

Cardiovascular Disease in South Asians

A CANADIAN PERSPECTIVE

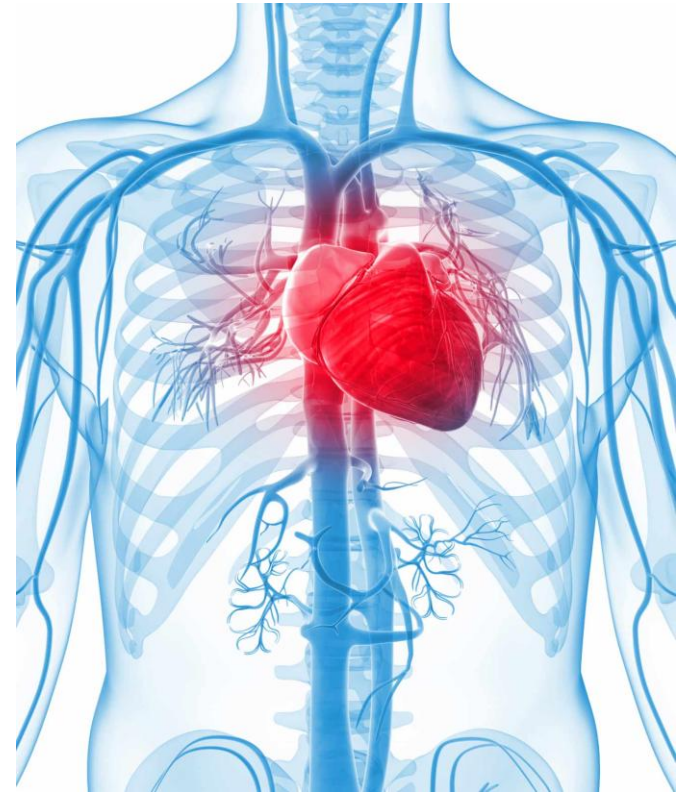


Outline

- The Heart
- Cardiovascular Disease
- South Asians in Canada
- Risk Factors
- Prevention and Treatment Strategies
- Challenges
- Resources
- Summary

The Heart

- Is a muscle located to the left of the middle of your chest
- About the size of your fist
- Sends blood around your body with the oxygen and nutrients it needs



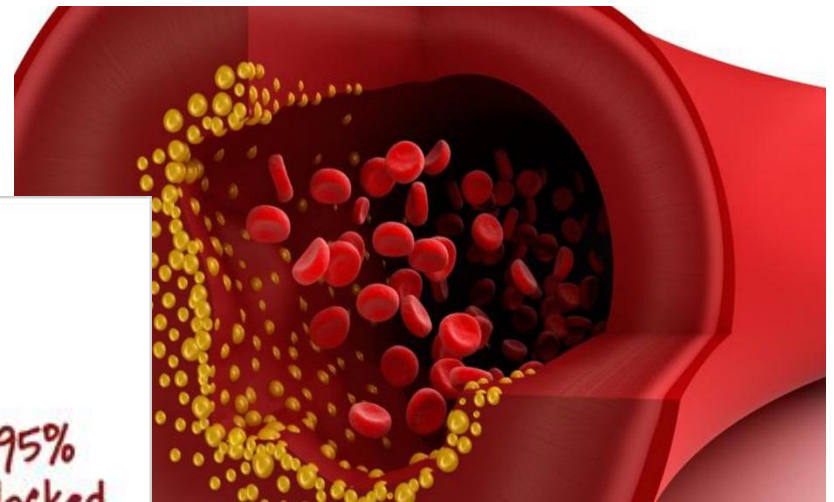
Cardiovascular Disease

- Cardiovascular disease (CVD) is the name for the group of disorders of heart and blood vessels.
- Generally refers to conditions that involve narrowed or blocked blood vessels that can lead to a heart attack, chest pain (angina) or stroke.
- Blood vessels are tubes that transport blood through the body's tissues and organs

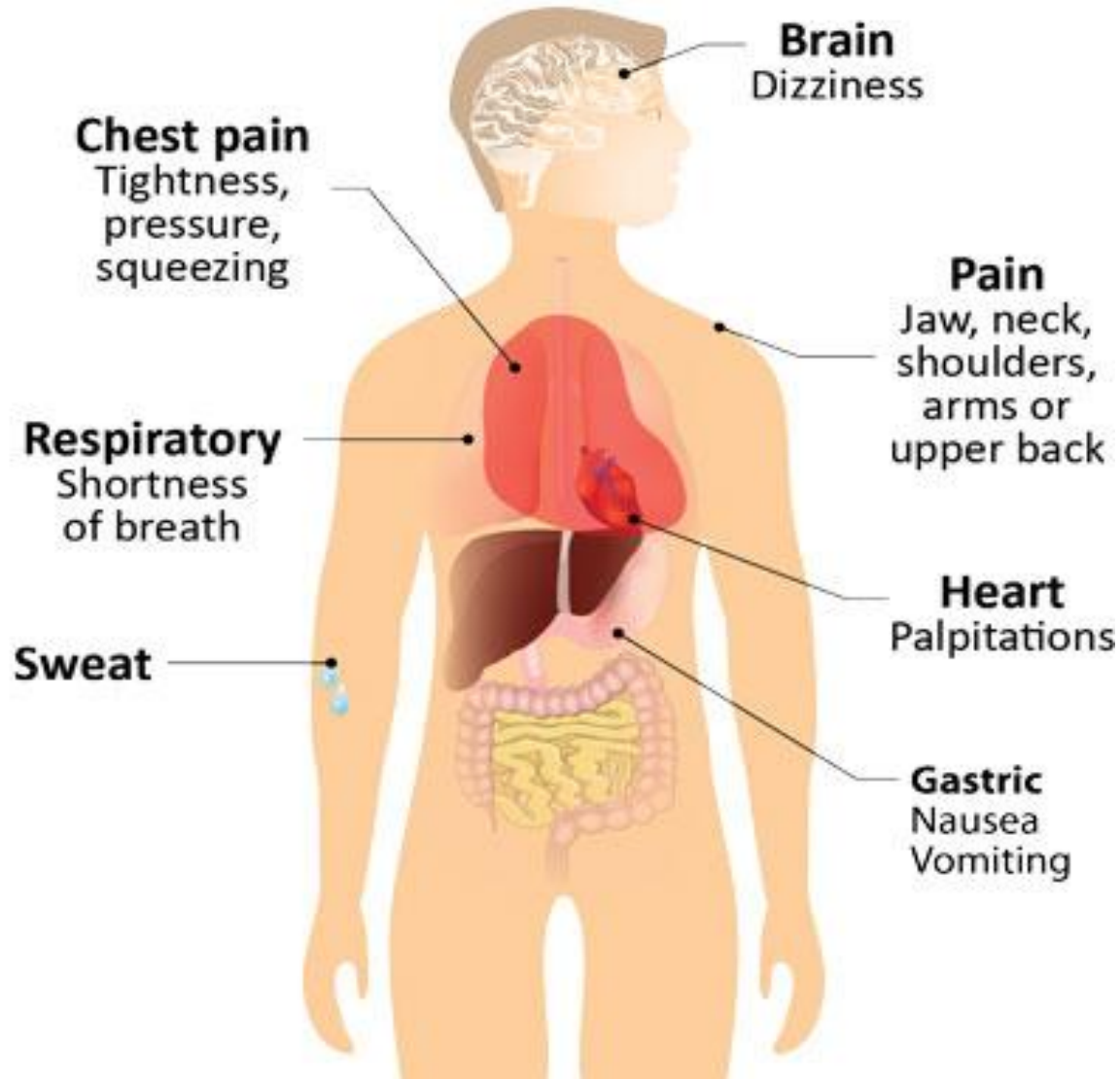


Heart Attack

- When blood going to the heart slows down or stops completely



Symptoms



Stroke

- When the blood supply in a part of the brain slows down or stops completely

Symptoms

- Sudden weakness or numbness in the arms, legs, or face
- Confusion, or trouble speaking or understanding
- Abnormal vision (blurred, double vision, transient blindness)
- Loss of balance, dizziness or light-headedness

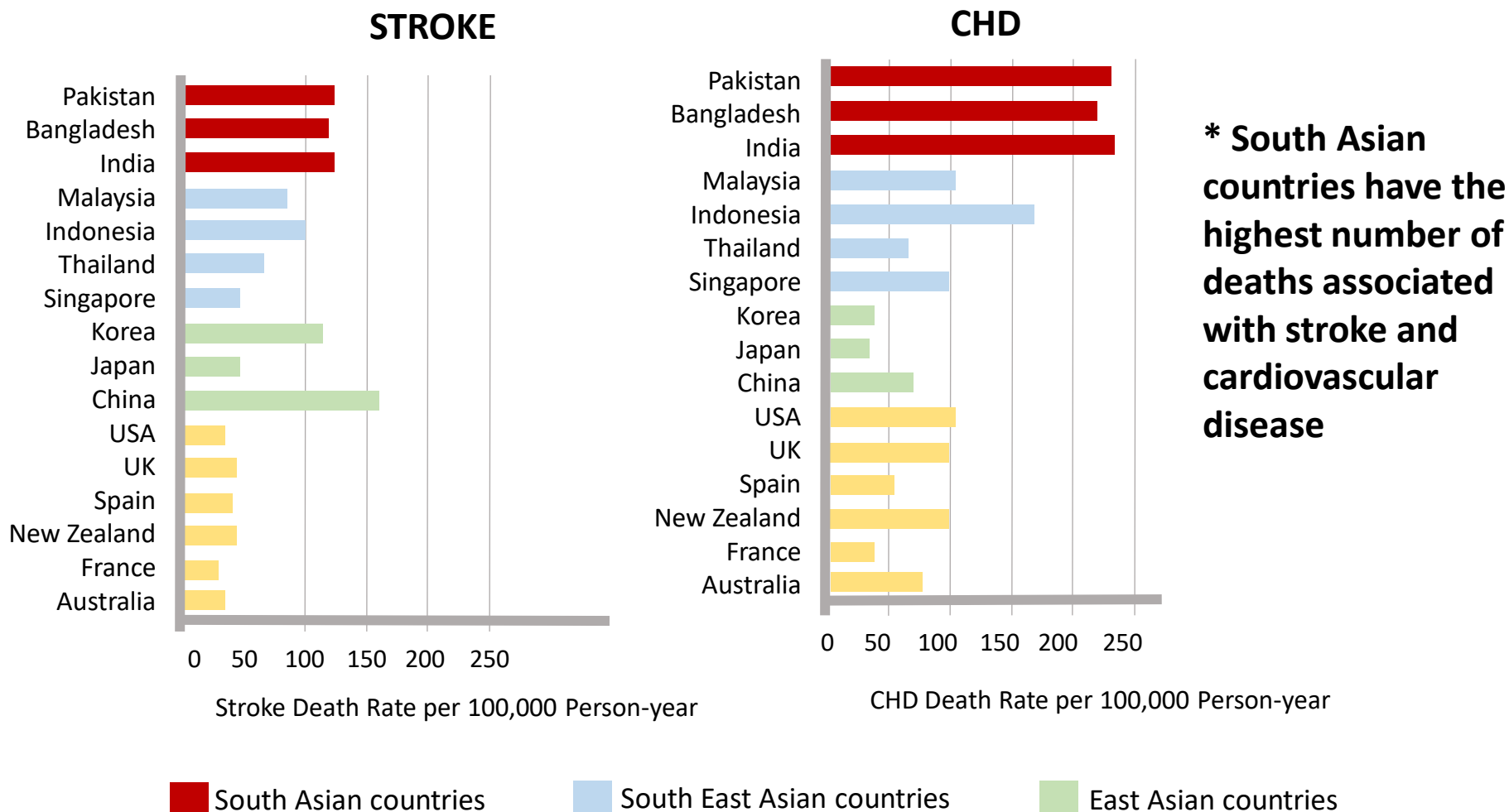




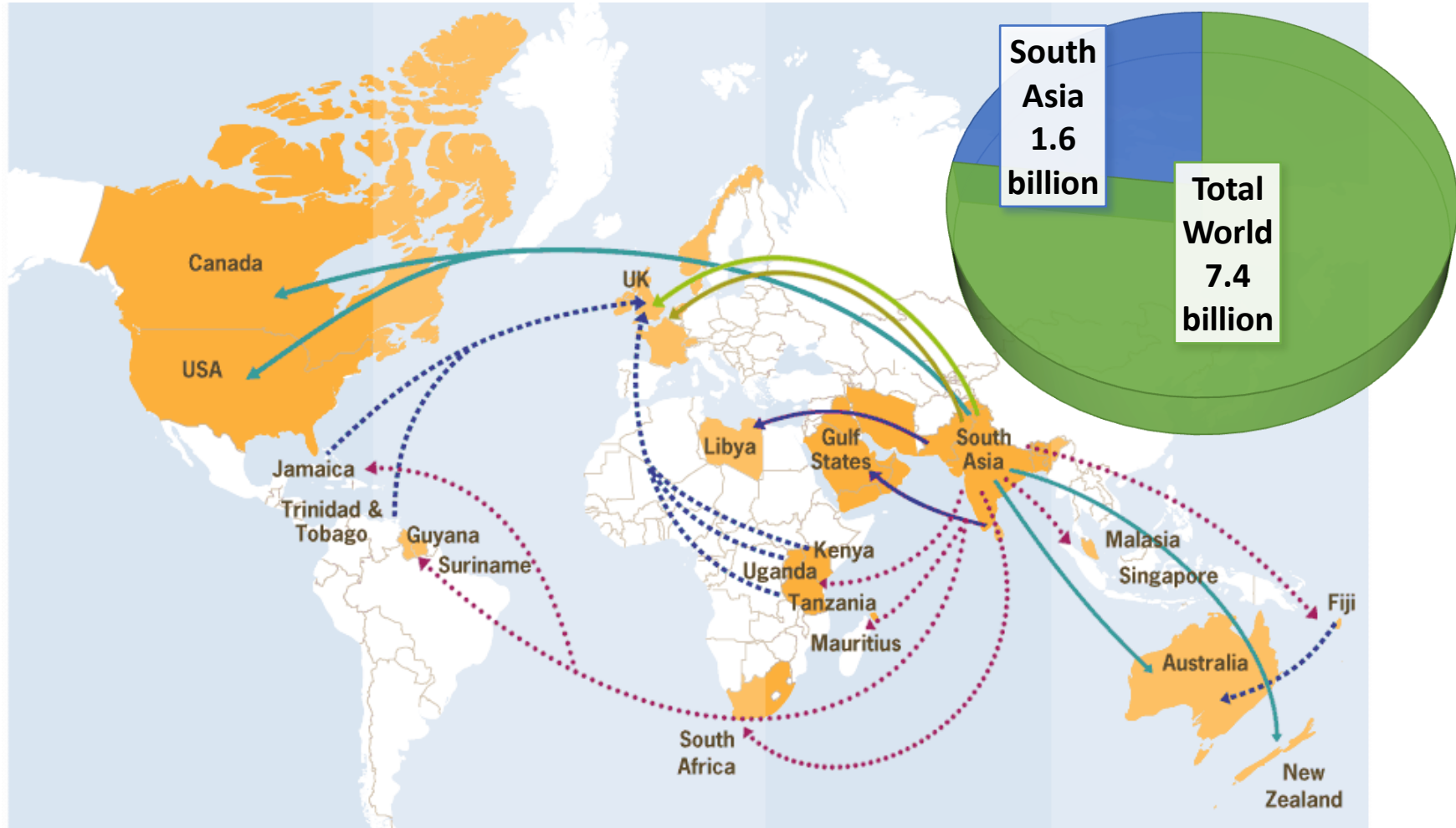
How Common is Cardiovascular Disease?



Death Caused by Stroke and Cardiovascular Disease



Who are “South Asians?”



People originating from India, Pakistan, Bangladesh, Nepal and Sri Lanka.

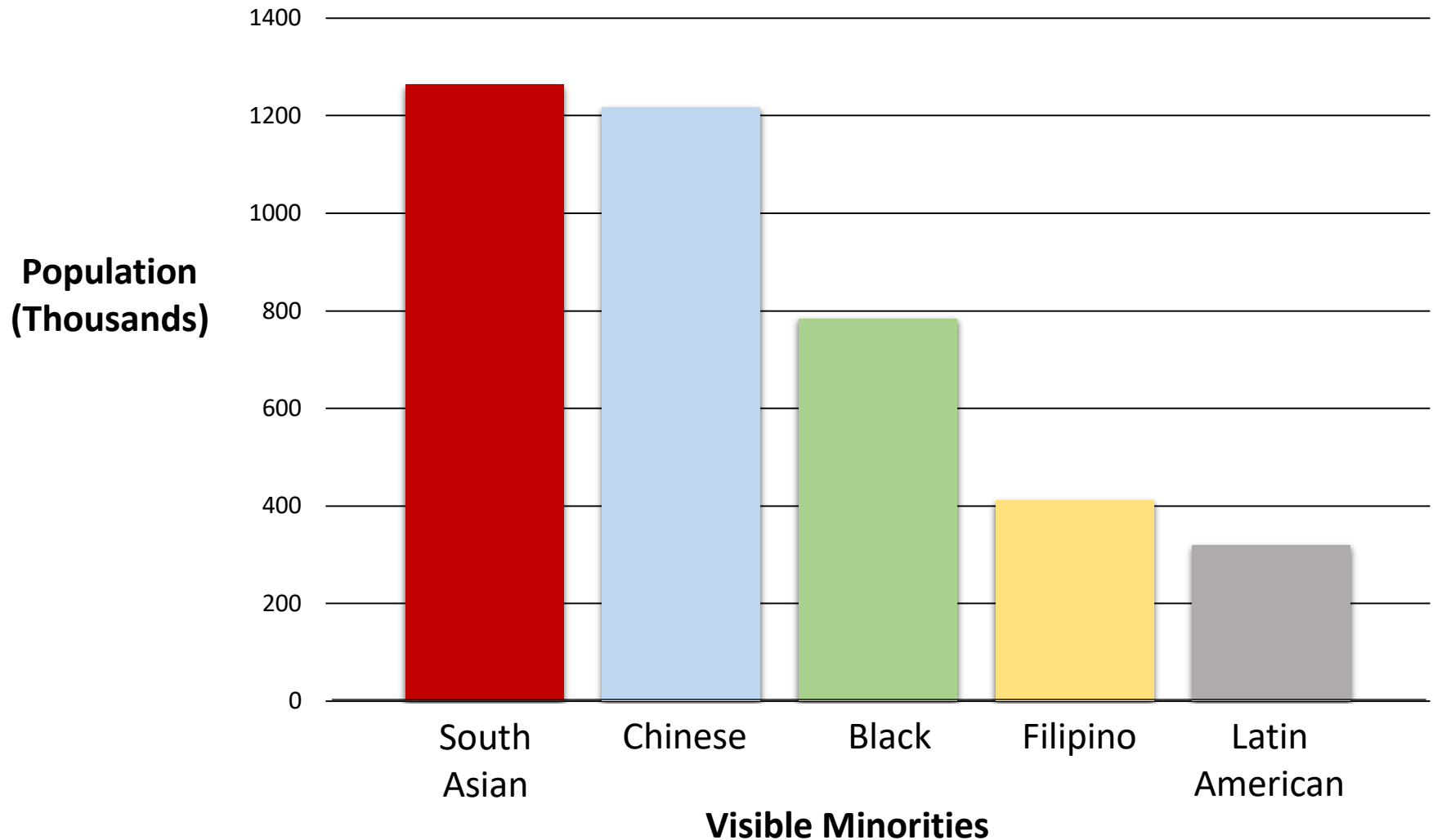
The Facts

- On average South Asians experience cardiovascular disease 10 years earlier and are faced with higher mortality rates compared to other ethnic groups
- 50% of all heart attacks in Indian men occur under 50 years of age and 25% of all heart attacks occur under 40 years of age.
- India accounts for approximately 60% of the world's heart disease burden, despite having less than 20% of the world's population.
- South Asian, Chinese and Black individuals also develop diabetes at a higher rate, at an earlier age, and at lower ranges of BMI than their white counterparts.

SOUTH ASIANS IN CANADA

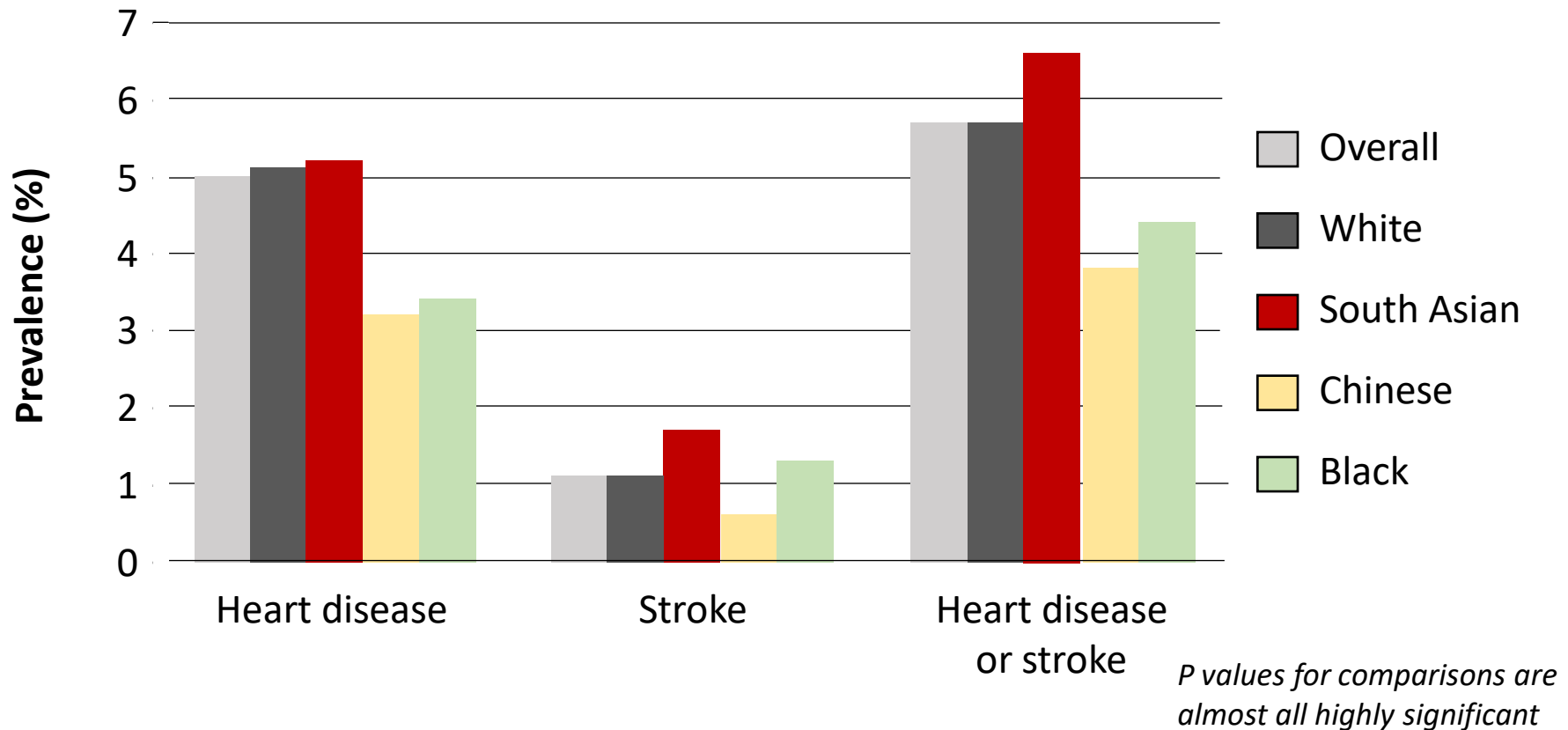


Largest Visible Minority in Canada

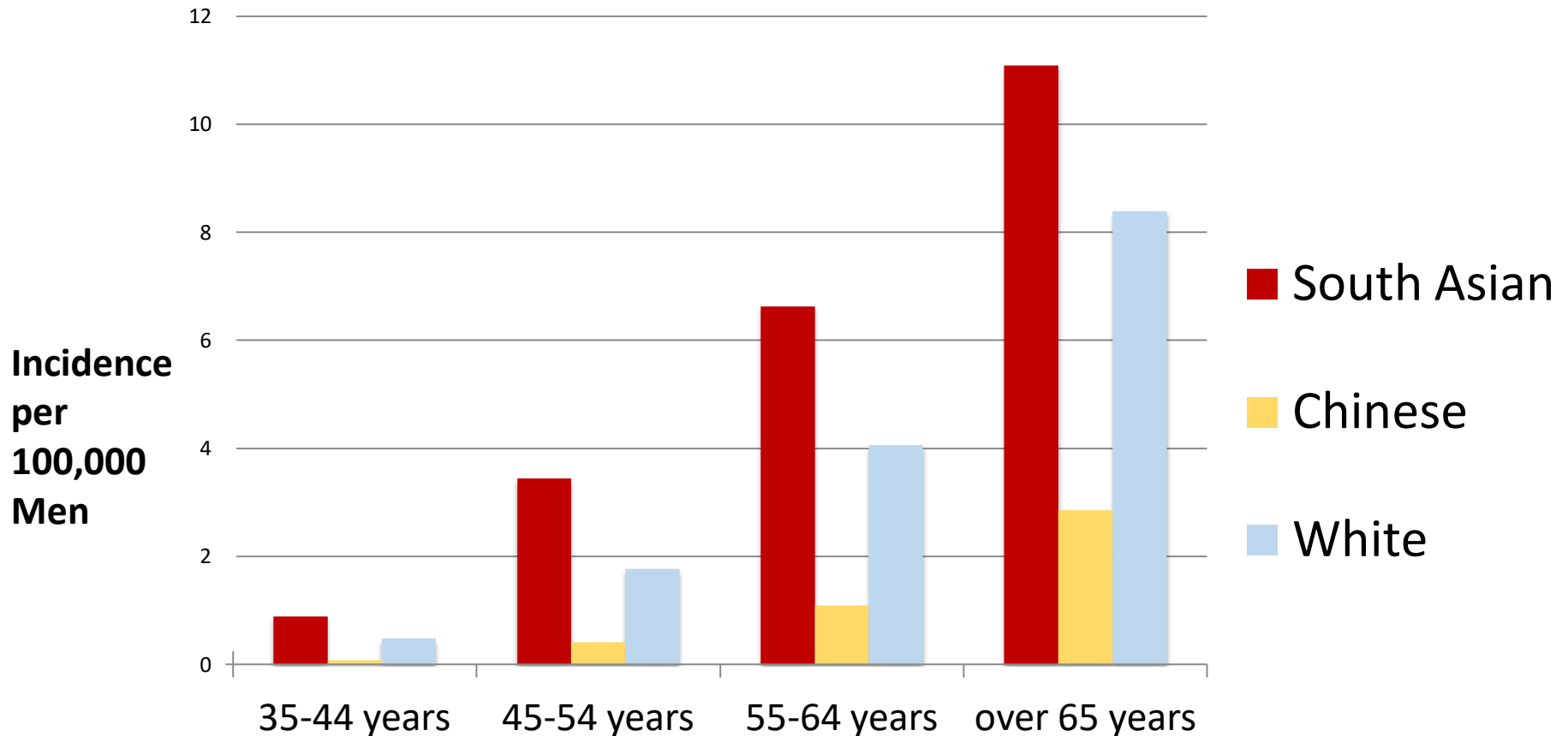


How Common is Cardiovascular Disease?

- Between 1996- 2007, having heart disease or stroke in Ontario was highest among South Asian populations



Incidence of Heart Attacks in Canada



- South Asians are more likely to have a heart attack than Chinese or White individuals.
- The likelihood of a heart attack increases with age.



RISK FACTORS: What Increases One's Likelihood of Developing Cardiovascular Disease?



Non-Modifiable Risk Factors

South Asians are more likely to be affected by heart disease than other ethnic groups



Men are typically at a higher risk of developing heart disease



Older age is associated with an increased risk of cardiovascular disease



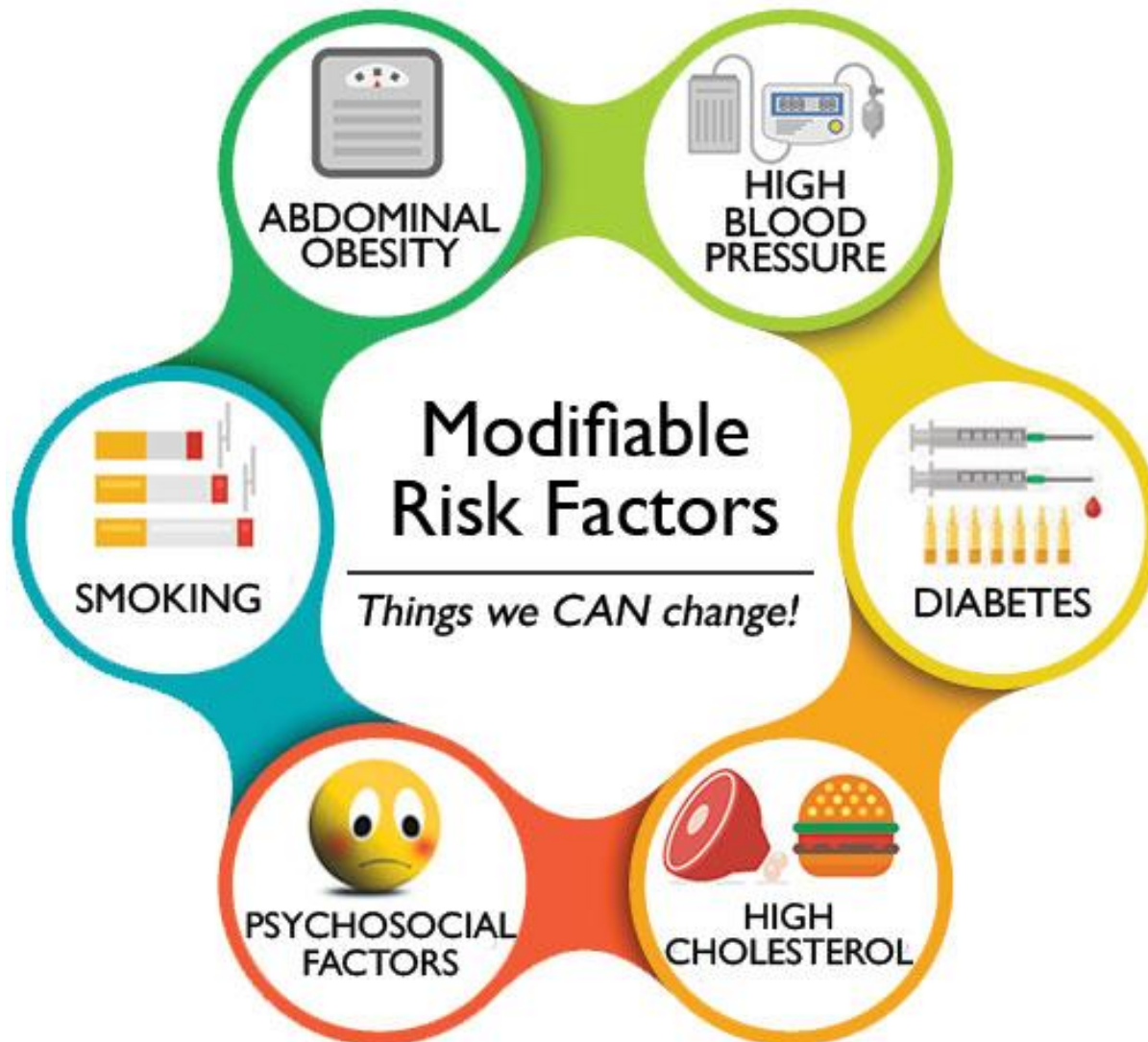
Having an immediate family member with heart disease increases one's risk of developing heart disease



Non-Modifiable Risk Factors

Things we cannot change

Modifiable Risk Factors



Traditional Modifiable Coronary Risk Factors

- Hypertension
 - Higher compared to whites
- Smoking
 - South Asians tend to smoke less in North America
 - Almost unheard of among South Asian women



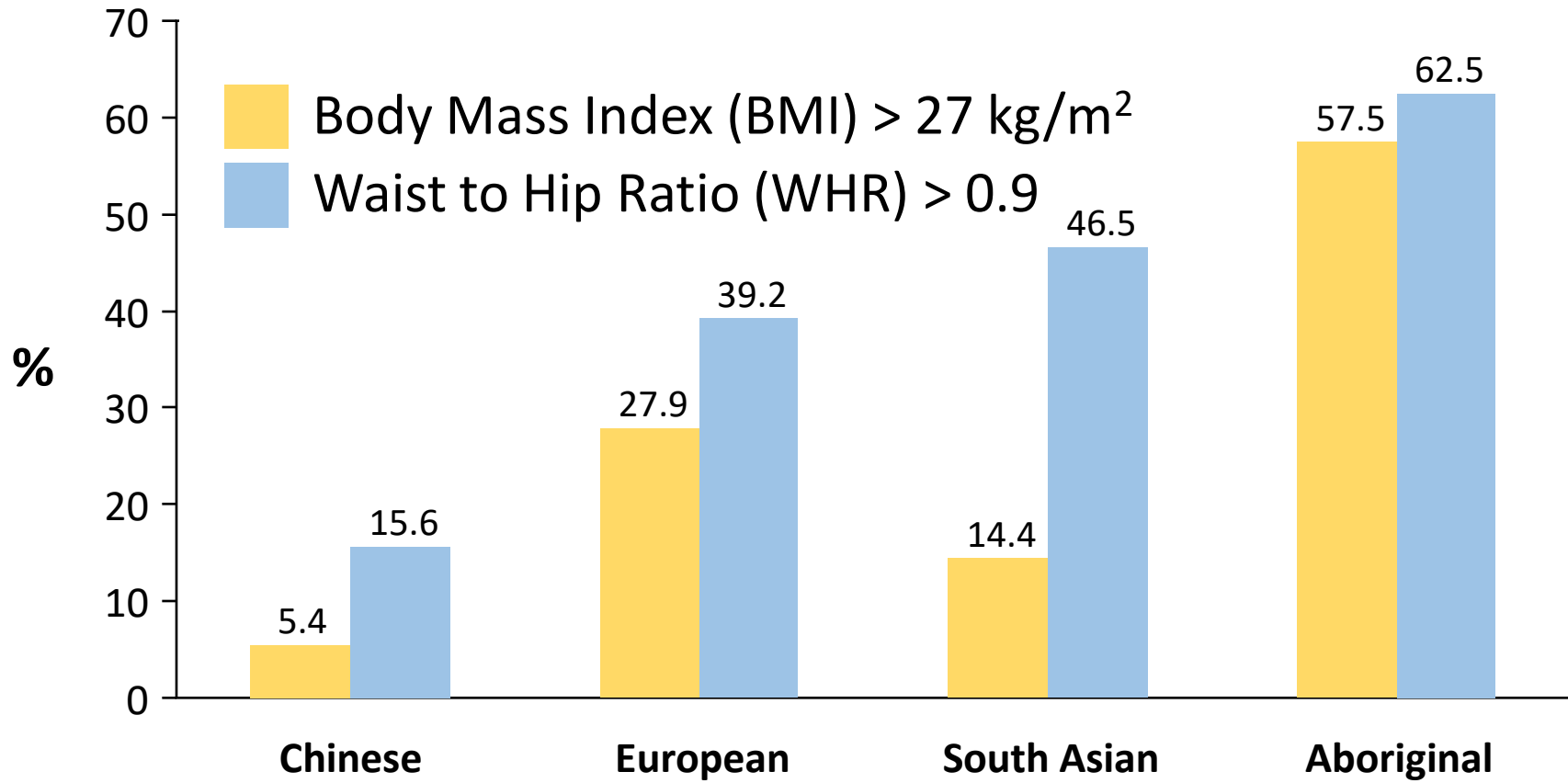
Traditional Modifiable Coronary Risk Factors

- Obesity

- South Asians have increased abdominal visceral fat, adipose tissue (fatty tissue), and an increased insulin resistance
- Visceral fat is excess fat surrounding important organs (i.e. liver, pancreas, intestines) and is known to affect hormone function
- This creates risk for numerous for health problems such as heart disease and type 2 diabetes

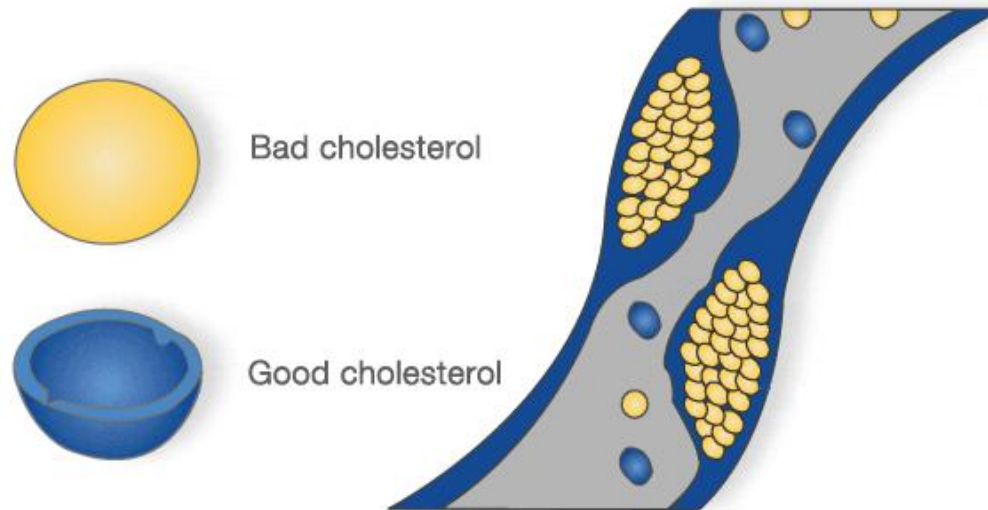


Abdominal Obesity and BMI



Traditional Modifiable Coronary Risk Factors

- Abnormal Lipids (Dyslipidemia)
- Higher low-density lipoprotein (LDL) cholesterol and total cholesterol
 - Higher triglycerides
 - LDL particle size tends to be smaller in SAs as well
 - Lower high-density lipoproteins (HDL) levels, but also higher concentration of small, less-protective HDL particles

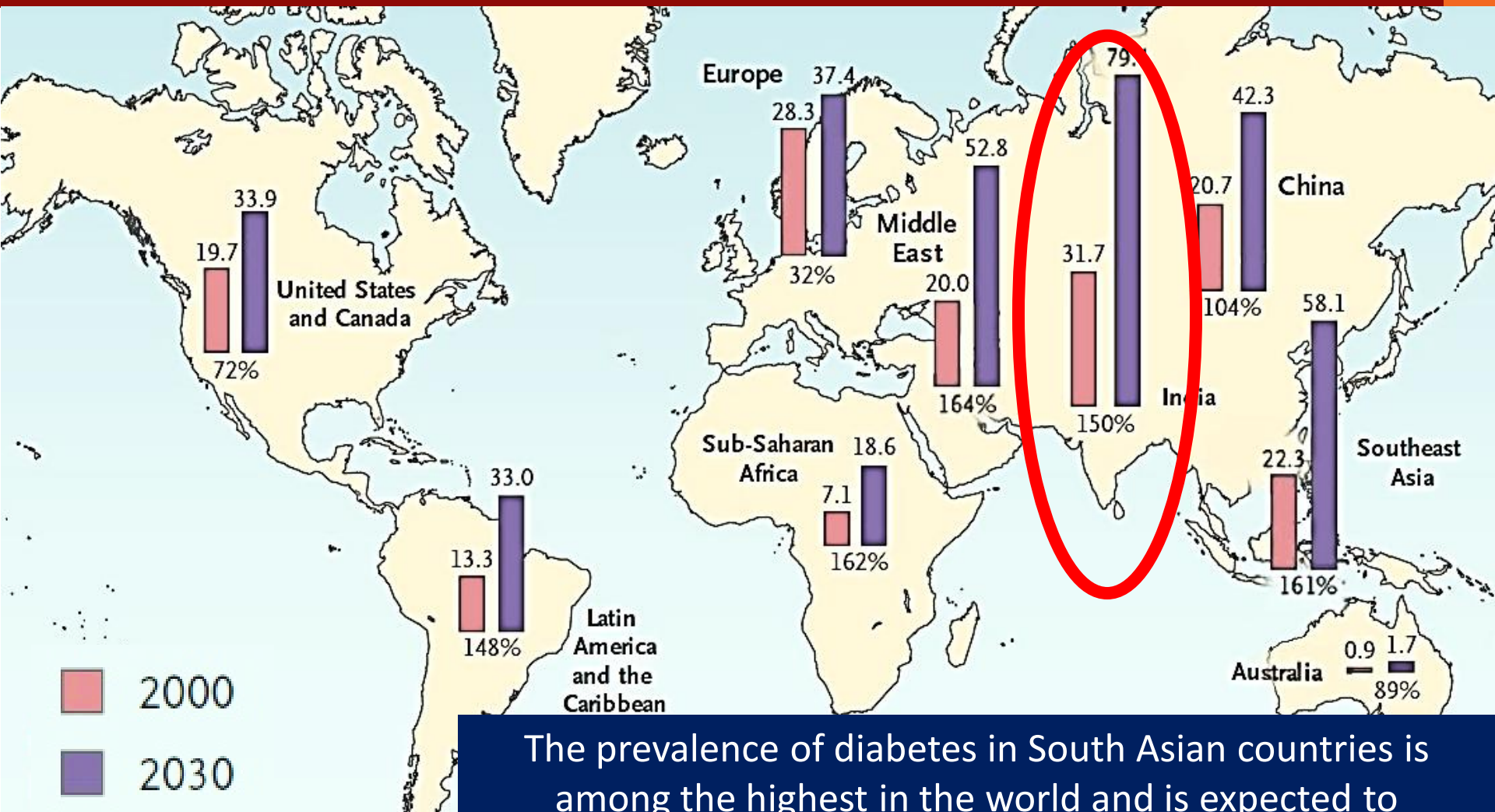


Traditional Modifiable Coronary Risk Factors

- Diabetes
 - South Asians in Canada have higher fasting levels of glucose
 - South Asians experience a 50% higher risk of developing Type 2 Diabetes Mellitus (T2DM)



Worldwide Prevalence of Diabetes



The prevalence of diabetes in South Asian countries is among the highest in the world and is expected to skyrocket in the next couple of decades

Traditional Modifiable Coronary Risk Factors

- Lack of protective factors
 - South Asians are less physically active than other populations
 - South Asians consume less fruits and vegetables daily than other populations



Other factors: Migration and Urbanization

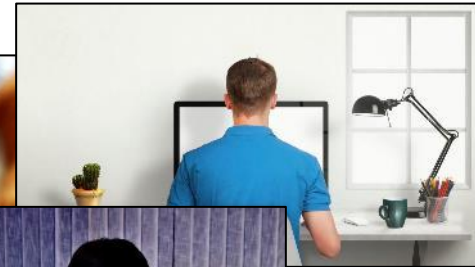


Urbanization

Low caloric intake
High energy expenditure
Low BMI and WHR



High caloric intake
Low energy expenditure
High BMI and WHR



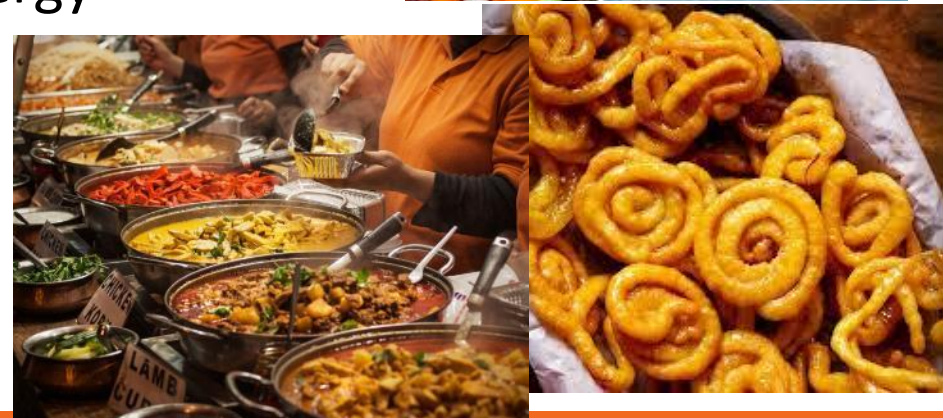
Environment and Obesity

- Current environment promotes behaviours that cause obesity
 - Energy-dense foods are easily accessible, convenient, relatively inexpensive and palatable
 - Portion sizes have increased at restaurants
 - Advances in technology and transportation in daily life mean that low levels of physical activity are needed for survival

High energy intake and low energy expenditure



OBESITY





The Good News Is... You Can Prevent Heart Disease



Consume A Healthy Diet

- Although South Asians tend to eat the same amount of food as others, their diet usually contains more carbohydrates
- These foods increase blood sugar levels more quickly and severely than other foods, therefore increasing risk of diabetes and heart disease



Ex. Naan bread, idli, potato curries, halwa, biryani, sweets

Reading Nutrition Labels

Nutrition Facts

Serving Size 2/3 cup (55g)
Servings Per Container About 8

Amount Per Serving

Calories 230 Calories from Fat 40

% Daily Value*

Total Fat 8g **12%**

Saturated Fat 1g **5%**

Trans Fat 0g

Cholesterol 0mg **0%**

Sodium 160mg **7%**

Total Carbohydrate 37g **12%**

Dietary Fiber 4g **16%**

Sugars 1g

Protein 3g

Vitamin A 10%

Vitamin C 8%

Calcium 20%

Iron 45%

* Percent Daily Values are based on a 2,000 calorie diet.
Your daily value may be higher or lower depending on
your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

- **Serving size:** If you eat the serving size shown on the Nutrition Facts Table you will get the amount of calories and nutrients listed.
- **Calories:** tell you how much energy you get from one serving of a packaged food.
- **Daily Value (% Daily Value):** tells you if there is a little or a lot of a nutrient in one serving of a packaged food.
 - * 5% DV or less is a little
 - * 15% DV or more is a lot
- Try to get more: Fibre, vitamin A, vitamin C, iron, calcium
- Try to get less: Fat, saturated fat, trans fat, sodium, cholesterol

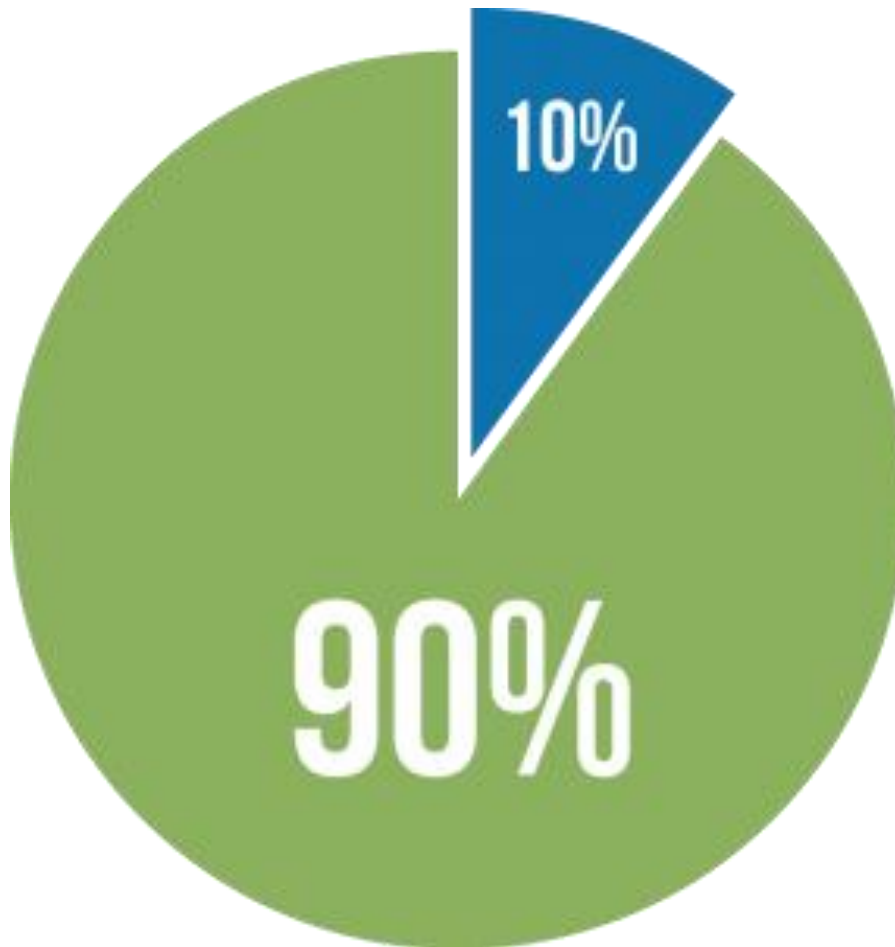
Eating Out

Eating out at parties or restaurants can be very challenging:

- Meals may not be balanced
- Menus may not having healthy options
- Large portion sizes
- There are hidden fats and sugars, and high salt content



90/10 Rule



90% of the time,
choose healthy options

10% of the time, allow
yourself "treats"

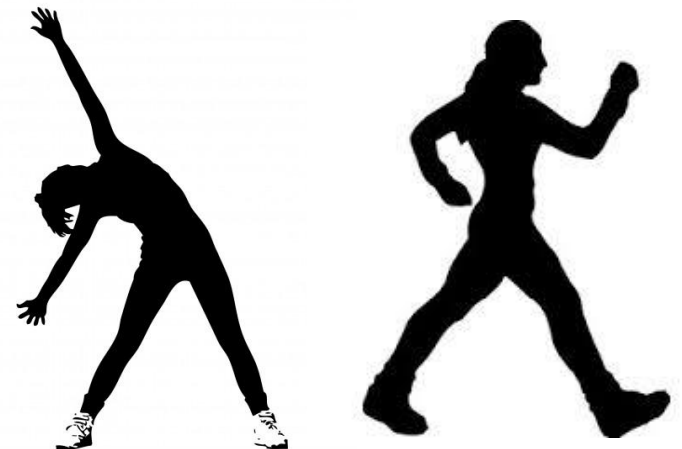
But don't just blame the diet!



Diets across South Asia (i.e. North vs South India) can be radically different, yet CVD rates are high throughout the region. Therefore, the higher rates cannot be explained by diet alone.

Exercise Regularly

- South Asians in Canada appear to be relatively sedentary
 - They report less work-related physical activity, time spent playing sports, and leisure time activities compared to Europeans.
- Being active can reduce the risk for heart disease by more than 50%
- Just brisk walking, for example, is associated with 30-50% reduction in risk for heart disease, stroke, obesity and diabetes



How Much Exercise Do You Need?

- You have to exercise according to your own personal fitness level, and your own personal goals
- As a general guideline, adults should try to do at least 30-45 minutes of exercise 4-7 days of the week

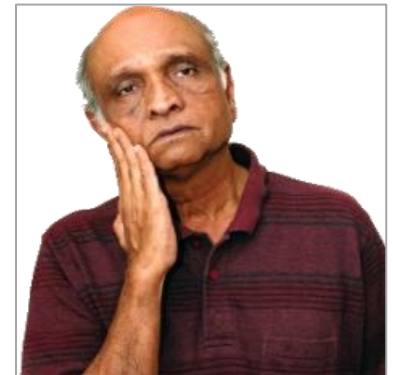
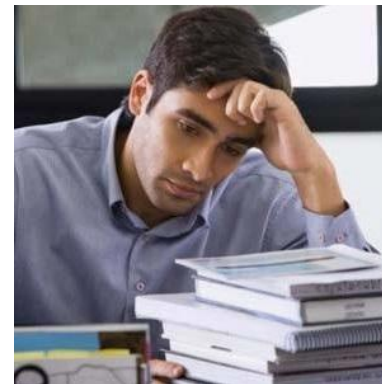


Reduce Your Stress



What causes stress?

- Depression
- Sleep apnea
- Poor sleep
- Psychosocial distress
- Loss of sense of control
- Chronic stress
- Stressful events in life



What happens next?

When stress is excessive, it can lead to:

- Headaches, stomach pains, back pains, asthma, ulcers, intestinal issues, etc.
- It can ALSO increase your risk for heart disease by:
 - Increasing your blood pressure
 - Increasing cholesterol levels
 - Increasing chance of smoking, drinking too much, physical inactivity, overeating and overeating

So managing your stress is very important.

What are Some Ways You Can Manage Stress?

- Get some fresh air
- Exercise
- Eat healthy
- Try to get enough sleep
- Manage your time wisely (don't leave things to the last minute)
- Stay positive and optimistic
- Be realistic and know that you can't control everything
- Use positive self-talk
- Make time for daily relaxation

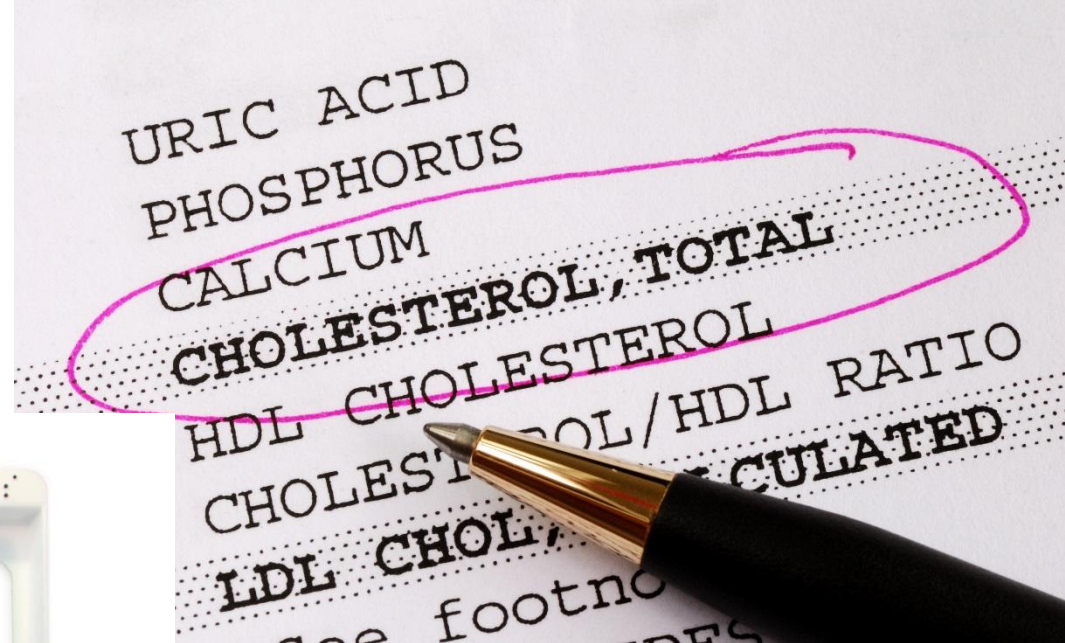
Taking Action

- Ask yourself what the sources of your tension or stress are
- Be aware of those triggers and try to find ways to avoid them altogether
- Come up with ideas and strategies in advance so you know what to do when you're in a stressful situation

Avoid Smoking



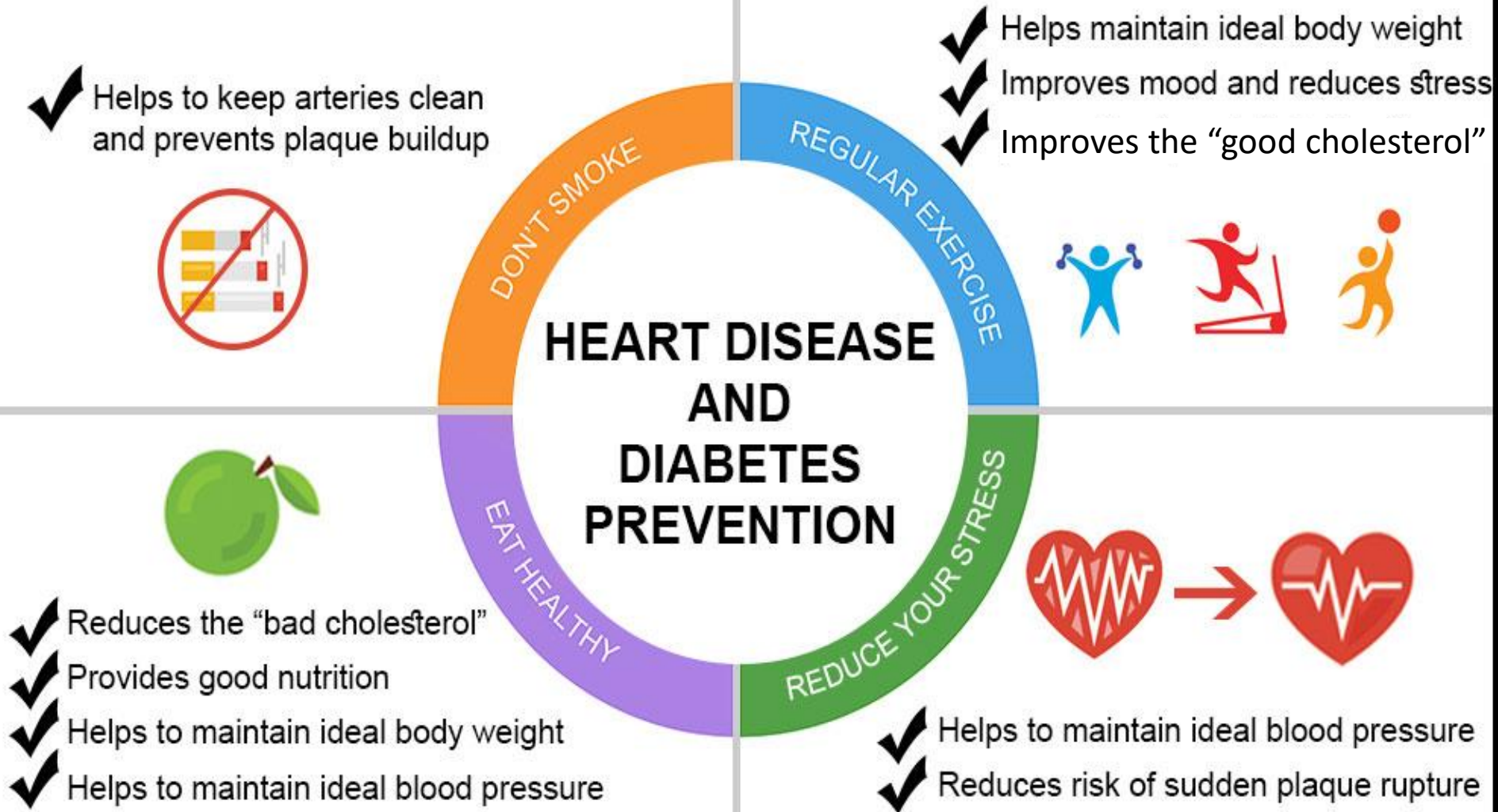
Take your medications regularly



Remember

- If medications are causing any issues or side effects in your body, your lab results will detect that
- You should still be trying to eat healthy and exercise, with or without medication!
- Medications that manage your cholesterol and blood pressure levels are prescribed to help you PREVENT heart disease
- Try to take your medications at the same time every day
- Buying medications in other countries can be dangerous
- If you are trying natural remedies, make sure you know exactly what you are taking

Prevention Strategies



Careful and Early Risk Assessment is Important



South Asian Cardiovascular
Risk Assessment Clinic

- 2 locations in the Greater Toronto Area
- Over 1,000 patients assessed by leading cardiac specialists
- Detailed cardiac testing as needed
- Personalized heart disease risk evaluation and report card
- Counseling on diet and lifestyle changes for primary prevention
- Services in English, Punjabi, Hindi and Urdu
- No charge for patients
- **Participating in early risk assessments can save lives!**

Did you know that South Asians are at increased risk for cardiovascular disease and diabetes?



How can you protect yourself?

SANSAR Website - www.sansar.org



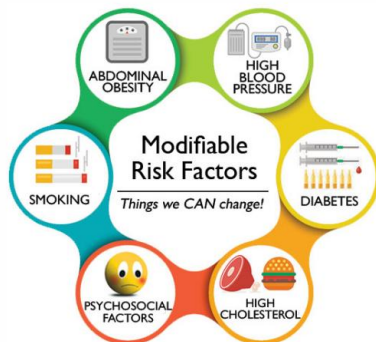
Our Purpose

The South Asian Network Supporting Awareness and Research (SANSAR) focuses on increasing community awareness, research and education. As well, we conduct research to determine if South Asians are at a higher risk for developing heart disease and diabetes, and we conduct community and research initiatives to improve the health and reduce the risk of these diseases.

Cardiovascular Risk in South Asians

Heart Disease

Please Do



[Click here to read more about these modifiable risk factors, and how to manage them.](#) Research has shown that at least 50-75% of the risk for a heart attack can be predicted by these 6 modifiable factors. These are all things that we have control over.

Healthy Eating

Food provides the body with the nutrition it needs so that it can grow and function well. In fact, a healthy diet can help to protect the body against many diseases, including heart disease and diabetes. The right habits in your daily life can help to maintain your blood pressure, cholesterol and can help you keep off excess weight.

For example, eating breakfast or dinner outside the home can increase your risk of obesity. Even simply skipping breakfast has been associated with a 450% increased risk of obesity, which is a major risk factor for diabetes and heart disease.

- **Basic Nutritional Tips**

What to increase in your diet and what to decrease. Explanations, tips, examples and more.

- **Healthier Cooking**

Tips, substitutions, ideas for children's meals, and more.

- **Eating Out**

How to make healthier choices at parties, restaurants, etc.

- **Grocery Shopping**

Tips and tricks, reading nutrition labels, etc.



Applications for the 2016 Award are now closed. The winner will be announced on December 9th.



SUMMARY



SUMMARY

- South Asians are at highest risk for cardiovascular disease and diabetes
- Be aware of the increased risk of CAD and its risk factors (i.e. ethnicity, age, gender, family history, obesity, diet)
- Managing stress is important to lower blood pressure, cholesterol levels and decrease the chance of smoking, drinking too much, physical inactivity, overeating and overeating
- Attend classes at community centres, places of worship, etc.
- Partake in yoga, mindfulness and deep breathing exercises
- Ensure to get screened and do an early risk assessment
- Stay educated and access resources
- Take action towards healthy living!



SANSAR

OUR MISSION

To promote cardiovascular health for South Asians through community awareness, education, research and clinical initiatives.

South Asians are at a higher risk for developing cardiovascular disease and diabetes. Our efforts are dedicated to improving the health and reducing the risks faced by this population.

WWW.SANSAR.ORG

Charitable registration # 84782 1634 RR0001

Programs at SANSAR

- Mera Dil/My Heart – Risk Management Program
 - Empowers the South Asian community to reduce and manage their heart disease and diabetes risk through education, lifestyle interventions and support
- South Asian Adolescent Diabetes Awareness program (SAADAP)
 - Offers South Asian adolescents with a family history of type 2 diabetes mellitus in the GTA an opportunity to attend group classes and individual consults to provide education on diabetes prevention through physical activity and nutrition
- BREATHE (Bringing Resources to Eliminate All Tobacco through Health Education)
 - Counselors pair with patients interested in finding out more information about quitting and together they make a personalized plan to quit smoking

Programs at SANSAR

- KIDS at heART
 - Health education through school-based initiatives emphasizing the importance of making heart-healthy decisions as a family to combat obesity, the increasing rates of childhood type 2 diabetes, and cardiovascular disease
- Physician Education
 - Educating physicians and other healthcare professionals on the growing epidemic of cardiovascular disease and diabetes faced by the South Asian population
- The SANSAR Young Investigator Award
 - Provides recognition and support to an outstanding young investigator whose research activities are focused on the health of South Asians

GET INVOLVED WITH SANSAR!

DONATE

All of SANSAR's programs and initiatives are free for the community. Help us maintain and expand our services by becoming a monthly donor or by sponsoring an event/program.

VOLUNTEER

Join one of our steering committees or advisory councils. You can also help at special events, and at community outreach initiatives. We are always looking for enthusiastic and dedicated volunteers from a variety of work and educational backgrounds!

CONNECT US

We want to connect and collaborate with business and community leaders. Help us find sponsors, partners and organizations who can work with us to further our mission.

Thank you!



Any questions?

Email: admin@sansar.org