

Teodora Premyanova (1918695)

Introduction to Physiology - BMHP5003_LON

Lecturer - Noura Mohamed

Assessment 1



DIABETES



"Diabetes is a lifelong condition that causes a person's blood sugar level to become too high." (NHS, 2019)

There are two types of diabetes, Type 1 and Type 2.

Type 1: Where your own immune system attacks the necessary cells which produce insulin.

Type 2: Where your body is incapable of producing enough insulin or your cells do not react to it.

The physiology of diabetes "is related to the levels of insulin within the body, and the body's ability to utilize insulin." (Moini, 2019)

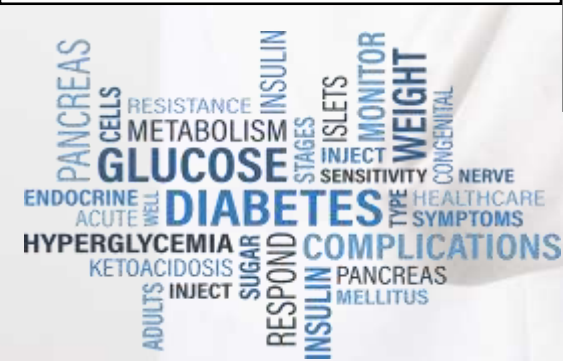
Type 1 diabetes occurs when your own immune system attacks the beta cells which produce insulin, therefore patients with this type of diabetes have no insulin present in their bodies and require daily injections.

Type 2 diabetes involves patients having insulin resistant tissue which does not respond effectively to the levels of insulin. The pancreas will eventually stop producing that much insulin so the levels of insulin your body will decrease.



The patient I interviewed is 45 years old with a height of 170cm and a weight of 70kg. They are an every-day smoker who drinks 3-6 units of alcohol daily and who also suffers from high blood pressure (140/90). High blood pressure is not uncommon with people who are diagnosed and suffer from diabetes. The patient has not experienced heart attack or angina or any type of stroke or weakness. They do not have a family history where anyone has experienced heart attacks above or below 60 years of age or have experienced any strokes. The patient does have sisters who have high cholesterol. The patient has informed me that their diet includes frozen food and eating sugary foods such as chocolate and fatty foods such as chips. Having high glucose level and cholesterol as a diabetic will slow down your blood flow which could have negative effects, and eating sugary and fatty foods will only worsen the situation.

"If you have diabetes, being active makes your body more sensitive to insulin." (CDC, 2018)
Exercise is especially important for obese people who can develop type 2 diabetes and for people who already have been diagnosed with type 2 diabetes. Exercise can also refer to any sort of activity you do, for example simply walking could help with managing your diabetes.
It is also vital to keep an eye on your diet as eating sugary or fatty foods will have a negative effect on your blood circulation. It is of extreme importance to keep your blood sugar levels steady as a diabetic.



References

- Cdc.gov. 2018. *Get Active! / Living with Diabetes / Diabetes / CDC*. [online] Available at: <<https://www.cdc.gov/diabetes/managing/active.html>>.
- Moini, J., 2019. *Epidemiology of Diabetes*. Elsevier, p.25.
- nhs.uk. 2019. *Diabetes*. [online] Available at: <<https://www.nhs.uk/conditions/diabetes/>>.