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Questions:

- **What are Coenzymes**

Coenzymes are substances that enhance the action of an enzymes. They by themselves cannot catalyse a reaction but they can help enzymes to do so. Coenzymes are organic nonprotein molecules that bind with the protein molecule (apoenzyme) to form the active enzyme (holoenzyme).

- **Differentiate between fat and water soluble vitamins.**

Fat Soluble Vitamin	Water Soluble Vitamin
<ul style="list-style-type: none">• They are found in high fat food sources like egg yolks, liver, beef, and diary products.• Presence of carrier proteins.• They are stored in the liver.• Deficiency manifest only when stores are depleted.	<ul style="list-style-type: none">• They are found in vegetables (leafy greens other green vegetables and fruits.• Absence of carrier protein.• No storage.• Deficiency manifest rapidly as there is no storage.

- **Describe Niacin in relation to its coenzymic function.**

Vitamin B3, generally referred to as niacin, is a water-soluble vitamin. This vitamin can generally be found in distinctive forms, namely nicotinic acid and nicotinamide.

Niacin assets functions of the nervous and digestive system. It plays a role in food metabolism and in information of red blood cells and skin. NAD (Nicotinamide adenine dinucleotide) and NADP (Nicotinamide adenine dinucleotide phosphate) are coenzymes that are part of the energy production system of the body. This system work by means of oxidation and reduction (redox) reactions.

Niacin is also part of a range of foods for example meat, fish, bread, yeast, nuts, seeds, soy beans, potatoes, dried fruit, tomatoes and peas. It also plays a role in converting carbohydrates into glucose, metabolising fats and proteins, and keeping the nervous system working properly. Niacin also helps the body make sex and stress related hormones and improves circulation and cholesterol levels.