

**Instructional Objectives / Learning Outcomes**  
**DMP 775, Veterinary Clinical Pathology**  
**Department of Diagnostic Medicine/Pathobiology**  
**College of Veterinary Medicine, Kansas State University**

Chapter 16: Lipids

293. If given serum concentrations of cholesterol or triglyceride and pertinent patient information,
- a. List or classify abnormalities using appropriate terms.
  - b. Propose appropriate ideas or conclusions (i.e., diseases, syndromes, or pathologic states) that might cause the defined abnormalities.
  - c. Based on your conclusions or ideas, explain the pathogenesis of each defined abnormality if the abnormality could be caused by the disorder.
294. List the two major processes that produce hypercholesterolemia.
295. List the two major processes that produce hypertriglyceridemia.
296. Explain or recognize the pathogenesis of hypercholesterolemia or hypertriglyceridemia that may be found with the following.
- a. Postprandial sample
  - b. Acute pancreatitis
  - c. Nephrotic syndrome or protein-losing nephropathy
  - d. Hypothyroidism
  - e. Lipoprotein lipase deficiency
  - f. Cholestasis
  - g. Diabetes mellitus
  - h. Hyperadrenocorticism
  - i. Primary versus secondary hyperlipidemia
  - j. Multiple conditions of equine hyperlipidemia: anorexia, pregnancy and lactation
297. List the major process that produces hypocholesterolemia.
298. Explain and recognize the pathogenesis of hypocholesterolemia that may be found in an animal with a portosystemic shunt.
299. Explain the relationships (if any) between the following:
- a. Presence or absence of plasma turbidity versus serum triglyceride concentration
  - b. Presence or absence of plasma turbidity versus serum cholesterol concentration
300. Explain why triglyceride concentrations in chylous effusions are much greater than serum triglyceride concentrations. Explain why a cholesterol:triglyceride ratio is much less in chylous effusions than in non-chylous effusions.