Vidya Bhawan Balika Vidyapeeth Lakhisarai

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subject biology

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# 1. How does chemical coordination take place in animals?

Chemical coordination takes place in animals with the help of chemical messengers called as Hormones. Hormones are the chemic fluids that are secreted by specific glands of the endocrine gland. Hormones regulate the growth, development and homeostasis of the animals.

### 2. Why is the use of iodized salt advisable?

Usage of lodized salt is advisable to avoid the deficiency of lodine. If the intake of iodine is low, the release of thyroxine from the thyroid gland will be decreased. This affects fat, carbohydrate and protein metabolism

Thus a person may have goitre problem in case if the intake of iodine is lowered.

# 3. How does our body respond when adrenaline is secreted into the blood?

Adrenaline hormone is secreted in large amounts when a person is frightened, or mentally disturbed. When it reaches the heart, it beats faster to supply more oxygen to our muscles. The breathing rate also increases because of the contractions of diaphragm and the rib muscles. It also raises the blood pressure, and allows more glucose to enter into the blood. All these responses together enable our body to deal with the emergency situations.

Adrenaline is a hormone secreted when a person is frightened or mentally disturbed. When Adrenaline reaches heart, heartbeat will increase to increase blood supply to our muscles. Adrenaline also increases the breathing rate because of contraction of diaphragm and the rib muscles. Adrenaline rush also increases blood pressure and allows entry of more glucose into blood. These altogether occurs when our body respond to secretion of adrenaline into our blood.

### 4. Why are some patients of diabetes treated by giving injections of insulin?

Diabetes is a condition where insulin hormone is produced less or stopped by pancreatic cells of a person. Insulin regulates blood glucose by converting extra glucose to glycogen. When insulin is not produced adequately person blood glucose level which leads to adverse effects. In order to maintain the insulin and blood glucose level diabetes patients are treated with injections of insulin.

#### 5. The gap between two neurons is called a

- (a) Dendrite.
- (b) Synapse.
- (c) Axon.
- (d) Impulse.

# Answer is (b) Synapse

Dendrite is a short branched extension of a nerve cell, along which impulses received from other cells at synapses are transmitted to the cell body.

An axon or nerve fiber is a long, slender projection of a nerve cell or neuron in vertebrates that typically conducts electrical impulses known as action potentials away from the nerve cell body. The function of the axon is to transmit information to different neurons, muscles, and glands.

Impulse an electrical signal that travels along axon.