#### LAB 2 REVIEW

Metabolism, pH and Urinary

How many grams of carbohydrates do you need daily to maintain adequate blood glucose levels? How many grams of carbohydrates do you need daily to maintain adequate blood glucose levels?

100 g/day

# What percentage of our caloric intake is lost as heat?

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50%

#### C6H12O6 + 6O2 2 6H2O + 6CO2 + 36 ATP + heat

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### Oxidation of glucose

# How many kcal per gram will you find in fats?

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### 9kcal

# Where does the Krebs Cycle take place?

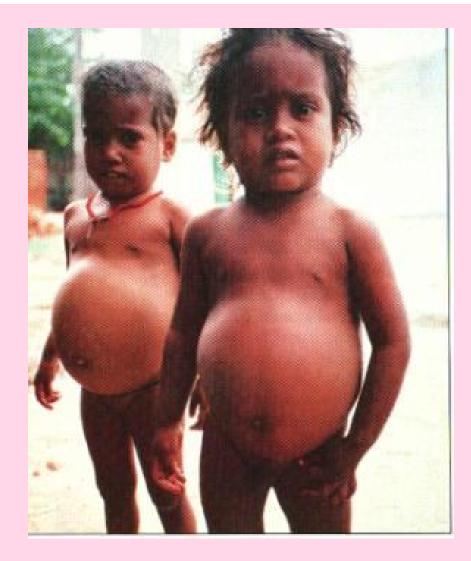
# Where does the Krebs Cycle take place?

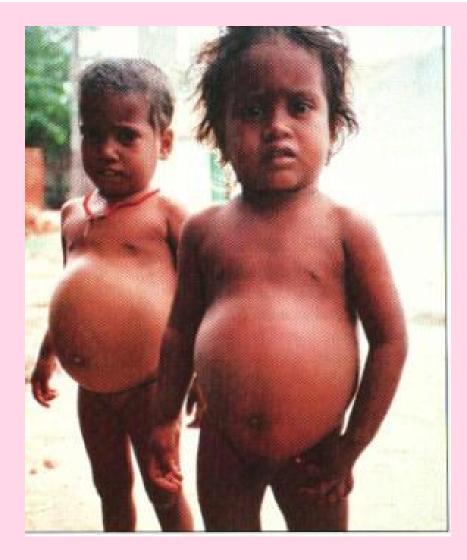
#### Mitochondrial matrix

# Which vitamins are produced by our bodies (THREE)?

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### B, D and K





#### kwashiorkor

Which enzyme initiates the break down fats in the mouth?

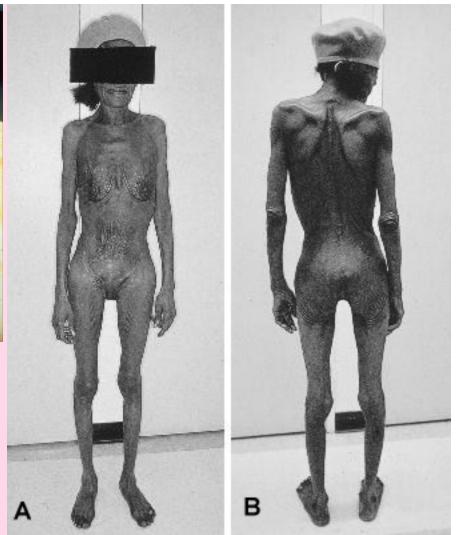
Which enzyme initiates the break down of fats in the mouth?

### Lingual Lipase





### Cachexia



# In terms of Redox Equations, define an oxidized substance?

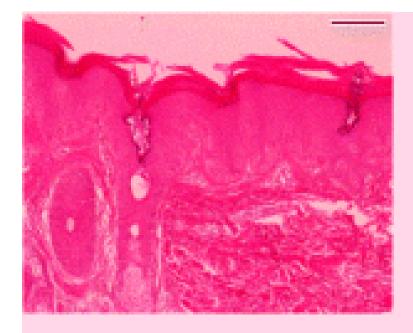
In terms of Redox Equations, define an oxidized substance?

# Oxidized substances lose electrons and energy.

#### Define glyconeogenesis?

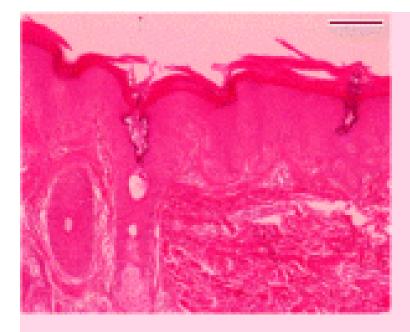
#### Define glyconeogenesis?

### Glucose formation from noncarbohydrate (glycerol and amino acid) molecules.





Follicular hyperkeratosis is a disease caused by what deficiency?





# Follicular hyperkeratosis is a disease caused by what deficiency?

#### Vitamin A

# What are the three primary steps of glycolysis?

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 Sugar Activation
sugar cleavage
sugar oxidation/ATP formation.

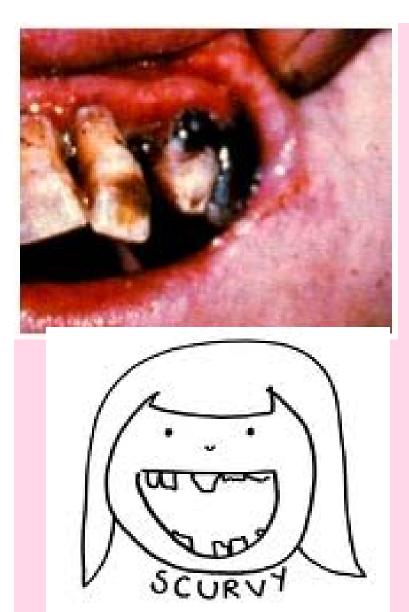
### What tissue secretes leptin and what is leptins function?

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Leptin is secreted by adipose cells and is an indicator of the body's total energy stores in fat tissue.







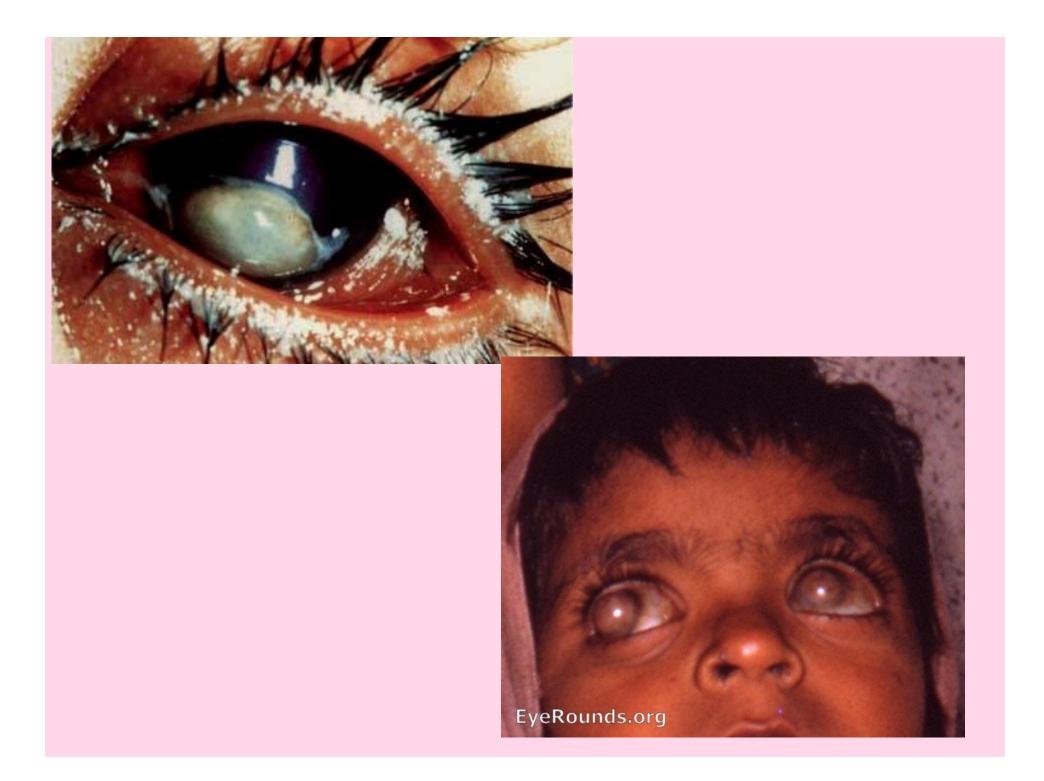


Vitamin C defiant

#### Define the condition called pica?

#### Define the condition called pica?

Eating and craving abnormal nutrients such as clay, cornstarch or dirt.





#### Vitamin A deficiency

#### keratomalacia



#### URINARY

# The kidneys are intraperitoneal or retroperitoneal?

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### Retroperitoneal

What are the three layers of the supportive tissue surrounding the kidneys?

What are the three layers of the supportive tissue surrounding the kidneys?

Renal fascia Perirenal fat capsule Fibrous capsule

#### What is pyelonephritis?

#### What is pyelonephritis?

#### Infection of the entire kidney

# Where is angiotensin I converted to angiotensin II and by what cells?

Where is angiotensin I converted to angiotensin II and by what cells?

The lungs and the cell is called an angiotensin-converting enzyme.

#### What causes urine to be yellow?

#### What causes urine to be yellow?

### Urochrome

### What are the two types of epithelium found in the urethra?

# What are the two types of epithelium found in the urethra?

Pseudostratified columnar epithelium Transitional epithelium