

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

Material not in *Fundamentals of Veterinary Clinical Pathology, 2002*

**Synovia analysis**

333. If given the results of a synovia analysis and other pertinent clinical information, use appropriate terms to classify the synovia as a neutrophilic (suppurative, purulent) or mononuclear (nonsuppurative, nonpurulent) inflammatory arthropathy.
334. Describe each component of routine synovia analysis (including units of measurement) and the purposes or potential value of each analytical procedure.
335. Explain why or how the viscosity of synovia interferes with the analysis of synovia and what can be done to synovia to reduce its viscosity.
336. Explain and recognize what a LE cell contains and what a ragocyte contains.
337. Based on your understanding of inflammatory reactions, explain the difference between synovia that contains many neutrophils versus synovia that contain many macrophages.
338. Explain and recognize an advantage and a disadvantage of collecting synovia into an EDTA-containing tube.
339. Explain the pathogeneses (how or why) of each of the following and propose and recognize disorders (diseases, pathologic states) which might cause the following:
  - a. Neutrophilic (suppurative, purulent) inflammatory arthropathy
  - b. Mononuclear (nonsuppurative, nonpurulent) arthropathy
  - c. Red synovia
  - d. Dark yellow to orange synovia
340. Explain why synovia should be submitted to attempt to culture of microorganisms if:
  - a. Organisms are seen in a microscopic examination
  - b. Organisms are not seen in a microscopic examination