# CLASS #1

# HEART HEALTH ESSENTIALS

#### OUTLINE

- What is cardiovascular disease?
- Know your targets for blood pressure & cholesterol
- Ways to reduce your risk
- Warning signs and symptoms
- What's next?

# FALSE

## People who are at a healthy body weight don't have to worry about high cholesterol.

#### **HOW THE HEART WORKS**

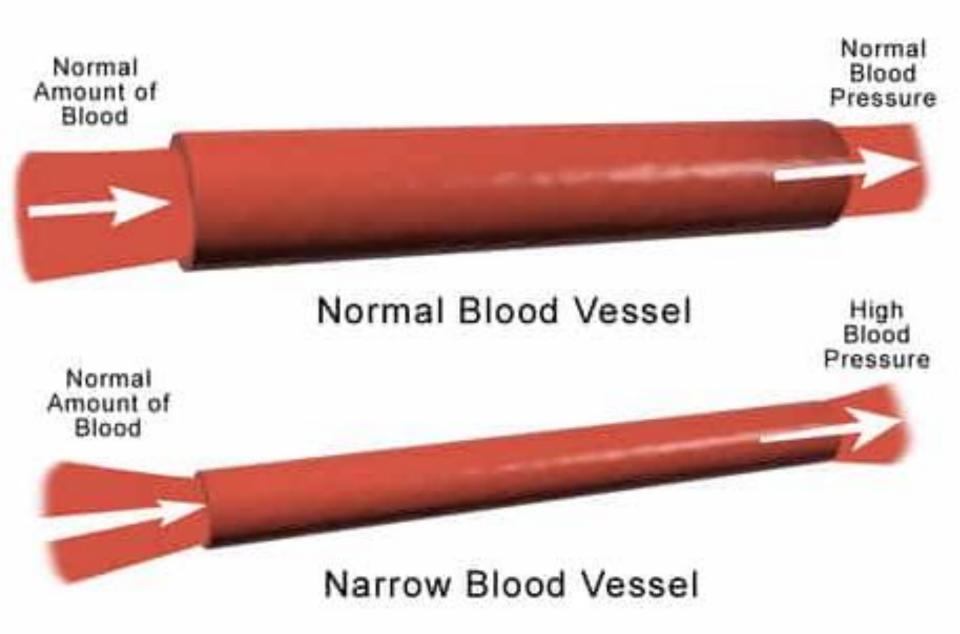
https://www.youtube.com/watch?v=CWFyxn0qDEU

#### **UNDERSTANDING BLOOD PRESSURE**



Amount of pressure in the arteries during *contraction* of heart muscle

Amount of pressure when heart muscle is **between** beats



#### **BLOOD PRESSURE**

### Low Risk: 120/80

#### Medium Risk: 121-139/80-89

## High Risk: 140+/90+

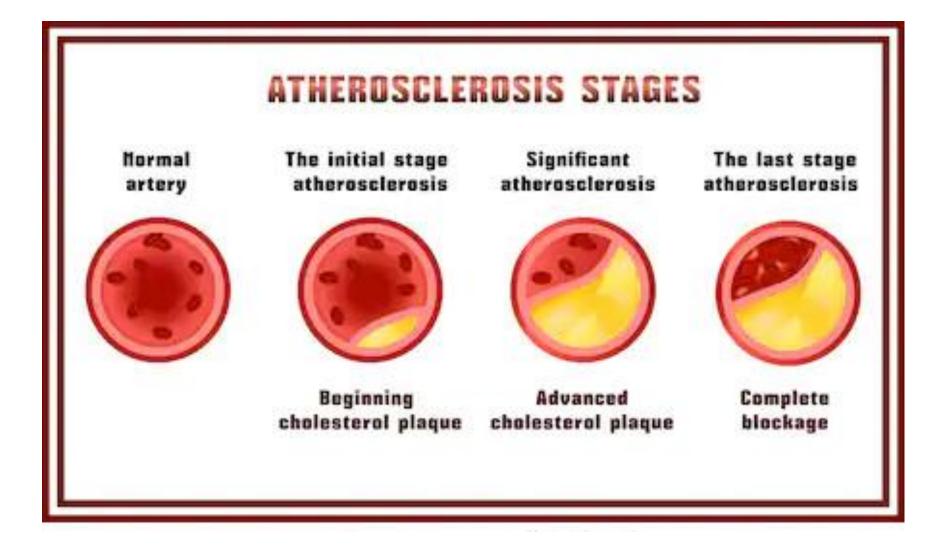
# TRUE

## You can feel "fine" even if your cholesterol and/or blood pressure are high.

#### **BLOOD CHOLESTEROL**

- Waxy, fat-like substance
- Found in every cell of the body
- LDL (*"lousy"* or bad cholesterol)
  - Builds up plaque on the inside of blood vessels
- HDL (*"healthy"* or good cholesterol)
  Cleans up and removes plaque from vessels
- Triglycerides (another type of fat in the blood)
  Affects blood clotting

#### **CLOGGED ARTERIES (ATHEROSCLEROSIS)**



#### TARGET CHOLESTEROL LEVELS

- Total cholesterol: 5.2 or lower
- HDL cholesterol:
  - Men: 1.0 or higher
  - Women: 1.3 or higher
- LDL cholesterol:
  - No statin / Low risk: 3.5 or lower
  - If diabetes, previous heart disease, kidney disease, or if taking a statin: 2.0 or lower (or 50% reduction)
- Triglycerides: 1.7 or lower

# MAYBE

# I should have my cholesterol checked every year after age 40.

#### **HEART DISEASE**

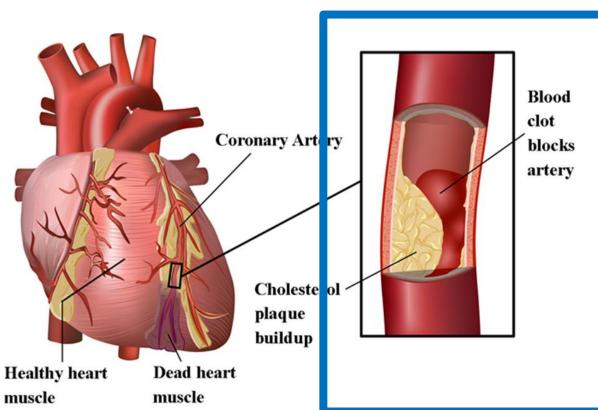
#### **CHEST PAIN (ANGINA PECTORIS)**



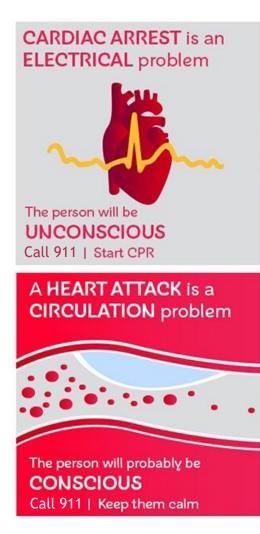
### HEART ATTACK (MYOCARDIAL INFARCTION)

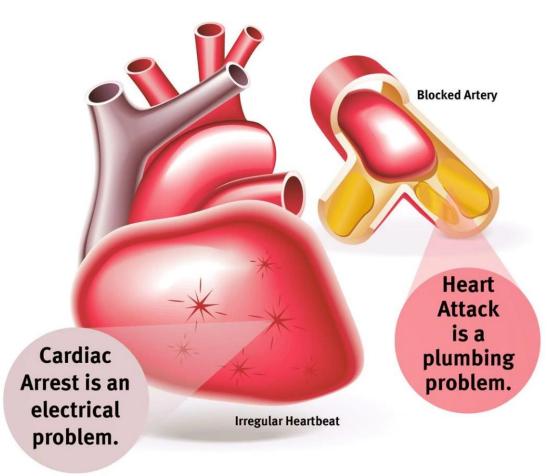


# Blood clot (Thrombosis)

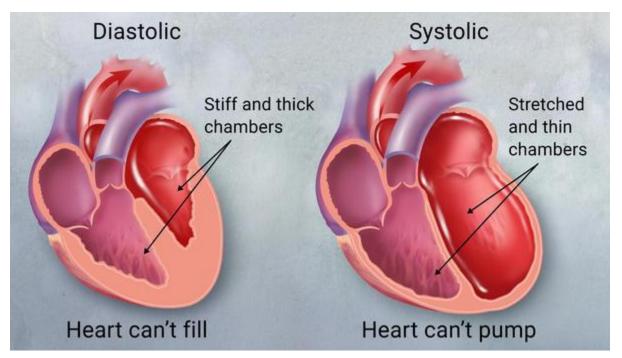


#### **CARDIAC ARREST (HEART STOPS)**



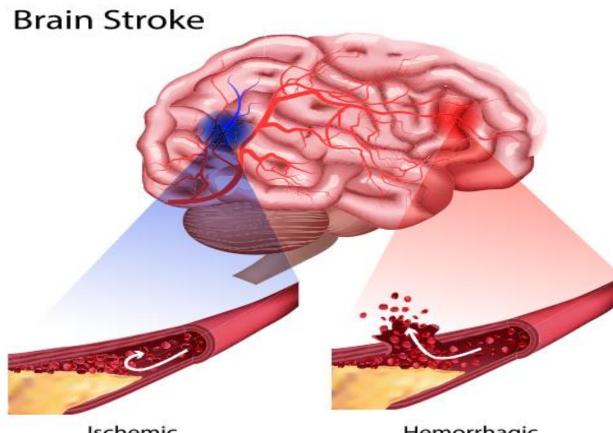


#### **HEART FAILURE**





#### **STROKE**



Ischemic

Blockage of blood vessels; lack of blood flow to affected area Hemorrhagic

Rupture of blood vessels; leakage of blood

Mini stroke = Transient Ischemic Attack (TIA)

# FALSE

Heart disease runs in my family, so there's nothing I can do to prevent it.

#### **RISK FACTORS**

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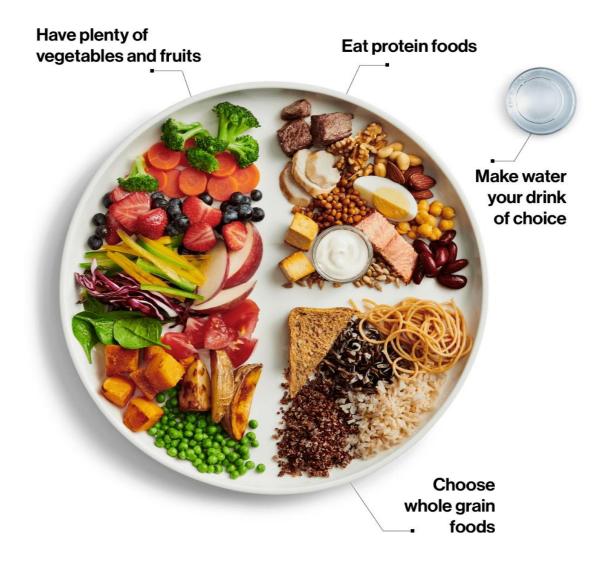
#### Non-Modifiable

- Age
- Sex
- Ethnicity
- Family history
- Sleep apnea

#### Modifiable

- Diet
- Alcohol intake
- Physical activity
- Stress
- Smoking/Substances
- Medications

#### **HEALTHY EATING**



#### ALCOHOL – MAXIMUM RECOMMENDED

- Men: 2-3 drinks per day (total 15 per week)
- Women: 1-2 drinks per day (total 10 per week)
- When moderation may be too much

(about 5% alcohol)

Avoid alcohol most of the time if you have fatty liver or high triglycerides



(about 12% alcohol)

(40% alcohol)

#### **SMOKING AND VAPING**



#### Vaping

- Vaping + cigarettes = MORE harmful
- Long term effects??

#### Cigarettes

- $\downarrow$  HDL (good cholesterol)
- $\downarrow$  Blood vessel size
- ↑ Blood pressure
- ↑ Blood clotting

### **CANNABIS / MARIJUANA**

- THC (psychoactive ingredient) stimulates the heart
- Makes the heart pump harder

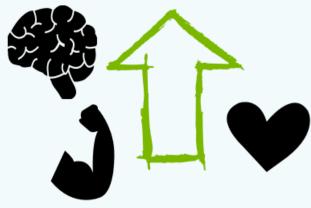
#### SUBSTANCE USE

Substance use (prescription or other) can cause irregular heart rate, stroke, or heart attack:

- -Opiates (e.g. fentanyl, codeine)
- -Sleep aids (e.g. zopiclone, benzodiazepines)
- Recreational drugs

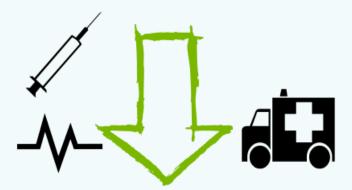
#### PHYSICAL ACTIVITY

#### Physical activity provides many health benefits!



Improve mental health, fitness and strength.

Info from the Canadian Physical Activity Guidelines: csep.ca/guidelines



Reduced risk of heart disease, stroke, high blood pressure, diabetes, osteoporosis and more





Aim for 150 minutes of moderate to vigorous-intensity physical activity each week. Your 150 minutes can be broken into chunks of 10 minutes or more. Include both muscle strengthening (ie. push-ups, climb stairs) and bone strengthening (ie. yoga) activities at least twice a week. If you haven't been active in awhile, speak to your health care provider. Start with low intensity (like a short walk) and go slow.



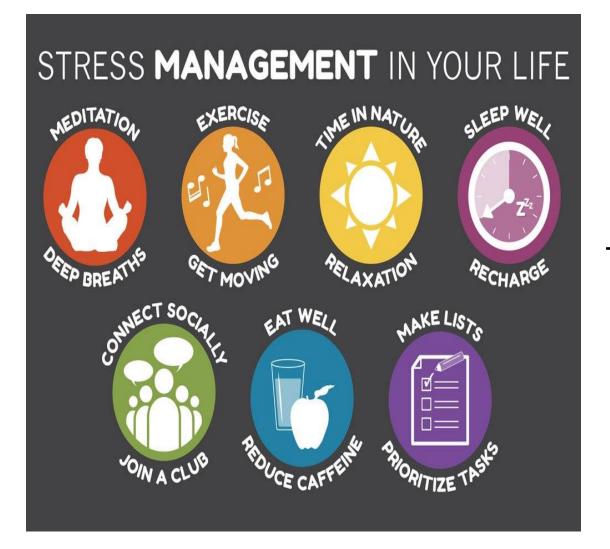
Tip: If you haven't been active, start slow. Try parking farther away from the doors, or get off the bus a stop early and walk the rest of the way!

#### **MANAGE STRESS**

- Living with health problems can be stressful
- Physical and emotional stress increases health risks: 个 Blood pressure
  - $\uparrow$  Blood clots  $\downarrow$  Immune function
  - ↑ Blood sugar

- $\downarrow$  Mental health
- More difficult to make good lifestyle choices

#### STRESS



You are in control!

Take 10 minutes to make one small change

#### TAKING MEDICATION

- Take medications as prescribed
- Reduces your risk of new health problems
- Helps stop existing problems from getting worse
- Have a conversation about risks, side effects, and options with your provider or pharmacist
- Keep a current list of your medications

#### TAKING MEDICATION

Medications may be prescribed for a variety of reasons:

- Make it easier for your heart to pump blood
- Open (dilate) blood vessels
- Slow down a heart that beats too fast
- Remove excess fluid from the blood (also reduce shortness of breath and swelling in legs & feet)
- Slow down plaque formation in blood vessels
- Prevent blood clots by making blood less "sticky"

# FALSE

# Fish oil supplements can cure cardiovascular disease.

#### NATURAL HEALTH PRODUCTS

- Can interfere with your heart medications or cause other health problems
  - Garlic pills, Fish oils, Grapefruit
- Always check with your pharmacist or doctor before taking any non-prescription medications or alternative therapies

#### NATURAL DOES NOT ALWAYS MEAN SAFE!

#### MANAGING HEART DISEASE

Monitor at home <u>only</u> if your doctor asks you to:

#### **Blood Pressure**

- Rest for 5 minutes before testing
- No talking
- Don't cross your legs
- Support your arm on a chair or table

#### MANAGING HEART DISEASE

Monitor at home <u>only</u> if your doctor asks you to:

**Daily Weight** (if you have Heart Failure)

- Weighing yourself daily tells you if your body is retaining fluid
  - Extra fluid  $\rightarrow$  Makes your heart work harder
- Gaining or losing 4-5 pounds is a big weight change
  - Call your doctor if this happens
- Ask your doctor about Heart Failure Zones

### WARNING SIGNS & SYMPTOMS OF A HEART ATTACK

Chest pain/ache	Lightheadedness or fainting
Chest squeezing, pressure, or fullness	Anxiety
Shortness of breath / Difficulty breathing	Sweating
Heartburn that doesn't get better with antacids	Cold, clammy skin
Upper body pain, sore back, sore shoulders/arms	Paleness
Abdominal pain	General weakness
Sore jaw	Unexplained fatigue (can last for days)
Nausea, with or without vomiting	<b>NOT JUST CHEST PAIN!</b>

### WARNING SIGNS & SYMPTOMS OF A STROKE

Confusion	Double vision
Trouble speaking / Slurring words	Blurry or blackened vision
Trouble understanding what others are saying	Headache (especially sudden or severe)
Numbness, weakness or paralysis of the face, arm or leg (especially 1 side)	Vomiting
Mouth drooping	Dizziness
Loss of balance or trouble walking	

#### FAST = Face, Arms, Speech, Time

#### WHAT TO DO

- Call 911 immediately (or have someone call for you)
- <u>Do not</u> drive yourself to the hospital
- Keep a list of emergency contacts and your medications

#### **GOAL SETTING**



#### www.heartandstroke.ca/articles/the-first-step-to-healthy-change

#### FOR MORE INFORMATION

- Heart & Stroke Foundation <u>www.heartandstroke.ca</u>
- Lipid Clinic at St. Boniface Hospital <u>www.cardiacsciencesmb.ca</u>
- Other health education classes, including *Physical Activity Essentials* & *Preparing for Success* <u>www.wrha.mb.ca/groups</u>

## MORE INFORMATION ABOUT QUITTING / REDUCING SMOKING

- Commit To Quit group <u>www.wrha.mb.ca/groups</u>
- Smoker's Helpline: 1-877-513-5333
- Peer support <u>www.facebook.com/groups/ManitobaQuits/</u>
- Manitoba Lung Association <u>www.mb.lung.ca</u>
- Talk to your doctor and health care team

#### **THANK YOU**

# **Any questions?** Use the chat function or un-mute your microphone