

**BIOLOGY OF AGING**  
**STUDY QUESTIONS FOR EXAM # 3**

This exam will cover pages 124-129 of chapter 6, pages 161-165 of chapter 8, and chapter 9.

The student should be able to .....

1. Discuss models of invertebrate animals as they relate to the study of aging. How have they been used?
2. Discuss models of vertebrate animals as they relate to the study of aging. How have they been used?
3. Describe how development from the embryonic stage through adolescence and adulthood occur. What are the important factors that regulate this process? Define the term differentiation.
4. Define the terms progeria and menopause.
5. Discuss the relationship of cardiovascular disease and aging.
6. Define atherosclerosis and arteriosclerosis and discuss the function of LDL and HDL and cholesterol in fatty deposit development and disease.
7. Define Hypertension. Describe some of the potential causes of hypertension.
8. Describe what happens to the size of the heart with age and how this relates to the efficiency of the heart as a pump. What happens to veins and arteries as we age?
9. For each of the following organ systems, describe what happens during aging. Where applicable, be able to illustrate (draw) the appropriate organs and label their parts.
  - Skin, taste and smell*-- discuss changes
  - hearing* (ear)-- draw and discuss changes
  - vision* (eye)-- draw and discuss changes
  - bone*-- discuss changes
    - osteoporosis
    - arthritis
    - Rheumatoid arthritis
  - lungs*-- discuss changes
  - gastrointestinal tract*--discuss changes