



Medical Committee
The University of Jordan



SLIDE



SHEET

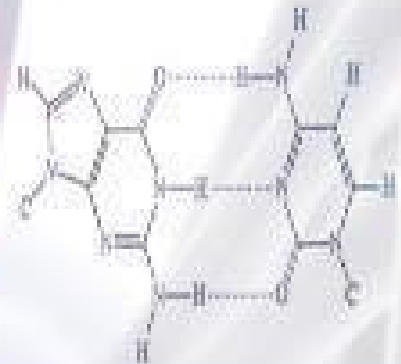


SLIDE : 13



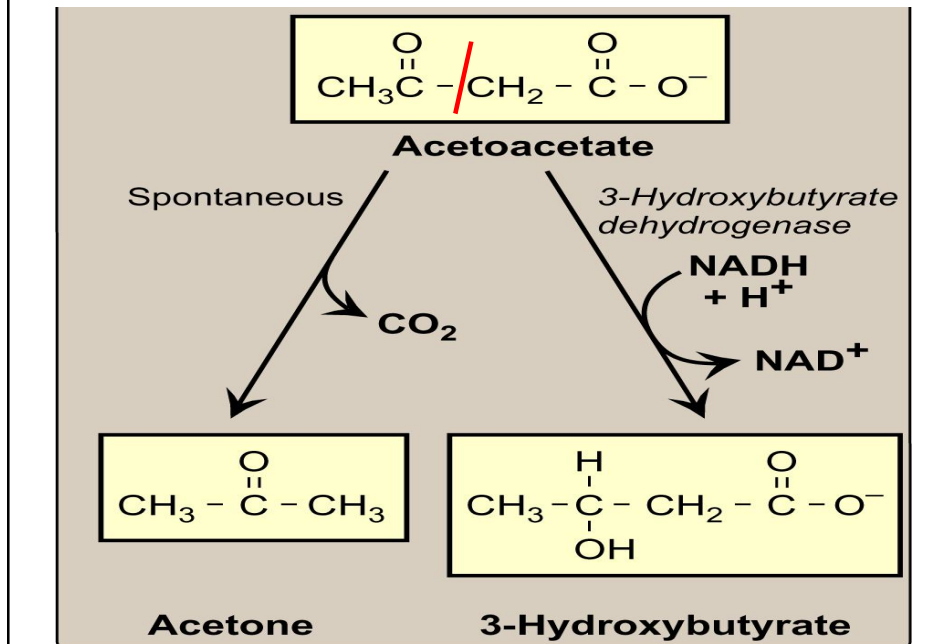
DR.NAME: Dr. Faisal

Biochemistry



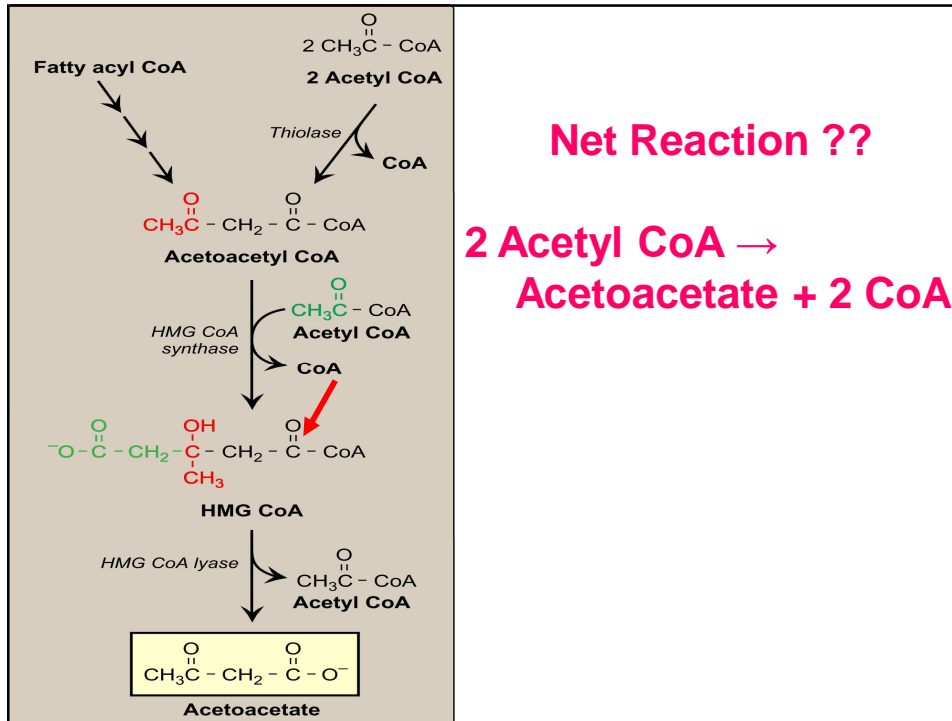
Majida Al-Foqaraa'

Ketone Bodies



Ketone Bodies

- Synthesis:
In Liver
- Precursor:
Acetyl CoA
- At high rate during:
 - Fasting
 - Uncontrolled Diabetes Mellitus



Net Reaction ??

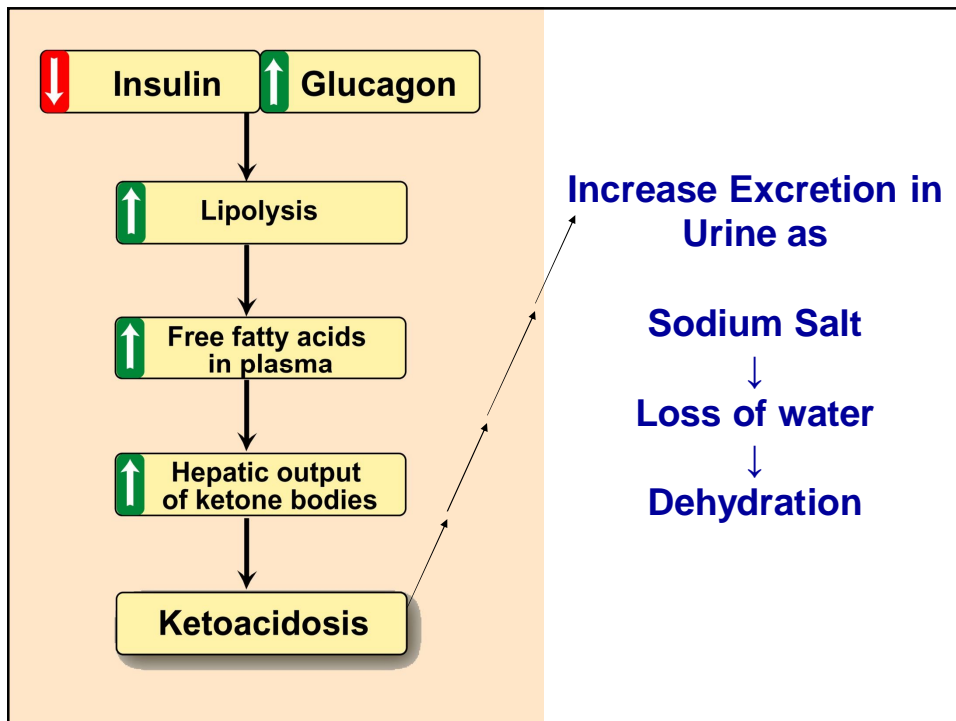
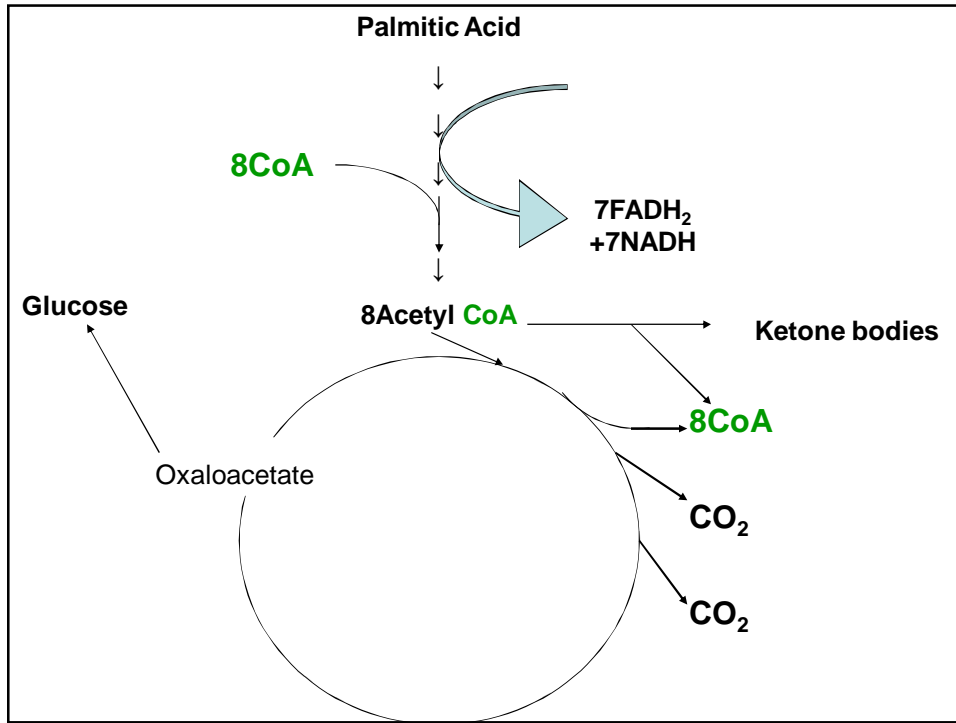


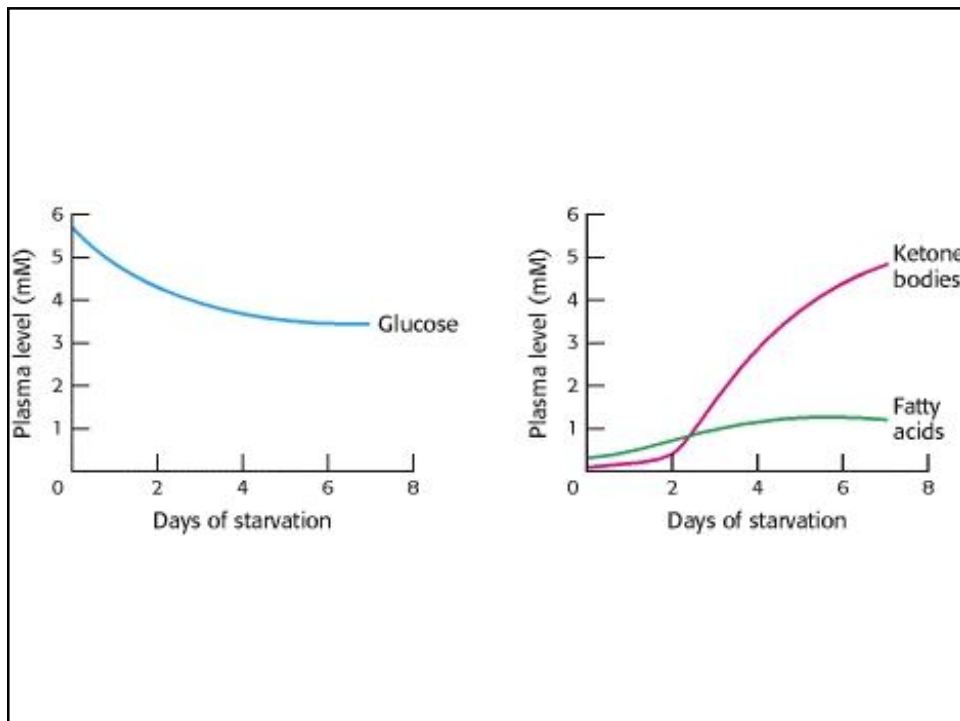
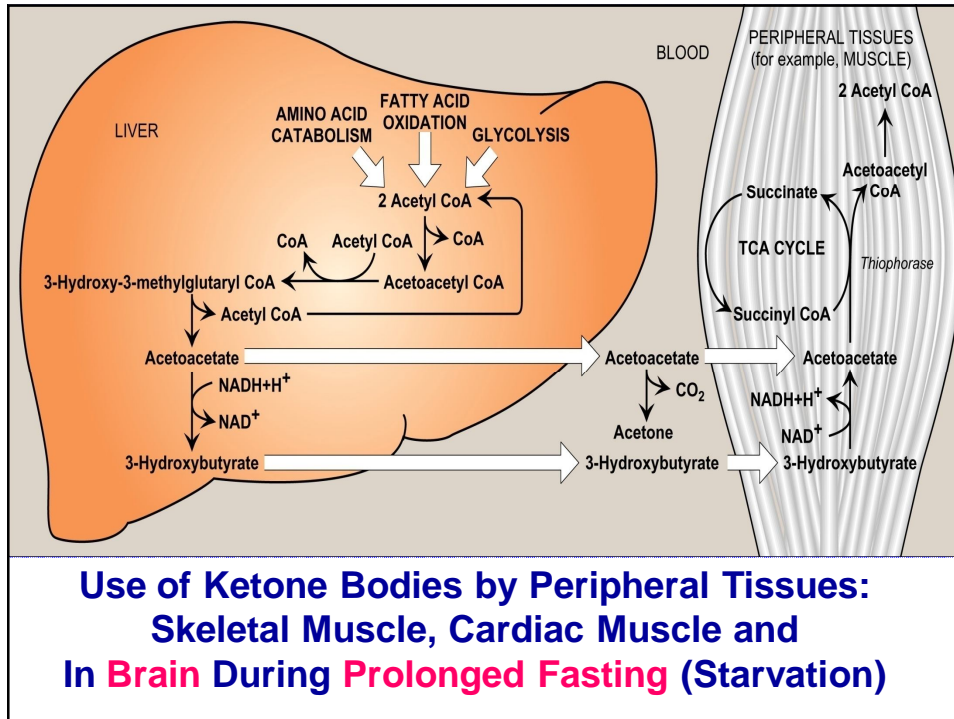
Net Reaction



Advantage (Purpose) ?

- For the liver
- For the tissues





Fuel metabolism in starvation

Fuel exchanges and consumption	Amount formed or consumed in 24 hours (grams)	
	3rd day	40th day
Fuel use by the brain		
Glucose	100	40
Ketone bodies	50	100
All other use of glucose	50	40
Fuel mobilization		
Adipose-tissue lipolysis	180	180
Muscle-protein degradation	75	20
Fuel output of the liver		
Glucose	150	80
Ketone bodies	150	150