

PRACTICE: FATTY ACID OXIDATION

23. In the catabolism of fat (triacylglycerols), glycerol enters central metabolism as:

- a. glucose.
- b. dihydroxyacetone phosphate.
- c. acetate.
- d. pyruvate.
- e. glyceryl-CoA.

24. Carnitine is:

- a. a 15 carbon fatty acid.
- b. a Citric Acid Cycle cofactor.
- c. essential for intracellular transport of fatty acids.
- d. a rare amino acid found in proteins.
- e. present only in carnivores.

25. What is the correct order of enzymes in β -oxidation?

- 1. β -hydroxyacyl-CoA dehydrogenase
- 2. thiolase
- 3. enoyl-CoA hydratase
- 4. acyl-CoA dehydrogenase

- a. 1, 2, 3, 4,
- b. 2, 3, 4, 1
- c. 4, 3, 1, 2
- d. 2, 4, 3, 1
- e. 3, 1, 4, 2

26. The conversion of one palmitic acid (16:0) through β -oxidation and the Citric Acid Cycle and all of the energy intermediates are converted to ATP equivalents that equal:

- a. 3
- b. 108
- c. 32
- d. 1000
- e. 10

27. The conversion of one palmitoleic acid (16:1) through β -oxidation and the Citric Acid Cycle and all the energy intermediates are converted to ATP equivalents that equal:

- a. 4
- b. 106
- c. 31
- d. 1004
- e. 12