Ask Weber

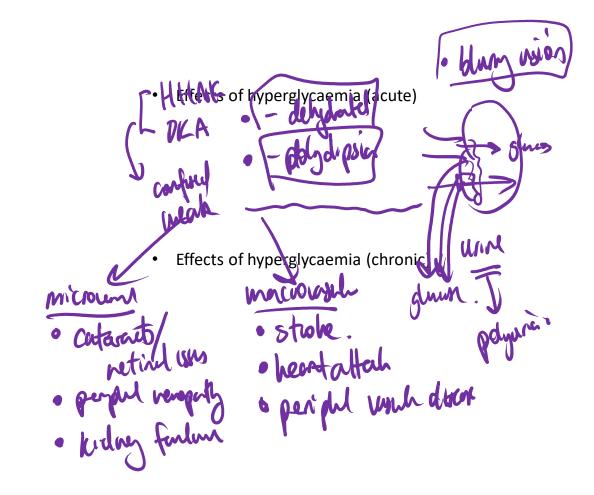
Session 3

Topic 7

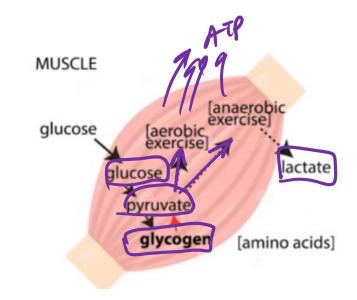
askweber.github.io

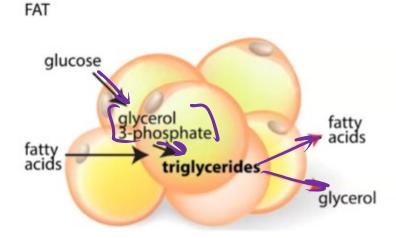
· Symptoms of hypoglycaemia

Symptoms of hyperglycaemia



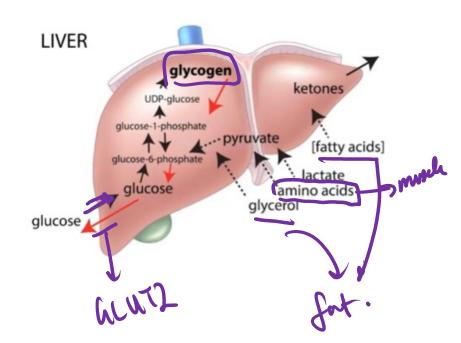
- 1. Describe the process in which glucose is used in muscle tissue
- 2. Describe the process in which glucose is turned into fats in fat cells





- 1. Describe the process in which glucose is stored in the liver
- 2. In the ketogenic diet, the participant aims to stop intake of carbohydrates (i.e. anything that will produce glucose).

 Describe the process in which ketones are made



1. List the targets of insulin and the 'action' insulin takes at these targets (muscle, liver, fat)

2. List the targets of glucagon and the 'action' it takes at these targets.

Targets:

glucose uptake · Liver to promote

glucose uptake

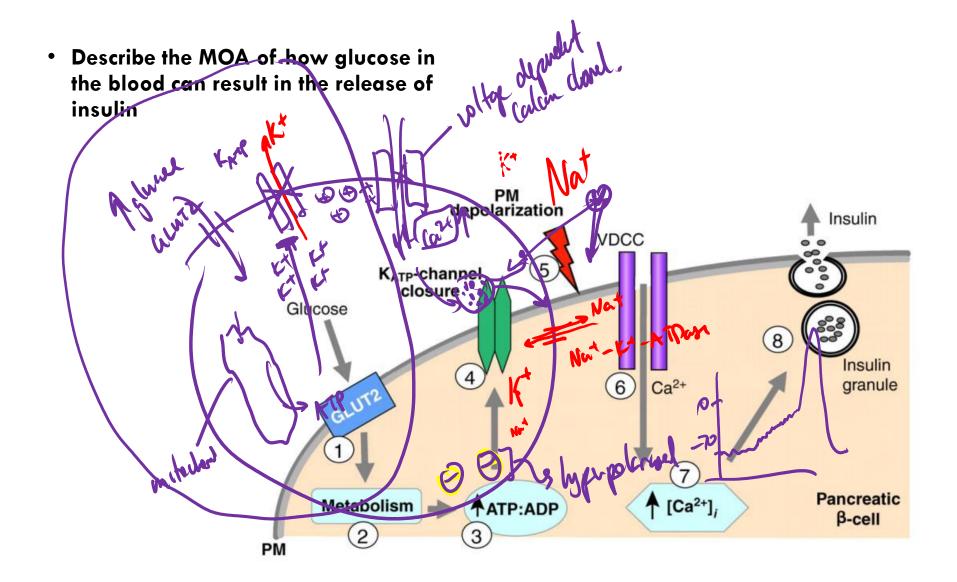
Fat to promote

rule /mtis **FASTING** FED INSULIN Amino acids Glucagon · Muscle to promote glucose alucose ketones glycogen storage Free fatty acids BRAIN

ghomogram

Targets:

 Liver to promote glycogen breakdown and glucose release



•	Where do you find pancreatic beta	cells	

2 WLPI Exenatide is a medication used in Type 2 diabetes. It is pharmacodynamically similar to the glucagon-like peptide 1, and thus acts as a glucagon-like peptide receptor agonist. Describe what direct enzyme GLP-1 the receptor acts on, and its downstream effects on GLP-1R pancreatic function OWN K_{ATP} Channel Glucose A A Glycol sis Epac2 L-Type VDCC PKA CICR Pdx-1 Insulin



Type 1 diabetes

- Describe the mechanism of Type 1 diabetes and its pathophysiology, including explanation of polyuria and polydipsia
- Type 1 diabetes is inheritable (T/F)
- Type 2 diabetes is inheritable (T/F)

Feature	Type 1 diabetes	Type 2 diabetes	
Onset	Sudden	Gradual	
Age at onset	Mostly in children	Mostly in adults	
Body habit's	Thin or normal	Often obese	
Ketoacidosis	Common	Rare	
Auto antibodies	Usually present	Absent	
Endogenous insulin	Low or absent	Normal, decreased or increased	
Concordance in	50%	90%	
identical twins			
Prevalence	~10%	~90%	