



YOUR WEIGHT & DIABETES

Diabetes is a group of disorders characterized by chronic high blood glucose levels (hyperglycaemia) due to the body's failure to produce any or enough insulin to regulate high glucose levels. There are two main types of diabetes. Type 1 diabetes, which often occurs in children or adolescents, is caused by the body's inability to make insulin or type 2 diabetes, which occurs as a result of the body's inability to react properly to insulin (insulin resistance). Type 2 diabetes is more prevalent than type 1 diabetes and is therefore seen in roughly 90% of all diabetes cases. Type 2 diabetes is predominantly diagnosed after the age of forty, however, it is now being found in all age ranges, including children and adolescents.

The impact of diabetes goes beyond chronic hyperglycaemia. Diabetes is the leading cause of blindness (diabetic retinopathy), end stage kidney diseases (diabetic nephropathy) and non-traumatic lower extremity amputations (diabetic neuropathy) in working-age adults. People with diabetes are also two to four times more likely to experience cardiovascular complications and strokes.

How does my weight relate to type 2 diabetes?

There are many risk factors for type 2 diabetes such as age, race, pregnancy, stress, certain medications, genetics or family history, high cholesterol and obesity. However, the single best predictor of type 2 diabetes is overweight or obesity. Almost 90% of people living with type 2 diabetes are overweight or have obesity. People who are overweight or have obesity have added pressure on their body's ability to use insulin to properly control blood sugar levels, and are therefore more likely to develop diabetes.

What can you do to prevent diabetes?

Type 2 diabetes is largely preventable. Studies have found that lifestyle changes and small amounts of weight loss in the range of five to 10 percent can prevent or delay the development of type 2 diabetes among high-risk adults. Lifestyle interventions including diet and moderate to intense physical activity (such as walking for 150 minutes per week) were used in these studies to produce small amounts of weight loss.

The development of diabetes was reduced by 40 to 60 percent during these studies, which lasted three to six years. Preventing weight gain, increasing activity levels and working toward small amounts of weight loss if you are overweight can have a big impact on the likelihood that you will develop diabetes in the future. Thus far, weight management is the best thing you can do to prevent the development of diabetes.

What can you do if you already have diabetes?

You can have a positive influence on your blood sugar and your overall health by choosing foods wisely, exercising regularly, reducing your stress levels, making modest lifestyle changes and using medications to lower blood glucose levels. Type 1 diabetic patients must have insulin exogenously applied to maintain healthy blood glucose levels. Type 2 diabetic patients, however, can use insulin or drugs that sensitise their bodies to insulin, which work quite well in lowering blood glucose levels. Unfortunately, these drugs are not without risk as they, as well as the exogenous application of insulin, can often cause diabetic patients to suffer from low blood glucose levels (hypoglycaemia) if taken improperly, which may result in seizures, unconsciousness, or death. Small amounts of weight loss (losing 10 pounds or more) can decrease the amounts of these medications needed to keep your blood sugar levels within a healthy range by lowering your blood glucose levels, which furthermore reduces the risk of diabetic complications. Ultimately, better nutrition, increased physical activity, and control of blood glucose levels can delay the progression of diabetes and help prevent the complications associated with the disease.



References:
Center for Disease Control and Prevention (CDC). Living with Diabetes: <http://www.cdc.gov/diabetes/living/index.html>
The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Statistics on Diabetes: [www.diabetes.niddk.nih.gov/dm/pubs/statistics/](http://www.diabetes.niddk.nih.gov/dm/pubs/statistics/http://www.diabetes.niddk.nih.gov/dm/pubs/statistics/)

Source: www.obesity.org/content/weight-diabetes