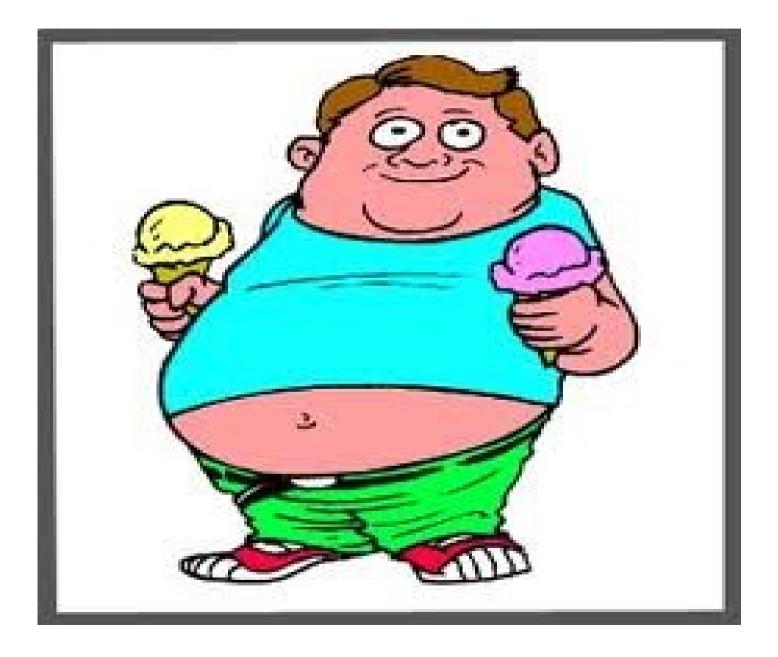
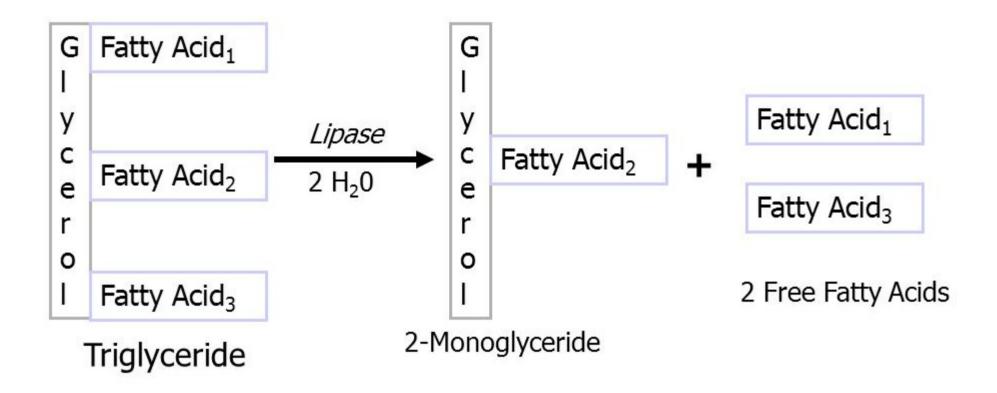
### Life cycle of Fatty acid in Humans

**SMPatel** 

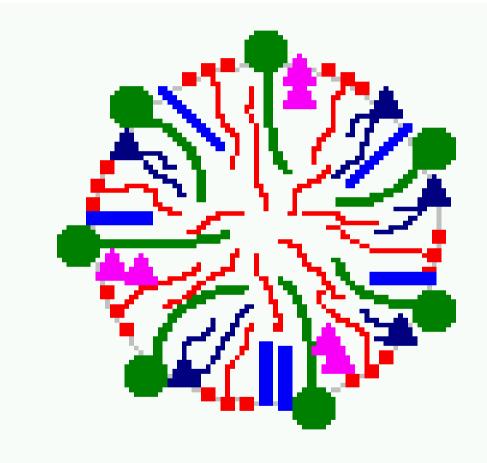
## FA - Food Sources (TG)



# **Digestion – Lipase, Bile Salt**

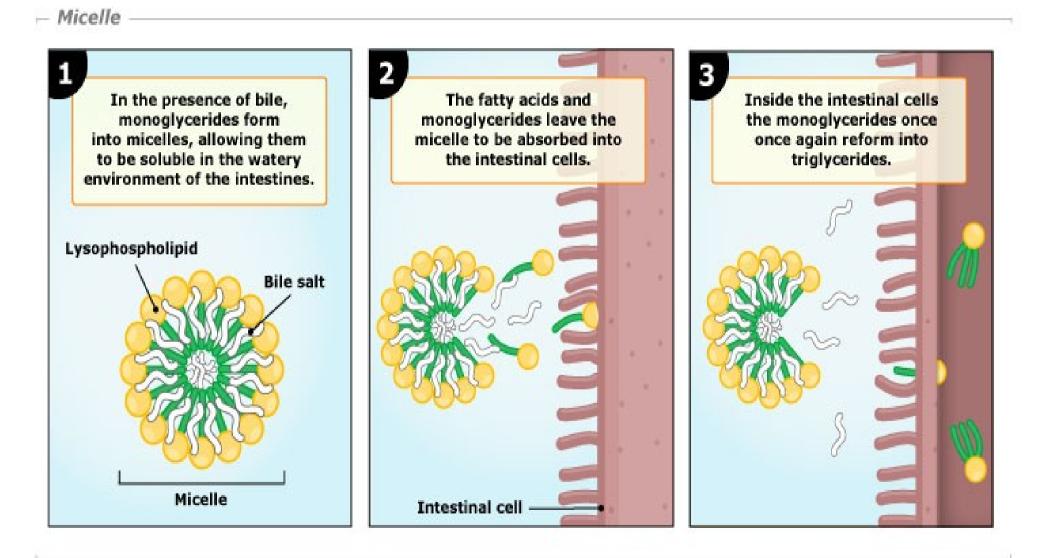


### **Absorption, Micelle**

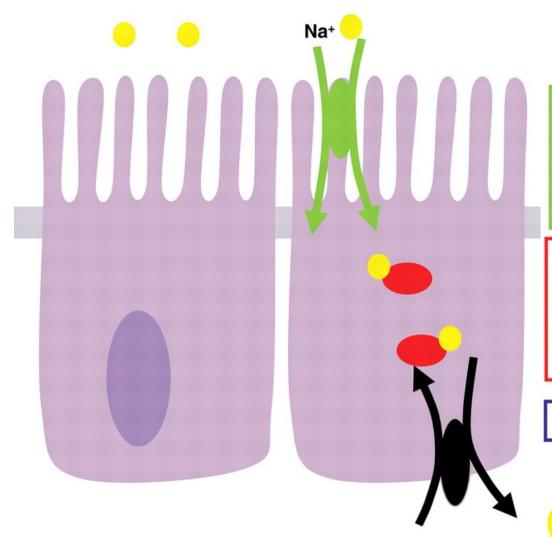


Bile salts Monoglyceride Fatty acids Phospholipids Cholesterol

# FA, MAG delivered to cell membrane



#### **Bile Acid absorbed in Ileum**



SLC10A2: Also known as Apical sodium-dependent bile acid transporter (ASBT) Ileal bile acid transporter (IBAT)

FABP6: Also known as Ileal lipid-binding protein (ILBP) Ileal bile acid-binding protein (IBABP)

 $OST-\alpha$  /OST- $\beta$  heterodimer

Organic Solute Transporter

Pattni S, and Walters J R F Br Med Bull 2009;92:79-93

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#### BRITISH MEDICAL BULLETIN

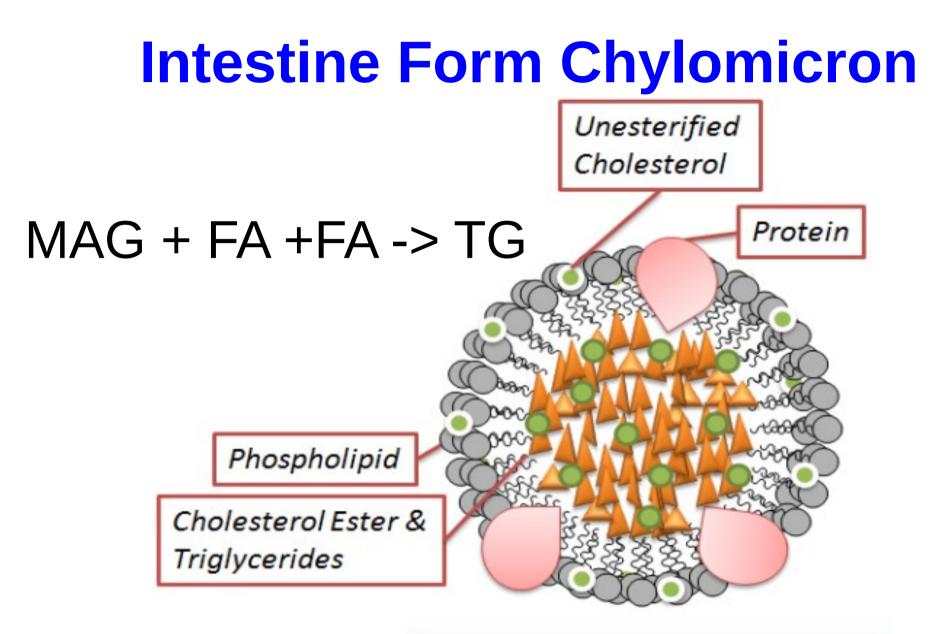
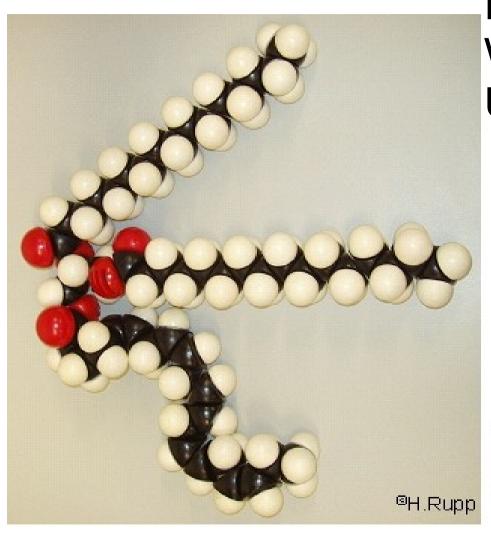


Figure 1. Schematic diagram of a Lipoprotein.

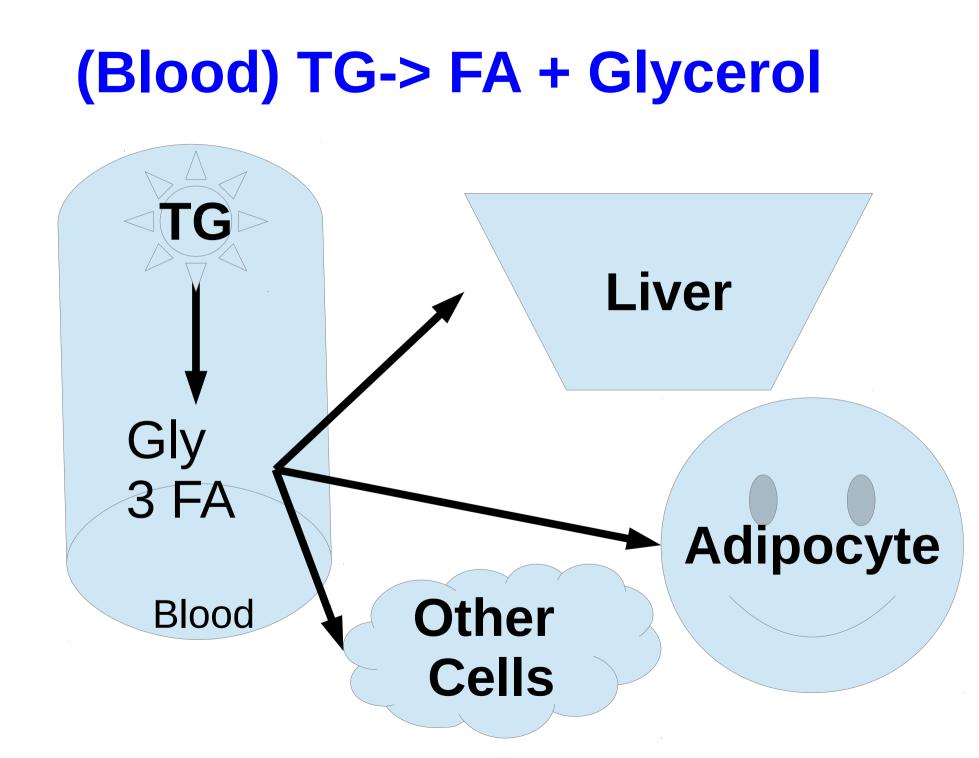
# **TG in blood**



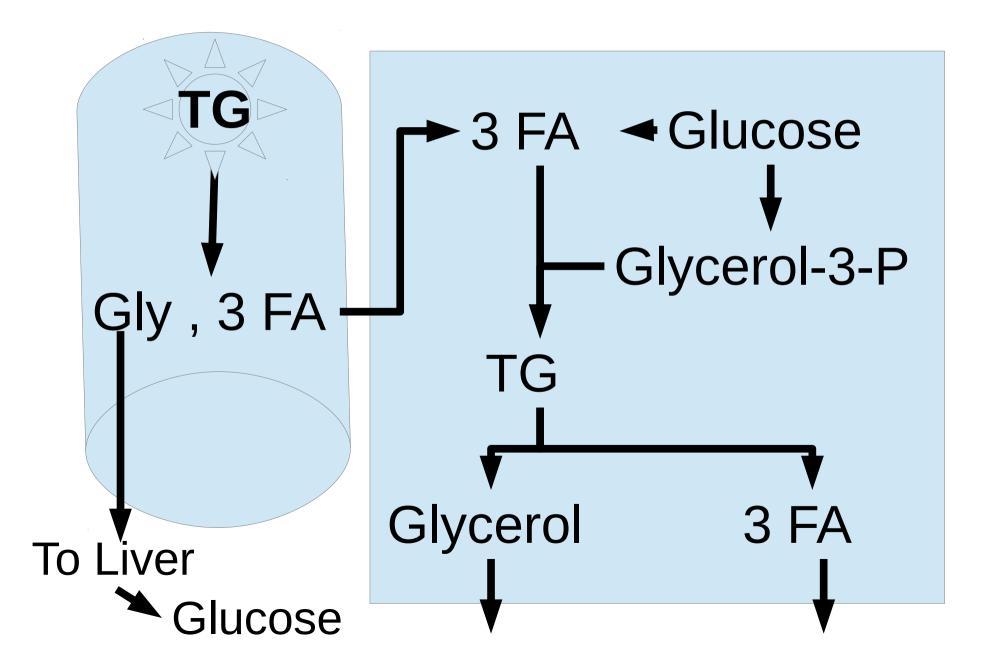
# H-Bond Water solubility Unique Transport system Unesterified Cholesterol

Phospholipid Cholesterol Ester & Triglycerides Eigure 1. Schematic diagram

Figure 1. Schematic diagram of a Lipoprotein.

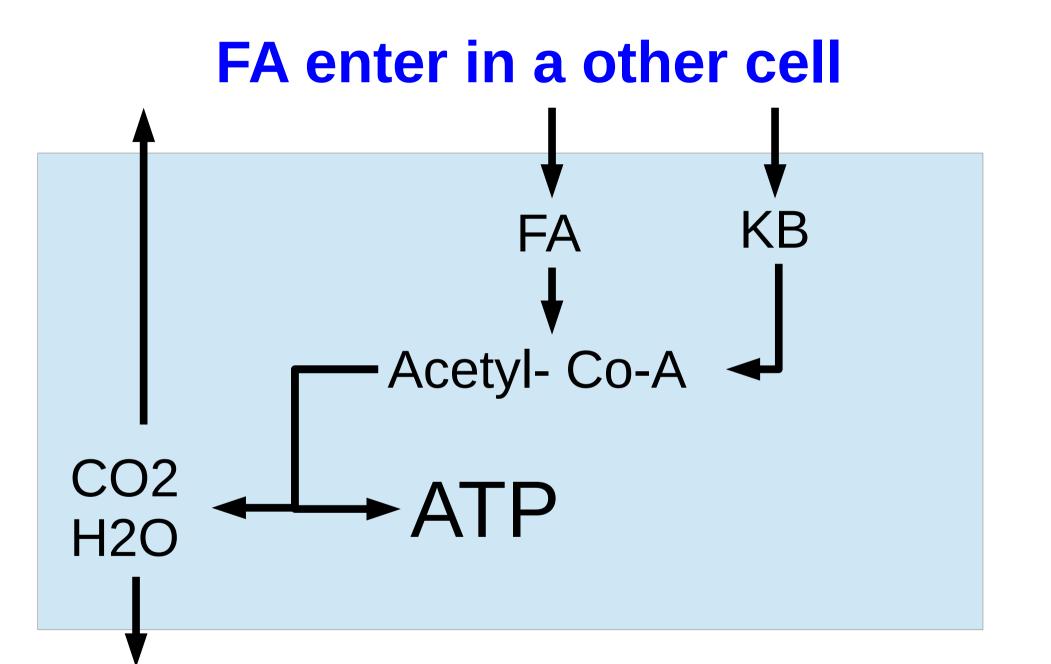


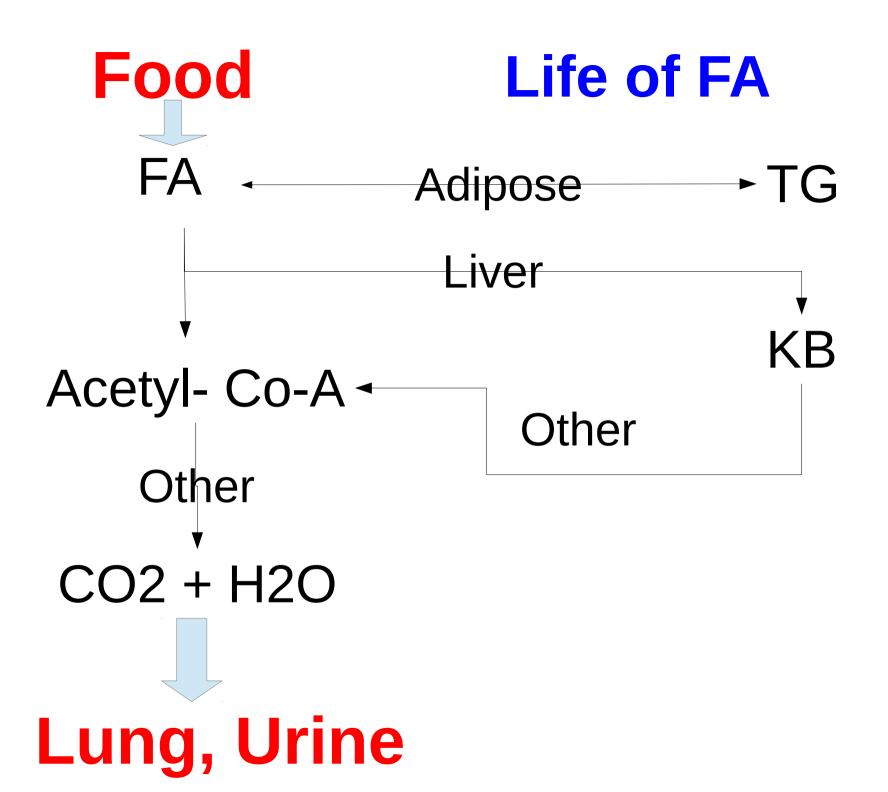
#### **FA enters adipose tissue**



### **FA enter in a liver cell** Aceto acetate, ←FA ← Glucose beta-**HydroxyButyrate** Glycerol-3-P Anonrotein ( Surface Phospholipid Apoprotein B100 ΤG







# **Fatty acid**

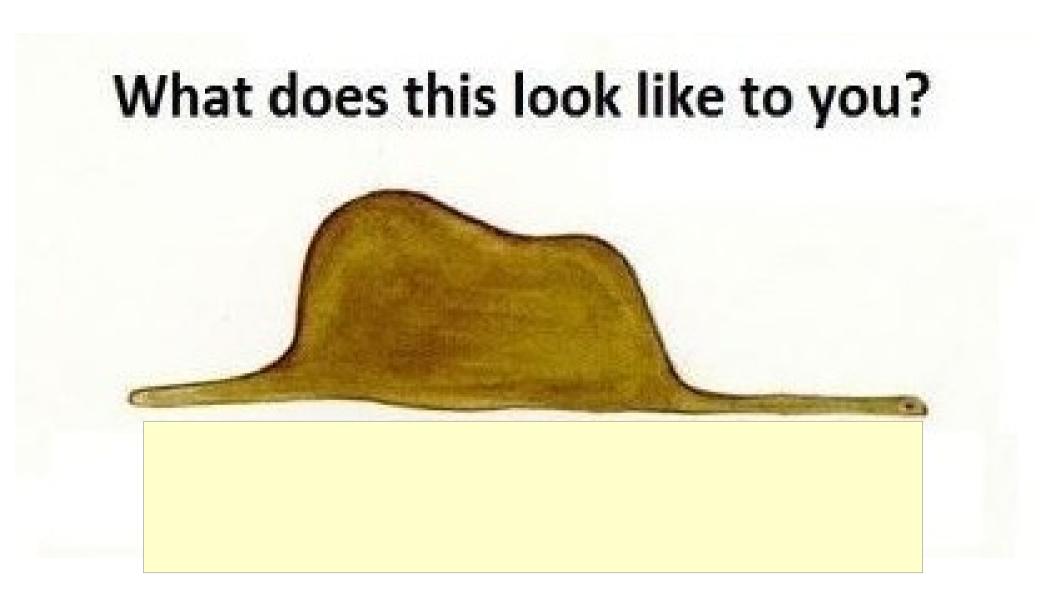
Is not Triacylglycerol Is not Fat Is not the only Lipid Is not Cholestrol Is thin and lean

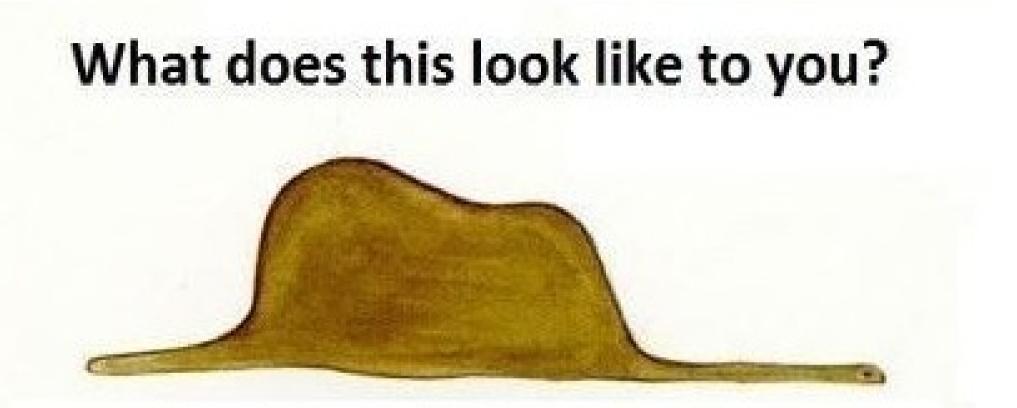


Why did the bear dissolve in water?



16 was a polar bear!





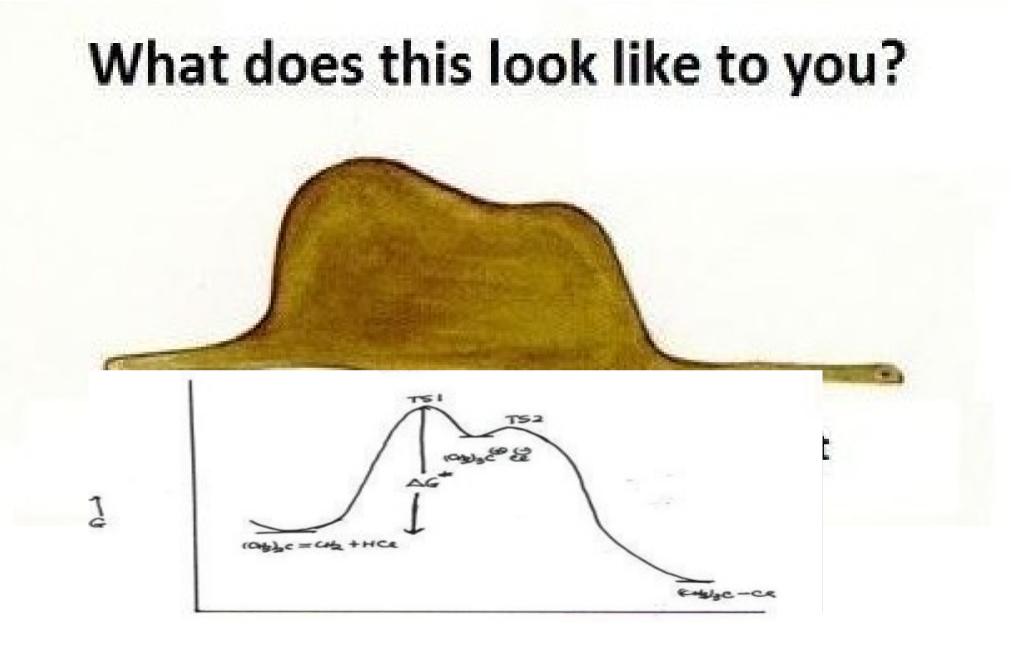
#### If it looks like a plain hat, you're an adult

#### **Boring Adult**



#### If you think that It is a Jerry hiding from Tom, You are still a child

Congratulation!!!!



If U say It is a Free Energy Curve, You are **hopeless** Biochemistry student

