



### [Welcome each participant. If desired provide name tags.]

I became involved in this advacacy campaign because

Good morning/afternoon/evening. Thank you for joining us for our talk on women's heart health, Because Her Heart Matters Too.

Let me begin by introducing myself. My name is \_\_\_\_\_\_\_. I am an advocate for women's heart health and have a passion to help spread the word on women's heart health.

### [Briefly share your story (3-5min)]

i became involved in this advocacy campaign because	
("I myself have heart disease" / "I have seen the impact that heart disease has a	_ on
others/loved ones" / "I know we can do more to make a women's heart health risk or journey	
more manageable"), and I am committed to helping more women protect their heart health.	

#### [If applicable]

This session is being hosted by \_\_\_\_\_\_. Thank you for your support.





This presentation was developed by the Canadian Women's Heart Health Centre

The Canadian Women's Heart Health Centre is committed to ensuring that everyone becomes more aware of how heart disease and its risks can impact a woman and her community.





Advocacy is how we transform public attitudes into action by educating, empowering and supporting individuals and communities.

Educating women greatly increases their willingness and ability to take heart-protective action, which is why the Canadian Women's Heart Health Centre, supports community advocacy to inform women about heart disease and how they can take appropriate action to reduce their risk.





## **DISCLAIMER**

Any information provided in this presentation by your women's heart health advocate should not be considered medical advice and is not intended as a substitute for medical professional help, advice, diagnosis or treatment. Always seek the advice of your physician or other qualified healthcare provider with any questions you have regarding your medical care.

The views and testimonials expressed by a women's heart health advocate or any other participant are his/her personal views and the University of Ottawa Heart Institute does not guarantee the accuracy or appropriateness of the opinions or advice expressed by women's heart health advocates.

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[Read from slide]





# LEARNING OBJECTIVES

# At the end of this session you will be able to:

- 1. Describe what heart disease is.
- 2. Describe how heart disease is different in women, including signs and symptoms.
- 3. Explain the risks for heart disease.
- 4. Describe how you can take heart health action.
- 5. Discuss tips for talking with your health care providers.
- 6. List key messages.

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[Read from slide]





## [Read from slide]





# What is Heart Disease?



- Also known as cardiovascular disease
- A general term for a variety of conditions that affect the heart and blood vessels.
- Can lead to heart attack and even death
- First cause of death worldwide
- Second leading cause of death in Canada

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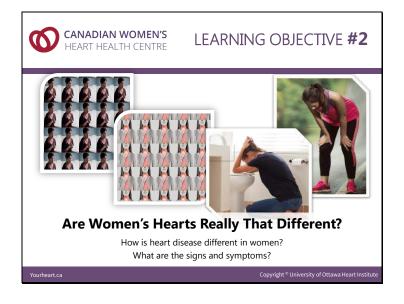
### [Read from slide]

It is a chronic disease that can lead to heart attack and even death.

Heart disease is the leading cause of death worldwide and the second leading cause of death in Canada, where the first cause is **cancer.** 

Note: This slide refers to both men and women.









HEART DISEASE IN WOMEN

# Important facts:



- Heart disease claims the life of 1 in 3 women.
- One Canadian woman dies from heart disease every 20 minutes.
- Heart disease is the leading cause of premature death in Canadian women.
- Heart disease kills 5x as many women as breast cancer.
- Heart events are increasing among women 35-55 years.
- 1/3 of women who have heart disease try to resume their pre-diagnosis lifestyles. But heart disease is a condition that **requires lifelong management**.

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Note: The facts on this slide apply to women.

The impact of heart disease on women has traditionally been underappreciated. As a result, when people think of heart disease, they have the image of a man clutching his chest in pain but did you know that....

- Cardiovascular disease is the #1 killer of women worldwide accounting for 1 in 3 deaths.
- Every 20 minutes, a woman in Canada dies from heart disease.
- Heart disease is the leading cause of premature death for women in Canada (dying before reaching their expected lifespan).
- When asked what their biggest health threat is, most women will say breast cancer. But the reality is 5x as many women die from heart disease as breast cancer. Because women



perceive that they are at lower risk for heart disease, they are less likely to recognize signs and symptoms of a heart event.

- Heart disease rates are increasing in younger women aged 55 years and under mostly due to a variety of risk factors and poor health behaviors.
- One-third of women with heart disease referred to their condition as an "event" or "incident" after which they resumed their pre-diagnosis lifestyle. This is a problem because heart disease is a lifelong condition that requires ongoing management.

#### Sources:

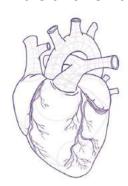
- -Global Atlas on Cardiovascular Disease Prevention and Control. Mendis S, Puska P, Norrving B editors. World Health Organization (in collaboration with the World Heart Federation and World Stroke Organization).
- -Ms. Understood Heart & Stroke 2018 Heart Report.
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- -S. Stranges et al. Cardiovascular disease prevention in women: A rapidly evolving scenario. Nutrition, Metabolism & Cardiovascular Diseases (2012) 22, 1013-1018.
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HEART DISEASE IN WOMEN

A male and female heart look the same overall, but...



- women's hearts are smaller
- women's hearts beat faster
- women's coronary arteries are **smaller**
- women's plaque build up is different
- women's hearts are affected by hormonal changes

As a result, some risk factors are **unique** to each men and women

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Overall female hearts look the same as male hearts. Most doctors in medical school were taught that all hearts are the same, it's just a muscle... BUT

- The female heart is somewhat smaller than a man's, about two-thirds the size.
- · A woman's heart tends to beat faster.
- A women's coronary arteries are also smaller.
- Importantly, there are differences in the way plaque builds up in the blood vessels and cause coronary heart disease
- Women's hearts are affected by hormonal changes such as those experienced during pregnancy and menopause

Heart disease can affect women differently than men, and can require a different approach to diagnosis and treatment.



When it comes to heart disease conditions and risks there are those that:

- Are unique to a single sex
- Occur in both sexes but with differences in prevalence between women and men
- Present differently in women than in men.

These will covered later in the presentation.





When it comes to heart disease, women are under-researched, under-diagnosed, under-treated, under-supported and under-aware.



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Despite the fact that females make up just over half the population, 2/3 of heart disease clinical research focuses on men.

As a result the strategies used to identify and treat heart disease have been based on data from primarily middle-aged, white, male research subjects.

This is an important point because clinical guidelines are based on research evidence. Therefore, medical decisions for women are being made on research evidence about how heart disease manifests in men.

Why were women not included in the research? Some of the reasons are:

- For safety concerns. Women between the onset of menstruation and menopause could potentially be pregnant and were excluded to prevent harm to the fetus
- **Hormone fluctuations.** Researchers avoided using female animals as the hormone fluctuations confounded results.
- Lack of participation in research. It has been reported that it is more difficult to find women willing to volunteer for research studies, in part due to the significant roles and responsibilities that women have in other facets of their lives. This is problematic because



without females participating in research studies we will continue to have limited insight on how heart disease impacts women differently.

There are **signs of positive change however.** Some agencies that fund research are now recommending that women be included research and if they are not included ethical and reasonable justifications must be provided.





# **UNDER-DIAGNOSED**

Women are slow to identify the signs and symptoms of a heart



Early heart attack signs are missed in **78% of women**.

### WHY?

Women delay seeking help due to fear, embarrassment, living alone, not wanting to bother anyone, or misinterpretation of signs and symptoms

## **Every minute counts.**

Getting treatment as fast as possible is critical to survival and to minimize damage.

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Women and their doctors can be slow to identify the signs and symptoms of a heart event. They can be overlooked or unrecognized by both.

Early heart attack signs are missed in 78% of women.

Missed diagnoses are more common in younger women or those who do not report the more typical signs of a heart event. We will review these signs and symptoms next.

Physicians may look for other causes of a woman's symptoms, without first doing appropriate tests to rule out cardiac issues.

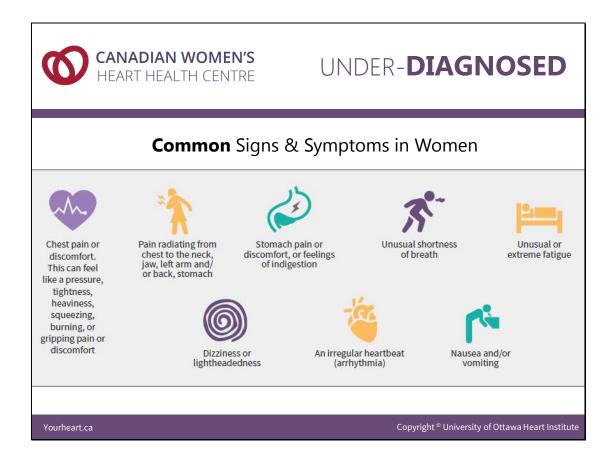
Women also report delays in seeking help due to fear, embarrassment, living alone, they don't want to bother anyone, or they interpret the signs as something else/non-urgent/temporary.



We know that every minute counts. Getting treatment as fast as possible is critical to survival and to minimize damage.

If you or someone you know is having any possible symptoms immediately call 911 or get to an emergency department as quick as possible to minimize damage to the heart muscle.





The signs and symptoms of a heart attack may be experienced differently by men and women. These are some of the common signs and symptoms women may experience.

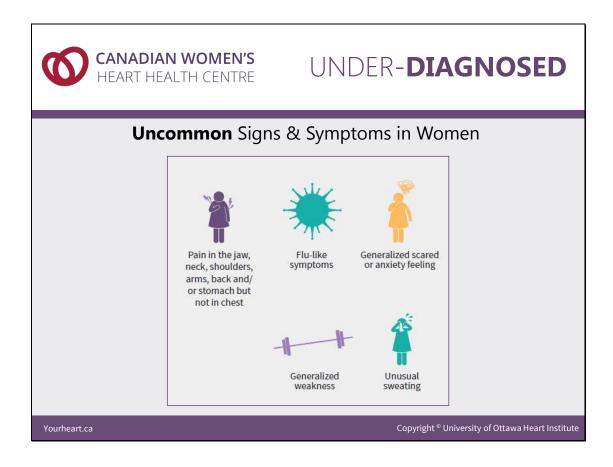
#### [refer to signs and symptoms on slide]

It's important to know that even though men and women can both experience symptoms such as chest pain, the language women use to describe their pain may be different, and that can impact their diagnosis and treatment. Women don't always perceive symptoms of pain as severe. For example, chest pain or discomfort is often instead described as: pressure, tightness, squeezing, sharp, burning, aching, or soreness. If their pain is less severe, or if they have nonpain signs such as nausea, sudden fatigue or shortness of breath (which are signs more often reported by women) they are more likely to delay getting to emergency care.



Be mindful that not everyone's symptoms are the same. Women are more likely to exhibit a combination of symptoms, usually 3 and are more likely to report signs and symptoms such as nausea, sudden fatigue or shortness of breath.





Women can also present with other symptoms not usually associated with heart attacks. These include:

#### [Refer to text on slide].

Today, physicians are far more aware of these differences, but still, women — particularly younger women — may have their signs attributed to anxiety or heartburn or other "female" issues and are less likely to get fast, aggressive treatment.





## **UNDER-TREATED**

There has been lots of evidence of sex disparities in the past 10 years.

The risk of heart disease in women is often **underestimated** and there are **notable differences** in the **identification**, **treatment and outcomes** for heart disease in women.

#### That is due to...

- 1-Lack of public and professional awareness of women's coronary risk;
- 2-Knowledge gaps regarding women's symptom presentation, optimal screening, and diagnostic procedures;
- 3-Sex disparities contribute to adverse coronary outcomes for women;

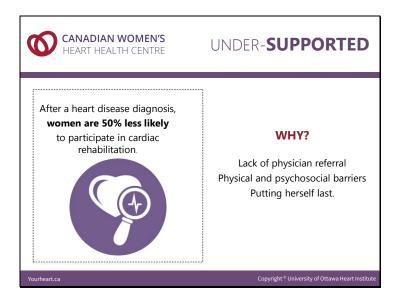
So ....Women are under-studied, under-diagnosed, and under-treated leading to multiple sex disparities.

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After a heart disease diagnosis attending cardiac rehabilitation is strongly recommended. Cardiac rehabilitation programs are a combination of exercise, education, healthy lifestyle counseling and psychosocial support. Patients who complete cardiac rehabilitation have better functional ability and quality of life.

Despite this clear benefit, women 50% less likely to participate in cardiac rehabilitation. Why?

- Lack of physician referral.
- Lack of personal time; Stress; Fatigue / sleep deprivation; Family/caretaking responsibilities;
   Cost; Lack of confidence in their ability to make a lasting change; Believe that heart disease is not a threat
- Women tend to put their needs last. Often ahead of a woman's needs will come the children, home, career, spouse, pets and then herself.

We also know women tend to have the greatest influence over the health behaviors of their families. So by leading a heart healthy lifestyle, the rest of the family will benefit too.





Despite years of information campaigns, women are still under-aware of the threat they face from heart disease.

- A national survey performed by the Canadian Women's Heart Health Centre identified substantial gaps in women's knowledge of heart disease.
- Specifically, there was a disconnect between women's perceived and actual risk of heart disease.
- In addition women's understanding and awareness of their own risk status was less than optimal. For example, in the Canadian Women's Heart Health Centre survey, 60% of women at high risk of developing heart disease due to medical risk factors perceived their level of risk to be low or moderate.

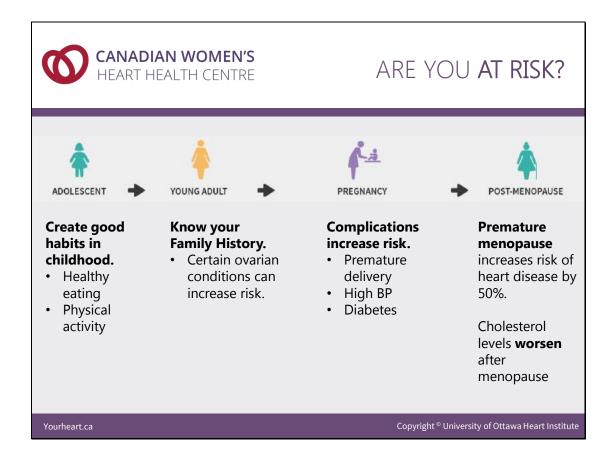




You may have heard the term 'risk factors'.

Risk factors are behaviors or conditions that increase your chance of developing a disease.





Heart disease affects females of all ages and there are different risks across a women's lifespan. It is important that we know and understand our risk factors.

Of concern is that disease rates are increasing in younger women aged 55 years and under mostly due to a variety of risk factors and poor health behaviors.

Taking heart health actions at any age matter. [refer to text on slide]

#### **Adolescent:**

Lifelong habits are created in childhood. Make sure you teach your children healthy eating habits and the importance of movement.



#### **Young Adult:**

Polycystic ovarian syndrome and primary ovarian insufficiency may increase a woman's risk for heart disease

(Polycystic ovary syndrome (PCOS) is a hormonal disorder common among women of reproductive age. Women with PCOS may have infrequent or prolonged menstrual periods or excess male hormone levels. The ovaries may develop numerous small collections of fluid and fail to regularly release eggs. (Mayo Clinic)

#### Pregnancy:

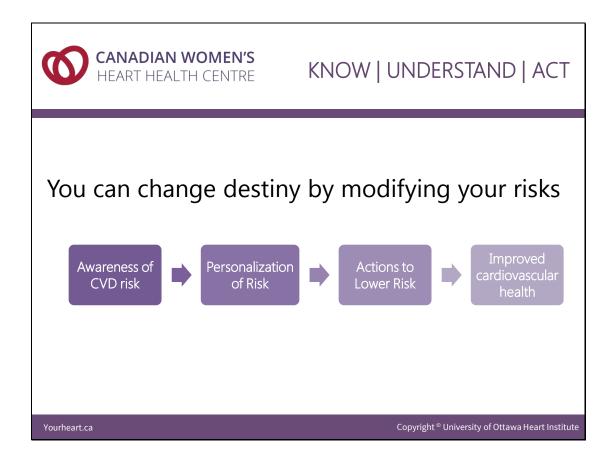
Pregnancy is like a 9 month long heart stress test. If you delivered pre-term (before 37 weeks), had high blood pressure, or diabetes during your pregnancy, it could mean higher risk for heart disease. Ask your healthcare provider if your complications will increase your risk for future heart disease.

#### Menopause:

Menopause before the age of 45 is linked to a 50% higher risk of heart disease. After menopause, cholesterol levels usually worsen.

At any age, it is important to take care of your heart health.





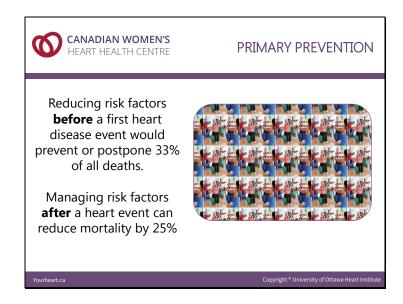
It's important to identify cardiovascular disease as early as possible to prevent and reduce further damage. Also critical is understanding how risk factors affect the development of CVD in the first place

Nine in ten Canadians (24 million) have at least one risk factor for heart disease and stroke Risk factors for cardiovascular disease are present as early as age 20.

Managing risk factors post event can reduce recurrence up to 50%







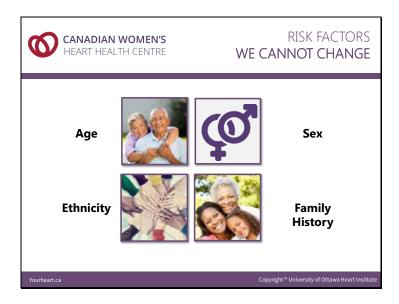
Making healthy lifestyle changes matter and they add up.

Reducing risk factors **before** a first heart disease event – referred to primary prevention - would prevent or postpone 33% of all deaths.

Managing risk factors **after** a heart event is also important, and can reduce mortality by 25% **[Read from slide]** 



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Some risk factors you cannot change and other risk factors you can change.

The risk factors you cannot change are age, whether you are a female or male, your ethnicity and your family history.

**AGE**: As you get older, your risk for heart disease increases. Aging is linked to heart disease because major organs, such as the heart, also change as you grow older. They become slower and weaker over time.

While the majority of heart disease deaths occur after age 55, the risk for heart disease is set early on, through behaviours and lifestyle habits that begin in childhood and continue into adulthood.

**SEX**: For the most part, men are at risk for heart attack much earlier in life than women, but the difference narrows after women reach menopause

After the age of 65, the risk for heart disease is about the same between the sexes when other risk factors are similar.

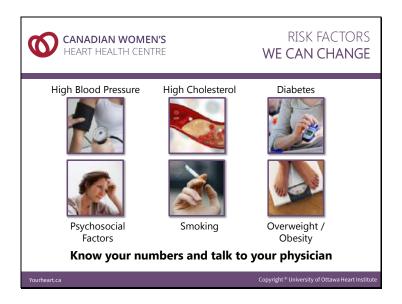


**ETHNICITY:** The ethnic group or race you belong to can have a genetic makeup and environmental influences that predispose its members to heart disease. Indigenous peoples and individuals of African or Asian descent are at higher risk of developing heart disease. Much of this elevated risk is due to a high prevalence of risk factors such as diabetes and high blood pressure.

**FAMILY HISTORY:** Your family history of heart disease is a strong indicator of your personal risk. A family history involving first-degree relatives is generally associated with doubling your risk of heart disease.

- Your own risk of developing coronary heart disease is increased if: your father or brother was
  diagnosed with the disease, or had a cardiac event under the age of 55 or your mother or
  sister was diagnosed with the disease or had a cardiac event under 65.
- Family history is important in determining your risk because you and your blood relatives share the same genes and often share similar behaviors.
- It is good to be aware if your family members have risk factors and get screened for these conditions





The good news is that up to 80% of heart disease is preventable and <u>can</u> be changed by managing your modifiable risk factors.

The risk factors you can control are: [refer to text on slide]

## High Blood Pressure

One risk factor we can change is high blood pressure.

Every time your heart beats it pumps out a wave of blood. As the wave of blood travels through your body it pushes against the walls of your arteries. This creates a force known as blood pressure.

High blood pressure, also known as hypertension, makes your heart work a lot harder and causes excess damage to your arteries. This can scar the walls and trigger the buildup of plaque, make your arteries stiffer, reduce blood flow and therefore contribute to heart disease.

• The top number – systolic – occurs when your heart beats and pumps blood.



- The bottom number diastolic occurs when your heart relaxes and fills with blood.
- According to the Canadian Hypertension Guidelines, patients can be diagnosed as
  hypertensive if their systolic blood pressure reading is over 135mmHg or diastolic blood
  pressure, over >85 mmHg if using an automated blood pressure monitoring cuff or home
  monitoring blood pressure device. If you are diabetic, the cut-off is more conservative, with
  hypertension considered when the systolic is greater than 130mmHg and diastolic greater
  than 80mmHg
- Talk to your physicians to know where your numbers should be. One high blood pressure
  reading is not enough to determine that you have high blood pressure. A doctor will diagnose
  high blood pressure after several readings taken over a period of time.

High blood pressure is often referred to as the "silent killer" because you may rarely experience symptoms. High blood pressure can double or even triple your risk of heart disease and stroke.

It is important to monitor your blood pressure and know your numbers. Talk to your doctor to know where your numbers should be.

If you do not have high blood pressure have it checked at least once a year.

\_\_\_\_

#### ❖ Cholesterol

Another risk factor for heart disease is high cholesterol. Cholesterol is a type of fat that is produced by the liver, and can be found throughout your body. You get cholesterol from the fats contained in your diet.

Cholesterol is not "bad" in that your body needs it to build cells, but too much cholesterol can be a problem.

There are two types of cholesterol: LDL cholesterol and HDL cholesterol that contribute to your total cholesterol levels.

- LDL Low Density Lipoprotein. This is the "bad" cholesterol as it causes plaque to build up in your arteries.
- HDL High Density Lipoprotein. This is the "good" cholesterol as it disposes of your LDL
   "bad" cholesterol.

As total cholesterol levels rise, so does the risk to your health.

1 in 2 women have elevated cholesterol.

\_\_\_\_\_



#### Diabetes

The third risk factor we can change is diabetes. People with diabetes are at very high risk of heart disease and stroke.

Diabetes is a disease that occurs when blood glucose, also called blood sugar, is too high.

The 4 types of diabetes are:

Pre-Diabetes: Blood sugar is higher than normal Type-1 Diabetes: Body does not make enough insulin Type-2 Diabetes: Body cannot use insulin properly

Gestational Diabetes: During pregnancy, not enough insulin is being produced.

\_\_\_\_\_

## Psychosocial factors:

Evidence suggests that negative emotional states such as depression, anxiety disorders, anger, and stress are associated with elevated heart disease risk as they have real physical effects on your body. Heart rate can become irregular, blood pressure can increase, fat cells become converted into cholesterol, and platelets can become "sticky" and build up in arteries.

## **❖** Smoking:

Any amount of smoking — light, occasional, or second-hand — is dangerous and likely to cause damage to your cardiovascular system.

Smoking negatively impacts blood pressure, cholesterol and makes your heart work harder. Quitting smoking is the most important thing you can do to positively affect your heart health. Becoming smoke-free at any age improves your health and can extend your life.

Within one year of quitting, your risk for a heart attack is reduced by 50%.

It's never too late to quit, but the sooner you quit, the sooner your body can begin to heal and repair the damage caused by smoking.

## Overweight/Obesity

**1)** Obesity is now considered a chronic disease. It is a chronic and often progressive disease similar to diabetes or high blood pressure.



Obesity is a complex illness caused by many different factors including environment, genes, emotional health, lack of sleep, medial problems or medications.

Managing obesity is much more complex than eat less and move more!

#### 2) It is good to be aware of your risks.

The waist circumference measure is an indicator of health risk associated with excess fat around the waist.

A waist circumference which is greater than 88 cm or 35 inches in women is associated with health problems such as type 2 diabetes, heart disease, and high blood pressure.

For certain ethnicities, this circumference is stricter, with the cut off being 80 cm or 32 inches. For instance, Sub-Saharan African, Eastern Mediterranean, Middle Eastern and South Asian are among some of the ethnic groups which fall within this subset.

#### 3) What can you do to better manage weight?

Focus on achieving your "best weight". Make healthy food choices, be physically active, and take care of your psychological health.

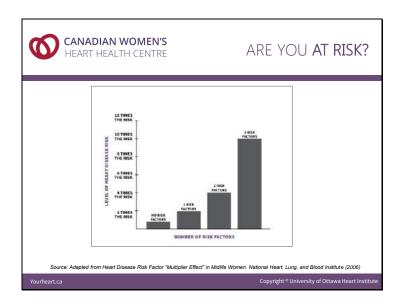
Your weight should be viewed as an "outcome" of all the positive habits you create, and not the goal itself.

What do we mean by Best Weight?

Your best weight is the weight you can maintain, while living the healthiest life you can and still enjoy.

For more information on weight management, click on the link below. You can also read more about weight management on Obesity Canada's website.





Many women don't realize that their risk for heart disease significantly increases based on the number of risk factors they have.

- 1 risk factor equals 2 times the risk of heart disease
- 2 risk factors equals 4 times the risk of heart disease
- 3 or more risk factors equals 10 times the risk of heart disease

It is recommended that a cardiovascular risk assessment should be completed every 5 years for men and women over age 40 years

Source: Heart Disease Risk Factor "Multiplier Effect" in Midlife Women. National Heart, Lung, and Blood Institute (2006)





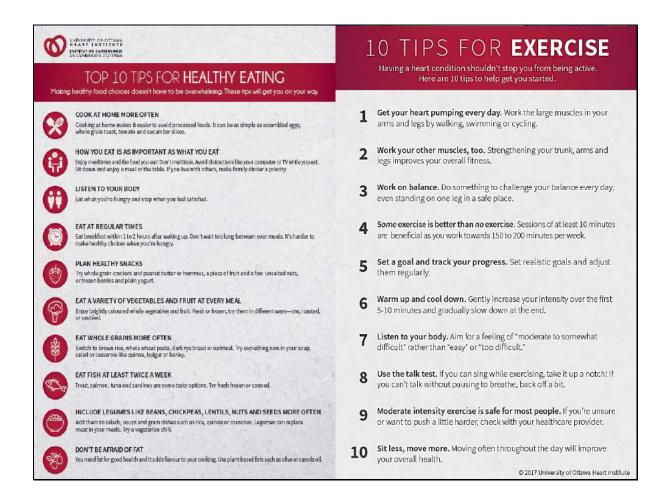




Managing your risk for heart disease or better managing your heart disease is possible. That can change beginning right now, with you.

If you have any risk factors start taking action to better manage them. Its never too late to start making changes!





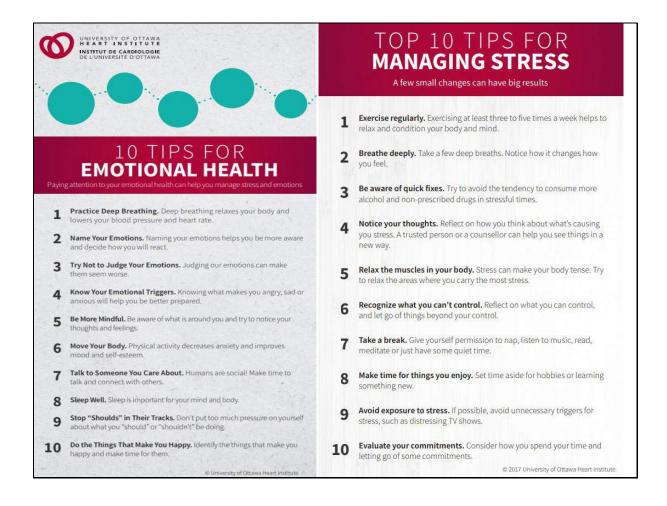
Mention the new Canada Food Guide released January 22<sup>nd</sup>, 2019. https://food-guide.canada.ca/en/

4 food groups to 3 (fruits and vegetables, whole grains, and proteins)
Protein group – plant-based proteins such as tofu and chickpeas emphasized over meat and dairy

Emphasis on proportions vs portions with half the plate being fruits and vegetables.











Good health care is a partnership between patients and their health care providers.

One of the keys in this partnership is clear communication between patients and their health care teams.

Strategies and tips for communicating with Health Care Providers include:

[Read from slide]





# TALKING WITH HEALTH CARE PROVIDERS



**Prepare for your visit.** Make a list of the health concerns you want to talk about. Keep in mind that you might only have time to talk about one thing, so tell your doctor about your most important concern first.



**Know your medicines.** Bring a list of your medicines. Many people see more than one doctor. Having a list of the medicines you're taking can help you and your doctor make decisions about your treatment.



# Use the Ask Me 3 questions Approach:

- 1. What is my main health problem?
- 2. What do I need to do?
- 3. Why is it important for me to do this?



**Take notes.** Write down the things you talk about, and the decisions you make with your health care team. This will help you remember what you decided, and what you need to do.

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One of the keys in this partnership is clear communication between patients and their health care teams.

Strategies and tips for communicating with Health Care Providers include:

# [Read from slide]







# TALKING WITH HEALTH CARE PROVIDERS



**Take someone with you.** Bring a trusted friend or a member of your family to help you at your visits. He or she can help take notes and ask questions.



**Ask for definitions.** It's okay to say you don't understand. Health information that's new can be confusing. If someone on your health care team uses terms you don't understand, ask him or her to explain again, in plain language.



**Recap**. At the end of your appointment, tell your doctor or nurse what you plan to do and when and how you'll do it.



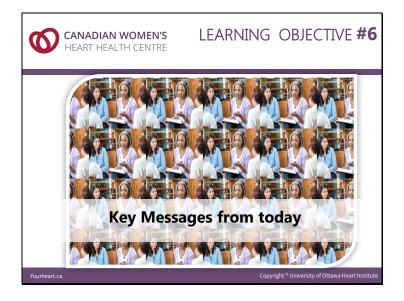
**Follow-up.** If you get home and still have questions, call or send an e-mail message to your health care team.

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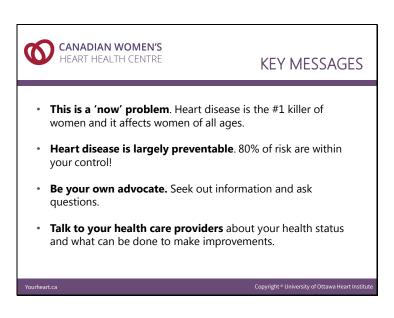


# [Read key messages from slide]

Slide 35



# [Read key messages from slide]





# [Read key messages from slide]

Slide 37



When women are valued and well, families, children and communities benefit.

We invite you to be part of the change.





Any questions?