MCM Practice Questions: Lecture Day 2

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Lecture 5: Membrane Transport

1) During glomerular filtration, your kidneys happened to filter out too much glucose. However, your kidneys happen to have a protein called a sodium-glucose cotransporter (SGLUT) to reabsorb the glucose back into your bloodstream. What kind of membrane transport does this protein engage in?

(A) Primary Active Transport

(B) Passive Transport

(C) Secondary Active Symport

(D) Secondary Active Antiport

(E) Osmosis

2) A 37 year old male comes to their Primary Care Physician complaining of acid reflux. He is subsequently diagnosed with GERD. In order to treat this, his physician prescribes a proton pump inhibitor that will decrease the activity of the patients H+/K+ ATP-ase. What kind of transport does this protein engage in?

(A) Primary Active transportt

(B) Passive Transport

(C) Secondary Active Symport

(D) Secondary Active Antiport

(E) Osmosis

3) What is the most common form of short term transporter activity regulation?

(A) Methylation/ demethylation

(B) Acetylation/ deacetylation

(C) Allosteric Regulation

(D) Phosphorylation/ dephosphorylation

4) Paracellular transport is driven primarily by what?

(A) Hydrostatic and Oncotic Pressure

(B) Muscular Contractions

(C) Oncotic Pressure only

(D) Hydrostatic Pressure only