Diabetes

Diabetes mellitus is a condition where the amount of glucose in the blood is too high, causing tissue damage. It falls into two types. Type 1 diabetes occurs when the body is unable to produce any insulin, and cannot be prevented. Type 2 diabetes develops when the body isn’t producing enough insulin, or becomes resistant to insulin, and this type of diabetes can be prevented. Most cases of type 2 diabetes are associated with being overweight.

Exercise is one of the key interventions that can help people control or reduce weight, and reduce their risk of type 2 diabetes. Physical therapists are experts in prescribing this as part of a structured, safe and effective programme.

The expert advice provided by physical therapists can also help people who have health complications as a result of diabetes. For example, they can help those who have lost limbs through diabetes-related amputations recover their mobility and adapt their environment so that they have independence. Physical therapists help people achieve a return to work, education, community participation and fulfilled lives.

Diabetes facts

The World Health Organization (WHO) estimates that 180 million people worldwide have diabetes. This number is expected to double by 2030.

According to WHO, 4-5% of health budgets globally are spent on diabetes-related illnesses.

Diabetes was traditionally more common in developed countries, but modernisation and lifestyle changes have meant it is increasingly prevalent in developing countries. According to WHO, almost 80% of diabetes deaths occur in low and middle-income countries.

In 2005, 1.1 million people died from diabetes (5% of global deaths). Almost half of diabetes deaths occur in people under the age of 70 years.
The death and disability rates caused by diabetes for every country are available at: 

Prevalence of diabetes by WHO Region

<table>
<thead>
<tr>
<th>Region</th>
<th>2000</th>
<th>2030 (predicted)</th>
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<tbody>
<tr>
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Exercise and diabetes

Exercise has a role in preventing diabetes and controlling diabetes. According to the World Health Organization, 30 minutes of moderate intensity physical activity on most days, along with a healthy diet, can significantly reduce the risk of developing type 2 diabetes.


Both resistance exercise and aerobic exercise are effective at reducing glucose intolerance and reducing the risk of diabetes.


High-intensity progressive resistance training, in combination with moderate weight loss, is effective in controlling blood glucose levels in older patients with type 2 diabetes.


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