







Dear readers,

Merry Christmas and Happy new year from the ECHO team! In this issue of A Simple Guide, Dr Maverick Uy of the Department of Cardiology in Changi General Hospital shares with us useful information about coronary artery disease, and specialist advice on its prevention and management. It is also important to have regular checkups, with screening for heart disease as indicated. Wishing everyone a good start on your new year's resolutions and looking forward to an excellent 2024!

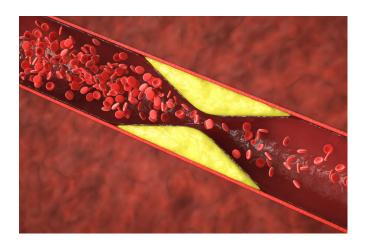


Coronary Artery Disease: How Does It Happen and How Do We Stop It?

What Caused Coronary Artery Disease?

Heart attacks and strokes are the leading cause of death and disability globally. In Singapore, heart disease due to blockages of cardiac arteries is the third leading cause of death

Coronary Artery Disease is caused by atherosclerosis, the thickening or hardening of the arteries. It is the result of sustained exposure of arteries to a variety of issues caused by factors like diabetes, hypertension, tobacco smoking and stress. The damage to these arteries causes the movement of certain forms of cholesterol, like low-density lipoprotein cholesterol (LDL-C), into their walls eventually leading to the formation of plaque.





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Formation of extensive plaque in the arteries of the heart increases the risk of heart attacks, abnormal heart rhythms, heart failure, disability, and death.

The formation of plaque takes years to form, and symptoms may not be apparent for a long time. Even in the absence of symptoms, heart attacks can still occur when arteries with small amounts of plaque are subjected to certain conditions. Atherosclerosis naturally progresses as we age but the prevention of plaque, slowing its progression, and in early cases, even the regression of plaque is possible!

Overcoming Atherosclerosis

Here are a few strategies to achieve this:



Stop Smoking

Cigarette smoking is responsible for 50% of all avoidable deaths in smokers and half of these are due to diseases caused by atherosclerosis. The risk of heart disease in smokers <50 years of age is 5 times higher than in non-smokers. Smoking cessation has been shown to reduce the risk of death by up to 36% in people with known heart disease. There are different strategies to stop smoking, including medications that increase the likelihood of success.

Weight Management



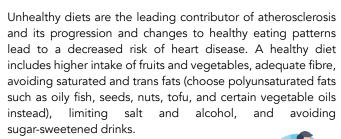
Over the recent decades, body mass index - measured as weight (in kg) divided by squared height (in m2) - has increased worldwide. The lifetime risk of heart disease is higher in those who are overweight or obese compared to those with a normal BMI (20-25 kg/m2). Obesity has been associated with a shorter lifespan, and being overweight is associated with an increased risk of heart disease at a younger age. In patients with heart disease, intentional weight loss (aiming for BMI <25 kg/m2) reduces the risk of poorer outcomes.

Psychosocial Factors



Psychosocial stress, anxiety and depression increase the risk of poor outcomes in patients with heart disease. They also make it difficult to make positive lifestyle changes and follow therapeutic regimens. As they are commonly undetected, it is recommended to screen for them in order to start overcoming psychosocial barriers to a healthy life.

Healthy Diet



Physical Activity and Exercise

Exercise is known as the "polypill" due to its many beneficial effects on the heart and the body. Thirty to sixty minutes of moderate-intensity aerobic exercise at least 5 times a week is recommended, especially for patients with a history of heart disease. Even irregular leisure-time physical activity and increasing overall activity reduces the risk of heart disease. Weight-training or resistance exercises also help to maintain muscle mass and strength. These different types of exercise contribute to improved control of blood pressure, sugar level and cholesterol, and hence control the progression of coronary artery disease.

Screening of Risk Factors and How to Control Them



Prolonged control of bad cholesterol (like LDL-C), blood pressure, and diabetes result in a lower risk of formation and progression of atherosclerosis. Healthcare guidelines advise regular checks for risk factors starting from 40 years old. Studies have even shown potential benefits of starting screening in people as young as 20 years old. Although control of diet and lifestyle contributes to the control of risk factors, medications, like statins, have had the most success for the reversal of plaque.

Coronary artery disease is a common condition and one of the leading causes of death worldwide. It can be prevented and controlled through a sustained healthy diet and lifestyle, along with the control of risk factors, which may require medications. Speak to your healthcare provider to discuss the different strategies to prevent coronary artery disease!



This is a creative way of introducing broccoli into one's diet. Serve these buns plain or with a little bit of unsalted butter.



Live Well by Eating Right! Broccoli Buns

Preparation Time: 1 hour 30minutes

Makes about 14 buns

PER SERVING			
Calories	113 kcal	Cholesterol	0.4 mg
Carbohydrate	20.3 g	Fibre	1.1 g
Fat	2.6 g		

This recipe is brought to you by the Dietetics and Food Services Department, Changi General Hospital.

METHOD:

- Preheat oven to 210°C (410°F)
- Combine bread flour and wholemeal flour and sift into a mixing bowl. Add yeast and sugar and mix well, then add water and milk and knead for 2 minutes. Add olive oil and knead until a soft dough is formed. Add broccoli, mix well and leave dough to rest (at room temperature) for 30 minutes.
- (3) Divide dough in to 5 cm (2 inch) pieces and leave to rest (at room temperature) for another 10 minutes. Using the palm of your hand, flatten dough pieces into rounds on a lightly work surface. Leave dough to prove until doubled in volume.
- Place proved dough rounds on a greased baking tray, making sure they are evenly spaced out. Lightly brushed with a little olive oil and bake for 12-15 minutes, or until light golden brown. Remove from heat and set aside to cool before serving.

INGREDIENTS:

Bread flour - 280 g (10 oz)

Wholemeal flour - 85 g (3 oz)

Salt - ½ tsp

Instant yeast – 1 tsp

Water - 160 ml

Low-fat UHT milk – 70 ml

Olive oil - 30 ml (1 fl oz)

Broccoli – 55 g (2 oz), boiled until slightly tender, drained and chopped



CONTACT US!

SEND IN YOUR INQUIRIES TO:

- ECHO Programme: echo@cgh.com.sg

 Visit ECHO website: https://www.singhealth.com.sg/rhs/keep-well/

 Health-Screening-in-the-East
- Health Up! Programme: health.up@singhealth.com.sg

 Visit Health Up! website: https://www.singhealth.com.sg/rhs/health-up

ALWAYS WANTED TO GET HEALTHIER BUT TOO BUSY TO ACT?



Keep Well, Get Well and Live Well

A SingHealth community programme

IS THE PROGRAMME FOR YOU!

Health Up! is a SingHealth initiative that aims to encourage individuals to adopt healthy lifestyle habits and complete age-appropriate health screenings.

Kickstart your journey to better health now!

- Complete the Onboarding Survey to help us understand your health status and lifestyle habits
- Receive a <u>Health Action Plan Personalised</u> for <u>You (H.A.P.P.Y)</u> based on your current health and fitness levels
- Be recommended to selected health screening(s)* if you are eligible
- Get connected to various fitness activities and pick up health and wellness tips from trained professionals



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Singapore Citizens & PRs
Aged 40 and above
Living in the East



Mild to Moderate Medical Conditions?

Your GP can treat it!



The GPFirst Programme is an initiative by Changi General Hospital's A&E Department in partnership with over 170 participating GP clinics in eastern Singapore.

Patients with mild to moderate symptoms are encouraged to seek treatment at the GP clinics first instead of going to the A&E.



- Be accorded higher priority over non-emergency cases
- Receive a \$50 subsidy* on the prevailing attendance fee at CGH A&E



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*Terms and Conditions apply





