17/MHS01/128

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BCH ASSIGNMENT

1. DEFINE THE FOLLOWING TERMS:
2. KETOGENESIS:ketogenesis is a metabolic pathway that produces ketone bodies, which provide an alternative form of energy for the body. The body is constantly producing Small amount of ketone bodies that can make 22 ATP each in normal circumstances, and it is regulated mainly by insulin. In a state ketosis, ketone body production s increased when there are decreased carbohydrates or increased fatty acids. However, ketoacidosis can occur if too many ketone bodies accumulate, such as in cases uncontrolled diabetes.
3. KETONEMIA:an abnormal increase of ketone bodies in blood as in diabetes mellitus. Symptoms of ketonemia is when there is any sensation or change in in bodily function that is experienced by a patient and is associated with a particular disease.
4. KETONURIA:a condition in which abnormally high amount of ketones and ketone bodies ( a byproduct of the breakdown of cells) are present in the urine.it is a sign seen in diabetes mellitus that is out of control.it can also develop as a result of fasting dieting, starvation and eating disorders.
5. KETOGENESIS:ketogenesis is a metabolic pathway that produces ketone bodies, which provide an alternative form of energy for the body. The body is constantly producing Small amount of ketone bodies that can make 22 ATP each in normal circumstances, and it is regulated mainly by insulin. In a state ketosis, ketone body production s increased when there are decreased carbohydrates or increased fatty acids. However, ketoacidosis can occur if too many ketone bodies accumulate, such as in cases uncontrolled diabetes.
6. WHAT ARE THE CONSEQUENCES OF KETOSIS:ketosis can trigger a dangerous condition called ketoacidosis. This occurs when the body stores up too many ketones acids produced as a byproduct of burning fat and the blood becomes too acidic, which can damage the liver, kidneys, and brain. Left untreated, it can be fatal.
7. WRITE CONCISELY ON THE MANAGEMENT OF KETOACIDOSIS:

* **Fluid replacement.** The patient will receive fluids either by mouth or through a vein (intravenously) until the patient is rehydrated. The fluids will replace those the patient lost through excessive urination, as well as help dilute the excess sugar in the blood.
* **Electrolyte replacement.** Electrolytes are minerals in the blood that carry an electric charge, such as sodium, potassium and chloride. The absence of insulin can lower the level of several electrolytes in the blood. The patient will receive electrolytes through a vein to help keep the heart, muscles and nerve cells functioning normally.
* **Insulin therapy.** Insulin reverses the processes that cause diabetic ketoacidosis. In addition to fluids and electrolytes, the patient will receive insulin therapy usually through a vein. When the blood sugar level falls to about 200 mg/dL (11.1 mmol/L) and the blood is no longer acidic, the patient may be able to stop intravenous insulin therapy and resume normal subcutaneous insulin therapy.