**ABA DORCAS MANGWO**

**18/MHS07/001**

**MEDICAL BIOCHEMISTRY**

**BCH 204**

**QUESTIONS:**

1. **WHAT ARE COENZYMES**
2. **DIFFERENCES BETWEEN FAT AND WATER SOLUBLE VITAMINS**
3. **DESCRIBE NIACIN IN RELATION TO ITS COENZYME FUNCTION**

**ANSWER: Coenzymes** are small molecules. They cannot by themselves catalyze a reaction but they can help enzymes to do so. In technical terms, **coenzymes** are organic nonprotein molecules that bind with the protein molecule (apoenzyme) to form the active enzyme (holoenzyme).

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| **FAT SOLUBLE** | **WATER SOLUBLE** |
| Not soluble in water | Not soluble in fat |
| Carrier protein present | Carrier protein absent  |
| Soluble in fat | soluble in water |
| Stored mainly in the liver | No storage |
| Hyper vitaminosis occurs | Hyper avitaminosis is unlikely to occur since excess is secreted |

3These 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. They play a **role**in cell signaling.