

Editorial

and the Student Health Service of the Department of Health



The heart is vital to the cardiovascular system of our body. It connects with all blood vessels in the body and provides oxygen and nutrients to different organs to maintain life. We are going to discuss the 'Caring for the heart, prevention of cardiovascular diseases' in this article. Our student will learn more about the risk factors of cardiovascular disease and take preventions accordingly.

Prevention of cardiovascular diseases:

- 1. Healthy eating
- 2. No smoking or quit smoking
- 3. Regular physical activity
- 4. Weight control and prevent obesity
- 5. Prevention of hypertension
- 6. Management of stress

In conclusion, no matter what age group we are in, healthy lifestyle is always the best strategy to prevent cardiovascular diseases.

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Introduction

The heart is the powerhouse of our life. Together with the blood vessels (arteries, veins and capillaries), the heart forms the powerful, yet a meticulous circulation network called the cardiovascular system. When we feel our heart beating, we know that it is working to transport the blood, nutrients and oxygen to our body organs so that they could function efficiently. No doubt, we care for our health and want to protect the heart.

Cardiovascular diseases are a group of diseases of the heart and blood vessels. The most common types are coronary artery disease and stroke. In general, the main problem comes from the plaques of fatty substances build up inside the blood vessel which is then narrowed and even blocked. A shortage of the blood and oxygen in the body organs hinders their functions, resulting in heart diseases, hypertension, stroke, retinal disease and kidney diseases. In 2012, some 6,000 people in Hong Kong died from heart diseases and some 3,000 people lost their lives because of stroke. Cardiovascular diseases are important and we should not ignore them.





Heart attack or stroke are emergency medical conditions. Nonetheless, they result from long-term illness. The abnormal changes in the heart or blood vessels may have developed for a long time before the signs and symptoms appear. Actually there are a number of factors that affect people's risk of getting the diseases. They include age, gender, family's health history, smoking, excessive drinking, high blood pressure, high blood lipids, high blood cholesterol and diabetes.

The heart and blood vessels function less well as we age. Men over 45 year old and women over 55 year old are at higher risk of getting cardiovascular diseases. Family history of heart disease, stroke, high blood cholesterol and hypertension also increase the risk. One important thing is that our behavior and lifestyle affect the risk of getting the diseases, and in the long run, can bring about serious health consequences. On the other hand, when we change our unhealthy behavior or lifestyle, the risk comes down.

The importance of prevention

The World Health Organization reported that 80% of the coronary artery disease and stroke were related to unhealthy diet, lack of physical activity, smoking and harmful drinking. The recently known metabolic syndrome is actually a combination of several risk factors. For example, obesity, high blood pressure, high blood cholesterol and high blood sugar cause disturbances in the body metabolisms. People with the syndrome are far more at risk of getting coronary heart disease, stroke and diabetes, than people who do not have the syndrome.

Cardiovascular disease is not merely a problem of the aging adults or elderly. Some risk factors, for example, dietary habit, physical activity and smoking, may have started at childhood or adolescence. These habits become high risk lifestyle, which may continue into the adulthood or elderly stage. The consequence is even worse if one has several high risk behaviors.

For this reason, childhood is the critical stage that prevention should start. A healthy lifestyle with healthy eating, regular physical activity and no smoking helps children lower their risk of getting cardiovascular disease when they grow up.

Health Topic: Caring for the heart, prevention of cardiovascular diseases Prevention of cardiovascular diseases

1. Healthy eating

A balanced and nutritious diet is extremely important to a growing child. Grains, vegetables, fruits, added with right portion of fish, meat, eggs, beans and dairy products are sources of energy, nutrition, vitamins and minerals, thus ensuring proper growth and health maintenance. Yet, excessive eating or imbalance diet pattern is unhealthy. High sugar, high salt and high fat food may accelerate the hardening of the blood vessels, deposition of fats and rise of blood pressure. Suitable food choices and in suitable portions are essential to lower the risk of getting cardiovascular disease.



2. No smoking or quit smoking



Smoking stimulates the heart beats, lowers the oxygen supply to the heart and hardens the blood vessels, thus increases the risks of heart disease. Studies pointed out that both smoking and second-hand smoking are hazardous to the heart. Therefore, reject to smoke is the best prevention. Apart from that, quit smoking for 1 year lowers the risk by one-half, when compared to smokers. Quit smoking for 15 years reduces the risk to the same level as non-smokers. Quit smoking as early as possible is surely advantageous.

3. Regular physical activity

The benefits of physical activity are many-folds: make the heart and lung stronger, lessen the high blood pressure, stabilize sugar level and lower blood cholesterol. These are helpful in lowering the rate of coronary heart disease, hypertension, stroke and diabetes. The World Health Organization advised children of 5-17 years old to have moderate to vigorous physical activities (for example, swimming, running and ball games...) for at least 60 minutes a day, and adults to have moderately vigorous physical activities 150 minutes a week or vigorous physical activities 75 minutes a week. Set the goal with a plan to keep active and even smaller amount of physical activities can be a good start to gain heart health.

4. Weight control and prevent obesity

Obesity is one of the contributing factors of hypertension, diabetes and high blood cholesterol. Some early pre-disease changes of cardiovascular disease, such as diabetes, high blood pressure, high blood lipids and metabolic syndrome, may have already happened in obese or overweight children and adolescents. Studies indicated that cardiovascular disease might appear at an earlier age, if these risk factors were not curbed in their young age. Obese adolescents may become obese adults and obese adults are likely to have high lipid or high cholesterol also. Their risk of having cardiovascular disease is raised further. Therefore, healthy eating and regular physical activity starting in the childhood is the mainstay of preventing obesity and cardiovascular disease.



5. Prevention of hypertension



Hypertension is not common in children and adolescents. Some cases are caused by medication or physical diseases (such as diseases of the heart, kidney and endocrine system). The causes of many others are unknown. Nevertheless, it is observed that family health history, obesity and high salt diet probably put someone at risk of high blood pressure. Studies showed that children with higher blood pressure readings had higher chance of getting hypertension when they became adults. Hypertension would lead to blood vessel hardening and increase the risk of heart disease. Through healthy diet, regular physical activity and alleviating excessive stress, prevention of hypertension is a means of cardiovascular diseases prevention.

6. Management of stress

Stressful events in daily life probably increase our risk of having cardiovascular disease. Excessive stress not only raises the blood pressure, but also quickens the heart beats. People may also resort to unhealthy ways to relieve pressure, such as binge eating, smoking, drinking alcohol and working exhaustively. It should be healthier if stress is handled with positive attitude, healthy lifestyle, regular physical activity and adequate rest. These help to bring down the risk of getting cardiovascular disease as well.

Health Topic: Caring for the heart, prevention of cardiovascular diseases

Conclusion

No matter what age group we are in, healthy lifestyle is always the best health strategy in the long run. Keeping the standard body weight, healthy eating and exercise more are keys to a healthy heart. Children and adolescents should also build up these healthy habits, take good care of their health, attend to risk factors and protect the heart.

• References

- American Heart Association. Available at http://www.heart.org/HEARTORG/Conditions/More/MyHeart andStrokeNews/Coronary-Artery-Disease---Coronary-Heart-Disease UCM 436416 Article.jsp (accessed Jan 2014)
- World Health Organization. Available at http://www.who.int/mediacentre/factsheets/fs317/en/ (accessed Jan 2014)
- National Heart, Lung and Blood Institute. Available at http://www.nhlbi.nih.gov/health/healthtopics/topics/cad/atrisk.html (accessed Jan 2014)
- Centre for Health Protection, Department of Health. Available at http://www.chp.gov.hk/en/health_topics/9/25.html (accessed Jan 2014)
- Tobacco Control Office, Department of health. Available at http://www.tco.gov.hk/eindex.html (accessed Jan 2014)
- Student Health Service, Department of Health. Available at http://www.studenthealth.gov.hk/tc_chi/health/health.html (accessed Jan 2014)



My views on Cardiovascular Health:

- Do more exercise to maintain cardiovascular health.
- No smoking, no alcohol drinking and no drug abuse.
- Eat less fried or junk food but eat more fruits and vegetables.
- When feeling unhappy and under stress, seek help from friends or family members.
- Reduce intake of food with high fat, high salt or high sugar content.
- Do aerobic exercise every day to strengthen the heart and blood vessels.
- Going to bed early, get up early in the morning, healthy eating and regular exercise are important factors to maintain cardiovascular health.
- No overweight.







My grandfather was diagnosed to have heart disease and has been hospitalized.

Oh! Sorry to know that. How do you feel?





My uncle also have the same problem. Fortunately, he was treated promptly. After recovery, he ate healthily, exercise regularly and refrained from smoking. His health has improved and he managed to keep an optimal weight.

Right! If we can adopt a healthy lifestyle as a child will prevent us from the cardiovascular diseases.





We have to remember this and work hard for our health.

Junior Health Pioneer

Junior Health Pioneer saw Siu-kin waiting for blood pressure measurement. He asked Siu-kin......



Of course.
I am worried about the measurement.

Why do I need to measure my blood pressure? I do not have high blood pressure.



Don't be worry. Just relax. It is just a health screening procedure to see whether your blood pressure is within the standard or not. It reflects on your cardiovascular health. If your blood pressure persists in the high range, you may have the risk of high blood pressure.



You should consult your family doctor for further assessment. If necessary, doctor will prescribe medication to control your blood pressure.



For enquiries of student's health problem, please send e-mail to "Health Box".

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