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Diabetes

Definition – Diabetes is a condition where the body fails to produce energy from eaten foods. In the human body, it is very necessary to converting proper foods to generate energy for all human works. After eating food body turned those foods into glucose to supply proper energy in the body but when the body fails to do the same ,it is called diabetes. Insulin is the main hormone that regulates this process. If the body fails to produce enough insulin hormones in the blood, the sugar percentage starts increasing as the body fails to use the energy from the glucose, (Vetter *et al*, 2018, p.65).

Physiology

The main issues as it has some symptoms in some cases and there are no symptoms exists. So immediately visit to a doctor should be the first step that should be taken. When those symptoms relating to physiology are found such as Frequent urination, Excessive thirst, Unexplained weight loss, Tingling or numbness in hands or feet, feeling very tired much of the time, very dry skin, Sores that are slow to heal, Extreme hunger 1, Sudden vision changes, More infections than usual. Diabetes patient mainly has this symptom. (Dyson *et al*, 2018, p.798). This disease is related to sugar imbalance, can be controlled with proper lifestyle

Causes and risk factor

Patient A. blood pressure **180/90** The patient smokes about **10 to 19** cigarettes a day and the patient also have a high blood pressure. The height of the patient is **165** cm and the weight of the patient is **86** kgs and patient does not have any time to exercise. Family history father had heart attack at age 68 and patient's sister also has a high cholesterol level. patient eats meat, fries and chips, patient consumes alcohol. Alcohol can affect the level of blood sugar. And also stimulate appetite which can cause overweight to diabetes patient (Onderwater *et al*.(2019),

Intervention:

There are different ways to consider while taking into account the overall approach of treatment for diabetes., while addressing the core needs There are a host of intervention methodologies applied for the overall approach. These take into account Healthy eating habits, Exercises, Check-ups, Managing Stress, Stop Smoking, Checking Alcohol intake. Exercise and healthy eating to boost natural immunity. Eating habits needs to be understood and the choice of food items needs to be healthy diet that won't affect blood sugar. Exercise- patient needs to join the gymnasium target around 30 minutes of training every day. (Suthon *et al*, 2021, p.87).

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Definition of diabetes and its effects

Diabetes is one kind of medical condition where the body fails to produce energy from the eaten foods. In the human body, it is very necessary to converting proper foods to generate energy for all human works. After eating food body turned those foods into glucose to supply proper energy in the body. But when the body fails to the same it is called diabetes. In the UK there are a huge percentage of people who are suffering from this disease. Insulin is the main hormone that regulates this process. If the body fails to produce enough insulin hormones, then in the blood, the sugar percentage starts increasing as the body fails to use the energy from the glucose. That is why many people called this disease sugar. Physiologists Researchers have found that children and adolescents have a high chance of getting this disease in their body whereas 90% of diabetes cases have been found in the adult groups (Vetter *et al*, 2018, p.65).

Insulin is an important hormone that helps to reduce diabetes in the human body. The pancreas is an organ that is responsible for producing this insulin hormone. When a patient has diabetes, the pancreas will fail to produce enough insulin according to the body's requirement. that come if anyone has diabetes. In this modern era, it is very important to control blood sugar levels to mitigate this disease. These are the main effects that come with this disease. Some people have said they have some special medical condition that appears after this disease in their body. The doctors have given them some special diet charts for the following purpose to restrict this disease. When it comes to the major side effects of this disease kidney failure, heart disease, and nerve damages are mainly considered as potential damage (Jude *et al*, 2021, p.76).

2. Describing the main information related to physiology for diabetes

The issue of diabetes disease as it has some symptoms and, in some cases, there are no symptoms exists. So, immediately visit a doctor should be the first step that should be taken. When those symptoms related to physiology such as Frequent urination, Excessive thirst, Unexplained weight loss, Tingling or numbness in hands or feet, feeling very tired much of the time, very dry skin, Sores that are slow to heal, Extreme hunger 1, Sudden vision changes, More infections than usual. These are the main symptom that a diabetic patient mainly has in their body (Dyson *et al*, 2018, p.798). This disease is related to sugar imbalance and this thing can be controlled with healthy diets and maintaining proper lifestyles. Improper sleep can make harm and it is necessary to make enough sleeping hours. Researchers have found in physiology

studies that exceeding the sleeping limit can also imbalance the blood sugar level and can cause diabetes. Prevention is better than cure and this thing should be followed in daily life. This disease is associated with the central nervous system. The central nervous system gives signals to the pancreas organ to store insulin and insulin hormone acts according to the nervous system. In diabetes case the nervous system gives signals but due to the low efficiency of the insulin hormone, it cannot process all its work.

When it comes to the types of this disease there are two types that mainly exist in the health care sector. The first type of diabetes is known as Insulin-dependent diabetes mellitus (IDDM) and the second type of diabetes is known as non-insulin-dependent diabetes mellitus (NIDDM). These types of diabetes depend on some factors such as environmental factors, genetic factors, and lifestyle factors. The physiology of diabetes depends on these factors. In some cases, no pattern has been discovered. But the majority of the patient has these factors that is why they are currently suffering from this disease.

Describing findings that come after the case study through questionnaires

Patient A. date of birth 1st January of the year 1973. The patient smokes about **10 to 19** cigarettes a day and the patient also have a high blood pressure. Apart from that, the patient does not have any kind of stroke or heart attack problem. The father of the patient has a hart attack at 68 years of age. The patient's sister also has a high cholesterol level. The blood pressure of the patient is **180/90** which can cause various problems to the patient. The height of the patient is **165** cm and the weight of the patient is **86** kgs. The patient does not have any time to exercise. It has been analyzed that the patient eats meat, fries and chips in a regular manner. Not only does the patient intake various unwanted foods but also the patient also drinks alcohol between 3 units and 6 units in a single day. As per the view of Onderwater *et al.* (2019), consuming moderate amounts of alcohol may increase the levels of the blood sugar but consuming excess amounts of alcohol can decrease the blood sugar levels to a drastic level. It has been identified that alcohol can also stimulate the appetite levels which can cause the diabetes patients to overeat which can affect the level of blood sugar. Moreover, alcohol also consists of high calories which can eventually lead to weight gain. Apart from this, the triglyceride levels can increase for in taking high alcohol

Describing two interventions/management options available for patients

There are different ways to considering while taking into consideration the overall approach of treatment of diabetes. Interventions are therefore considered one of the key terms while addressing the core needs. There is a host of intervention methodologies applied for the overall interaction here. These take into account Healthy eating habits, Exercises, Check-ups, Managing Stress, Stop Smoking, Checking Alcohol intake. Smoking and consumption of alcohol are not good for health. Most diseases come from this kind of practice. So, avoiding these things helps to boost natural immunity. Out of the different intervention methods, Exercise and healthy eating Habits are considered quite normal here (Suthon *et al*, 2021, p.87).

Eating Healthy- Describing the Eating habits it could and needs to be understood that choice of food items needs to be such that won't affect blood sugar. A person can consume whole food grains, high sugar, Carbohydrates, Vegetables, Fruits. The meal portion needs to follow a symmetrical order. Similarly, Cross-training needs to be considered while taking insulin drugs. In some case studies, it has been found that patient A not following proper diet plan. It is very important to avoid those junk foods which have poor nutritional value. Avoiding fats can make an extra advantage.

Exercise- One needs to be hyperactive while considering the different elements of health. The patient needs to join the gymnasium. One needs to target around 30 minutes of training every day. This might bring in change internally to the body and physics. This takes into consideration different types of gyms like Aerobics, Cardio. Besides this, different forms of exercises like yoga and others could be a very good option here. Cardiac vascular diseases are spreading rapidly. This kind of disease comes from overthinking. In medical terms, it is known as hypertension. It is very important to do exercises to mitigate these kinds of issues. Health is wealth and doing exercise helps to mitigate hypertension disease and makes the body functional and flexible.

Conclusion

After doing this case study it can be concluded that health is wealth and people should take care of their health. It is very important to take care of internal health as it is not visible from

the outside. In this case study, it has been found that most people are not aware of their health condition.

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