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KETOGENESIS: It is the biochemical process through which organisms produce ketone bodies through breakdown of fatty acids and ketogenic amino acids. This process supplies energy under circumstances such as fasting or caloric restriction to certain organs, particularly the brain, heart, and skeletal muscles.

KETONEMIA: It is the presence of an abnormally high concentration of ketone bodies in the blood.

KETONURIA: It is a medical condition in which ketone bodies are present in the urine. It is seen in conditions in which the body produces excess ketones as an indication that it is using an alternative source of energy.it is seen during starvation or commonly in type I diabetes mellitus.

CONSEQUENCE OF KETOSIS

Ketosis is a metabolic state characterized by elevated levels of ketone bodies in the blood or urine. The common side effects of ketosis include;

* Headache
* Fatigue
* Dizziness
* Insomnia
* Difficulty in exercise tolerance
* Constipation
* And nausea, especially in the first days and weeks after starting a ketogenic diet.

Breath may develop a sweet, fruity flavor via production of acetone that is exhaled because of its high volatility.

Most adverse effects of long-term ketosis reported are in children because of its long-standing acceptance as a treatment for pediatric epilepsy. These include compromised bone health, stunted growth, hyperlipidemia, and kidney stones.

MANAGEMENT OF KETOACIDOSIS

Elements of management of ketoacidosis include making the appropriate diagnosis using current laboratory tools and clinical criteria and coordinating fluid resuscitation, insulin therapy, and electrolyte replacement through feedback obtained from timely patient monitoring and knowledge of resolution criteria. In addition, awareness of special populations such as patients with renal disease presenting with ketoacidosis is very important during the ketoacidosis therapy. During ketoacidosis therapy, complications may arise and appropriate strategies to prevent these complications are required.