EMMANUEL COLLINS DANIEL 18/MHS01/121 ANATOMY

MEDICAL BIOCHEMISTRY, BCH 204

1) What are coenzymes?

These are cofactors that are loosely bound to the enzyme. They are organic in nature

2) Differentiate between fat and water soluble vitamins

	Fat Soluble	**Water Soluble**
1	Soluble in fat, not soluble in water	Soluble in water not soluble in fat
2	Absorption of fat soluble vitamins occurs with lipids and they require bile salt	Absorption is simple, excess is excreted
3	Carrier proteins are present	No carrier proteins required
4	They are stored in the liver	No storage required
5	Deficiency occurs only when stored vitamins are depleted	Deficiency manifests rapidly as there is no storage
6	There is hypervitaminosis, there is no possibility of toxicity	Toxicity is unlikely since excess is excreted
7	The treatment of deficiency involve single large doses	Regular dietary supply is required
8	Vitamins include : ADEK	B complex,vitamin C

3) Describe niacin in relation to its coenzymic function.

The vitamin can generally be found in two distinctive forms, namely nicotinic acid and nicotinamide. These substances are used by the body to form the coenzymes NAD and NADP. Niacin coenzymes degrade carbohydrates, fats, proteins and alcohols and synthesize fatty acids and cholesterol