

According to the World health organization ischemic heart disease is the leading cause of death worldwide. There are several factors which increase the risk of developing cardiovascular disease. Modifiable risk factors include high blood pressure, smoking, dyslipidemia, impaired fasting glucose, obesity and living a sedentary lifestyle. Non modifiable risk factors include family history, age and gender. Ways of adopting a healthy lifestyle to ensure a healthy heart include smoking cessation, following a heart-healthy diet, maintaining a healthy weight, ensuring regular health screenings and exercising regularly.

# Don't smoke or use tobacco

Cigarette smoking is a significant public health problem that influences health and disability. Tobacco smoking is said to cause serious health problems; including the development of atherosclerotic disease, myocardial infarction, stroke, lung cancer, Chronic Obstructive Pulmonary Disease (COPD) and sudden cardiac death. Nicotine in cigarette smoke narrows your blood vessels resulting in a higher resting heart rate and blood pressure. The risk of heart disease drops dramatically when one quits the use of tobacco.



# Eat a heart-healthy diet

Eating a diet rich in fruits, vegetables, whole grains, low-fat dairy products and low-fat sources of protein, can help protect your heart and reduce the risk of heart disease. Saturated food products and trans-fat can raise blood cholesterol levels therefore increasing the risk of coronary artery disease. Polyunsaturated fats (e.g. Omega-3 fatty acids) is known to lower blood pressure and protect the heart against heart disease.

Alcohol should be used in moderation. The recommended daily allowance is less than two drinks for men and one a day for women.

## **Exercise**

Exercise has physical, metabolic, psychological and emotional benefits. Physical activity reduces the incidence of stroke, high blood pressure, high cholesterol, diabetes, cancers, osteoporosis, depression and obesity. Significant health benefits can be obtained by boosting daily activity. The American College of Sports Medicine recommends 30 minutes of light to moderate activity on most days of the week. For more information on exercise recommendations, contact a biokineticist (see details below).

# Maintain a healthy weight

An increase in body weight increases the risk of hypertension, high cholesterol, diabetes, and heart disease. Body Mass Index (BMI) is a measure of the lean mass and fat mass components. It is calculated as weight in kilograms (kg) divided by height in meters (m) squared. A normal BMI is considered 18.5-24.9. BMI can be improved through regular exercise and a controlled healthy eating plan. Waist circumference measures abdominal fat and is a helpful tool to measure stress on the heart. Men are considered overweight if their waist circumference is greater than 102 cm. Women's waist circumference should be less than 88 cm.



# Get regular health screenings

High blood pressure and cholesterol don't always present themselves with symptoms therefore it is important to have regular screenings. Regular exercise and healthy eating habits facilitate with blood pressure, cholesterol and diabetes regularity.

# **Blood pressure**

Blood pressure is measured to screen for hypertension and cardiovascular risk assessment. High blood pressure (hypertension) places great stress on the heart. The pressure exerted on the arterial walls during the contraction of the left ventricle is known as systolic blood pressure (SBP). A SBP of  $\leq 120$  mm Hg at rest is considered normal. Values  $\geq 140$  mm Hg is considered hypertensive. The pressure exerted on the arterial walls during the resting phase of ventricular beats is known as diastolic blood pressure (DBP). Values of  $\leq 80$  mm Hg at rest are considered normal, whereas values  $\geq 90$  mm Hg are considered hypertensive.

# Cholesterol

Cholesterol is a fatty, waxy substance in the blood. Dyslipidemia is one of the major risk factors for coronary heart disease. A normal fasting total cholesterol is less than 5.2 mmol/l.

# Diabetes

Glucose is a simple sugar found in certain foods. The measuring of blood glucose levels is an important test in diabetes. A normal fasting glucose is < 5.6 mmol/l.



It is vital to take control of your health to ensure a healthy heart. Being screened and assessed by a biokineticist is an important step in improving your quality of life. A biokineticist will address cardiac risk factors through individualized scientific assessments and exercise prescriptions.

#### For more information, please contact the Institute for Sports Research at 012 420 6033, or visit our website at http://www.up.ac.za/isr.

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