

Biochemistry

- 1- 3 moles of acetyl CoA in the TCA cycle produce
- 2- enzymes that undergo oxidative decarboxylation in the TCA cycle
- 3- glutamate produces both of the urea nitrogens by
- 4- Picture of Urea cycle: enzyme of rxn. 3
- 5- Picture of Urea cycle: molecules of the same class
- 6- catabolism of serine produces
- 7- essential amino acids
- 8- true about PKU
- 9- Other reactants and products of the reaction between CO₂ and NH₃
- 10- which is not antioxidant
- 11- after 14-hour, milky looking plasma indicates
- 12- binds the scavenger receptor class b1 in the liver
- 13- familial hypercholesterolemia
- 14- true about acetyl CoA carboxylase
- 15- wrong about HMG CoA (reductase)
- 16- Wrong about de novo synthesis of pyrimidines
- 17- a child with severe combined immunodeficiency, the enzyme involved converts
- 18- a fat free diet reduces production of
- 19- Vitamin D is synthesized from
- 20- Picture of bile acid: rate limiting step of its synthesis
- 21- Wrong about H₂O₂ 22- Wrong about deoxyribonucleotides
- 23- wrong about Purine degradation
- 24- Ammonia is mostly transported in blood as
- 25- an enzyme that fixes free ammonia to the substrate
- 26- Wrong about alcoholic fermentation
- 27- true about ketonbodies
- 28- true about gluconeogenesis
- 29- not consistent with maintaining sufficient glucose to brain during fasting
- 30- to make sphingomyelin from ceramide we need
- 31- to cut the phosphocholine from lecithin we need

- 32- Orlistat inhibits
- 33- someone prevented from a chlorophyll-rich diet because of
- 34- Wrong about TAG synthesis in the adipose tissue
- 35- true about converting 3-Hydroxyacyl CoA to 3-ketoacyl CoA
- 36- Nieman-pick disease is
- 37- wrong about homocysteine
- 38- wrong about lactose synthase
- 39- wrong about monosacharide metabolism
- 40- a galactose free diet, where do we get galactose from
- 41 - high blood glucose in diabetics causes problems because
- 42- Products of converting malate to pyruvate
- 43- conversion of phosphatidylethanolamine to phosphatidylcholine requires
- 44- a product of nucleotide salvage pathway
- 45- Wrong about pentose phosphate pathway
- 46- Wrong about propionyl CoA
- 47- beta oxidation of Oleic acid produces
- 48- Wrong about the nonoxidative reactions of PPP
- 49- true about acetate's fate produced from ethanol metabolism
- 50- not a coenzyme of pyruvate dehydrogenase
- 51- wrong about hormone sensitive lipase
- 52- wrong about purine de novo synthesis

1-3 FADH₂

2- Isocitrate and alpha ketoglutarate dehydrogenase

3- oxidative deamination and transamination

4- mitochondrial ornithine carbamoyltransferase

5- G, B, C, E (amino acids)

6- pyruvate

7- Leucine, lysine, valine

8- if not treated, mental retardation

- 9- none of above *maybe*
- 10- Cysteine
- 11- Chylomicron remnant defective absorption by liver
- 12- HDL
- 13- Defective LDL receptors
- 14- its product inhibits fatty acyl coa entry to mitochondria
- 15- active when phosphorylated
- 16- UTP made from CTP
- 17- adenosine to inosine
- 18- arachidonic acid
- 19- 7-dehydrocholesterol
- 20- 7-hydroxylase
- 21- is a free radical
- 22- made from dPRPP
- 23- X.O. has H₂O₂ as substrate
- 24- glutamine and alanine
- 25- alpha ketoglutarate to glutamate
- 26- produces 1 ATP
- 27- fully oxidized in the heart to CO₂
- 28- activated in the kidney after prolonged fasting
- 29- activating pyruvate dehydrogenase
- 30- phosphatidylcholine
- 31- phospholipase C
- 32- pancreatic lipases
- 33- deficient alpha oxidation
- 34- glycerol 3 phosphate is produced by glycerol kinase
- 35- in the mitochondria
- 36- deficient sphingomyelin degradation
- 37- source of the carbon skeleton of cysteine

- 38- joins UDP-galactose and CDP-glucose
- 39- hereditary fructose intolerance is due to deficient fructokinase
- 40- epimerisation of UDP-glucose
- 41- converted to sorbitol
- 42- CO₂ and NADPH
- 43- 3 S-adenosylmethionine
- 44- GMP form Guanine
- 45- Activated by NADPH
- 46- a product of peroxisomal very long chain fatty acid oxidation
- 47- 7 FADH₂
- 48- transaldolase transfers 2-c
- 49- activated to acetyl CoA by many tissues
- 50- pyridoxine
- 51- extracellular
- 52- sulfonamides strongly inhibit nucleotide synthesis in humans