



Exercise and Type II Diabetes

Diabetes mellitus is a chronic illness. Obesity (particularly central obesity), aging and urbanization of lifestyle including unhealthy eating habit and lack of exercise are all contributory factors to rising rates of diabetes. Diabetes is a condition that impairs the body's ability to process blood glucose through inadequate (usage of) insulin and thus raising the blood glucose level. On a long-term basis, high blood glucose can damage nerves, small and large blood vessels, resulting in complications affecting the kidney, heart, brain, eye and feet.



In Hong Kong



Over 90% of people with diabetes have type 2 disease. The prevalence has increased from approximately 5% in 1990 to 10% recently. That means one in ten people in Hong Kong suffers from diabetes mellitus. It was the tenth commonest cause of deaths in Hong Kong, accounting for 1% of all deaths in 2015.

Why Can Exercise Help?



Exercise most importantly helps to control your blood sugar level, as it helps your cells to become more sensitive to insulin, making them work more effectively. Furthermore, regular physical activity helps lower blood pressure, lower harmful LDL cholesterol and triglycerides, raise healthy HDL cholesterol, and improve your general well-being.

Exercise Recommendations

Aerobic Exercise



Be active on most days of the week but at least three to four days. Work up to five days a week.



Exercise 30-60 minutes per day at a moderate level.



Any type of rhythmic exercises using large muscle groups.

Resistance Training



Do resistance training at least two days per week.



Exercise at a moderate level.



This will depend on the number of exercises you do.



Exercise all major muscle groups using either free weights or a machine.

A combination of aerobic and resistance training leads to the BEST health outcomes

Tips for Getting Started

- Although exercise is important in managing your diabetes, you may need to make changes to your diet.
- Start by exercising on your own. Begin walking or another form of activity that you can integrate into your daily routine.
- Use an activity tracker to monitor your progress. Slowly work toward a goal, like 10,000 steps per day.

References

- 1) 2019, 'Diabetes Mellitus', The Centre for Health Protection, <<https://www.chp.gov.hk/en/healthtopics/content/25/59.html>> (viewed on 26/11/2019)
- 2) 'Health Feature - Diabetes Mellitus', The Prince of Wales Hospital Charitable Foundation, <<https://www3.ha.org.hk/pwh/pwhcharity/dmpatient.htm#knowledge>> (viewed on 26/11/2019)
- 3) 'The importance of exercise when you have diabetes', Harvard Health Publishing, <<https://www.health.harvard.edu/staying-healthy/the-importance-of-exercise-when-you-have-diabetes>> (viewed on 26/11/2019)



運動與二型糖尿病

糖尿病是一種普遍的慢性疾病。二型糖尿病是胰島素抵抗或胰島素不足而引致血糖水平過高的慢性疾病。患上糖尿病的高危因素包括年老、中央肥胖和城市化生活方式，如不健康的飲食習慣和缺乏運動等。長期血糖水平過高會破壞神經和心血管系統，引發腎、心臟、腦、眼睛及腿部的併發症。



本地情況



超過90%的糖尿病患者屬二型糖尿病，本港有十分之一人口患有糖尿病，患病率從1990年約5%增加到最近的10%。在2015年，糖尿病佔總死亡率的1%，是本港十大主要死亡原因之一。

運動怎麼可改善？



運動可改善細胞對胰島素的敏感度，有助更有效地控制血糖水平。恆常運動有助降低血壓、低密度膽固醇(LDL)和三酸甘油酯(Triglyceride)的水平，同時可提高促進心血管健康的高密度膽固醇(HDL)，繼而改善整體健康。

運動建議

有氧運動



每週運動次數：每天盡量保持活躍，建議每周最少3-4次，目標增至每周5次。



每次運動時間：每天30-60分鐘中強度。



運動模式：任何有節奏、持續使用大肌肉群的運動。

阻力訓練



每週運動次數：每周至少2次。



運動強度：中強度。



每次運動時間：視乎動作數量。



運動模式：可使用自由重量或器械進行阻力訓練，鍛鍊各個主要肌肉群。

開始時注意事項

- 以飲食配合運動能更有效控制糖尿病。
- 把運動融入日常活動中，可以散步或其他體能運動作開始。
- 使用運動追蹤器來記錄進度和目標，如用計步器達到每天步行10,000步。

參考資料

- 1) 2019, 'Diabetes Mellitus', The Centre for Health Protection, <<https://www.chp.gov.hk/en/healthtopics/content/25/59.html>> (viewed on 26/11/2019)
- 2) 'Health Feature - Diabetes Mellitus', The Prince of Wales Hospital Charitable Foundation, <<https://www3.ha.org.hk/pwh/pwhcharity/dmpatient.htm#knowledge>> (viewed on 26/11/2019)
- 3) 'The importance of exercise when you have diabetes', Harvard Health Publishing, <<https://www.health.harvard.edu/staying-healthy/the-importance-of-exercise-when-you-have-diabetes>> (viewed on 26/11/2019)