#### Life cycle of Fatty acid in Humans

**SMPatel** 

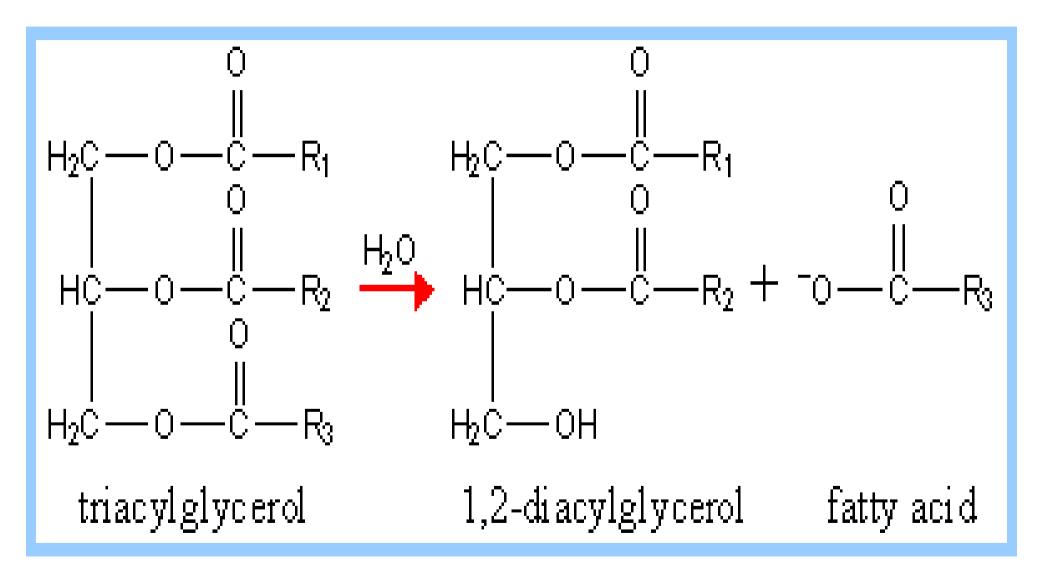
#### **FA - Food Sources (TG)**



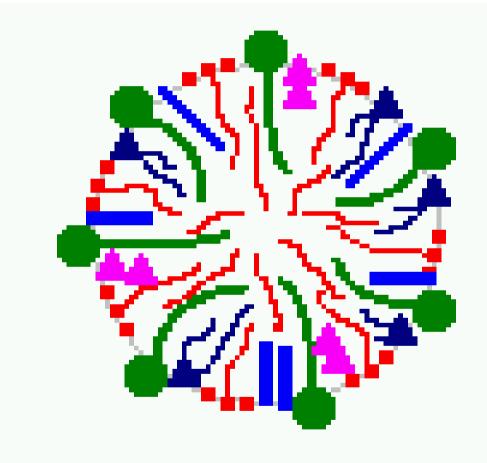
GLASBERGEN

"Today I ate two bowls of dog food, a sandwich crust, some spaghetti that fell on the floor, half of your cat food, a wet tea bag, three bugs and the inside of a sneaker. How many grams of fat is that?"

#### **Digestion – Lipase, Bile Salt**

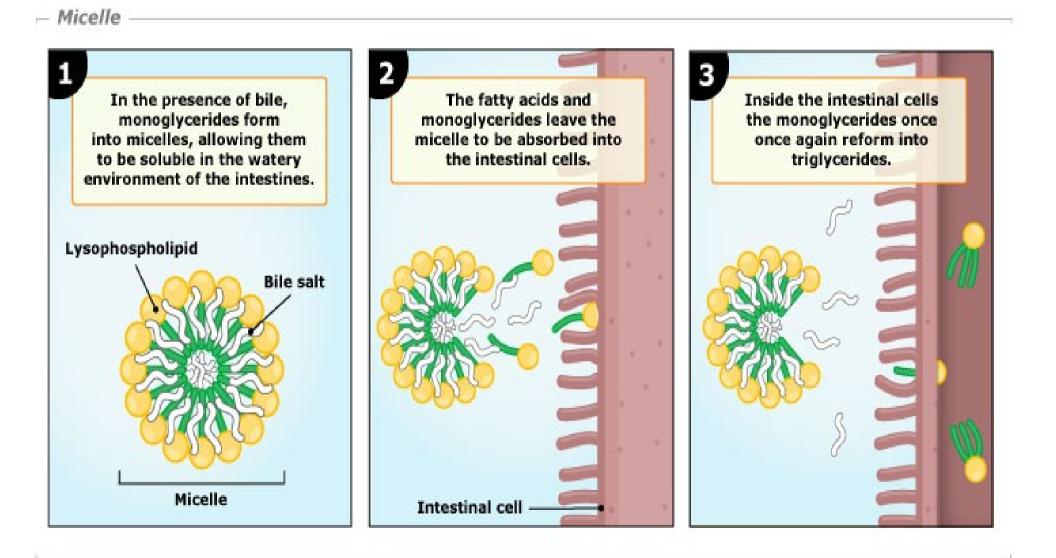


#### **Absorption, Micelle**

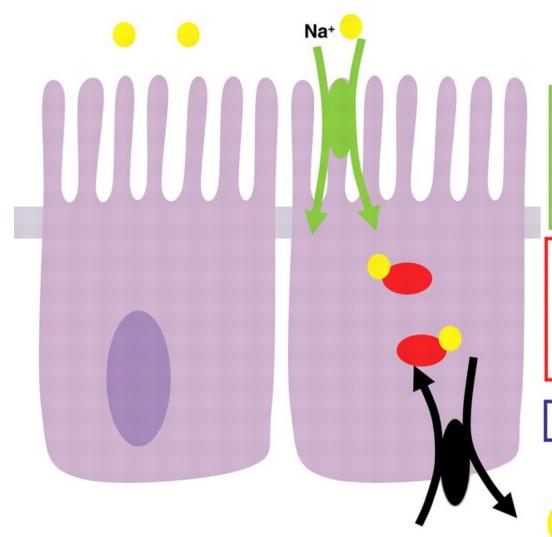


Bile salts Monoglyceride Fatty acids Phospholipids Cholesterol

# 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

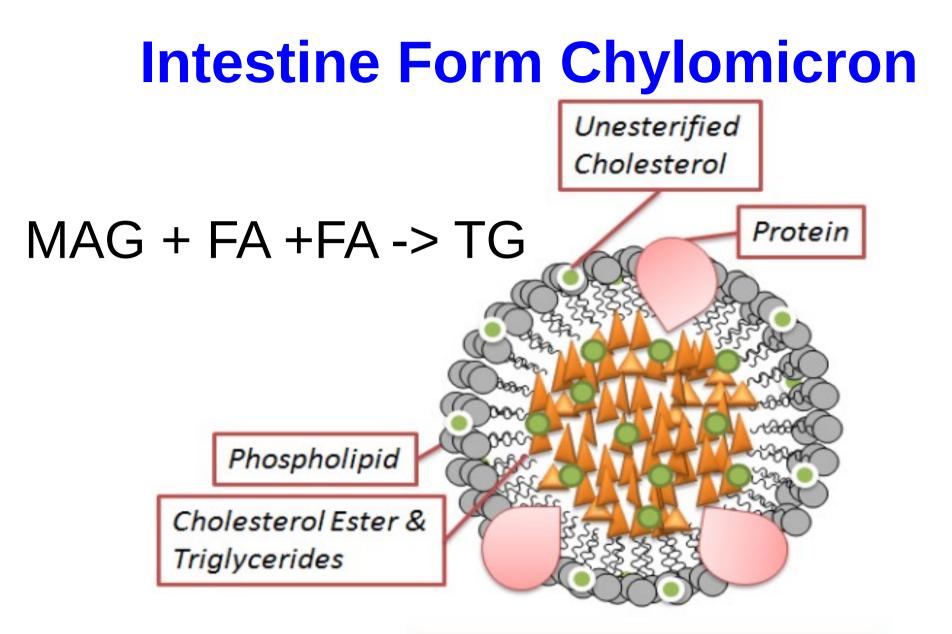
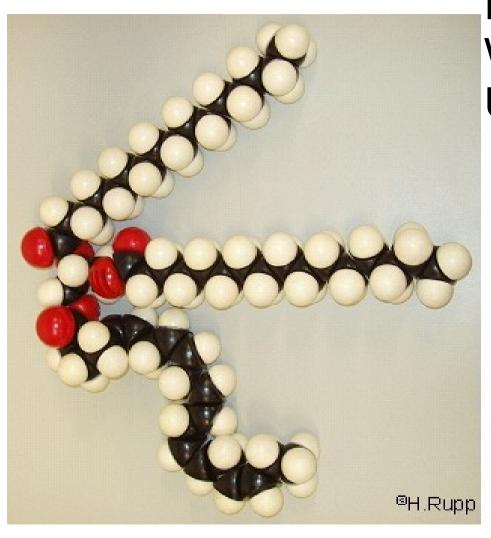


Figure 1. Schematic diagram of a Lipoprotein.

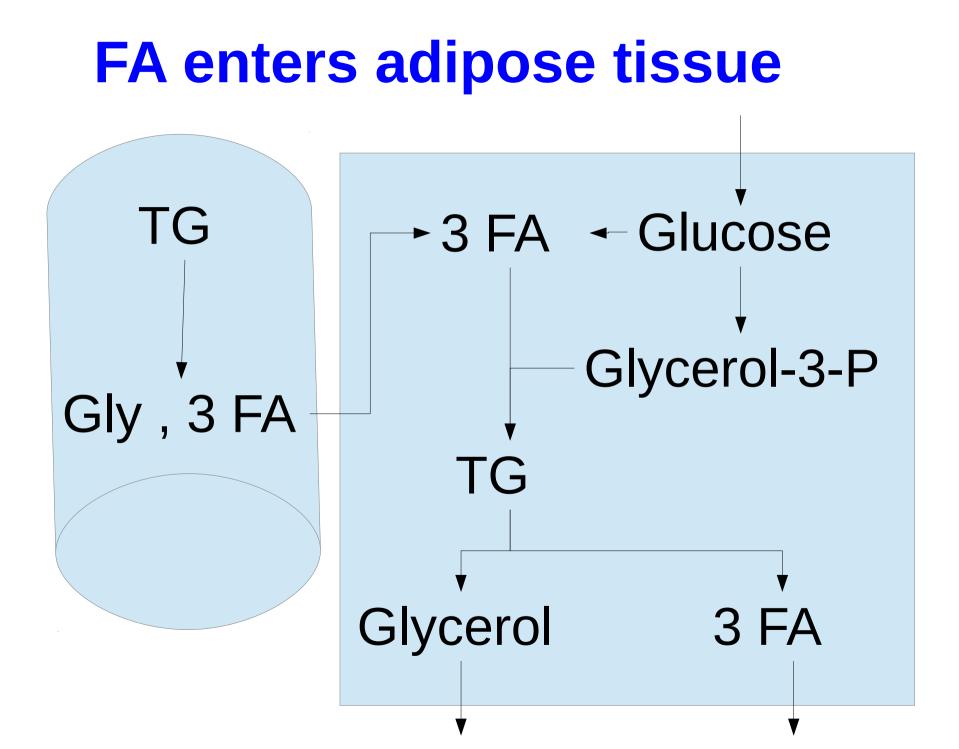
# **TG in blood**

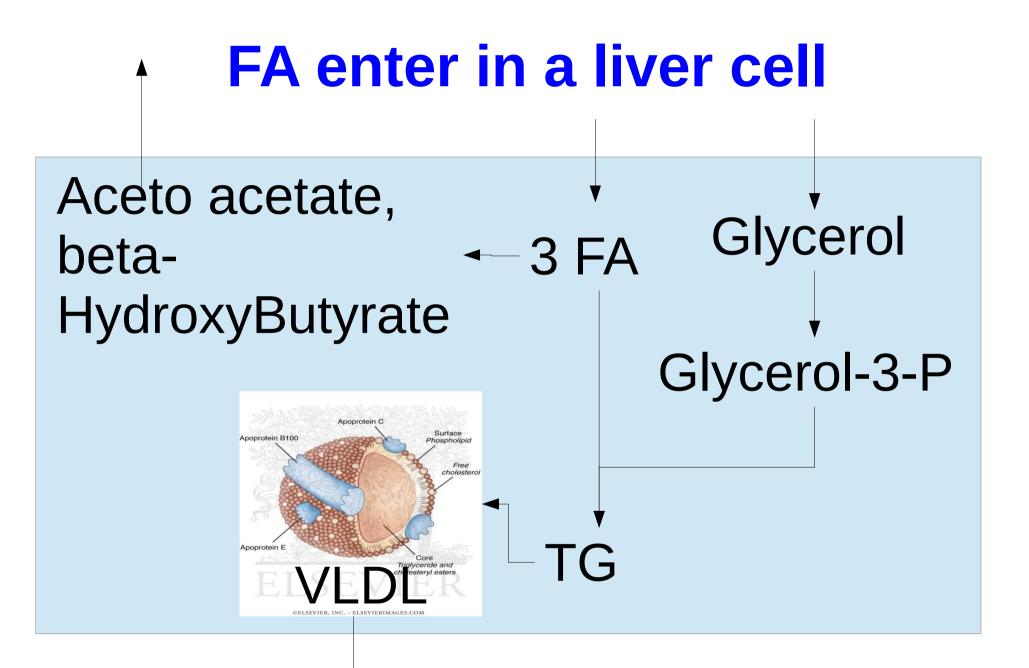


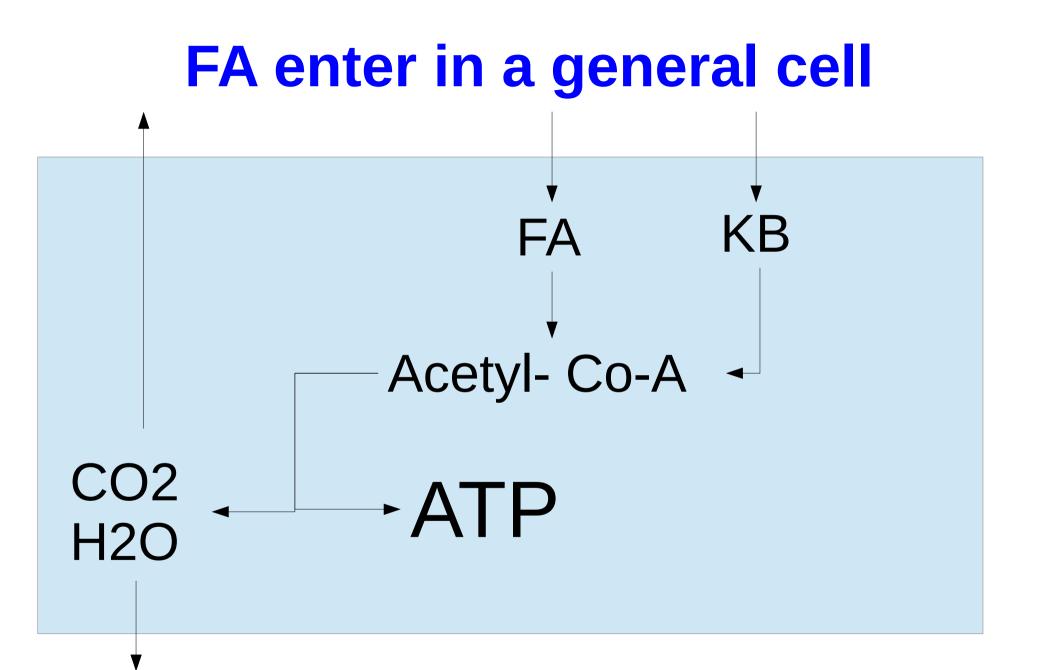
### H-Bond Water solubility Unique Transport system Unesterified Cholesterol

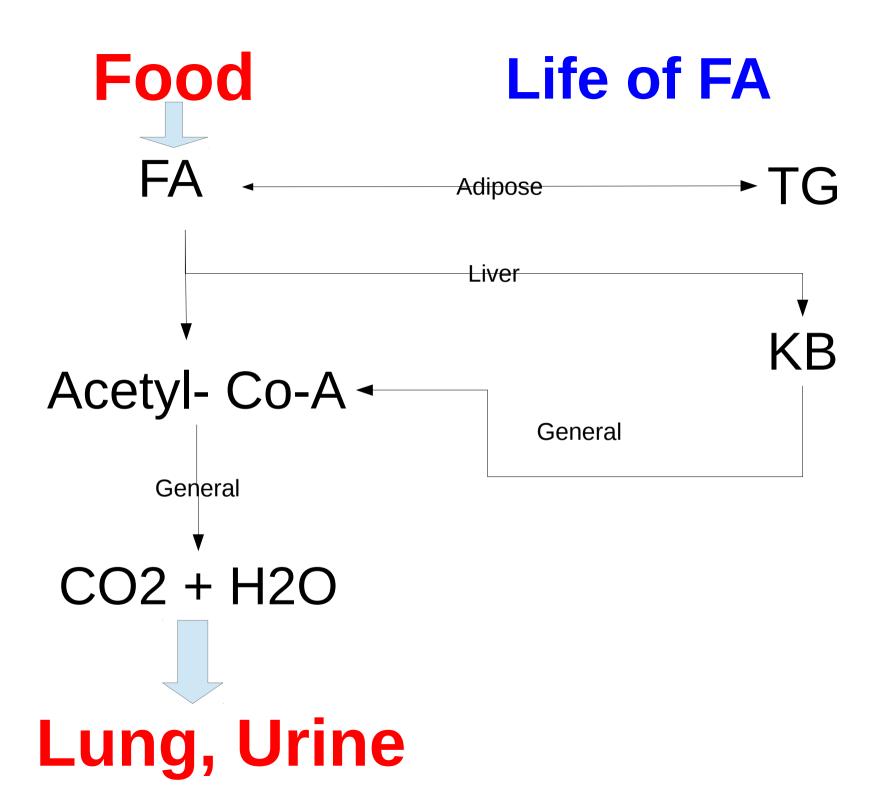
Phospholipid Cholesterol Ester & Triglycerides Eigure 1. Schematic diagram

Figure 1. Schematic diagram of a Lipoprotein.









# **Fatty acid**

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

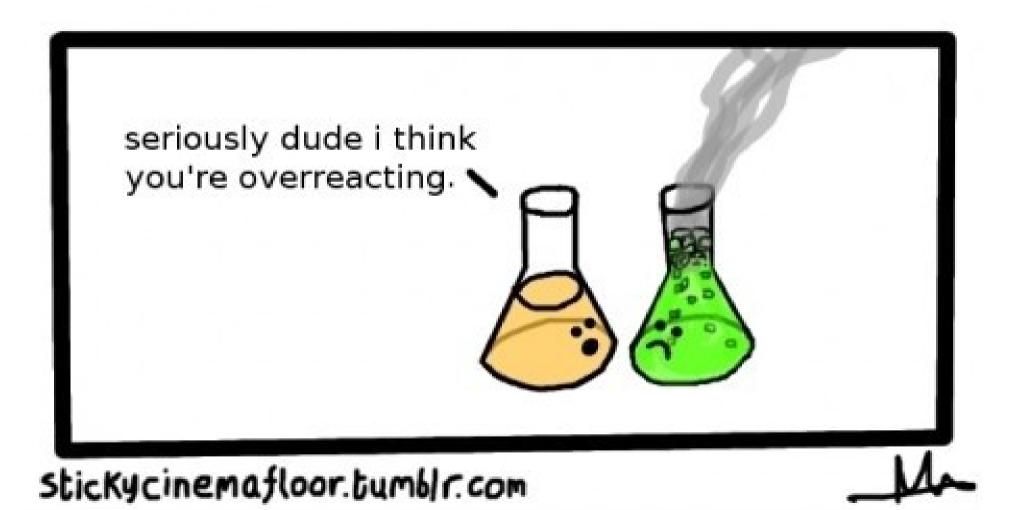


Why did the bear dissolve in water?

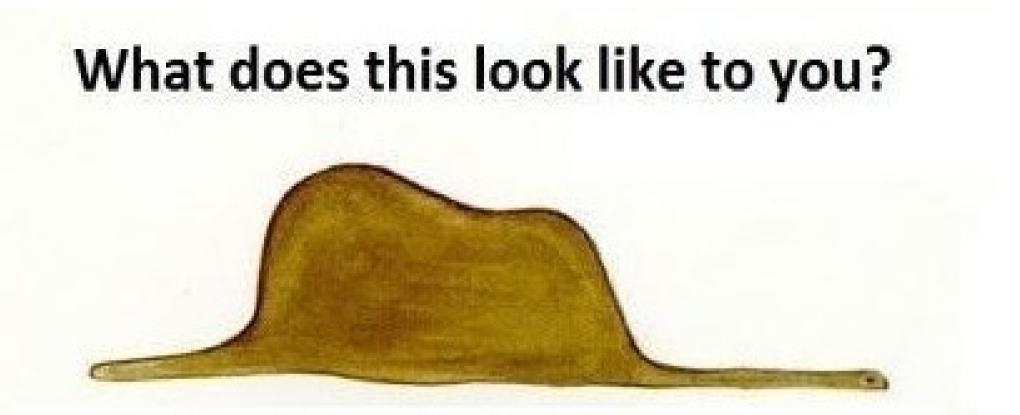


16 was a polar bear!

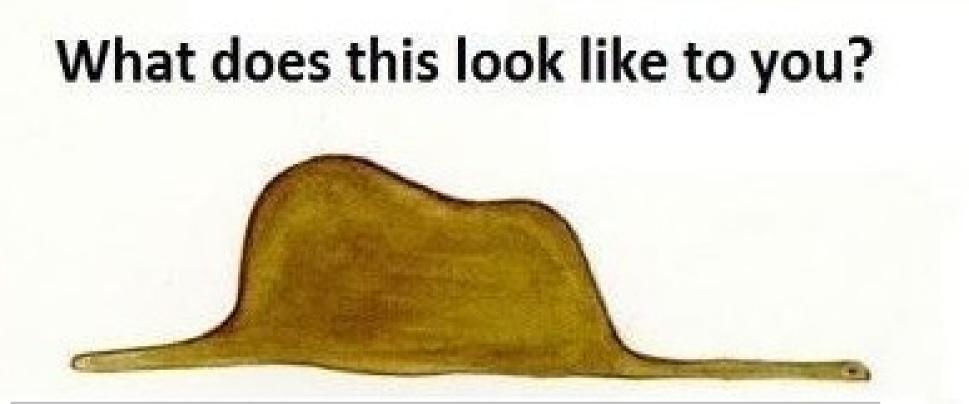
#### **Over reaction**



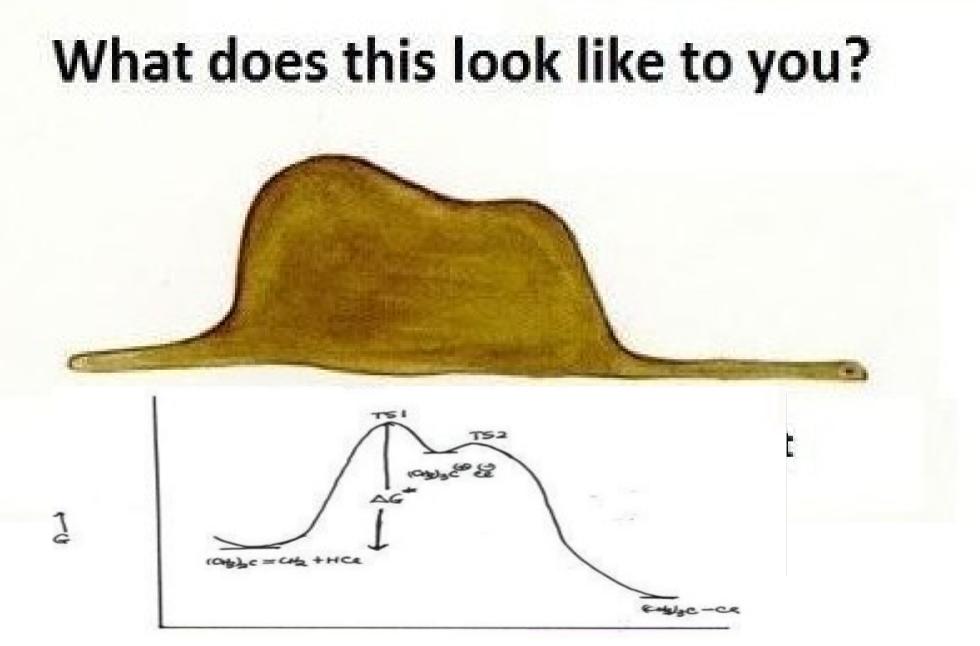
you just lost The Game by 96A6.COM



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



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



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