糖尿病
DIABETES

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What is diabetes?

Diabetes is a complex group of diseases with a variety of causes. People with diabetes have high blood glucose, also called high blood sugar or hyperglycemia.

Diabetes is a disorder of metabolism—the way the body uses digested food for energy. The digestive tract breaks down carbohydrates—sugars and starches found in many foods—into glucose, a form of sugar that enters the bloodstream. With the help of the hormone insulin, cells throughout the body absorb glucose and use it for energy. Diabetes develops when the body doesn't make enough insulin or is not able to use insulin effectively, or both.

Insulin is made in the pancreas, an organ located behind the stomach. The pancreas contains clusters of cells called islets. Beta cells within the islets make insulin and release it into the blood.

If beta cells don't produce enough insulin, or the body doesn't respond to the insulin that is present, glucose builds up in the blood instead of being absorbed by cells in the body, leading to prediabetes or diabetes. Prediabetes is a condition in which blood glucose levels are higher than normal but not high enough to be diagnosed as diabetes. In diabetes, the body's cells are starved of energy despite high blood glucose levels.

糖尿病迷思?

糖尿病是一种由很多原因导致的复杂性疾病，糖尿病患者会有高血糖，或称多糖症。

糖尿病是一种代谢紊乱的病症 —身体使用已消化的食物，并把它转化为能量。消化道分解食物中碳水化合物、糖分及淀粉，转化成葡萄糖后进入血液中。在胰岛素的帮助下，身体细胞吸收的葡萄糖会变成能源或体力。如果身体不能制造足够的胰岛素，或胰岛素无法发挥作用，就会衍生糖尿病了。

胰岛素是由胰腺（胃后方的器官）制造的，胰腺含有胰岛细胞群，胰岛素内的胰岛β细胞会制造胰岛素并释放到血液中。

如果β细胞不能产生足够的胰岛素，或身体无法对胰岛素的出现有反应，葡萄糖会停滞在血液中，且不被身体的细胞所吸收，导致糖尿病或前驱糖尿病的引发。前驱糖尿病是由于血糖水平值高于正常，但却还不可以被诊断为糖尿病。糖尿病患者的血糖偏高，但身体的细胞却因无法吸收血液中的葡萄糖，以致缺乏体力。

日积月累下去，高血糖会损害神经和血管，并会导致如心脏病、中风、肾病、失明、牙齿疾病、截肢等并

发症。糖尿病的并发症还有增加疾病的损害性、老化而导致行动不便、抑郁以及怀孕问题。直到现在都没有任何原因可以得知糖尿病是从何开始，但科学家相信，基因和环境是导致糖尿病衍生的因素。

糖尿病通常分成两大类，那就是第一型糖尿病以及第二型糖尿病，第3型则是妊娠糖尿病，会在怀孕期间发生。

什么原因导致第一型糖尿病的发生?

第一型糖尿病是由于缺乏胰岛素产生，这是因为胰腺内产生胰岛素的β细胞被破坏，是身体的免疫系统攻击及破坏β细胞。正常情况下，免疫系统会保护身体，免受细菌、病毒及其他潜在有害外来物质的感染。可是，在自身的免疫系统疾病上，免疫系统会攻击身体本身的细胞。在第一型糖尿病中，β细胞的破坏会需要好几年，但一些症状在短时间内就看得出。

第一型糖尿病通常发生在儿童及年轻人身上，但也可能出现在任何年龄层上。第一型糖尿病也被称为青少年糖尿病或胰岛素依赖型糖尿病。

什么原因导致第二型糖尿病的发生?

第二型糖尿病是常见的糖尿病类型，这类型糖尿病由很多因素造成，包括胰岛素抵抗，一种身体肌肉、脂肪及肝细胞无法有效使用胰岛素的状况。第二型糖尿病会产生，当身体无法提供足够的胰岛素来替补细胞吸取胰岛素能力的不足。第二型糖尿病的症状是会逐步逐步发展的，一些人经过了许多年都无法确诊为第二型糖尿病患者。

第二型糖尿病通常会在一些中年或老年人身上发生，如果有过重和痴肥就更加可能。这种疾病目前已趋向年轻化，一些超重和儿童和青少年也有可能患上此病。科学家认为引发第二型糖尿病的因素是基因遗传和环境。

肥胖和缺乏运动

缺乏运动和肥胖都是与第二型糖尿病息息相关的因素。一些人如果有基因遗传，患上第二型糖尿病的风险更高。

热量摄入不均匀及运动不足会导致肥胖，从而造成胰岛素抵抗，这类是常见的第二型糖尿病患者的状况。重心肥胖是指一些人的腹部有多余的脂肪，这不只是胰岛素抵抗和第二型糖尿病的风险，也是心脏及血管疾病，或称心脏血管疾病（CVD）的风险。这个多余的“啤酒肚”会产生荷尔蒙及其它有害物，并且会对身体造成伤害，如损害血管。

Over time, high blood glucose damages nerves and blood vessels, leading to complications such as heart disease, stroke, kidney disease, blindness, dental disease, and amputations. Other complications of diabetes may include increased susceptibility to other diseases, loss of mobility with aging, depression, and pregnancy problems. No one is certain what starts the process that cause diabetes, but scientists believe genes and environmental factors interact to cause diabetes in most cases.

The two main types of diabetes are type 1 diabetes and type 2 diabetes. A third type, gestational diabetes, develops only during pregnancy.

What causes type 1 diabetes?

Type 1 diabetes is caused by a lack of insulin due to the destruction of insulin-producing beta cells in the pancreas. In type 1 diabetes—an autoimmune disease—the body's immune system attacks and destroys the beta cells. Normally, the immune system protects the body from infection by identifying and destroying bacteria, viruses, and other potentially harmful foreign substances. But in autoimmune diseases, the immune system attacks the body's own cells. In type 1 diabetes, beta cell destruction may take place over several years, but symptoms of the disease usually develop over a short period of time.

Type 1 diabetes typically occurs in children and young adults, though it can appear at any age. In the past, type 1 diabetes was called juvenile diabetes or insulin-dependent diabetes mellitus.

What causes type 2 diabetes?

Type 2 diabetes—the most common form of diabetes—is caused by a combination of factors, including insulin resistance, a condition in which the body's muscle, fat, and liver cells do not use insulin effectively. Type 2 diabetes develops when the body can no longer produce enough insulin to compensate for the impaired ability to use insulin. Symptoms of type 2 diabetes may develop gradually and can be subtle; some people with type 2 diabetes remain undiagnosed for years.

Type 2 diabetes develops most often in middle-aged and older people who are also overweight or obese. The disease, once rare in youth, is becoming more common in overweight and obese children and adolescents. Scientists think genetic susceptibility and environmental factors are the most likely triggers of type 2 diabetes.

Obesity and Physical Inactivity

Physical inactivity and obesity are strongly associated with the development of type 2 diabetes. People who are genetically susceptible to type 2 diabetes are more vulnerable when these risk factors are present.

An imbalance between caloric intake and physical activity can lead to obesity, which causes insulin resistance and is common in people with type 2 diabetes. Central obesity, in which a person has excess abdominal fat, is a major risk factor not only for insulin resistance and type 2 diabetes

but also for heart and blood vessel disease, also called cardiovascular disease (CVD). This excess "belly fat" produces hormones and other substances that can cause harmful, chronic effects in the body such as damage to blood vessels.

Insulin Resistance

Insulin resistance is a common condition in people who are overweight or obese, have excess abdominal fat, and are not physically active. Muscle, fat, and liver cells stop responding properly to insulin, forcing the pancreas to compensate by producing extra insulin. As long as beta cells are able to produce enough insulin, blood glucose levels stay in the normal range. But when insulin production falters because of beta cell dysfunction, glucose levels rise, leading to prediabetes or diabetes.

Metabolic Syndrome

Metabolic syndrome, also called insulin resistance syndrome, refers to a group of conditions common in people with insulin resistance, including

- higher than normal blood glucose levels
- increased waist size due to excess abdominal fat
- high blood pressure
- abnormal levels of cholesterol and triglycerides in the blood

People with metabolic syndrome have an increased risk of developing type 2 diabetes and CVD. Many studies have found that lifestyle changes, such as being physically active and losing excess weight, are the best ways to reverse metabolic syndrome, improve the body's response to insulin, and reduce risk for type 2 diabetes and CVD.

Diabetes prevention: 5 tips for taking control

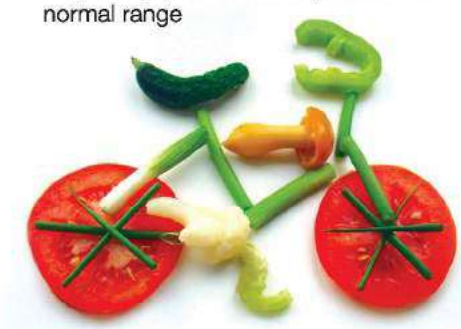
When it comes to type 2 diabetes — the most common type of diabetes — prevention is a big deal. It's especially important to make diabetes prevention a priority if you're at increased risk of diabetes, for example, if you're overweight or have a family history of the disease.

Diabetes prevention is as basic as eating healthily, becoming more physically active and losing a few extra pounds — and it's never too late to start. Making a few simple changes in your lifestyle now may help you avoid the serious health complications of diabetes down the road, such as nerve, kidney and heart damage. Consider the latest diabetes prevention tips:

Tip 1: Get more physical activity

There are many benefits to regular physical activity. Exercise can help you:

- Lose weight
- Lower your blood sugar
- Boost your sensitivity to insulin — which helps keep your blood sugar within a normal range



Research shows that both aerobic exercise and resistance training can help control diabetes, but the greater benefit comes from a fitness programme that includes both.

研究显示，有氧运动及训练可以帮助控制糖尿病，但如果配合健身计划，并包括上述两种运动，对身体会更有裨益。

胰岛素抵抗

胰岛素抵抗是一种常见的疾病，通常在超重或肥胖、腹部多余脂肪或缺乏运动的人身上。肌肉、脂肪及肝细胞不再对胰岛素有反应，迫使胰脏生产额外的胰岛素来补充不足。如果β细胞能生产足够的胰岛素，血糖水平会保持在正常的范围。但如果因为β细胞功能减退，胰岛素的产量不足，血糖水平会上升，就会造成前驱糖尿病或糖尿病。

代谢综合症

代谢综合症也被称为胰岛素抵抗综合症，是一组胰岛素抵抗的普遍状况，包括

- 高于正常的血糖水平
- 由于腹部多余的脂肪，腰围增加
- 高血压
- 血液中的胆固醇和三酸甘油脂的含量异常

患有代谢综合症的人会增加第2型糖尿病及心脏血管疾病（CVD）的风险。很多研究证明，改变生活习惯，如多运动及减掉多余体重，是逆转代谢综合征的最佳方法，甚至还可以改善身体对胰岛素的反应，降低第二型糖尿病及心脏血管疾病的风险。

预防糖尿病：5种控制方法

要预防第二型糖尿病出现可说是一点都不简单。如果您已有患上糖尿病的风险，预防是您现在必要的动作，如果您现在超重，或家族有糖尿病历史更加不可忽视。

预防糖尿病的基本方法，就是吃得健康、多运动及减掉身上多余体重，而且永远不会迟。改变您现在的生活习惯，或许能帮助您避免患上由糖尿病衍生的严重的疾病，例如神经、肾脏及心脏的损害。考虑以下预防糖尿病的提示：

提示1：多运动

运动有很多好处，可帮助你：

- 减肥
- 降低血糖
- 提升您对胰岛素的敏感性 – 帮助血糖保持在正常范围内

提示2：摄取大量纤维

虽然它很粗糙，可是却很“强”，它能帮助您：
- 帮助你控制血糖，降低患上糖尿病的风险
- 减低心脏病的风险
- 让您有饱足感，帮助您减肥

含有丰富纤维的食物包括水果、蔬菜、豆类、全谷类、坚果和种子。

提示3：吃全谷类吧

虽然到现在都不清楚，为何全谷类食品可以减低患上糖尿病风险，以及帮助维持血糖水平。当您摄取谷类时，尝试摄取50巴仙。很多全谷类食品都可以立刻进口，包括各种面包、面条产品及许多谷类食品。在包装以及材料表上注意看“全谷类”这个成分。

如果您可以用新生命面包制造机及全麦高纤维面包混合料自制面包会更好！

提示4：减掉多余的体重

如果您超重，要预防糖尿病的话就只好减肥了。您减掉的每一公斤，不仅可以促进您的健康，得到的惊喜可是远不只如此而已。在一项大型研究里，成功减掉适量体重的参与者，大约是原本体重的7巴仙，再加上经常运动可以令糖尿病的风险降低近60%。

提示5：服用有机铬

为何我们需要铬?

铬能增强胰岛素，而且也让身体保持正常代谢及脂肪、蛋白质及碳水化合物储存。铬的摄入量不足和葡萄糖不耐症息息相关，这就是第二型糖尿病开始发生的状况。铬也能保住提高高密度脂蛋白（好的胆固醇）水平，可以预防心脏疾病。

铬不足会有哪些征兆?

顾及美国越有25-50%的人口有轻度缺乏铬的状况，这也在其他发展中国家有发现到。美国的食品工业供应链上，反映出精制食品，尤其是糖、面粉中含有非常低的青草水平，而且也缺乏铬。铬饮食的吸收率很低，而且会随着年龄增长变得越来越低，所以老年人的风险比较高。虽然不会危及生命，但铬的缺乏是蛮常见的。

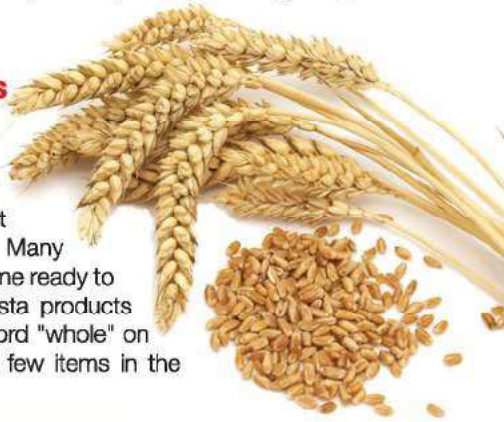
拥有足够的铬饮食能帮助维持胰岛素的敏感性，缺乏铬会导致糖尿病及新城代谢综合征的产生。即使轻度缺乏铬，也会造成血糖代谢问题，还会有焦虑或疲劳的症状。铬的缺乏会导致改变胆固醇的代谢、加速动脉粥样硬化、阻碍年轻人的成长、让伤口更难愈合等。

Tip 2: Get plenty of fiber

It's rough, it's tough — and it may help you:
- Reduce your risk of diabetes by improving your blood sugar control
- Lower your risk of heart disease
- Promote weight loss by helping you feel full

Foods high in fiber include fruits, vegetables, beans, whole grains, nuts and seeds.

Tip 3: Go for whole grains



Although it's not clear why, whole grains may reduce your risk of diabetes and help maintain blood sugar levels. Try to make at least half your grains whole grains. Many foods made from whole grains come ready to eat, including various breads, pasta products and many cereals. Look for the word "whole" on the package and among the first few items in the ingredient list.

Even better would be for you to make your own bread using the NewLife™ Bread Maker and Bread Mix.

Tip 4: Lose extra weight

If you're overweight, diabetes prevention may hinge on weight loss. Every pound you lose can improve your health, and you may be surprised by how much. Participants in one large study who lost a modest amount of weight — around 7 percent of initial body weight — and exercised regularly reduced the risk of developing diabetes by almost 60 percent.

Tip 5: Take Chromium Picolinate

Why is chromium necessary?

Chromium enhances the actions of insulin and is necessary for maintaining normal metabolism and storage of fats, proteins and carbohydrates. Inadequate intake of chromium has been linked to the development of glucose intolerance, a condition seen in type 2 diabetes. Chromium can also help raise HDL ("good") cholesterol levels, and may play a role in preventing heart disease. Supplementing with chromium can also help to curb cravings, decrease body fat, and increase lean body mass.

What are the signs of a deficiency?

An estimated 25-50% of the U.S. population is mildly deficient in chromium, a greater incidence of deficiency than is found in almost any other developed country. The industrialization of the American food supply chain, reflected in very low soil levels of chromium and the loss of chromium from refined foods, especially sugar and flours, probably contributes to this. Dietary chromium has a low absorption rate, which becomes even lower with age, so the elderly are especially at risk. Life threatening clinical deficiency may be rare, but deficiency is common.

Because adequate dietary chromium helps to maintain insulin sensitivity, chromium deficiency can contribute to the development of diabetes and metabolic syndrome. Even mild deficiencies of chromium can produce problems in blood sugar metabolism, and contribute to other symptoms such as anxiety or fatigue. Altered cholesterol metabolism, accelerated atherosclerosis, decreased growth in young people and delayed healing time after injuries or surgery can result from chromium deficiency.

NewLife™'s Nutritional Guide for Diabetics

Through our products and nutritional programmes, and over the past 20 years, NewLife™ has been able to help change the lives of many people who suffered from type 2 diabetes. We believe that the solution to metabolic imbalances or systemic diseases such as diabetes is to strengthen the body and give it a chance to heal itself. We use a combination of lifestyle and diet changes along with a variety of health products that support the body's ability to reverse disease and restore health.

新生命糖尿病患者的营养指南

通过我们的产品和营养方案，新生命在过去的20年里，帮助了很多因受第二型糖尿病之苦的人。我们相信代谢失衡或系统性疾病如糖尿病的解决方案，就是令身体变得强壮，以及能有自愈的能力。我们结合多种生活习惯及服用保健品改变饮食，令身体抵抗疾病及恢复健康。

If you are diabetic or pre-diabetic and would like to find out more about NewLife™'s Nutritional Guide, please contact our in-house nutritionist and consultant, Leon Tan, at leon@newlife.com.my.
如果您是糖尿病患者或前驱糖尿病患者，想了解更多有关新生命营养学的指引，欢迎联络我们的营养师及顾问Leon Tan, leon@newlife.com.my

Why NewLife™ Nature's Gift Chromium Picolinate?
为什么选择新生命天然之增品的有机铬?

NewLife™ Nature's Gift Chromium Picolinate is a chelated complex of chromium and consists of Biologically Active Chromium (BAC). It exists in an organic form which possesses significantly better absorption rate as compared to ordinary dietary chromium.
新生命天然之增品的有机铬是铬螯合物和具有生物活性的铬（BAC）。它是有机的，相比起普通所食用的铬，它拥有更显着的吸收率。

Testimony 见证

I got to know about NewLife™ through my wife when she went through Dr. Lynn Tan's Detoxification & Rejuvenation Programme (DRP). After the DRP she began to change her diet and eating habits. She started eating healthier food, drinking juices, taking less salt and sugar, and taking nutritional supplements. Day by day I could see her health improving.

My wife advised me to change my diet together with her but I really enjoyed eating so I continued on my normal diet.

In the year 2012, I started realizing that my body was not in perfect condition and I had a very strong feeling that my body was degenerating. I always felt tired and I was overweight.

I sought advice from my doctor about my health condition and a medical check-up was done. The results showed that I had a pre-diabetic condition.

For the sake of my health and my family, I immediately started the NewLife™ Health Maintenance Programme and learned more about health issues. I started to drink juices and take NewLife™ supplements such as Herbal Klenz Powder, Immuflora, Super Green Food Plus, K Salt, Flaxseed Oil, Vitamin B Complex, Niacin and Chromium Picolinate, together with the coffee enema.

Since then, I have gradually changed my diet and continued with the 5 Essentials together with Chromium Picolinate for the past year. I recently went for another medical check-up and the great news is that my sugar levels are back to normal! In addition, I have lost weight and am at my ideal bodyweight. I am healthy and free from all pre-diabetic conditions!

Thank you NewLife™ for having such great programmes and products.

By S.C. Ang

我是通过我的妻子认识了新生命这间公司，当时我的妻子在进行体内排毒与恢复活力程序（DRP）。进行DRP后，她开始改变饮食习惯，吃健康的食物，喝果汁，减少食取盐和糖，并服食营养辅助品。日复一日，我看到她的健康有着明显的改善。

我的妻子曾劝我跟随她一起改变饮食习惯，但我实在阻挡不了美食的引诱，所以，我还是继续我的日常饮食习惯。

在2012年，我开始意识到身体条件不再完好，更有着一股强烈的感觉，感觉到我的身体正在退化中。我总是觉得很累，且体重超标。

我试图询问医生有关我的健康状况，同时也做了身体检查。结果显示我患有前驱糖尿病的症状。

为了我的健康和我的家人，我立刻开始按照新生命的维护健康计划，并去了解更多有关健康的知识。我开始喝果汁和服食新生命辅助品，如天然净化粉、免疫激菌植、特超绿食品、钾质、真美加金牌亚麻籽油、维他命B综合丸、血液循环补充丸及有机铬，再加上咖啡灌肠。

在过去的一年里，我逐渐地改变了我的饮食习惯，并继续服食五大要素和有机铬。最近，我再次去做身体检查。很高兴的，我的血糖水平已经恢复正常！此外，我已经成功减肥，并且达到我的理想体重。我现在拥有健康的体魄，并远离前驱糖尿病的症状了！

感谢新生命有着这么美妙的程序和产品。

S.C. Ang