

NAME: OLOKOOBA ADEKUNLE **MAT NO:** 18/MHS01/290
DEPARTMENT: ANATOMY **COURSE:** MEDICAL BIOCHEMISTRY
COURSE CODE: BCH 204

ASSIGNMENT.

1a. What are coenzymes.

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

1b. Differentiate between fat and water soluble vitamins.

ANS: Fat soluble vitamins are carried to the body's tissues, but the body cannot store them. Fat soluble vitamins absorbed in lymphatic system, stored in tissues, and have a hormone-like function.

They are most abundant in high-fat foods and are much better absorbed into your bloodstream when you eat them with fat.

WHILE

Water soluble vitamins dissolve in water, which means these vitamins and nutrients dissolve quickly in the body.

Water soluble are absorbed in the portal blood, readily excreted in the urine, and they act as coenzymes to catalyse activity in the body.

1. Describe niacin in relation to its coenzymic function.

ANS: Niacin assists functions of the digestive and nervous system. It plays a role in food metabolism and in the formation of red blood cells and skin. NAD and NADP are coenzymes that are part of the energy production system of the body. This system works by means of oxidation and reduction (redox) reaction.