

Digestion and Respiration

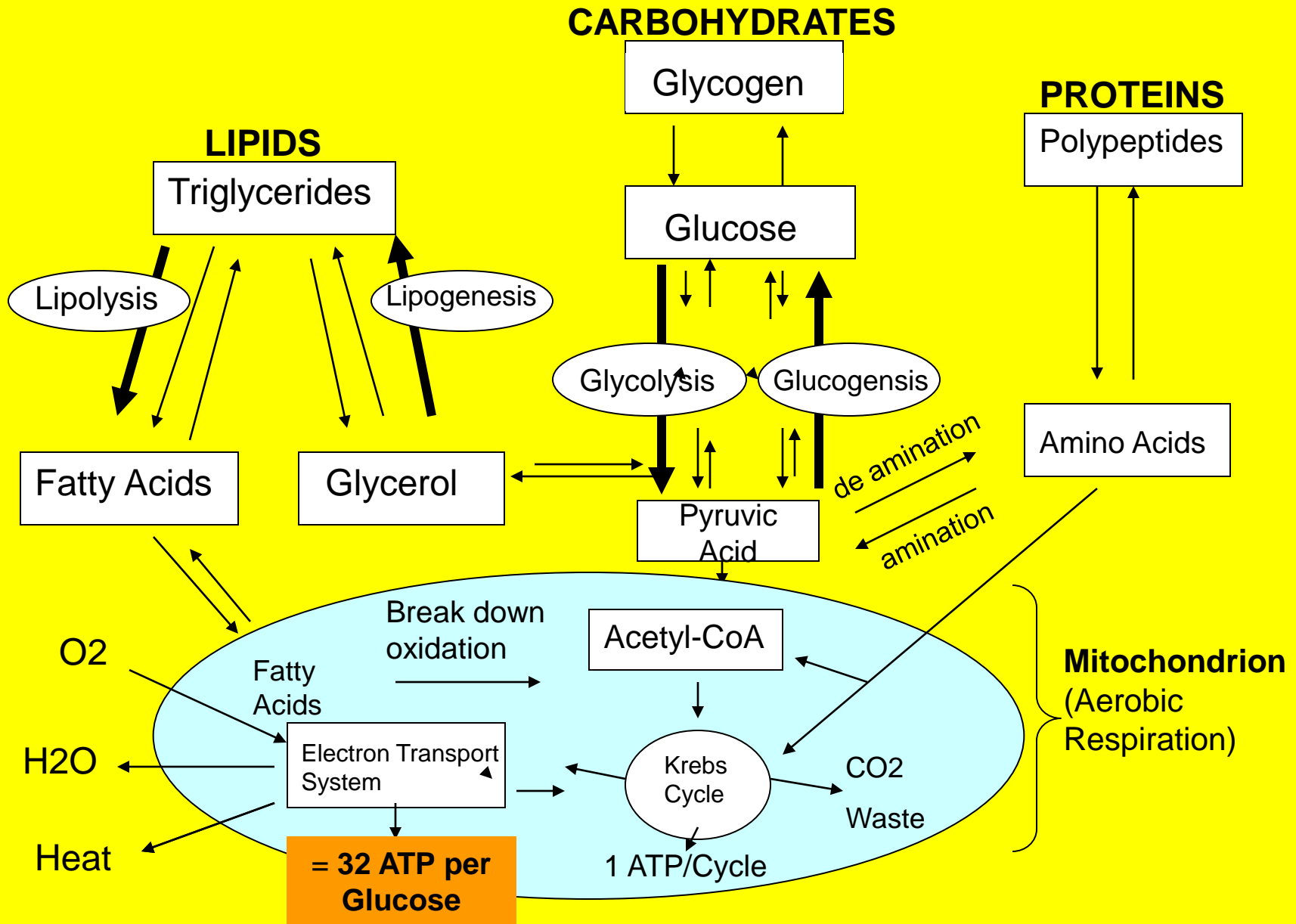
MMHS Anatomy

Chitraroff

Definitions

- **Catabolism**: Breakdown reaction of large to small molecules. (=digestion)
→ releases energy (**ATP** created)
- **Anabolic** : Synthesis reaction (=creation)
→ requires energy (**ATP** used)
- **Metabolism** : Sum reactions of catabolism & anabolism.

Digestion and Respiration



Respiration Reaction (=Burning the Food)

Glucose + Oxygen (Reactants)

(Reaction) 

CO₂ + H₂O + Heat

(Products)

ATP is Ubiquitous!

- **ATP surplus can be used for cellular activities like...**
 1. Active Transport of materials
 2. Muscle Contraction
 3. Waste Removal
 4. Thought / Brain Activity
 5. Maintaining Homeostasis