



Blood Pressure & Cholesterol Basics




Group Norms

- Hope to create a safe and supportive environment for you to share
- Privacy
- Class duration approx. 2 hours
- Feel free to stand up or move around if needed
- If you need to leave during the class, please let us know

Virtual Norms:


- By participating in remote learning today, you agree that you may not save, record, share, or post this session or any photos from this session.
- Participants agree to participate in these virtual sessions in a quiet, private area free of distraction.



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Zoom Basics (Virtual)

- You may have your video on or off.
- Please mute when you're not speaking.
- Please feel free to ask questions either by unmuting or using the chat box.
- Any questions?



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Ice Breaker

- Introduce yourselves-what's your name? Tell us a bit about you.
- What are your expectations of today?



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What is the Highland Primary Care Network?

- A group of family doctors who work together with the Highland Health Team (Nurses, Social Workers, Dietitian, Kinesiologist, Pharmacist & Mental Health Therapist)
- **Covers area from Airdrie to Didsbury. Each doctor's office or medical home has a Nurse and Social Worker attached.**



Doctors@work



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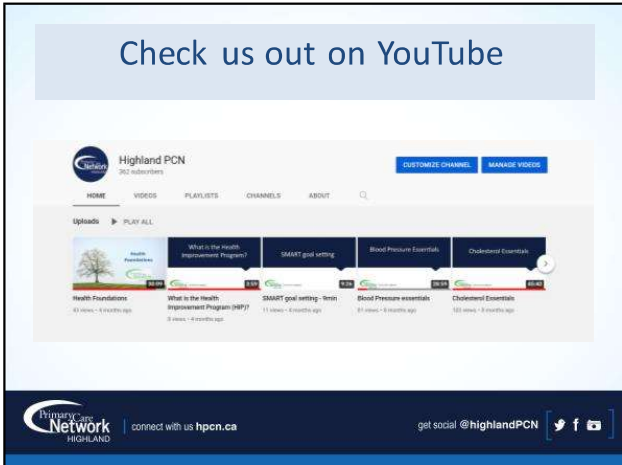
What is the Health Improvement Program?

- Guides individuals who are ready to take their health in their own hands and improve their quality of life.
- A variety of group classes you can choose what you would like to take when
- Flexible schedules
- Option of 1:1 visits in the medical home (phone/virtual)



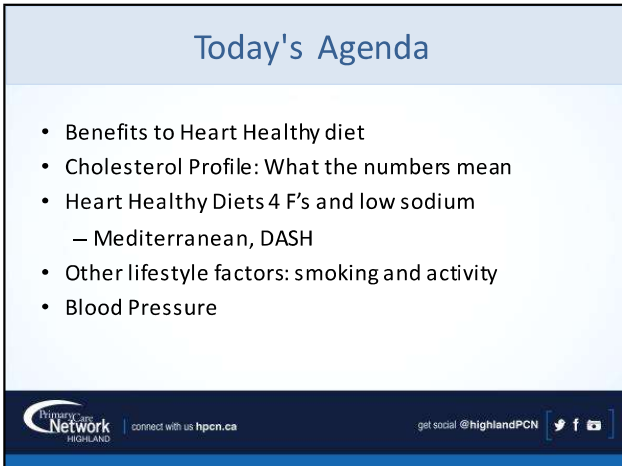
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Check us out on YouTube



Today's Agenda

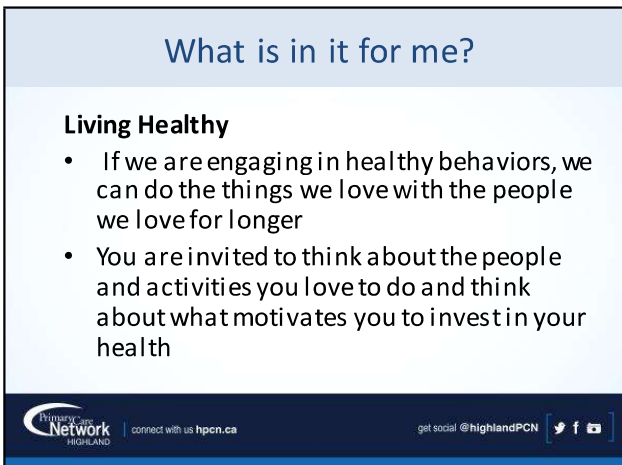
- Benefits to Heart Healthy diet
- Cholesterol Profile: What the numbers mean
- Heart Healthy Diets 4 F's and low sodium
 - Mediterranean, DASH
- Other lifestyle factors: smoking and activity
- Blood Pressure



What is in it for me?

Living Healthy

- If we are engaging in healthy behaviors, we can do the things we love with the people we love for longer
- You are invited to think about the people and activities you love to do and think about what motivates you to invest in your health



What are the benefits of a heart healthy lifestyle?

8 out of 10 incidents of premature heart disease and stroke are preventable with lifestyle.

- ✓ Healthy Eating
- ✓ Activity
- ✓ Absence of smoking
- ✓ Moderate or absence of alcohol

Lowers incidence of heart disease or stroke

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Cholesterol: Factors we cannot control

- Family history
- Age, Gender, Race
- Pre-existing conditions such as diabetes, liver or thyroid disease
- Metabolic syndrome

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Cholesterol: Factors we can control

Lifestyle factors:

- Smoking
- Stress (and Sleep)
- Dietary habits
- Activity
- Alcohol



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Who should get checked?

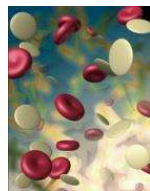
Canadian guidelines recommend having your cholesterol tested if you:

- Are over 40 years of age
- Have heart disease, diabetes or high blood pressure
- Have a **waist circumference** greater than 94 cm (37 inches) for men and 80 cm (31.5 inches) for women
- Smoke or have smoked within the last year
- Have erectile dysfunction
- Have a family history of heart disease or stroke

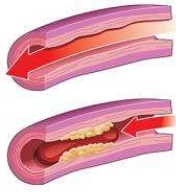


Cholesterol

- A waxy substance in blood
- Two main types HDL and LDL
- Important functions
 - Cell membranes
 - Nerve tissues
 - Certain hormones



Arteries



Normal blood flow through healthy artery (top) and blocked blood flow in artery with yellow plaque and red blood clot (bottom).

Cholesterol Levels: What do the numbers mean?



"GOOD NEWS, MR. LOCKHORN... WE'VE LOCATED SOME BLOOD IN YOUR CHOLESTEROL."

LDL Low Density Lipoprotein

- Think L for "lousy" or low
- Carries mostly fat from the liver to other parts of your body
- A certain level is normal and healthy as it moves cholesterol to the parts of your body that need it
- Your target level depends on how many risk factors you have.
 - <3.37 mmol/L no risk factors, <2.0 high risk factors)
- Talk to your doctor about your target



HDL High Density Lipoprotein

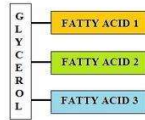
- Known as HDL or ‘healthy’ cholesterol as keeps vessels clean
- Sweeps LDL back to the liver to be removed by the body
- May be increased/ maintained with exercise, Omega 3’s and fibre
- Decreases with smoking



Target is greater than 1 mmol/L

Triglycerides

- Storage molecule; comes from excess at any one time (perhaps high fat & starchy/sugary foods)
- Alcohol can increase triglycerides
- Ideal target for all is under 1.7 mmol/L



Tips to reduce triglycerides

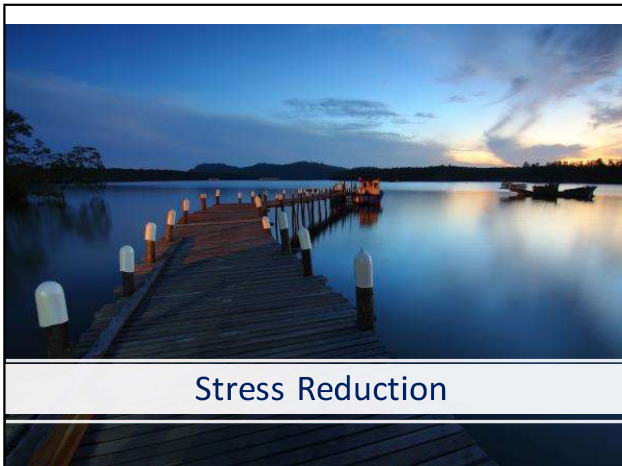
- Regular meals at regular time.
- Watch excess at any one time (especially foods with high sugar)
- Eat fatty fish twice a week



What can we do to prevent high blood pressure and high cholesterol?

- Stress Reduction
- Active Living
- Healthy Eating
- Moderate or no Alcohol
- Absence of Tobacco






Stress Reduction

Stress

Sustained Stress: Detrimental to health



- Stress (activation of sympathetic NS – “fight or flight”) body is flooded with sugar and cholesterol.
- Linked to high blood pressure, high cholesterol and higher blood sugar eventually impaired glucose/Diabetes
- Also body under stress tends to store calories.






Physical Activity



- Adults: aim for 30 mins 5x/week of aerobic activity and 2-3 days of strengthening exercises
 - Pace yourself and work up to the guidelines
 - Can be broken up into smaller pieces throughout the day
 - Aim to work at a moderate intensity
 - Try and reduce sedentary time


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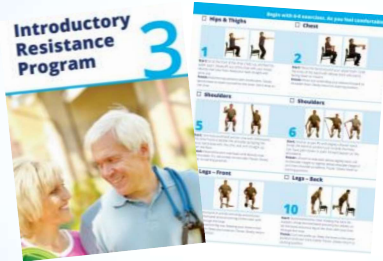


Getting Started

- Many ways to be active, important to find things you enjoy!
- What is motivating you to be more active? Or What is stopping you?
- Plan ahead (what/when/where)
- Try 5:60 strategy
- Fit small bouts of activity into your day (eg: Take the stairs, walk after eating, park farther away)


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Diabetes Canada Activity Resources



Physical Activity resources which include introductory resistance program (videos and brochures)



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Life Enhancing Movement

GOAL


- To make you feel good, increases self-esteem if you enjoy it you are likely to continue
 - To help with stress, boredom and tension
 - Muscle (lean mass) improves metabolism
 - To "check" the hunger cues.
- Activity can moderate non-physical hunger (boredom)





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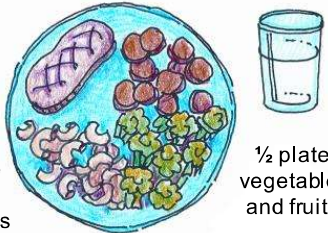
Healthy Eating

 **Healthy Eating Basics**

- Try to eat within two hours of waking
- Try not to go more than 4-6 hours without a meal or snack
- The key is **balance**
- Choose a minimum of 3 of the 4 food groups at each meal!
 - Aim for 1-2 for snacks

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What is a Healthy Plate? 



1/4 plate meat or a meat alternative

1/4 plate grain products

1/2 plate vegetables and fruits

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Canada's food guide Eat well. Live well.

Eat a variety of healthy foods each day



Have plenty of vegetables and fruits

Enjoy protein foods

Choose whole-grain foods

Make water your drink of choice

Healthy eating is more than the foods you eat

Be mindful of your eating habits

Cook more often

Enjoy your food

Eat meals with others

Use food labels

Limit foods high in sodium, sugars or saturated fat

Be aware of food marketing

Discover your food guide at Canada.ca/FoodGuide



   

Heart Healthy Eating: 4Fs 

Fats, Fruits and Vegetables, Fibre and Fluids



Low salt (sodium)

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Fats: The good, the bad and the ugly

Unsaturated = healthy

- Monounsaturated
- Polyunsaturated
 - Omega 3
 - Omega 6



Saturated = less healthy




Trans Fats = unhealthy fats

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Unsaturated Fats: The Good 

Monounsaturated fats

- Sources: olive oil, canola oil, peanut oil, non-hydrogenated margarine, avocados and some nuts such as almonds, pistachios, cashews, pecans and hazelnuts.

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Unsaturated fats: The Good

Polyunsaturated fats can lower bad cholesterol levels (LDL cholesterol.)

- Sources: safflower, sunflower and corn oils, non-hydrogenated margarine and nuts such as almonds, pecans, brazil nuts and sunflower seeds.
- Oils rich in PUFA provide essential fat:
- Omega-3: which can help prevent clotting of blood, reducing the risk of stroke and also helps lower triglycerides
- Omega 6: Caution with too high, processed foods (eg salad dressing)



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Omega 6



- Omega-6. It helps lower LDL cholesterol, but in large amounts it's thought to contribute to inflammation and to lower the good HDL cholesterol. Eat it in moderation.
- Found in prepared meals (think boxes, bags dressings etc).



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Omega 3's

- Salmon
- Trout
- Herring
- Char
- Sardines
- Mackerel



Aim for 2 servings/week




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Other sources:

- Omega 3 plant sources:
 - Ground flax and flax oil
 - Walnut and walnut oil
 - Chia seeds
 - Canola oil
 - Kelp and seaweed
- Other foods
 - Fortified eggs and margarine



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Saturated fats: The bad

Think foods from animals (exception is palm and coconut oil)



Our liver takes saturated fat and turns it into cholesterol

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Trans fats: the ugly

- Increases the bad LDL cholesterol and decreases the good HDL cholesterol
- Hydrogenation

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Tips to avoid trans-fats

- Use a non hydrogenated margarine.
- Home baked goods vs store bought.
- Choose 0g of trans fats on label



Focus on good fats

- Use lean cuts of meat
- Use small amounts of canola oil and olive oil in cooking
- Trim fat from meat and watch portion
- Remove skin from poultry
- Avoid processed meats
- Try a meatless meal once/week (lentils, dried beans and tofu)



Focus on good fats

- Add chia, flax or hemp seed to yogurt cereal or in baking.
- Eat lower fat dairy products.
- Select foods with less than 2 grams saturated fat



What about dietary cholesterol?



- Have less impact on blood cholesterol than saturated and trans fats.
- Dietary cholesterol is found in egg yolks, organ meats, full-fat dairy products and processed meats.

*If your cholesterol is very high, it may be prudent to limit to 4 egg yolks a week

Fiber



- Fibre is our friend.
- Acts like a sponge cleaning the body as it moves through the body.
- Lowers your risk of heart disease.
- Improves cholesterol levels

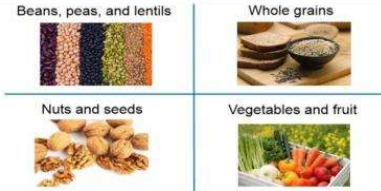
Fibre

- Helps lower LDL (bad) cholesterol
- Helps control blood sugar levels
- Found in:
 - vegetables, fruits
 - whole grain breads cereals and pastas, wheat bran
 - oats, barley, psyllium, quinoa, millet
 - beans and lentils

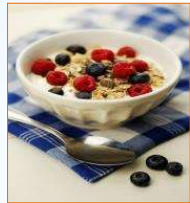


How much fibre do we need?

- Eating high fibre foods may help you feel full for a longer time, helping to control appetite.
- Increase fibre slowly
- Increase fluids



Ways to increase fibre



- Eat whole grains to increase your fibre intake
- Look at ingredient list for words “whole grain”
- Try whole grains like barley, oats, millet, quinoa or brown rice




Fruits and Veggies



- Add sliced fruit to cereal or yogurt
- Add veggies (greens) to smoothies
- At lunch or supper add salad made from spinach, romaine, green or red leaf lettuce
- Keep washed & sliced veggies in the fridge at eye level
- Grab easy on the go fruit snacks like bananas, apples, pears & oranges


Putting It Into Practice

Breakfast	fibre (g)
1 cup rice crisp cereal	0.7
1 cup milk	0.0
1 pc white toast with butter	1.3
Lunch	
2 slices white bread	2.6
½ cup tuna	0.0
1 cup tomato soup	1.8
Supper	
3 oz. grilled chicken breast	0.0
1 cup white rice	1.7
1 cup romaine lettuce	1.2
1/2 cup cucumber	0.5
¼ cup tomato	0.6
Total fibre	10.4

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Putting It Into Practice

Breakfast	fibre (g)	Breakfast	fibre (g)
1 cup rice crisp cereal	0.7	1 cup corn bran cereal	2.8
1 cup milk	0.0	1 cup milk	0.0
1 pc white toast with butter	1.3	1 medium pear	5.5
Lunch			
2 slices white bread	2.6	2 slices whole grain bread	4.2
½ cup tuna	0.0	½ cup tuna	0.0
1 cup tomato soup	1.8	1 medium tomato sliced	1.5
Supper			
3 oz. grilled chicken breast	0.0	½ cup raspberries	4.2
1 cup white rice	1.7	Supper	
1 cup romaine lettuce	1.2	3 oz. grilled chicken breast	0.0
1/2 cup cucumber	0.5	1 cup brown rice	4.0
¼ cup tomato	0.6	½ cup green peas	5.6
Total fibre	10.4	½ cup broccoli	2.0
		Total fibre	29.8

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Cookspiration

- <https://www.cookspiration.com>



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Save on Foods: grocery store tours



HEALTHY EATING STARTS IN THE GROCERY AISLES
Request a Nutrition Tour

Our stores offer thousands of choices and it can be hard to know what to buy to keep you and your family healthy. Fresh or frozen? Pastured or antibiotic? Shopping on a budget? And what about fats, proteins, sugars, and fiber? Our Nutrition Tours can help you sort it all out.

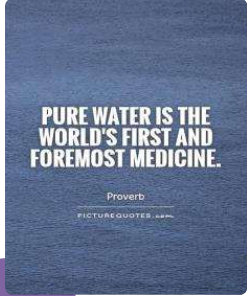
We are pleased to continue offering Virtual Nutrition Tours for adults groups and school groups. Our team of Registered Dietitians will host interactive virtual sessions to show you how to better food labels, how to make healthy food choices, and how to meet special dietary requirements.

Starting September 28, 2022, we will begin to offer in-person Nutrition Tours at select stores.


NOTE: A Nutrition Tour requires a minimum of 7 participants and are offered for free to those with My Rewards card members. Tours are available for organized groups such as university and post-secondary classes, community health programs, wellness and retirement programs, English language programs, and those with insurance and other community groups.

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You are sweet enough...choose water



- Drink a glass of water when you wake up each morning or before you go to bed.
- Carry a water bottle
- Drink a glass of water before eating your meals
- Don't ignore thirst. Drink water or another healthy drink when you feel thirsty.



Drinks

- It is very easy to drink in anywhere from an extra 500 to 1000 calories a day
- Become a label reader ask questions (if it is an everyday habit)

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Alcohol

Alcohol consumption per week

Drinking alcohol has negative consequences. The more alcohol you drink per week, the more the consequences add up.



Smoking: Be a quitter

- The best thing you can do for your heart is quitting smoking.
- Resources:
 - AB Quits www.abquits.ca or 1-866-979-3553
 - Health Care Provider
 - Health Link 811

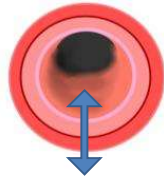


Weigh in?



Blood Pressure

- It is the force exerted on the arteries when the heart contracts & relaxes
- When blood pressure is high it is called Hypertension.



Blood Pressure Reading

- Systolic blood pressure is the highest pressure measurement (when heart contracts)
- Diastolic blood pressure is the lowest pressure measurement (when the heart relaxes & refills with blood)

120
—
80



Symptoms of high blood pressure

Some may experience:

- Headaches
- Tremors
- Difficulty hearing
- Sweating
- Palpitations
- Weakness
- Shortness of breath
- Chest pain
- Ankle swelling

Most people will experience **NO SYMPTOMS** which is why hypertension is known as the silent killer



Salt

- Keeps fluid in the body.
- Extra fluid can:
- Increase blood pressure
 - Can cause swelling

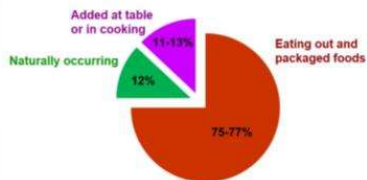


How much sodium?

- Between 1500mg and 2300mg from food, cooking and at the table



Where does our salt intake come from?



Guess – how much salt?

Menu Item	Sodium (mg)
Breakfast Egg Sandwich	840
Chicken Caesar Salad	570
12" Pepperoni Pizza	5960
Deluxe Cheeseburger & Medium Fries	1910
Fried Chicken Dinner	2280

Source: www.1newsat10.ca



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Tips to eat less salt

- Take shaker off the table
- Eat home prepared foods more often
- Use fresh or dried herbs, spices and no salt added as seasonings
- Choose lower sodium or no added salt packaged foods
- Read Nutrition facts table and look for 5% sodium or less



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Salt Alternatives



If you like	Try one or more of these
Hot	cayenne pepper, chili (fresh, oil, powder or low sodium sauce), ginger, hot dry mustard, red pepper flakes, wasabi
Sour	lemon, lime, vinegar (balsamic, cider, rice, white, wine)
Peppery	pepper (black, brown, pink, white), or peppercones
Sweet	cranberry sauce, fresh fruit, fruit juice, honey, molasses
Citrus	lemon, lemongrass, lime
Tomato	tomato (fresh or low sodium canned)
Other	anise, coriander, cumin, curry powder, dill, dry mustard, garlic, onion, paprika







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1.  +  = 2600mg




2.  +  = 1400mg



3.  +  = 400mg

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DASH and Mediterranean Diet

- Help lower blood pressure
- Protects heart and blood vessels
- Emphasis is on
 - Vegetables and fruits
 - Whole grain breads, cereals
 - Low fat dairy
 - Beans, peas and lentils
 - Nuts and seeds
 - Low in Sodium (DASH)



   **NUTS**

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Nutrition Facts Table

Nutrition Facts	
Per ½ cup/175 mL (100 g)	
Amount	% Daily Value
Calories 200	
Fat 10 g	15 %
Saturated 6 g	48 %
+ Trans 3.6 g	
Cholesterol 20 mg	
Sodium 320 mg	13 %
Carbohydrate 34 g	11 %
Fibre 2 g	8 %
Sugars 7 g	
Protein 4 g	
Vitamin A 10 %	Vitamin C 2 %
Calcium 4 %	Iron 6 %

- Use the Nutrition Facts label to compare products
- Ingredient list can also be helpful

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Serving Size and Daily Value

Serving Size:
Compare this to the amount you usually eat

Nutrition Facts	
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Fibre 2 g	8 %
Sugars 7 g	
Protein 4 g	
Vitamin A 10 %	Vitamin C 2 %
Calcium 4 %	Iron 6 %

% Daily Value:
• 5% is a little
• 15% is a lot

Fat and Fibre

Serving Size:
Compare this to the amount you usually eat

Fats: Choose foods with ≤ 2g saturated and 0g trans fats

Fibre: Choose foods that have ≥ 2 grams per serving

Nutrition Facts	
Amount	% Daily Value
Per ½ cup/175 mL (100 g)	
Calories 200	
Fat 10 g	15 %
Saturated 6 g	48 %
+ Trans 3.6 g	
Cholesterol 20 mg	
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Carbohydrate 34 g	11 %
Fibre 2 g	8 %
Sugars 7 g	
Protein 4 g	
Vitamin A 10 %	Vitamin C 2 %
Calcium 4 %	Iron 6 %

% Daily Value:
• 5% is a little
• 15% is a lot

Sodium

Serving Size:
Compare this to the amount you usually eat

Fats: Choose foods with ≤ 2g saturated and 0g trans fats

Fibre: Choose foods that have ≥ 2 grams per serving

Nutrition Facts	
Amount	% Daily Value
Per ½ cup/175 mL (100 g)	
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+ Trans 3.6 g	
Cholesterol 20 mg	
Sodium 320 mg	13 %
Carbohydrate 34 g	11 %
Fibre 2 g	8 %
Sugars 7 g	
Protein 4 g	
Vitamin A 10 %	Vitamin C 2 %
Calcium 4 %	Iron 6 %

% Daily Value:
• 5% is a little
• 15% is a lot

Sodium: Choose foods with less than 5% of daily value

SMART Goals

GOAL EXAMPLE

I will eat at least (one more whatever your number is) servings of vegetables and fruit a day.

OR

I will eat breakfast (including 3 food groups) 3 days this week. I will shop on the weekend and start on Monday.

- 1. Specific
- 2. Measureable
- 3. Achievable
- 4. Rewarding
- 5. Time frame



Recapping: Tips to aid in your success

Set the stage

- If you smoke... cut back or quit.



- Look for healthy positive ways to cope with stress



- Get moving ...



Recapping: Tips to aid in your success

FUEL and hydrate your Body

- Breakfast – Try to eat within two hours of waking.
- Eat at least three meals a day (trying not to go more than 4 hours without eating).
- Drink water or milk with meals.
- Eat more vegetables and fruit at meals than other foods.
- Look for higher fibre choices.



Thank You



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- Comments or Questions
- Your opinion matters to us. We would love to get your feedback to help us improve our offerings.



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