

**ETON TIMMY LARRY**

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**ASSESSMENT 1 ( POSTER PRESENTATION)**

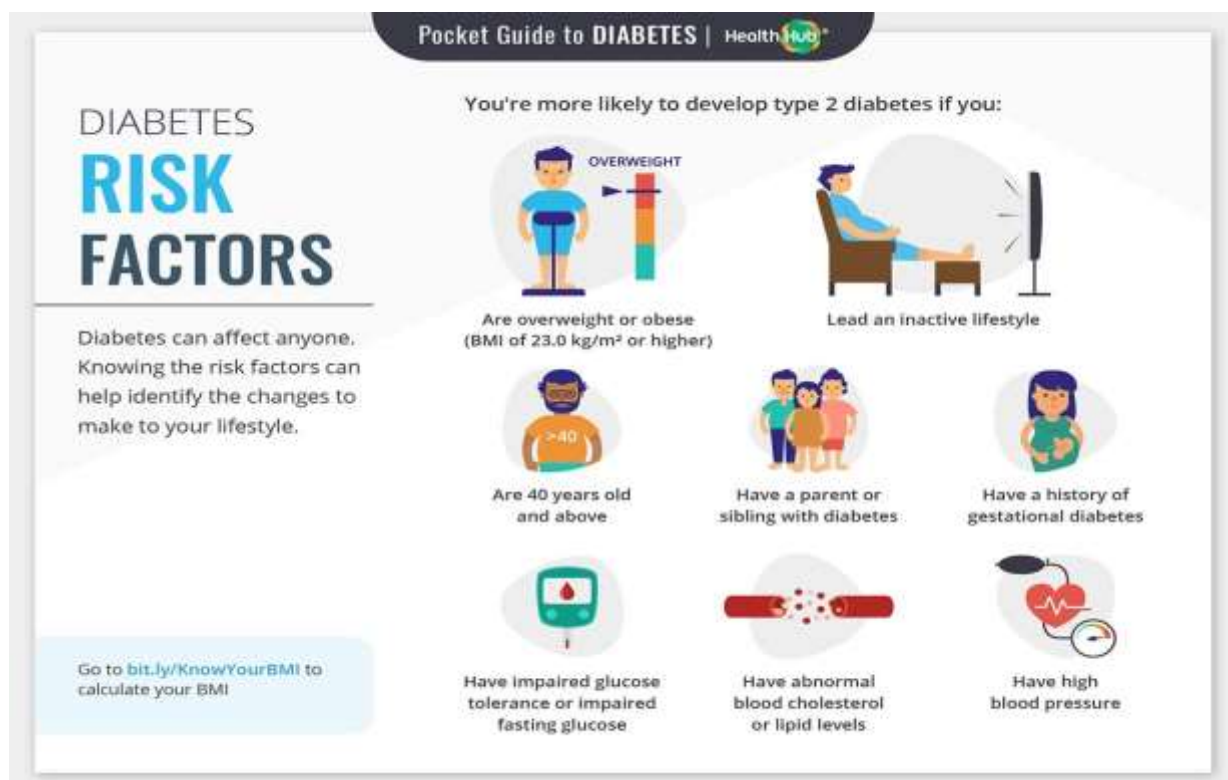
**INTRODUCTION TO PHYSIOLOGY**

**BMHP 5003-A1**

**JULY, 2021.**

# DIABETES

- According to NHS, Diabetes is a lifetime disorder that causes an increase in one's blood sugar level.
- There are Two major types of diabetes:
- Type 1 diabetes- This condition arises when the immune system damages the cells responsible for insulin production.
- Type 2 diabetes – is a condition where insulin is not sufficiently produced in the body, or body cells have no reaction to insulin.



Figures: Poster on Diabetes- Meaning and Risks Factor

## INTRODUCTION

**Definition of Diabetes :** According to Lal (2016), Diabetes is a set of metabolic disorders where a person has elevated glucose level in the blood, due to insufficient production of insulin, or failure of the body to respond properly to insulin, or a combination of both effect.

### Diabetes in relation to physiology

Every individual has an organ called the pancreas which is located behind the stomach and liver, and the pancreas is responsible for the secretion of glucagon and insulin which are hormone and digestive enzymes. Insulin and glucagon are both secreted into the bloodstream to regulate glucose levels in the body. In healthy individuals, after meals, the blood sugar level gets sharply elevated, when this happens, insulin is secreted to help keep it in check. On the other hand, if blood sugar level is low, glucagon is released into the bloodstream to activate released of stored glucose from the liver.

The two major classification of diabetes are type 1 and 2 Diabetes

**Type 1 Diabetes :** This is mostly in youths and children. It arises once pancreatic beta cells ( which produces insulin) are destroyed by an individual's immune system.

**Type 2 Diabetes:** This the most occurring form of diabetes. It is caused by different factors and include environmental and genetic features that hinders the function of beta cells and the sensitivity of the body to insulin.

### Intervention and management options

Mostly, lifetime treatment is essential for diabetic patients. This would include regulation of meal intake, physical activity level, and insulin dosage- depending on blood sugar level. Intervention and management options involves support by Health Care Providers to often check the indicators of glucose and modify treatment plans Petersen, B et al (2021).

### Lifestyle notification

From the questioner, patient A is above 40 years, has a sedentary lifestyle with no exercise, has high blood pressure, BMI of 31.25 which is classified as obese, has family history of high cholesterol level and stroke, addicted to smoking, loves alcohol and eats lots of junks and chocolates.

From the diagram above and from studies the following can be noted, junk foods have low nutritional content but high calories value, and intake of too much sugars and fats in junks will definitely lead to gaining weight which can in turn lead to diabetes this is according to Bhaskar, (2012). On the other hand, high BMI which leads to increased body mass is related to elevation of occurrences of diseases such as dyslipidaemia, diabetes mellitus, and hypertension. Bay, Grandy, Chapman, (2007, pp. 737–747). Furthermore, according to Pan et al (2015), smoking cigarette is amongst the highly rated risk factor for diabetes mellitus and it is broadly known that smoking considerably elevates exposure to macro and microvascular impediments in people with diabetes type-2. Lastly, it has been established that extreme alcohol intake is a lifelong indicator for different severe conditions, plus diabetes type 2 and its impediments, Volaco, (2018).

### Recommendation/Conclusion

It has been established that Patient A has diabetes type 2( Diabetes mellitus). As a social worker, I recommend that the patient have an healthy diet of eating more vegetables, should exercise more often, quit smoking and excessive alcohol intake, aim to lose weight, drink water especially at night to clear toxins and see a doctor to get back healthy life.

## References

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