

REPORT ON THE CAUSES OF DIABETES

DIABETES

- Diabetes is a disease in which the body's ability to produce or respond to the hormone insulin is impaired, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in the blood.
- In other it may be defined as a condition where our body can't make enough insulin or can't use it as well as it should.
- The most common symptoms experienced by many people with diabetes are increased thirst, going for a wee a lot, feeling tired and losing weight.

CAUSES OF DIABETES

- There are different types of diabetes caused by different factors;
 - a) DIABETES TYPE 1
- Type 1 diabetes occurs when your immune system, the body's system for fighting infection, attacks and destroys the insulin-producing beta cells of the pancreas.
- Scientist think diabetes one is caused by the genes and environmental factors, such as viruses, that triggers the diseases.

b)DIABETES TYPE 2

- This is the most common form of diabetes -is caused by several factors, including lifestyle factors and genes.
 - Overweight, obesity and physical inactivity
- You are more likely to develop type 2 diabetes if you are not physically active and are overweight or have obesity.
- Extra weight sometimes causes insulin resistance and its common in people with diabetes type 2.
- The location of body fats also makes difference.
- Extra belly fat is linked to insulin resistance, type 2 diabetes, and heart and blood vessels.
- It's advisable to check on your Body Mass Index(BMI) charts so as to check on your body weight.

Insulin resistance

- Type 2 diabetes usually begins with insulin resistance, a condition in which muscle, liver, and fat cells do not use insulin well.
- As a result, your body needs more insulin to help glucose enter cells.
- At first, the pancreas makes more insulin to keep up with the added demand.
- Over time, the pancreas can't make enough insulin, and blood glucose levels.

Genes and family history

- As in type 1 diabetes , certain genes may make you more likely to develop type2 diabetes.
- The diseases tends to run in families and occurs more often in these racial/ethnic groups:
 - Africans Americans
 - Alaska Natives
 - American Indians
 - Asians Americans
 - Hispanics/Latinos
 - Native Hawaiians
 - Pacific Islanders
- Genes also can increase the risk of type 2 diabetes by increasing a person's tendency to become overweight or have obesity.

C)GESTATIONAL DIABETES

- This is a type diabetes that develops during pregnancy, is caused by the hormonal changes of pregnancy along with genetic and lifestyle factors.

Insulin resistance

- Hormones produced by the placenta contribute to insulin resistance , which occurs in all women during pregnancy.
- Most pregnant women can produce enough insulin to overcome insulin resistance , but some cannot.
- Gestational diabetes occurs when the pancreas can't make enough insulin.
- As with type 2 diabetes, extra weight is linked to gestational diabetes.
- Women who are overweight or have obesity may already have insulin resistance when they become pregnant.
- Gaining too much weight during pregnancy may also be a factor.

Genes and family history

- Having a family history of diabetes makes it too more likely that a woman will develop gestational diabetes, which suggest that genes play a role.
- Genes may also explain why the disorder occurs more often in African Americans, American Indians, Asians and Hispanics/Latinas.

Other causes of diabetes includes; Genetic mutations, other diseases, damage of the pancreas and certain medicines may also cause diabetes.

Genetic mutations

- Monogenic diabetes is caused by mutations or changes in a single gene.
- These changes are usually passed through families, but sometimes the gene mutation happens on its own.
- Most of these gene mutation cause diabetes by making the pancreas less able to make insulin.
- The most common types of monogenic diabetes are neonatal diabetes and maturity.
- [Cystic fibrosis](#) produces thick mucus that causes scarring in the pancreas. This scarring can prevent the pancreas from making enough insulin.
- [Hemochromatosis](#) causes the body to store too much iron. If the disease is not treated, iron can build up in and damage the pancreas and other organs.

Hormonal diseases

- Some hormonal diseases cause the body to produce too much of certain hormones, which sometimes cause insulin resistance and diabetes.
- [Cushing's syndrome](#) occurs when the body produces too much cortisol-often called the "stress hormone."
- [Acromegally](#) occurs when the body produces too much growth hormone.
- [Hyperthyroidism](#) occurs when the thyroid gland produces too much thyroid hormone.

Damage of or removal of the pancreas

- Pancreatitis, pancreatic cancer and trauma can all harm the beta cells or make them less able to produce insulin, resulting in diabetes.
- If the damaged will occur due to the loss of the beta cells.

Medicines

- Sometimes certain medicines can harm beta cells or disrupt the way insulin works.
- These include:
 - Niacin, a type of vitamin B
 - Certain types of diuretics, also called water pills
 - Anti-seizure drugs
 - Anti-rejection medicines, used to help stop the body from rejecting a transplanted organ.
- Statins, which are medicines to reduce LDL("bad") cholesterol levels, can slightly increase the chance that you'll develop diabetes.
- However, statins help protect you from heart disease and stroke. (ALOICE, 2023)