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MATRICULATION NUMBER: 17/MHS03/025

DEPARTMENT: MBBS

COURSE: MEDICAL BIOCHEMISTRY IV

COURSE CODE: BCH313

ASSIGNMENT TITLE: OBESITY, DIABETES AND CANCER

1. Define the following terms:
2. Ketogenesis
3. Ketonaemia
4. Ketonuria

**KETOGENESIS**: This is a biochemical process in which the body synthesizes ketone bodies through the catalysis of fatty acids and ketogenic amino acids, occurring when there’s unavailability of glucose in the body.

**KETONAEMIA**: This is defined as the presence of abnormally high concentration of ketone bodies in the blood.

**KETONURIA**: This is the excretion of abnormally high amounts of ketone bodies in urine usually associated with Diabetes Mellitus, starvation and other medical conditions.

1. What are the consequences of ketosis?

Excess fat are being burnt away by the body and ketones are produced and then excreted via urine in small amounts and can be used in the treatment of some diseases e.g. epilepsy, metabolic syndrome, etc. But if it becomes excessive it can lead to the following:

* Ketoacidosis associated with diabetes and starvation,
* Ketonuria,
* Ketonaemia.

1. Write concisely on the management of ketoacidosis

**MANAGEMENT OF KETOACIDOSIS**

Management and treatment of ketoacidosis should be geared towards identifying the underlying causes, correcting dehydration, replacing electrolyte and volume losses, bringing blood plasma glucose concentration back to normal and reversing the ketosis and acidosis, which is done via the following ways:

* By administering rapid and short-acting insulin
* By giving electrolyte supplement
* By giving alkalinizing agents
* Fluid replacement
* Through cardiac monitoring