking with mindless grazing.

## Sit Down to Eat

Sit, even if only for a cup of tea or an apple. Concentrate on the food in front of you, and enjoy every mouthful.



## Don't Upsize Your Portion

Opt for smaller meals. Eating more often is a great way to keep your metabolism revving high. Don't let yourself get to starving mode: eat regular snacks instead. Try a healthy appetizer like a salad or raw veggies before a meal to help take the edge off your hunger, and help you feel satisfied with a healthy-sized portion for your main meal.



## Don't Rush

Eat slowly, chew well, savouring each mouthful. Between bites, put your fork and knife down. Be the last person (not the first) to finish. Stretch out your meal by 15 minutes to allow your stomach to signal your brain's appetite centre that it's full.

## Listen to Your Stomach

Practice stopping eating when you're comfortably full, but not "stuffed." Try to leave the table feeling satisfied but not too full or bloated. Remember you can use leftovers for a snack or another meal.



## Avoid Mindless Eating

Separate your eating from other activities. Most overeating is thoughtless (nibbling on chips at a party, grazing on leftovers after a meal, eating treats and snacks left out at the office, etc.). Be conscious of where and what you're eating.

## Use the 90/10 Rule

Don't give up all treats; keep them small and occasional. If 90 percent of your intake is healthy, use the remaining 10 percent for an occasional treat.



**FRESH, FROZEN AND CANNED - ARE THERE NUTRITIONAL DIFFERENCES?**

Yes, but they can all be good choices depending on availability, economics and ability to prepare food. Fresh foods are often considered to have the most nutritional value.

However, frozen foods can often be more nutritious as they are picked ripe and frozen quickly, minimizing the nutrients lost between harvest and consumption. Canning is more likely to reduce some of the nutrients because of the high temperatures needed in the canning process.

When using canned foods, opt for canned goods without syrup and low in sodium. Choose a variety of forms of fruits and vegetables that fit your nutrition, finances, and taste preferences to ensure you have a healthy and balanced diet.

**KEEP TRACK OF WHEN YOU EAT UNHEALTHY FOODS**

Look at your weekly eating, then think about what leads you to unhealthy foods. Pinpoint the times and situations that lead to unhealthy eating, so you can make a plan for healthier eating. If you regularly make these plans and follow through, they will become habits!

**COMMON TOPICS OF INTEREST**

**ANTIOXIDANTS**

Some studies suggest that people who eat more vegetables and fruits, which are rich sources of antioxidants (including vitamin C, vitamin E, carotenoids, and many other antioxidant phytochemicals), may have a lower risk of some types of cancer. The current advice is to get your antioxidants through food and beverages rather than dietary supplements.

**ORGANIC FOODS**

Although people may choose organic foods because they believe them to be healthier and safer, there is not enough evidence to show this is true. Whether you choose organic or non-organic, the important thing is to eat the recommended number of fruits and vegetables servings each day. Additionally, pollutants may be found on both organic and non-organic foods so all vegetables and fruits should be washed thoroughly.



AN UNHEALTHY MEAL/SNACK HAPPENS WHEN	A PLANNED ALTERNATIVE
I'm rushed on a weeknight because of post-work commitments or my kids' activities.	Cook and freeze chili, stew, lasagna etc. on a weekend afternoon to heat up on a busy weeknight.
I resort to the drive-thru on mornings when I'm running late.	Prepare yogurt, fruit and granola in a container the night before to eat a healthy breakfast at work.
I have a night out with my friends.	Plan an activity with your friends such as going on a hike, playing soccer or basketball, cooking a new dish together or taking a dance class.
I'm on the road.	Pack a cooler with lots of water, fruit, chopped veggies, and a sandwich or two (you'll feel better and save money when travelling). Remember you can stop at a grocery store instead of a restaurant and pick up fresh healthy foods!
I'm eating at a friend or family member's house.	Suggest a potluck where everyone brings a dish, and you can bring a healthy dish, or suggest cooking together with a new healthy recipe. Offer to bring a veggie tray for appetizers and/or fruit for dessert.
I indulge in ice cream, chips, or treats while watching TV after dinner.	Do something to keep you busy and moving in the evening such as going for a walk with a friend, your kids or your pet. If you have a sweet tooth, try making your own popsicles with fruit juice. Don't buy any chips or other treats so there will be less temptation at home. Also try knitting or another activity to keep your hands busy.
I'm too tired and hungry to cook a healthy dinner after a long day.	Have a few 10-minute options ready like a scrambled egg dinner burrito or a tuna melt that you can make on nights when you need something quick and easy.



### SOY

Soy foods such as tofu, soy milk, soybeans, and soy nuts are an excellent source of protein. They are a lower-fat, healthy alternative to meat. Soy contains estrogen-like phytochemicals, which may help reduce the risk of osteoporosis and heart disease. Studies on soy and the risk of cancer are inconclusive. If you're being treated for cancer, talk to your doctor before adding soy to your diet.

### SUPPLEMENTS

"Evidence from both observational studies and clinical trials suggests that dietary supplements are unlikely to improve prognosis or overall survival after the diagnosis of cancer, and may actually increase mortality." (Rock et al, 2012, p. 253) Before taking a supplement, you should try to get the nutrients through dietary sources. Supplements should only be considered if a nutrient deficiency is demonstrated.

### FOOD SAFETY

It's not just what you eat that keeps you healthy but also how you cook and prepare it. For general good health, it is important to prepare, cook, and store food with care to kill harmful bacteria that can cause food-borne illnesses. Also, how you prepare your food can affect your cancer risk.

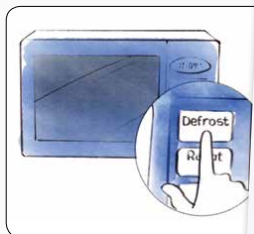
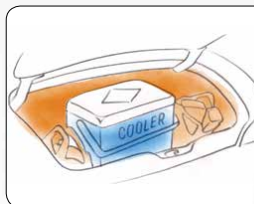


### AFLATOXIN AND CANCER RISK

Aflatoxin increases the risk of liver cancer. Aflatoxin is produced by a certain fungus that can grow on a wide range of foods including cereals, oilseeds, spices, and tree nuts as well as milk, meat, and dried fruit. Nuts such as peanuts, pistachios, and brazil nuts are of most concern. To stop this fungus from developing, store peanuts and natural peanut butter in the refrigerator. Never eat nuts that smell musty, look mouldy or are shriveled, discoloured, or damaged.

**"I'M NOT A VEGETARIAN. HOW DOES THIS INFORMATION APPLY TO ME?"**

The addition of more plant foods to your diet is a healthy choice whether or not you choose to follow a vegetarian diet. Diets that include lean white meats, fish, and red meat in small amounts, can also be healthy.



### IMPORTANT SAFETY TIPS:



- Keep foods refrigerated to stop micro-organisms from growing.
- Thaw meat, poultry, and seafood in the microwave or refrigerator, not on the kitchen counter.
- Wash your hands before you start handling foods. When handling foods, wash your hands often.
- Always wash raw vegetables and fruit in clean running water (even if the package says pre-washed).
- Wash all plates, utensils, and cutting boards that touch raw meat or poultry with hot soapy water before using them again.
- Use separate cutting boards for raw foods and cooked foods.
- Foods that need to be kept in the fridge or freezer should be stored as soon as you return home from grocery shopping. If you live far from a grocery store, bring a cooler bag for the cold and frozen items for the drive home.
- Do not use plastic storage containers to heat up food in the microwave, unless they are labeled microwave safe.
- Do not eat foods showing signs of mould.





### COOKING TEMPERATURE AND CANCER RISK

For food safety, it is important to cook meat, poultry, and seafood to thoroughly destroy any germs that could cause disease. However, research shows that cooking meat, poultry and fish at high temperatures such as by frying, broiling or barbecuing may increase your risk of cancer. Cooking meats at very high temperatures creates chemicals (heterocyclic amines or HAs) that may increase cancer risk.

- Regularly cook proteins at lower temperatures by braising, stewing, steaming or roasting.
- Use high-temperature cooking methods such as barbecuing, broiling or pan frying less often.
- Marinate meat, poultry, and fish before cooking. Marinating these foods can prevent the formation of cancer-causing chemicals. Use an oil-free marinade that contains a strong acid like lemon juice or balsamic vinegar.

### TRY THESE HEALTHY BARBEQUING TIPS

- Choose lean cuts of meat, poultry, and seafood. Trim off visible fat. This will reduce the amount of harmful chemicals that develop from the smoke created by burning fat.
- Barbeque slowly and keep the food away from the hot coals to prevent charring.
- Try grilling vegetables, veggie burgers, and fruit slices. Most experts agree that plant-based foods do not form the cancer-causing substances when cooked at high heat.

## IN YOUR COMMUNITY, YOU CAN:

- Create a healthy cooking club or group.
- Promote healthy eating in meetings at your workplace.
- Advocate for cooking, nutrition, meal-planning demonstrations at your local community centre.
- Join an existing community garden or if your community doesn't have one, advocate for one.
- Ask community leaders about planting food rather than flowers in communal spaces (raspberry and blackberry bushes in public parks, for example).
- Advocate for nutrition education for different groups.
- Support local markets, stores, and restaurants that offer healthy food.
- Encourage healthy food donations to your local food bank including canned fish, low sodium soups and vegetables.
- Help friends and family with meal planning and navigating the grocery store.
- Educate young people in your community about why and how to eat healthy.
- Share your ideas for healthy eating with your friends and family, and ask them for theirs!



### INFORMATION GARNERED FROM THE FOLLOWING SOURCES:

BC Cancer Agency. A Nutrition Guide for Women with Breast Cancer, 2012

Canadian Cancer Society, Eat Well, Be Active

Centers for Disease Control and Prevention (U.S.)

[www.cdc.gov/healthyweight/healthy\\_eating/energy\\_density.html](http://www.cdc.gov/healthyweight/healthy_eating/energy_density.html)

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First Nations Health Authority. (2013, August). Traditional Food Factsheets

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Rock, C. L., Doyle, C., Demark-Wahnefried, W., Meyerhardt, J., Courneya, K. S., Schwartz, A. L., Bandera, E. V., Hamilton, K. K., Grant, B., McCullough, M., Byers, T. and Gansler, T. (2012). Nutrition and physical activity guidelines for cancer survivors. CA: A Cancer Journal for Clinicians, 62

# ACTIVE LIVING



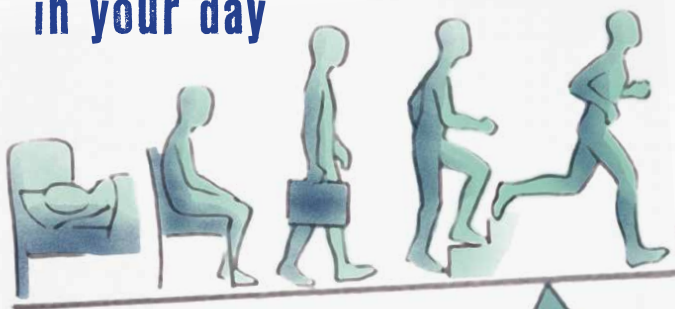
"Exercise benefits the heart, lungs and other organs; and can reduce the risk of cancer recurrence. Ease into any new routines to allow your body to adjust. This will also ensure that the changes become a part of your life and not just a phase."  
- BC Cancer Agency

## ESSENTIAL FACTS

- Reduce overall sedentary behaviours.
- Increase incidental activity such as standing and taking the stairs: **EVERY MOVE COUNTS!**
- Any form of regular physical activity is important and beneficial.
- Use a graduated and individualized approach to increase activity levels.
- Physical activity provides great health benefits for all ages. The more, the better.



## Include a range of activity in your day



- AS A CANCER SURVIVOR, WHY EXERCISE?**
- Speeds up recovery and lowers the chance of recurrence
  - Improves sense of well-being, mood and self esteem
  - Helps with memory and reduces "chemo brain"
  - Improves strength, endurance, muscle and bone strength
  - Increases life expectancy
  - Decreases depression, anxiety and fatigue
  - Decreases symptoms of menopause and arthritis
  - Can reduce risk and severity of comorbid conditions such as diabetes, heart disease and dementia, which cancer survivors are at an increased risk of developing.



- What are the risks of being sedentary?**
- Increased blood pressure
  - Cancer and cardiovascular disease
  - Decreased quality of life
  - Premature death

### REDUCE SITTING TIME

The amount of time we spend sedentary, or not moving, can have serious implications for our health. Long periods of inactivity is not only unhealthy, but dangerous to our health. Sitting for more than six hours daily can cause chronic disease, just like smoking, an unhealthy diet, and problematic substance use can.

#### WHAT CAN YOU DO?

- Decrease your recreational sitting to less than two hours a day; this can lower your risk for colon and breast cancer by up to 30 percent. Watch TV while standing or doing an activity like cooking or on a treadmill/stationary bike. Go for a walk or add a recreational activity to your evening (a workout class, dance lessons, intramural sports team, etc.). Put your computer on a high table so you can stand while you email.
- Take the stairs to a bathroom on a different floor, walk to a colleague's desk instead of sending an email, park your car further from entrances, etc.
- Swap a sitting activity for an active one.

Break up your sitting time. Even standing for five minutes every hour can reduce your risks. (Try a smartphone app like StandApp and WorkSafe Sam for reminders to stand at work or home.)



## WHAT IS MODERATE AND VIGOROUS ACTIVITY?

Moderate activity will cause adults to sweat a little and breathe harder than resting. Examples of moderate activity include walking briskly (approximately 5-8km/hr), leisure cycling, playing golf (walking), general cleaning at home and mowing the lawn.

Vigorous activity will cause adults to sweat a lot and be "out of breath". Examples of vigorous activity include running, cross-country skiing, jumping rope, and using an elliptical trainer at a high speed.

### AEROBIC

Aerobic exercise strengthens our heart and lungs and makes them work more efficiently. Any activity that raises the heart rate to an elevated but safe level for a period of time is an aerobic activity.



*Being active for at least 150 minutes per week can help reduce the risk of:*

- Chronic disease (such as high blood pressure and heart disease)

- Premature death

*It can also help to:*

- Maintain functional independence and mobility

- Improve fitness

- Improve or maintain body weight

- Maintain bone health

- Maintain mental health

*Always check with your healthcare team before changing your physical activity routine.*

## STRENGTHENING

Exercises that work our muscles against weight or resistance are called strength exercises. From the age of 30, our muscle strength starts to decrease by a small amount every year. That's why strengthening exercises are important for everyone, especially older adults.

Strength exercises can:

- Improve blood sugar control for people with diabetes
- Build bone density to reduce the risk of osteoporosis
- Strengthen core muscles to reduce back pain

Strength exercises can be done using inexpensive free weights (e.g., dumbbells), weight machines, resistance bands, cans of food or your own body weight.

## FLEXIBILITY

A regular series of flexibility and balance exercises that works our joints through their full range of motion can help us to keep moving and stay active as we age. By staying mobile and improving our balance, we can prevent falls and injuries.

## HOW TO START GETTING ACTIVE

- Over time, increase how often you're active and how long you do an activity. Start with short periods of exercise (5-10 minute sessions) and rest after each session. Gradually build up to 20-30 minutes of continuous activity. Work up to being active three-to-five days a week.

## PACE YOURSELF

- Be active when you have energy. Your energy level may change from day to day or throughout the day.
- Listen to your body. Take breaks or change activities when you need to.
- Adjust how hard you're working and how long you're active, based on how you're feeling.
- You may prefer being active every second day so you have time to recover.
- Do activities that are safe and reasonable for you. Exercise should make you feel better, not more tired or stressed.

*Start slow! Begin with light activity, then gradually move to moderate and more vigorous activities.*



## BUILD PHYSICAL ACTIVITY INTO YOUR LIFE

*Take note of how you are already active and increase those frequencies. For example, are you active when you babysit your nieces/nephews or your grandkids? Can you play with them more often or take them to the park or play outside with them one day a week after school and work?*

*Do you take the bus? Try getting off a stop earlier, or walking to a stop further away before you board.*

*Do you own a dog? Get them out for longer walks each day.*



## HIGHER INTENSITY ACTIVITY



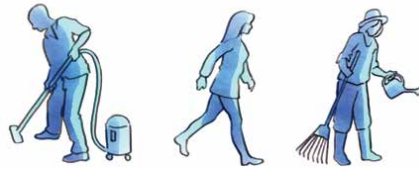
**Jogging (5mph)**  
300 calories burned in 30 mins  
**Cycling (leisurely)**  
300 calories burned in 30 mins  
**Running (7mph)**  
430 calories burned in 30 mins



**Swimming (leisurely)**  
225 calories burned in 30 mins  
**Tennis**  
260 calories burned in 30 mins  
**Climbing stairs**  
260 calories burned in 30 mins



**Dancing (disco)**  
170 calories burned in 30 mins  
**Aerobics (low impact)**  
190 calories burned in 30 mins  
**Hiking (cross-country)**  
225 calories burned in 30 mins



**Vacuuming**  
130 calories burned in 30 mins  
**Walking (3.5 mph)**  
140 calories burned in 30 mins  
**Gardening (general)**  
150 calories burned in 30 mins

## LOWER INTENSITY ACTIVITY

## CANADIAN PHYSICAL ACTIVITY GUIDELINES

### 18-64 YEARS:



To achieve health benefits, adults aged 18-64 years should accumulate at least 150 minutes of moderate-to-vigorous intensity aerobic physical activity per week, in bouts of 10 minutes or more.



It is also beneficial to add muscle and bone strengthening activities using major muscle groups, at least 2 days per week.



More physical activity provides greater health benefits.

### 65+ YEARS:



To achieve health benefits, and improve functional abilities, adults aged 65 years and older should accumulate at least 150 minutes of moderate-to-vigorous intensity aerobic physical activity per week, in bouts of 10 minutes or more.



It is also beneficial to add muscle and bone strengthening activities using major muscle groups, at least 2 days per week.



Those with poor mobility should perform physical activities to enhance balance and prevent falls.



More physical activity provides greater health benefits.



If you suffered significant nerve damage, you may have... a reduced ability to use your affected limbs because of weakness or loss of balance. Consider a stationary reclining bicycle, for example, rather than walking on a treadmill.

IF YOU HAVE COMPROMISED IMMUNE FUNCTION... avoid public gyms and pools until your white blood cell levels return to safe levels. Survivors who completed a bone marrow transplant are advised to avoid such exposures for one year after transplantation.



IF YOU HAVE AN INDWELLING CATHETER OR FEEDING TUBE... avoid pool, lake or ocean water or other microbial exposures that may result in infections. Also, be careful of resistance training of muscles in the area of your catheter to avoid dislodgement.



#### PRECAUTIONS

The effects of cancer treatment may increase the risk of exercise-related injuries and adverse effects. Depending on your situation, specific precautions may be advisable.

For example, if you are living with severe anemia, you should delay exercise (other than the activities of daily living) until your anemia has improved. If you are experiencing severe fatigue from therapy, you may not feel up to an exercise program. In this case, try doing just 10 minutes of light activity daily. Survivors undergoing radiation should avoid chlorine exposure to irradiated skin (e.g., swimming pools and hot tubs).

As always, if you have multiple or uncontrolled comorbidities such as previous heart attacks, heart disease and asthma, it's important to consult with your physician before modifying your exercise levels.



## HOW TO CHOOSE YOUR PHYSICAL ACTIVITY

WHAT APPEALS TO YOU ABOUT PHYSICAL ACTIVITY?	ACTIVITY IDEAS
Having "me time"/clearing my head	Yoga, tai-chi, jogging, swimming, kayaking
Accomplishing a personal best	Set a time or distance goal and work towards it; sign up for a charity walk, run, or cycle event; or try using a pedometer to track your movement
Being social with family/friends	Sign up for a water aerobics class with a friend, go snowshoeing with a relative, start a walking or canoeing group, join a recreational hockey or curling team
Being committed or giving back	Coach a child/grandchild's sports team; commit with colleagues to take the stairs once a day; commit to your pet to take it on a walk or a longer walk each day; volunteer to walk dogs at a local shelter
Having something to show for your efforts	Plant a new stretch of garden, learn salsa dancing, try a new sport such as golf

## MAKE SPECIFIC PLANS

ACTIVITY	PLACE	DATE & TIME	TRANSPORTATION	WHAT I NEED TO BRING
Swimming	Name of local pool	Wednesday after work	Drive from work to pool, then from pool home	Towel, swimsuit, goggles, water bottle and an apple and trail mix for snack
Skating	Nearby pond/lake that is frozen	Sunday after lunch	Carpool with friends to the lake	Skates, helmet, gloves, water, tuna sandwich for snack

Making specific plans can help you follow through. For example: On Saturday morning after breakfast, I will walk my dog to my friend's house; then we will walk together to Cottonwood Park.

Instead of...



Meeting a friend for a coffee or drink

Try this!



Meet a friend for a walk



Watching the game



Play a game! Play ball hockey or go ice skating with friends.



Going to a movie



Go to a dance class or an archery lesson



Watching the news



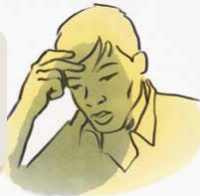
Listen to the radio or the news on a smartphone while you go for a walk or garden

## Identifying barriers to physical activity

It is important to identify our exercise barriers in order to overcome them. Here are some common excuses, concerns and worries with possible solutions. What are your barriers? What will be your plan to overcome them?

### "I'm too sick."

You may be too sick for a vigorous or strenuous exercise program (check with your healthcare team), but you can usually find some ways to be more active throughout your day. Remember you can exercise for one minute several times a day. Enhanced physical fitness can help you better cope with your illness and prevent further problems.



### "I don't have enough time."

We all have different priorities with our time. Some find a lot of time for television, but nothing to spare for fitness. Remember that physical activity doesn't have to take a lot of time. Even five minutes a day is a good start. You may be able to combine activities. For example, arrange a "walking meeting" to discuss business or family matters, or meet friends for a bike ride rather than a coffee.

### "I'm too tired."

When we are out of shape, we tend to tire easily, then we don't have energy to exercise because we're too tired. It's a vicious cycle! Break out of the "too tired" cycle. Regular activity increases our energy to do the things we like. Build up slowly and adjust your activity as your energy levels grow.



### "It's too cold, hot, dark, etc."

Weather can be a challenge for physical activity in the North, but it is also an opportunity to have activities and sports for each season! Be flexible and to have the right clothing/gear to stay comfortable. For example, try walking on your lunch break while it is light outside, or try indoor activities such as using a stationary bicycle or a workout DVD.

### "I get enough exercise."

You may meet physical activity guidelines (of at least 150 min/week including two days for strengthening activities), but for most people, their daily jobs and activities do not provide enough sustained exercise to keep them fit and energetic. Be sure to add incidental activity to your day and avoid sitting for more than six hours/day.



### "I'm too old."

You're never too old for some type of physical activity. No matter what your level of fitness or age, you can always find some way to increase your activity, energy and sense of well-being. In fact, fitness is especially important as we age to stay mobile and strong. Work with your healthcare team to find an activity that is right for you.



### "Exercise is boring."

Choose activities that you enjoy to make it easier to sustain regular physical activity. Try doing activities with your friends, kids or grandkids; or try a new sport, activity or class. Add variety to your activities and your routines. For example, vary your walking routes, or choose different topics to think or talk about on your walks.

### "Exercise is painful."

The old saying "no pain, no gain" is simply wrong. Recent evidence shows that significant health benefits come from gentle, low-intensity, enjoyable physical activity. You may sweat or feel a bit short of breath, but if you feel pain you may be exercising improperly or overdoing it for your body. Check with your instructor or healthcare team; you may need to adjust the level or type of activity you're doing.





### IN THE NORTH, WE ARE CREATIVE!

- Use what you've got. You may not have a gym or a pool in your community, but do you have a skating rink or a pond that freezes over in the winter? What about hiking/walking trails or a lake for canoeing? When you drive into a nearby town for groceries, could you use the pool or fitness facilities there before you shop?
- Can you bike to work or to the store? If not, just park farther away from the store and walk, or use the stairs at lunch time to build incidental activity into your routine.
- Weather may make activities difficult, but find activities you like to do both inside and outside (e.g., cross-country skiing when it's nice out; a workout video and an exercise ball when it's not.)
- If you're returning to work in a camp or isolated setting where physical activity may be more limited, try exercising with your colleagues. Play a pick-up game outside, talk to the camp operators to arrange for fitness equipment/space, bring resistance bands and do activities in your room.



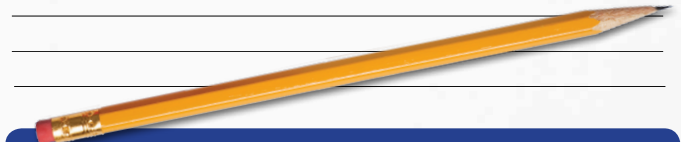
### PHYSICAL ACTIVITY AND INJURY PREVENTION

- Start small with physical activity to avoid injury
- Be patient with your body. Becoming active again after a period of inactivity requires a slow and steady approach.
- Be aware of balance issues and choose activities accordingly.
- Practice safety in your physical activities (whether it be in sports, in the water or with daily activities and household chores).

## IN YOUR COMMUNITY, YOU CAN:

- Work to build or restore physical activity spaces such as a baseball field, walking paths or a communal fitness place.
- Apply for grant money to support a local physical activity project.
- Start a snowshoeing, hiking or walking group.
- Develop an active transport initiative such as a bike-to-work program or a walking school bus where parents and students walk to school together.
- Educate friends, community leaders and teachers about the importance of physical activity for everyone.

Your plan to increase your activity:



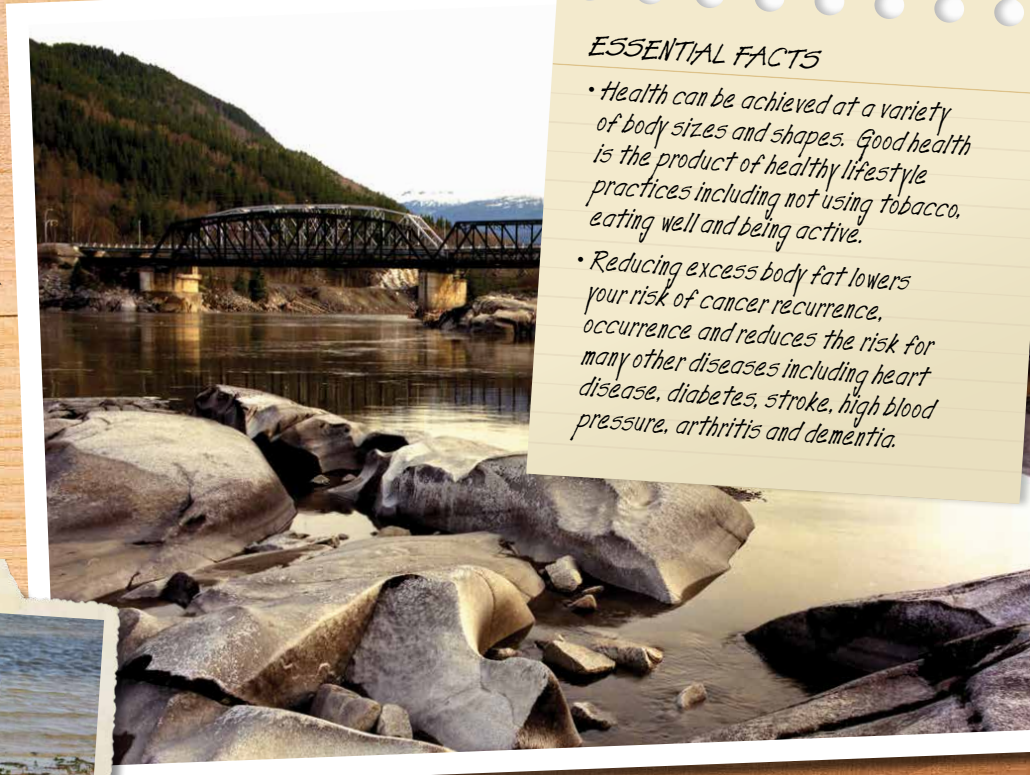
### INFORMATION GARNERED FROM THE FOLLOWING SOURCES:

- BC Cancer Agency, 2012, First Nations Survivorship Care Plan
- Rock, C. L., Doyle, C., Demark-Wahnefried, W., Meyerhardt, J., Courneya, K. S., Schwartz, A. L., Bandera, E. V., Hamilton, K. K., Grant, B., McCullough, M., Byers, T. and Gansler, T. (2012), *Nutrition and physical activity guidelines for cancer survivors. CA: A Cancer Journal for Clinicians*, 62: p. 249-250
- Northern Health Position on Sedentary Behaviour and Physical Inactivity, 2012. [www.northernhealth.ca/AboutUs/PositionStatementsAddressingRiskFactors.aspx](http://www.northernhealth.ca/AboutUs/PositionStatementsAddressingRiskFactors.aspx)
- Canadian Society for Exercise Physiology [www.csep.ca/guidelines](http://www.csep.ca/guidelines)
- World Cancer Research Fund UK. (2012). Move More for Life. [www.wcrf-uk.org/PDFs/Youcanmovemoreforlife.pdf](http://www.wcrf-uk.org/PDFs/Youcanmovemoreforlife.pdf)
- Physical Activity Line [www.physicalactivityline.com](http://www.physicalactivityline.com)
- Lorig, K., Holman, H., Sobel, D., Laurent, D., González, V., Minor, M. (2012). *Living a Healthy Life with Chronic Conditions, For Ongoing Physical and Mental Health Conditions*. Bull Publishing Company, Boulder, Colorado.





# BODY WEIGHT



**ESSENTIAL FACTS**

- Health can be achieved at a variety of body sizes and shapes. Good health is the product of healthy lifestyle practices including not using tobacco, eating well and being active.
- Reducing excess body fat lowers your risk of cancer recurrence, occurrence and reduces the risk for many other diseases including heart disease, diabetes, stroke, high blood pressure, arthritis and dementia.



PEOPLE WHO HAVE EXCESS BODY FAT—PARTICULARLY IF THEY ARE CARRYING THEIR WEIGHT AROUND THE MID-SECTION—HAVE HIGH LEVELS OF SUBSTANCES THAT STIMULATE CELL DIVISION CIRCULATING IN THEIR BLOOD.

### HOW IS BODY FAT ASSOCIATED WITH CANCER RISK?

The fat we store on our bodies is not simply extra weight. Fat cells produce estrogen, which promotes cell growth. They also produce a variety of proteins that cause inflammation and insulin resistance, which in turn also promote cell growth and cell reproduction. The more often cells grow, reproduce or divide, the more opportunity there is for cancer to develop.

Fat stored at the waist is more active in producing these growth stimulants. So people who are overweight—particularly if they are carrying their weight around the mid-section—have high levels of substances that stimulate cell division circulating in their blood.

Gaining weight can be very easy in our daily lives. Things like inexpensive processed foods, modern conveniences that make physical exertion unnecessary, and TV and computers that keep us sedentary for long periods of time, all work against us to maintain a healthy weight.

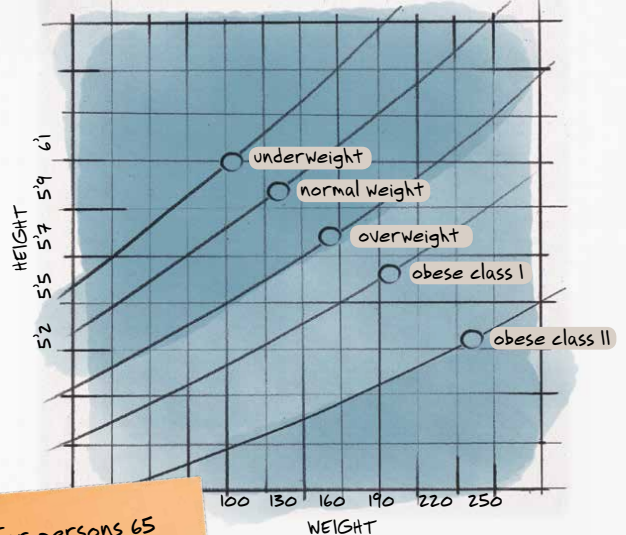
It's important to remember that being at a healthy body weight does not mean being skinny. Skinny does not equal healthy.

### HOW DO WE GAIN WEIGHT?

Weight is gained when we consume more calories than we burn. Weight gain can sneak up on us quickly. In fact, if we consume just 100 calories more than we burn each day, we'll put on a pound in a little more than a month, and almost 30 pounds in three years.

## Determining Your Body Mass Index (BMI)

BMI stands for 'body mass index'. It is a measure of your weight in relation to your height. Try finding your BMI using the calculation below, then learn more about your BMI classification on the following page.



Almost half of Canadians are overweight and 15% are obese. This puts us at increased risk for breast, colorectal, esophagus, kidney, pancreas and uterine cancer.

- Canadian Cancer Society

Note: For persons 65 years and older, the normal range may begin slightly above BMI 18.5 and extend into the overweight range.

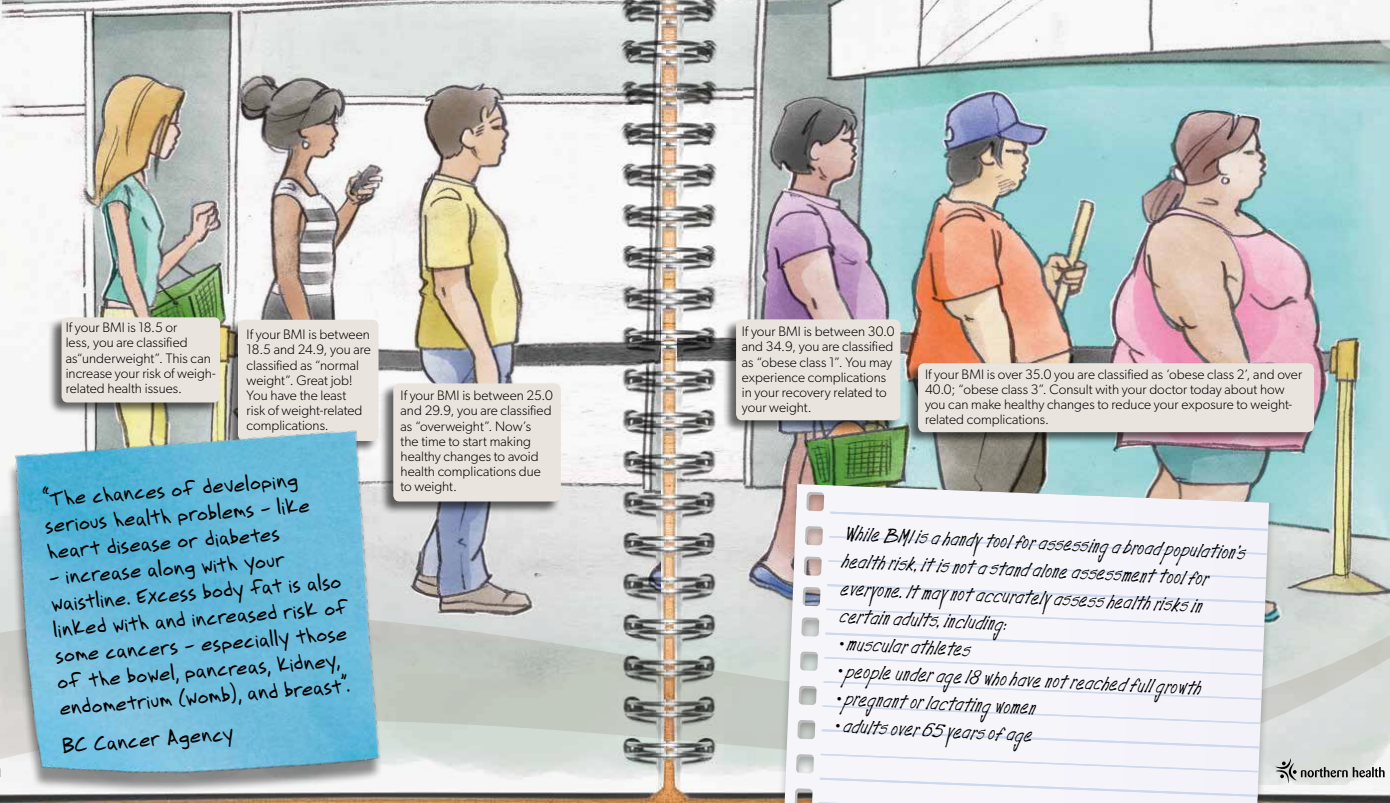
(Health Canada. Canadian Guidelines For Body Weight Classification in Adults. Ottawa: Minister of Public Works and Government Services Canada: 2003.)

BMI is an assessment tool for helping to determine your health.

To calculate your BMI, divide your weight in pounds by your height in inches squared, then multiply the result by 703. For example, if you weigh 160 pounds and are 68 inches tall, divide 160 by 4,624, which is 68 squared. Multiply the answer, 0.034, by 703 for a BMI of 24.3.



# What BMI group applies to you?



If your BMI is 18.5 or less, you are classified as "underweight". This can increase your risk of weight-related health issues.

If your BMI is between 18.5 and 24.9, you are classified as "normal weight". Great job! You have the least risk of weight-related complications.

If your BMI is between 25.0 and 29.9, you are classified as "overweight". Now's the time to start making healthy changes to avoid health complications due to weight.

If your BMI is between 30.0 and 34.9, you are classified as "obese class 1". You may experience complications in your recovery related to your weight.

If your BMI is over 35.0 you are classified as 'obese class 2', and over 40.0; 'obese class 3'. Consult with your doctor today about how you can make healthy changes to reduce your exposure to weight-related complications.

*"The chances of developing serious health problems - like heart disease or diabetes - increase along with your waistline. Excess body fat is also linked with and increased risk of some cancers - especially those of the bowel, pancreas, kidney, endometrium (womb), and breast."*  
BC Cancer Agency

*While BMI is a handy tool for assessing a broad population's health risk, it is not a stand alone assessment tool for everyone. It may not accurately assess health risks in certain adults, including:*

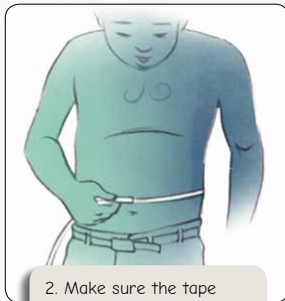
- muscular athletes
- people under age 18 who have not reached full growth
- pregnant or lactating women
- adults over 65 years of age



## How to measure your waist circumference



1. Place a tape measure around your body at the halfway point between the bottom of your lowest rib and the top of your hip bone. This is the point at which to measure your waist.



2. Make sure the tape is straight and snug but doesn't compress your skin and measure after breathing out.

Waist circumference is another indicator of health risk associated with excess abdominal fat (fat around the belly). Excess fat around the waist and upper body (an "apple" body shape) is associated with a greater health risk than having more fat in the hip and thigh areas (a "pear" body shape).

In general, the risk of developing health problems, including cancer, increases as waist circumference increases above 102 cm (40 inches) in men and 88 cm (35 inches) in women. Even though a person's BMI may be in the normal weight range, a high waist circumference indicates some health risk.

## IN YOUR COMMUNITY, YOU CAN:

- Advocate for environments that support physical activity and healthy eating. For example, safe and accessible walking paths, and healthy foods and beverages at community events and work meetings.
- Create an environment of wellness where you work or volunteer. (For more information, visit the Canadian Cancer Society's workplace wellness resources: [www.wellnessfits.ca](http://www.wellnessfits.ca))
- Advocate for healthy and active fundraising activities. Swap a bake sale for a community walk or car wash and instead of selling chocolate bars or cookies, do a bottle drive or sell berries.
- Encourage local restaurants and grocery stores to sell healthy food and drink options.

Your ideas to improve your body weight:

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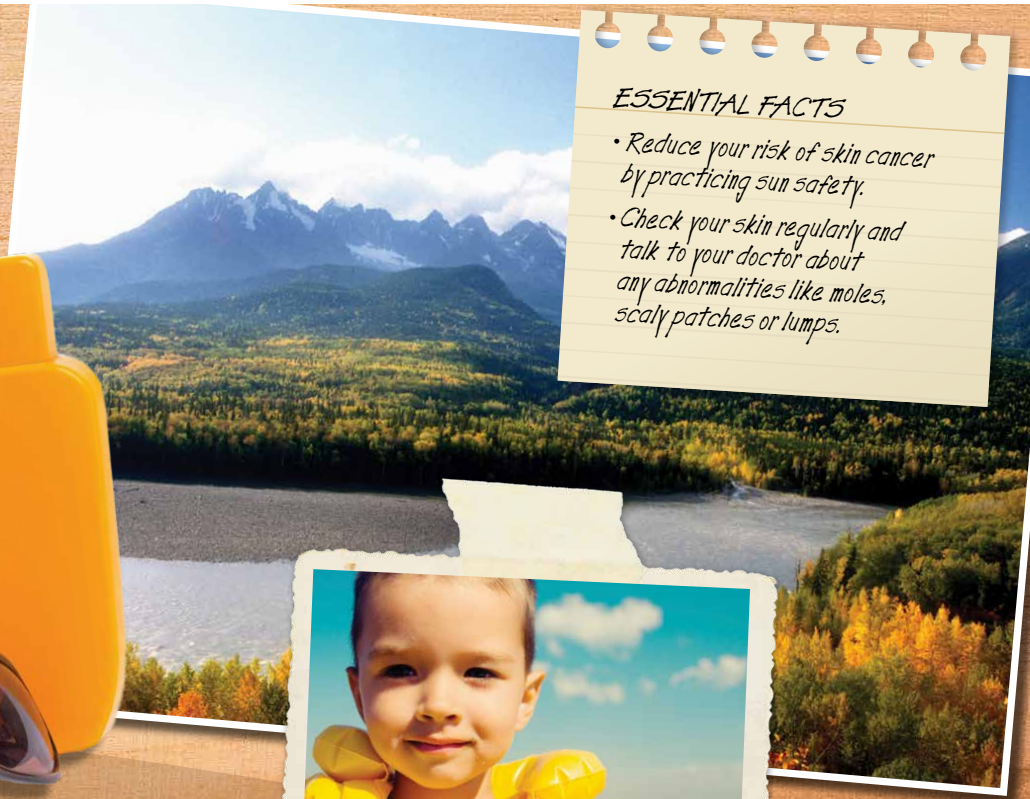
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### INFORMATION GARNERED FROM THE FOLLOWING SOURCES:

- American Institute for Cancer Research
- BC Cancer Agency, First Nations Survivorship Care Plan, 2012
- Canadian Cancer Society
- Dietitians of Canada

# SUN SAFETY



## ESSENTIAL FACTS

- Reduce your risk of skin cancer by practicing sun safety.
- Check your skin regularly and talk to your doctor about any abnormalities like moles, scaly patches or lumps.





While being outside in the sun can feel good, we have to protect our skin from the sunlight at the same time. In Canada, sunlight is strong enough to cause skin cancer and premature aging of the skin. And in British Columbia, we have the highest rates of melanoma [the most serious type of skin cancer] in the country. The risk of skin cancer today is greater than it was 20 years ago and continues to increase.

### WHY SHOULD I CARE ABOUT SKIN CANCER?

- The chance of developing skin cancer in BC is about 1 in 7.
- Skin cancer can kill you.
- All skin cancers need to be treated and that involves surgery, chemotherapy, or radiation. Skin cancer can leave you scarred for life.
- Sun exposure also causes wrinkling, sagging skin, freckles, moles and cataracts.

### HOW DOES THE SUN CAUSE SKIN CANCER?

The sun's rays enter the skin and harm the DNA within skin. The body naturally works to repair the damage, but it may not be able to fix everything. This can result in uncontrolled cell growth, leading to the development of skin cancer. Sunburns and suntans are both signs of skin damage. Repeated sun exposure over the years may result in wrinkles, mottling of skin colour, and skin cancer.

We are exposed to more ultraviolet (UV) rays/radiation because pollution has damaged the protective layer of ozone around the earth. UV rays can get through clouds, fog and haze. Water, sand, concrete and especially snow can reflect, and even increase, the power of the sun's rays.

You have a higher risk of skin cancer if you:

- have light-coloured skin, eyes and hair
- work, play or exercise in the sun for long periods of time
- had several blistering sunburns as a child
- take drugs that make you more sensitive to UV light

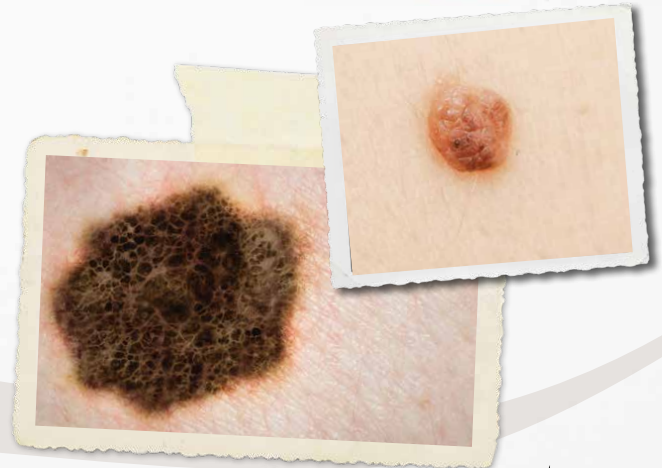
### CHECK YOUR SKIN!

Inspect your skin regularly, all over, using a mirror to look at hard-to-see places such as your back. Tell your doctor if you notice any of the following skin changes:

1. A new growth or spot on the skin, such as a mole, a scaly patch or a lump
2. A change in an existing skin spot or growth
3. A sore that does not heal

In particular, look for moles or skin spots that have any of the following symptoms:

- Larger than a pencil eraser from edge to edge
- Uneven, blurred or ragged edges
- More than one colour, such as black, brown or tan, or even bits of red, white or blue
- One half that doesn't match the other half (asymmetry)
- A noticeable increase in size



Suntans are a sign of skin damage and provide little protection from the sun. They are equal to a sun protection factor (SPF or protection against sunburn) of between 2 and 4.  
- BC Cancer Agency



## Be sun smart!



Use lip balm with SPF 30. Reapply every two hours or after swimming or sweating.



Lay it on thick. Use between 2 to 3 tablespoons for your body (don't forget your ears and the tops of your feet!)

**Do not use tanning beds or sun lamps. All tanning beds use UV light. There is no such thing as a safe tan!**

Seek shade between 10am and 3pm. "If your shadow is shorter than you, it's time to find some shade or go inside."  
-Canadian Cancer Society



Cover yourself with clothing, a hat and sunglasses. You still need sunscreen on sunny days in the winter.

Choose a sunscreen that is labeled "broad spectrum." This means it protects against both UVA and UVB radiation. Use sunscreen of at least SPF 15. Check the expiry date as old sunscreen will not protect you.



## IN YOUR COMMUNITY, YOU CAN:

- Schedule outdoor events outside peak sun hours; encourage event organizers to have shaded areas, provide sunscreen, and put up sun safety reminders at outdoor events (even in the winter).
- Ask for shaded areas in your community at outdoor sporting venues and in children's play areas.
- Encourage schools and community centres to have sunscreen available.
- Remind family and friends to stay out of the sun at peak times and to wear at least SPF 15 sunscreen.
- Advocate for policies that restrict the use of tanning beds for young people.

Your thoughts about sun safety:

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### INFORMATION GARNERED FROM THE FOLLOWING SOURCES:

- Canadian Cancer Society (2013). Sun and UV  
[www.cancer.ca](http://www.cancer.ca)
- BC Cancer Agency, Hi5 Living, Facts about Sun Safety  
[www.hi5living.org](http://www.hi5living.org)
- BC Cancer Agency (2012)  
[www.bccancer.bc.ca](http://www.bccancer.bc.ca)
- BC Cancer Agency (2013)  
[www.suntips.ca](http://www.suntips.ca)

# ALCOHOL USE

## ESSENTIAL FACTS

- If you drink alcohol, limit it to no more than one glass a day for women and two glasses a day for men.
- Drinking alcohol increases your risk of developing many types of cancer.

## What does “one drink” mean?

**WINE**  
one 145mL glass (5 oz = 12% alcohol)



**BEER**  
one 350mL bottle (12 oz = 5% alcohol)

**SPIRITS**  
one 45mL glass (1.5 oz = 40% alcohol)

### ALCOHOL: RISKS AND BENEFITS

Research shows that alcohol intake has both positive and negative health effects. Alcoholic drinks up to one or two drinks per day can lower the risk of heart disease, but higher levels of drinking do not offer additional benefit. In fact, it may increase the risk not only of complications of alcohol use but also specific cancers. Additionally, for people who have already been diagnosed with cancer, alcohol intake could increase their risk of new primary cancers.

Use a single-ounce shot glass to measure out your wine so you know how much 5 oz looks like in your wine glass. Many wine glasses hold much more than five ounces!

*Alcohol use is among the top three leading risk factors for death from cancer worldwide.* As alcohol intake increases, it has been proven that the risk of cancer also increases.

Plan your drinks in advance before attending an event or a party, and limit your ability to access more drinks after your agreed limit.

Here are some ideas to help control alcohol intake:

If you are going out...

- bring cash only
- leave credit cards at home
- buy a set amount of drink tickets at the start
- ask your friends not to buy you drinks

If at home...

- don't keep alcohol in the house
- keep only alcohol that you don't prefer
- pre-prepare to offer non-alcohol-based drinks if company comes

If at a friend's house...

- let the host know you are cutting down on alcohol, and if you can contribute a non-alcohol-based punch
- bring your own low or non-alcoholic drinks to enjoy
- request a watered-down version of your drink favorites
- bring your own straw to encourage sipping of your drinks
- avoid house parties where the main intent is to drink

Current evidence does not identify a 'safe' level of alcohol consumption below which no increased risk of cancer is evident. In one study, women averaging just one alcoholic drink per day of about 12 g of alcohol had a 10% increased risk of breast cancer. Where and when possible, always choose non-alcoholic options first.

Concurrent tobacco use is common among alcohol drinkers. **Smoking and drinking at the same time can increase your cancer risk even more than just drinking alone.** If you plan to have a drink at an event, and are concerned that you may smoke, take steps in advance to create opportunities for positive choice. Leave your cigarettes at home; let your host know in advance that you are trying to

cut down on smoking; and avoid areas at the event where others are smoking and drinking together.

If you are having a difficult time getting your drinking under control, connect with your physician for assistance. You can also reach out to a number of local, anonymous organizations for help. Don't wait! Seek the assistance you need to help you continue your journey to be cancer-free.

While the specific effects of alcohol use may be limited for cancer survivors, alcohol overuse and abuse may become a concern for you or members of your family as you deal with the stress of treatment and recovery.

*To get help controlling your use of alcohol, talk to your doctor or contact your local chapter of Alcoholics Anonymous.*

*Drinking about 3.5 drinks a day can double or even triple your risk of developing cancer of the mouth, pharynx, larynx and esophagus, and can increase the risk of developing cancer of the colon and rectum, and breast by 1.5 times.*

- *Excessive alcohol use can be defined for women as more than 7 drinks per week, or more than 3 drinks per occasion, on a recurring basis. For men, excessive use is defined as more than 14 drinks per week, or more than 4 drinks per occasion.*
- *Avoiding excessive alcohol consumption, as well as addressing other key risk factors such as poor nutrition, obesity and physical inactivity, can prevent about one-third of all cancers.*



## IN YOUR COMMUNITY, YOU CAN:

- Advocate for "dry" community events.
- Bring non-alcoholic drinks as an option to gatherings.

Your thoughts about reducing alcohol use:

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### INFORMATION GARNERED FROM THE FOLLOWING SOURCES:

Danaei G, Vander Hoorn S, Lopez AD, Murray CJ, Ezzati M. Comparative Risk Assessment collaborating. Causes of cancer in the world: comparative risk assessment of nine behavioural and environmental risk factors. *Lancet*. Nov 19 2005;366(9499): 1784-1793.

World Cancer Research Fund / American Institute for Cancer Research. Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective. Washington DC: AICR;2007.

Castellsague X, Munoz N, De Stefani E, et al. Independent and joint effects of tobacco smoking and alcohol drinking on the risk of esophageal cancer in men and women. *Int J Cancer*. Aug 27 1999;82(5):657-664.

Pelucchi C, Gallus S, Garavello W, Bosetti C, La Vecchia C. Alcohol and tobacco use, and cancer risk for upper aerodigestive tract and liver. *Eur J Cancer Prev*. Aug 2008;17(4):340-344.

Ellison RC, Zhang Y, McLennan CE, Rothman KJ. Exploring the relation of alcohol consumption to risk of breast cancer. *Am J Epidemiol*. Oct 15 2001;154(8):740-747.

*Congratulations!*

*You've reached the end of this guide, but it's just the beginning of your healing journey. Keep this book handy when you need a "health boost", or feel yourself slipping back into older, unhealthy habits. Remind yourself of how far you have come, and plan concrete ways each day that you will commit to keep yourself on a journey of health.*

*What are some goals you can set today about your personal health? Write them down, and reflect on them in a week, a month, and a year. Chart your progress and celebrate each small success and change you make.*

*Involve your friends and family in your plans, and share this guide with them! The movement towards greater health is a journey, not a destination - and your Northern Health organization is excited to be part of your journey.*

*Good health to you!*



# ADDITIONAL RESOURCES

## ENVIRONMENTAL FACTORS OF CANCER RISK AND PREVENTION:

- Canadian Cancer Society  
[www.cancer.ca/en/prevention-and-screening/be-aware/harmful-substances-and-environmental-risks/?region=on](http://www.cancer.ca/en/prevention-and-screening/be-aware/harmful-substances-and-environmental-risks/?region=on)
- First Nations Environmental Health Innovation Network (FNEHIN)  
[www.fnehin.ca](http://www.fnehin.ca)

## INJURY PREVENTION:

[www.northernhealth.ca/YourHealth/InjuryPrevention.aspx](http://www.northernhealth.ca/YourHealth/InjuryPrevention.aspx)

## HEALTHY EATING FOR FIRST NATIONS COMMUNITIES:

- First Nations Health Authority - find traditional food factsheets and great healthy eating guidelines for families and communities including meal and snack planning for meetings and feasts.  
[www.fnha.ca/wellness/wellness-for-first-nations/wellness-and-healthy-living/nutrition](http://www.fnha.ca/wellness/wellness-for-first-nations/wellness-and-healthy-living/nutrition)

For additional copies of CANHEAL,  
contact your Northern Health practitioner.