Vascular Risk Reduction: Healthy Lifestyle Behaviours
Vascular Risk Reduction (VRR)

Welcome!

• Presentation & Activities

• Focus: Discovering ways to promote healthy lifestyle behaviour strategies within your clinical practice to reduce vascular risk.

• Engage, collaborate and have fun!
Vascular Risk Reduction

Objectives:

- Discuss the impact of vascular disease in Canada.
- Identify non-modifiable and modifiable vascular risk factors.
- Implement strategies to promote healthy lifestyle behaviours.
Impact of Vascular Disease

Vascular Risk Round Up:

1. Volunteer reads Question card.
2. The person with the correct Answer card must wave it and read the answer aloud.
3. If correct, it will be his/her turn to read out the question on the Question card.
4. If not correct, everyone must agree on the correct answer, then ask the person with the correct Answer card to read out his/her question.
5. Play continues until all questions have been read, along with their correct answers.
Addressing Vascular Risk Factors
Vascular Disease & Risk Factors

Most vascular disease(s) can be prevented or managed by addressing the risk factors

Why are risk factors such a big deal??

- Over 90% of Canadians have one or more risk factors
- Almost every person you come across can have increased risk for vascular disease
Non-Modifiable Risk Factors

- Age
- Gender
- Family History/Genetics
- Ethnicity
- Previous Event (Heart Attack, Stroke, etc)
What are some risk factors we can modify?
Modifiable Risk Factors

May also be called “Healthy Lifestyle Behaviors”

- Tobacco Use
- Physical Inactivity
- Poor Diet
- Obesity or Overweight
- Excess Alcohol
- Unmanaged Stress
- Lack of Sleep
**Tobacco Use**

Smoking may:
- Contribute to the build-up of plaque in the arteries
- Increase the risk of blood clots
- Reduce oxygen in the blood
- Cause the heart to work harder by ↑ heart rate and blood pressure, and constricting blood vessels
- ↑ LDL and ↓ HDL cholesterol

In Alberta, healthcare costs associated with tobacco use are estimated at $470.6 million/year
Tobacco Use – Intervention

Assess tobacco use of every individual:

- Consider tobacco use as a vital sign in every patient visit.
- Support tobacco users in quitting efforts and link to available resources.

Research shows that support and advice from a trained health professional can double a person’s chances of successfully quitting tobacco use.
Tobacco/Smoking Cessation

The 5 A’s

• Ask (every individual) about tobacco use
• Advise to reduce/quit (personalized)
• Assess readiness to quit and interest in support
• Assist with providing information and referrals
• Arrange for follow up or additional support
(AHS) Tobacco Cessation Resources

For Providers:

• Tobacco Free Future - Online Training (1 hour)
• TRAC Program (2 day training)
• On Line
  – [www.albertaquits.ca](http://www.albertaquits.ca) – Download or order online (free)
    • Tobacco Free Future brief intervention laminated card
      – The 5 A’s
• Tobacco Cessation Toolkit
• Tobacco Cessation Kits
Tobacco Cessation Resources

For Patients:

1. AlbertaQuits – Online quit smoking service from Alberta Lung Association (www.albertaquits.ca)
2. QuitCore – Free group cessation programs in Alberta
   • 1-866-710-QUIT (7848)
3. AADAC – Smokers help line (1-866-332-2322)
4. Nicotine Anonymous – Non-profit support group
   • www.nicotineanonymous.org

What’s available in your community??
Modifiable RF – Physical Inactivity

“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”
Benefits of Physical Activity

Physical:
- ↑ Strength and endurance
- ↑ Range of motion
- Maintain or ↑ bone density
- ↓ BP; ↑ HDL; ↓ LDL & Trigs
- ↓ inflammation
- ↓ Insulin resistance
- Improves endothelial function

Mental:
- Improves mood
- Improves sleep
- Improves brain function
- ↑ Energy
- ↑ Self esteem & confidence
- ↓ Stress
Physical Activity Recommendations

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 muscles groups, at least 2 days per week.

More physical activity provides greater health benefits.
Physical Activity Intensity (examples)

Moderate Intensity
- Brisk walking
- Dancing
- Gardening
- Housework
- Traditional hunting and gathering
- Active involvement in games and sports

Vigorous Intensity
- Running
- Walking/climbing briskly up a hill
- Fast Cycling
- Aerobics
- Fast swimming
- Competitive sports and games
- Heavy shovelling or digging
“The handle on your recliner does not qualify as an exercise machine.”
Physical Activity Considerations

• Consider physical activity as a “vital sign” in every patient visit – **Ask!**

• Implement “Prescription for Healthy Living”
  – Assess current level of activity
  – Ask patient’s goals for becoming more active
  – Develop a plan (“prescription”) that aligns with guidelines and patient’s goals
    • The total duration should be increased gradually to maximize weight loss and other health benefits
Community Resources

Ensure patients are effectively counselled and/or referred to an exercise professional for more guidance.

What is available in your community to support an active lifestyle?

- AHS Alberta Healthy (Living Exercise) Program
- Walking/Running programs and groups
- Mall Walking programs
- Community fitness facilities
Poor Dietary Intake

An unhealthy diet is the leading risk for death and disability in Canada and can lead to:

• Increased weight
• Type 2 diabetes
• High blood pressure
• High cholesterol
• Heart disease & stroke
• Some cancers
• Osteoporosis
• Depression
Healthy Eating - Recommendations

- Have a good variety of healthy foods from the four food groups each day
- Increase daily intake of vegetables and fruit to 7 or more servings
- Drink fresh, clean water instead of sugary drinks
- Plan your meals ahead and shop for healthy ingredients
- Eat less packaged and restaurant food
- An optimal dietary plan for health issues may need guidance from a qualified health care professional (registered dietician)
Canada’s Food Guide

All adults should maintain a healthy balanced diet that is high in vegetables, fresh fruits, low-fat dairy products, dietary and soluble fibre, whole grains and protein from plant sources, and low in saturated and trans fat, cholesterol and sodium, in accordance with Canada’s Food Guide to Healthy Eating.

Resources available online and print materials to order.
Increase Vegetable and Fruit Intake

Recommend 7 - 10 servings a day

What are some ways to increase intake?

- Have 2 or more servings at each meal and snack
- Fill half your plate with vegetables and fruit
- Add fruit to breakfast
- Pack vegetables and fruit to eat
  - with lunch
- Write down what you eat and drink

Visit Healthy Eating Starts Here:
www.albertahealthservices.ca/5621.asp
Special Considerations

**Hypertension:** Consider the DASH diet (high in V/F, whole grains, fish, poultry, nuts and low fat dairy). Has been shown to reduce systolic and diastolic blood pressure.

**Diabetes:** No more than 7% of total daily intake from saturated fats and limit trans fatty acids to a minimum. Develop an optimal diet plan for achieving healthy body weight.

**Chronic Kidney Disease:** Maintain adequate fluid intake as fluid restriction is not required for most patients. Monitor protein intake and refer to a CKD dietician when possible.

**Consult or refer patient to an experienced health care provider (preferably a registered dietician) for more guidance and information**
Weight Management

Maintenance of a healthy body weight and waist circumference can reduce vascular risk.

Body Mass Index (BMI)
- Normal BMI 18.5-24.9 kg/m²
- BMI > 27 is linked with HTN, DM, Dyslipidemia

Waist Circumference
- < 102 cm for men and < 88 cm for women

Initial weight loss goal in obese individuals (BMI > 30) should be **5-10% of baseline body weight**
• A comprehensive healthy lifestyle intervention is recommended for overweight and obese people
• It is vital to create a non-judgemental atmosphere when discussing weight management
• Consider the specific individual barriers patients may have regarding obesity and its management and what potential solutions might be feasible.

Are there any resources you can think of in your community for weight management??
Alcohol Consumption

Drinking too much of any type of alcohol can increase blood pressure and contribute to heart disease and stroke.

Best to follow low risk drinking guidelines and encourage those who chose to drink to limit to:

- 2 or fewer standard drinks per day;
- fewer than 14 drinks per week for men;
- and fewer than 9 for women.
Stress

Chronic Stress
• Long-term or work-related stress can predict the occurrence of coronary heart disease (CHD)
• Isolated individuals have an increased risk for a cardiac event

Acute Stress
• Can act as a trigger of cardiac events
Stress and Vascular Risk

**Brain**
- Threat
- Challenge
- Loss

**Coping strategies**
- Behavioural
- Biological

**Biological risk factors**
- ↑ BP
- ↑ blood fats
- ↑ BG
- ↑ weight

**Macrovascular disorders**
- Vasospasm
- Atherosclerosis

**Microvascular disorders**
- Retinopathy
- Nephropathy
- Neuropathy

**Early developmental adversity**
- Genetic vulnerability
- Psychological vulnerability

**Current environmental adversity**
Symptoms of Stress

Stress can lead to unhealthy coping habits:

• Smoking/drugs
• Too much alcohol
• Over eating, choosing less healthy foods
• Not continuing physical activity
Symptoms of Stress

• Headache
• Fatigue
• Stomach complaints
• Symptoms that mimic illness
• Anxiety
• Depression

What are some ways to deal with stress?
Stress Management

- Change how we react/perceive things
- Breathing exercises
- Progressive Relaxation
- Meditation
- Make time for laughter
- Daily physical activity
- Coping by learning- books, films, courses
- Counselling and support
Sleep

• Most adults need 7-8 hours of uninterrupted sleep each night
• Chronic sleep deprivation can lead to fatigue, anxiety, depression and weight gain
• It also disrupts the normal restoration and regeneration process and affects hormones
• Long term sleep loss can lead to vascular problems

Don’t underestimate the importance of a good night’s sleep!
Addressing Vascular Risk

Key Messages:

• Assess tobacco use of every individual:
  – Consider tobacco use a vital sign in every patient visit.
• Support tobacco users in quitting efforts
  – link to available resources
• Support healthy eating and physical activity to promote health
  – Increase vegetable and fruit intake
  – Promote 150 minutes of aerobic activity per week
Questions?
A Special Thanks to:

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References:

AHS Smoking Cessation Guidelines:
http://www.tobaccofreefutures.ca

Canadian Cardiovascular Society:

Canadian Society for Exercise Physiology:
http://csep.ca

C-CHANGE Clinical Resource Centre:
http://www.c-changecrc.ca/
References:


Heart and Stroke Foundation of Canada:
http://heartandstroke.com

Hypertension Canada (CHEP recommendations):
http://hypertension.ca

Vascular Risk Reduction Resource:
http://www.albertahealthservices.ca/10585.asp