

Matters of the Heart

关怀您的“心”



There are over 1.5 million heart attacks per year and at least one-third of patients die before reaching the hospital. When the heart muscles are starved of blood, and the heart goes into a dangerous rhythm, rapid death is imminent!

每年有150万宗心脏病发作的病例，当中有三分之一的患者在抵达医院之前病发去世。当心肌缺血时，心脏的跳动节奏变得不寻常和危险，并将面临死亡。

Heart Statistics

Heart disease is the leading cause of death in the United States and is a major cause of disability.

The most common heart disease in the United States is coronary heart disease, which often appears as a heart attack.

In 2009, an estimated 785,000 Americans had a new coronary attack, and about 470,000 had a recurrent attack.

About every 25 seconds, an American will have a coronary event, and about one every minute will die from one.¹

Although heart disease is sometimes thought of as a "man's disease," it is the leading cause of death for both women and men in the United States, and women account for nearly 50% of heart disease deaths.

Heart disease is also the number one killer of Malaysian women, not breast cancer.

Each year about 500,000 people suffer first-time strokes and 200,000 have recurrent attacks; 22% of men and 25% of women will die within one year.²

Stroke is the third leading cause of death in the United States; it is a leading cause of disability and among the 700,000 stroke survivors, about 15-30% are permanently disabled.³

¹ Lloyd-Jones D, Adams R, Carnethon M, et al. *Heart Disease and Stroke Statistics—2009 Update. A Report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Circulation. 2009;119:e21-e181.*

² American Heart Association. *Heart Disease and Stroke Statistics—2007 Update.* Dallas, TX: AHA, 2007.

³ McNeil JM, Binette J. Prevalence of disabilities and associate health of the United States, 1999. *MMWR* 2001;50(7):120-5.

心脏资料统计

心脏病在美国是第一号杀手，也是导致残障的主要原因。

冠状性心脏病在美国是最常见的心脏病类型，一般被视为心脏病发作。

2009年，在美国大约有785,000宗冠状性心脏病袭击的新病例，470,000宗复发病例。

每25秒钟就有一个美国人面对心脏问题，每分钟就有一人因心疾而病发死亡。¹

虽然心脏病普遍被视为“男性疾病”，事实上，它却是美国男性和女性最为致命的杀手，女性患者占了心脏病死亡数据的50%。

在马来西亚的女性当中，它也是第一致命原因，而不是乳癌。

每年约500,000人初次面对中风问题，当中200,000属复发病例。22%男性和25%女性将在同一年死去。²

中风是美国第三大致命原因，它是导致残障的主要原因。在700,000中风病幸存者当中，约15-30%的病患有面对终身残障问题。³

¹ 洛-琼斯D, 亚当斯R, 康纳登M, 等人. 心脏病和中风病统计-2009年更新. 美国心脏学会统计委员会和中风统计委员会. 发行, 2009;119:e21-e181.

² 美国心脏学会, *心脏病和中风统计-2007年更新.* 德克萨斯州达拉斯市: AHA, 2007

³ 麦纽尔JM, 拜纳J. 美国残障和相关健康问题的普遍性, 1999, *MMWR* 2001;50(7):120-5.

What Is Heart Disease?

Heart disease is an umbrella term that refers to any disease or condition of the heart including coronary heart disease, hypertension, heart failure, congenital heart disease, heart valve disorder, heart infection, and heart arrhythmia. While some could be genetic, the main cause for concern is the build up of plaque - the accumulation of fat, cholesterol, and other substances on the interior walls of the blood vessels that supply oxygenated blood to the heart muscle. What many people are unaware of is that this underlying cause, known as atherosclerosis, is totally preventable.

When blood flow is greatly reduced through atherosclerosis, a heart attack can occur. In a heart attack, or *myocardial infarction*, the artery becomes totally blocked with plaque, preventing vital oxygen and nutrients from reaching the heart. A heart attack can cause death and/or permanent damage to the heart muscle.

From the same root cause, a stroke is when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or burst. Ischemic strokes occur as a result of an obstruction within a blood vessel supplying blood to the brain. The underlying condition for this type of obstruction is the development of fatty deposits lining the vessel walls. Stroke prevents part of the brain from getting the blood (and oxygen) it needs. Within a few minutes of starvation, the brain cells begin to die.

The Beat

Our heart is a muscular pump in the body. Throughout our lifetime, it beats rhythmically and continuously sending blood to the lungs, organs, and the rest of the body. Weighing less than 11 ounces and about the size of your fist, it beats 60 to 120 times a minute, depending on our degree of activity at that time. The heart pumps five quarts of blood around our body 500 times a day, with the average blood cell making a round trip through the body's arteries and veins every 60 seconds! Depriving this wonderful machine of its life source or throwing this life cycle out of sync can lead to serious consequences and is a crime punishable by death!

Risk Factors

There are many factors that influence your risk of heart disease, some we have control over and some we don't. Common risk factors include:

- **High blood cholesterol** - High blood cholesterol, especially an elevated LDL (low-density lipoprotein) or "bad" cholesterol, is a major risk factor for heart disease and also increases the risk of stroke. When the arteries become clogged with deposits made up of "bad" cholesterol, plaque, or scar tissue, the heart has a harder time pumping and circulating blood. This clogging causes a myriad of heart problems and can lead to a heart attack.
- **High blood pressure** - Blood pressure is the force of blood pushing against blood vessel walls. High blood pressure or hypertension increases the heart's workload, causing the heart to enlarge and weaken over time. In addition, more stress is exerted in places where the arteries bend and divide. This added pressure increases the speed at which cholesterol is deposited along the walls of the arteries and the development of heart failure.
- **Physical inactivity** - Many studies have shown that a lack of physical activity is a risk factor for heart disease and indirectly increases the risk of stroke. In fact, they found that heart disease is almost twice as likely to develop in inactive people than in those who are more active. When we are inactive and eat too much, we are prone to gaining excess weight. This often leads to high blood cholesterol, high blood pressure, diabetes, and an increased risk of heart disease or stroke.

什么是心脏病?

心脏病是一个用以形容任何心脏疾病与状况的泛称,其中包括冠状性心脏病、高血压、心脏衰竭、先天性心脏病、心脏瓣膜混乱、心脏感染及心律失常。当中有些是先天遗传因素,但其主要原因是脂肪、胆固醇及其他物质积累在血管内壁,堵塞了为心肌输送有氧血液的血管。而许多人没意识到的是,这种潜在的病症称为动脉粥样硬化,是完全可以预防的。

当患上动脉粥样硬化病时,血流的速度将严重减低,可导致心脏病发作。当心脏病发作或心肌梗塞时,动脉内壁将被堵住,阻止了重要的氧气和营养抵达心脏。心脏病有可能导致死亡或对心肌造成永久性创伤。

同样的原因可导致中风,即为脑部输送氧气和营养的血管被血块堵塞。缺血性中风的发生源于脑部缺血,这种潜在的血管堵塞状况是因为脂肪不断地积累在血管内壁上。中风会阻碍部分脑部吸取所需的血液(和氧气)。几分钟的脑部缺氧将导致脑部细胞开始死亡。

心脏

我们的心脏是个强健的血泵。在日常生活中,它有规律地跳动,并持续为肺部、各器官和身体其他部位输送血液。重量约11盎司,体积约如拳头般大小。它每分钟跳动60至120次,并随当下进行的活动剧烈与否而调整。我们的心脏每天给全身输送500次多达五夸脱的血液,以平均每60秒血液细胞通过动脉和静脉完成一个输血周期的频率输送。一旦如此完善美妙的血液循环系统失去运作效率,将会导致严重后果及死亡!

致病原因

有许多原因可能影响患上心脏病的风险,有些原因可控,有些则不可控。常见的风险原因包括:

- **高胆固醇** - 堆积的低密度脂蛋白或劣质胆固醇,是导致心脏病和中风的主要原因。当动脉被由劣质胆固醇、噬菌斑和损伤细胞组成的积废物堵塞时,血液输送和循环过程将变得更困难,并将造成大量的心脏问题和可能促使心脏病发作。
- **高血压** - 血压是指把血液泵出心脏的力量。血压升高即表示心脏需要以较高的动力才能将血液推出,心脏的负担自然加重。长期如此会导致心肌扩大和虚弱。此外,动脉的转弯和分化部位心脏将承受更大压力。这些额外压力将增加胆固醇堆积于动脉内壁的速度继而促成心脏衰竭。
- **缺少运动** - 许多研究结果显示缺少运动是导致心脏病的原因之一并间接提高中风的风险。实际上,专家发现不活跃的人比活跃者拥有两倍的更高机率患上心脏病。当我们饮食过多又缺少运动时,就容易超重。这将导致高胆固醇、高血压、糖尿病,进而增加患心脏病和中风的风险。

- **Obesity and overweight** - Our weight directly affects our cholesterol level. People who are overweight often have high cholesterol and raised blood pressure. Furthermore, the blood is more likely to clot. Excess weight increases the heart's workload. It also raises blood pressure and triglyceride levels, and lowers HDL ("good") cholesterol levels. It can also make diabetes more likely to develop. Many obese and overweight people may have difficulty losing weight, but losing even as little as five kilograms can significantly lower your heart disease risk.
- **Diabetes mellitus** - adults with diabetes have heart disease death rates that are two to four times of those adults without diabetes. Diabetes increases the risk of heart disease and stroke, and the risks are even greater if blood sugar levels are not well controlled. People with diabetes often have high blood pressure, high cholesterol, and are overweight - increasing their risks even more.
- **Tobacco smoke** - Smoking is the single most preventable cause of death. Smoking is a major cause of cardiovascular heart disease and causes an increased risk for ischemic stroke and subarachnoid haemorrhage. Besides, smoking causes chemical changes to HDL, which may eliminate its beneficial effects. Constant exposure to "second hand smoke" at work or at home also increases the risk, even for non-smokers.
- **Trans Fats** - Trans fats are created during a manufacturing process where vegetable oils undergo a process called "hydrogenation" - hydrogen is added to solidify and preserve the product. The product is more stable and lasts longer on shelf. Trans fats are far worse for your health than saturated fats. Not only they raise your bad cholesterol level, they also lower your good cholesterol and encourage the development of atherosclerosis (narrowing of the arteries). Trans fats can be found in processed foods such as cereals, biscuits, vegetable shortening, margarine, and some cooking oils.
- **Stress** - Individual's response to stress may be a contributing factor. Some scientists have noted a relationship between coronary heart disease risk and stress in a person's life, their health behaviours, and socioeconomic status. These factors may affect established risk factors. For example, people under stress may overeat, start smoking or smoke more than they otherwise would.
- **肥胖和超重** - 我们的体重直接影响胆固醇水平。一般上, 超重者都拥有较高的胆固醇水平和血压, 而且, 他们的血液也比较容易凝结。超重将增加心脏的负荷度, 提高血压和甘油三酸酯水平, 并减低高密度脂蛋白(“良性”)胆固醇水平, 同时, 也可能促成糖尿病。许多肥胖和超重者都觉得减肥是件难事, 但只要减去五公斤体重, 就能大大减低患上心脏病的风险。
- **糖尿病** - 患有糖尿病的成年人比没患者拥有两倍至四倍的更高死亡机率。糖尿病提高患心脏病和中风的风险, 如不控制血糖水平, 患病风险则更高。糖尿病患者一般都有高血压、高胆固醇和超重问题, 这些病症又将提高患病风险。
- **抽烟** - 抽烟是唯一最为容易预防的死亡原因。抽烟是导致心血管心脏病的主因并促成缺血性中风和蛛网膜下腔出血。此外, 抽烟将导致高密度脂蛋白产生化学变质并破坏它的正面作用。在工作地点或家中长时间吸入“二手烟”将提高非抽烟者的患病风险。
- **反式脂肪** - 是一种在食品加工制造过程中产生的氢化脂肪酸。当植物油经过氢化后, 有助产品性质变得更稳定, 产品的有效期限也更长, 但是反式脂肪比饱和脂肪酸对健康更不利, 它们将提高您的劣质胆固醇水平, 降低良性胆固醇并促成动脉粥样硬化(动脉缩小)。一般上, 在麦片、饼干、植物酥油、人造黄油以及烹饪食用油中都很容易找到这种反式脂肪。
- **压力** - 如何化解压力将决定我们患病的可能性。一些科学家表示患冠状心脏病的风险与某个人的生活压力, 健康习惯和社会经济地位息息相关。这些原因有可能促成其他患病原因, 如经常承受高压者将有过度饮食和开始大量抽烟的倾向。

Changing Habits

Unlike genetics, the good news is that people can make choices to improve their heart health. Heart disease is a lifelong condition. Even if you've had surgery or other procedures to help with blood flow in your heart, your arteries remain damaged. Their condition will only worsen unless you make changes in your lifestyle and habits. There is much you can do to control heart disease, prevent a first or second heart attack, and increase your chances for a long and healthy life.

These are some things we could do for a healthy heart:

Good nutrition - Make the right choices from each food group and be extra careful with what we put on our plates.

Dietary supplements - get the right nutritional supplements in the right amounts for better health.

Maintain a healthy weight and body composition - excess body fat can lead to a variety of health problems. Start taking steps to lose weight today to enjoy a healthier, happier body!

Regular exercise - this is vital in maintaining good health.

Smoke free - Quitting smoking can increase your HDL by up to 10%. Yes, quitting isn't easy but the best time to stop might be during a 1 to 2 weeks of Detoxification & Rejuvenation Programme (DRP). Many smokers experienced success in quitting smoking through the DRP. Don't wait. Give yourself a total body transformation today!

改变生活作息

除了先天性遗传因素以外, 我们能选择通过许多方式来提升心脏健康。一旦患上心脏病, 便是一辈子的事。即使您通过进行手术或其他程序来改善心脏血液循环, 您的动脉已遭受损坏。除非改变生活方式和习惯, 否则情况将继续恶化。我们可通过许多途径减低罹患心脏病的机率, 预防第一次或第二次的心脏病发作, 进而延长寿命和享受健康生活。

以下是增进心脏健康的一些建议:

均衡的营养 - 从不同的食物组别中做出谨慎明智的选择。

口服辅助品 - 适量食用正确的营养辅助品有助保健养生。

维持健康体重和身体构成 - 多余的身体脂肪将导致许多健康问题。今天就开始采取行动瘦身, 拥有健康身体和愉快人生!

常做运动 - 这对保持身体健康非常重要。

戒烟 - 戒烟将提高高密度脂蛋白水平多达10%。当然, 戒烟并非易事, 但最佳时期正是您进行1至2周排毒与复健程序(DRP)的时候。许多抽烟者通过DRP成功戒烟。别迟疑了, 今天就让您的身体做出重大改变!



Important nutrients and antioxidants

The idea of antioxidants for heart protection has long been established. This is because in the research laboratory, oxidation plays a big role in the formation of atherosclerotic plaque (the cholesterol-formed substance that can eventually rupture to cause a heart attack). Starting antioxidant supplements earlier in life may be required for heart protection. Thousands of studies published by medical researchers worldwide show that living a healthy lifestyle helps keep cholesterol and blood pressure levels low, thus reducing the risk of heart disease. The research contains ample evidence that there are specific nutrients that are powerful in supporting heart health.

By all necessary means, you should include these heart smart nutrients in your diet:

Coenzyme Q10 - A vitamin-like substance made by the human body. The importance of CoQ10 can never be over-emphasized because it helps to turn food into energy and is responsible for about 95% of the food to energy conversion in the body! The highest concentrations are found in the liver and the heart, as these two organs have the highest metabolic demands. CoQ10 is also a powerful antioxidant, and studies have proven its ability to prevent LDL oxidation (bad) and free radical damage (very bad), making it an excellent heart-health booster.

As we age, the body produces less and less CoQ10, and in addition, medications, stress, and unhealthy diets can reduce CoQ10 levels by as much as 40%! The only sure way to maintain adequate levels of CoQ10 in the body is through regular supplementation.

Vitamin C - This antioxidant plays many roles, but it is especially important and well known for its ability to prevent diseases. It is a key component of collagen, the protein that forms the basic building blocks needed for connective tissues such as cartilage, ligament, tendon, skin, and bone. Collagen is also one of the main components of the blood vessels. Vitamin C helps to maintain the integrity of artery walls, preventing damage that could in turn lead to the accumulation of plaque as the body tries to repair or cover up the damaged areas. Some even say that vitamin C could be one of the most essential factors in the prevention of heart disease and atherosclerosis.

Vitamin E - LDL is ever present in our body. It is not harmful, but when it is oxidized, it can produce inflammation in arteries that supply blood to our organs and other tissues, thus promoting atherosclerosis and increasing our risk of having a heart attack or stroke.

Vitamin E is touted as the most powerful antioxidant in the body's lipid (LDL) phase. Its ability to protect cell membranes from oxidation is of crucial importance in preventing and reversing many degenerative diseases. In 1992, researchers at the University of Texas reported that vitamin E protects against atherosclerosis (hardening of the arteries) by preventing oxidation of the low-density lipoprotein fraction of blood.

重要营养素和抗氧化剂

以抗氧化剂保护心脏的概念由来已久。这是因为研究显示，氧化是促使心肌梗塞的主因（胆固醇的积淀总有一天将爆裂进而引发心脏病）。尽早服用抗氧化辅助品能保护心脏。逾千名世界各地医药研究者的研究结果显示，健康的生活习惯将使胆固醇和血压保持在低水平，继而减低罹患心脏病的风险。这些研究以大量丰富的理据证明某些的营养素能有效增强心脏的健康。

关怀您的心脏，您应把以下对心脏健康有益的营养元素纳入您的饮食范围内：

辅酶素Q10 - 一种人体产生的仿维他命物质。辅酶素Q10对人体极为重要，因为它协助把95%食物转化为体内的能量。它集中在人体内代谢运作最频繁的肝部和心脏。辅酶素Q10也是一种极强的抗氧化剂，研究证明它能预防氧化低密度脂蛋白（劣质）和自由基对人体的袭击，并成为一种对心脏健康有促进作用的元素。

当年龄渐渐增长，人体将产生越来越少辅酶素Q10，此外，药物、压力和不健康的饮食习惯也将减低辅酶素Q10水平高达40%。唯一能保持体内辅酶素Q10水平的方法就是定期服用辅助品。

维他命C - 这是一种对人体产生极大正面作用的抗氧化剂，其较为人知的重要好处在于预防疾病。它是胶原蛋白的构成要素，一种为人体细胞组织如软骨、韧带、肌腱、皮肤和骨骼建设基础系统的蛋白质。胶原蛋白也是血管的主要组成部分。维他命C协助保持动脉内壁的健全性，当人体修复损坏组织时，它能避免动脉内壁遭损坏和被积淀物堵塞。

维他命E - 低密度脂蛋白一直都存在于人体内。它并无害处，但一旦氧化后，它将导致为身体器官和其他组织输送血液的动脉发炎，进而导致动脉粥样硬化并提高心脏病发作和中风的风险。

维他命E被熟知为最有效避免体内低密度脂蛋白氧化的辅助品。它能避免细胞膜氧化，其重要性在于预防和恢复许多退化性病症。1992年，美国德克萨斯州大学的研究员表明维他命E能预防动脉粥样硬化，防止血液内的低密度脂蛋白碎片氧化。

Omega 3 Fatty Acids - Known as an “essential fatty acid” or more commonly as a “good fat”, Omega 3 contains two fatty acids that are crucial for supporting heart health – EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid). DHA and EPA were both included in the FDA’s approval of qualified health claims for the prevention of coronary heart disease. Research shows that a higher intake of omega-3 slows the development of atherosclerotic plaque and lowers the risk of death from heart disease.

Virgin Coconut Oil - Coconut oil consists predominantly of 65% MCFAs (medium chain fatty acids) and MCFAs are metabolized rapidly in the liver to energy and do not participate in the biosynthesis and transport of cholesterol. Coconut oil, in fact, tends to raise the HDL (good cholesterol) thus lowering the LDL (bad cholesterol): HDL ratio. Coconut oil is not deposited in adipose tissues and therefore does not lead to obesity. Countries consuming the highest amounts of coconut oil – the Polynesians, Indonesians, Sri Lankans, Indians, Filipinos – have not only low serum cholesterol but also low coronary heart disease rates – morbidity and mortality. Coconut oil is also the healthiest cooking oil on earth because it has high heat resistance and does not break down and becomes carcinogenic unlike other vegetable oils (including olive oil). Long-term consumption of Virgin Coconut Oil has resulted in improved body composition, specifically in the reduction of body fat. Think you should be avoiding ALL fats to stay in shape? Think again.

Fibre - Research shows that extra fibre in the diet not only prevents intestinal traffic jams, it also helps to carry fats out of the digestive system, thus helping in the control and reduction of the cholesterol levels. Also, the added bulk keeps you from getting hungry quickly, so you’re less likely to snack on ‘junk foods’. Fibre from psyllium husk, oat bran, alfalfa, and apple pectin promote metabolism and are particularly helpful in reducing high cholesterol levels.

Heart disease and its risk factors can be treated in three ways: by making healthy changes to your daily habits/diets, by taking lifelong medication, and in some cases, by having a medical procedure. The choice is yours – choose wisely!

奥米加3脂肪酸 - 被称为“不可缺少的脂肪酸”或“良性脂肪”。奥米加3包含两种促进心脏健康的脂肪酸EPA（二十碳五烯酸）和DHA（二十二碳六烯酸）。DHA和EPA都被美国食品及药品管理局核准为预防冠状动脉粥样硬化的健康要素。研究显示，多摄取奥米加3将减缓动脉粥样硬化的发展并减低心脏病的死亡风险。

初榨纯鲜椰子油 - 椰子油的主要成分为65%的中等链脂肪酸(MCFAs)。MCFAs在肝部内快速代谢为能量，并不牵涉到胆固醇的生物合成和输送过程。事实上，椰子油能提高高密度脂蛋白（良性胆固醇）继而降低低密度脂蛋白（劣质胆固醇）和高密度脂蛋白的比例。椰子油不会积累在脂肪细胞上，因此也不会导致肥胖。大量食用椰子油的人包括波利尼西亚人、印尼人、斯里兰卡人、印度人及菲律宾人，他们拥有极低的胆固醇，极低的冠状心脏病患病率、发病率和死亡率。椰子油也是世上最健康的烹调用油，因它有极高的耐热性和不会像其他植物油（包括橄榄油）变质成致癌物质。长期食用纯鲜椰子油能促进身体构成，减少体内脂肪。您以为回避所有脂肪就能使您体形完美吗？是时候重新考虑啰！

纤维 - 研究显示食用高纤维食物能预防肠胃消化不良，纤维也能减去消化系统内的脂肪成分，继而协助控制和降低胆固醇水平。同时，纤维量将增加饱足感，帮助您远离零食。车前子壳、燕麦、紫花苜蓿和苹果胶质内所含有的纤维有利于促进新陈代谢，特别是降低胆固醇水平。

我们可通过三种途径来控制心脏病和降低其风险：改变日常生活和饮食习惯，接受终身治疗，或在某种情况下进行手术。您有权为自己的人生做主！