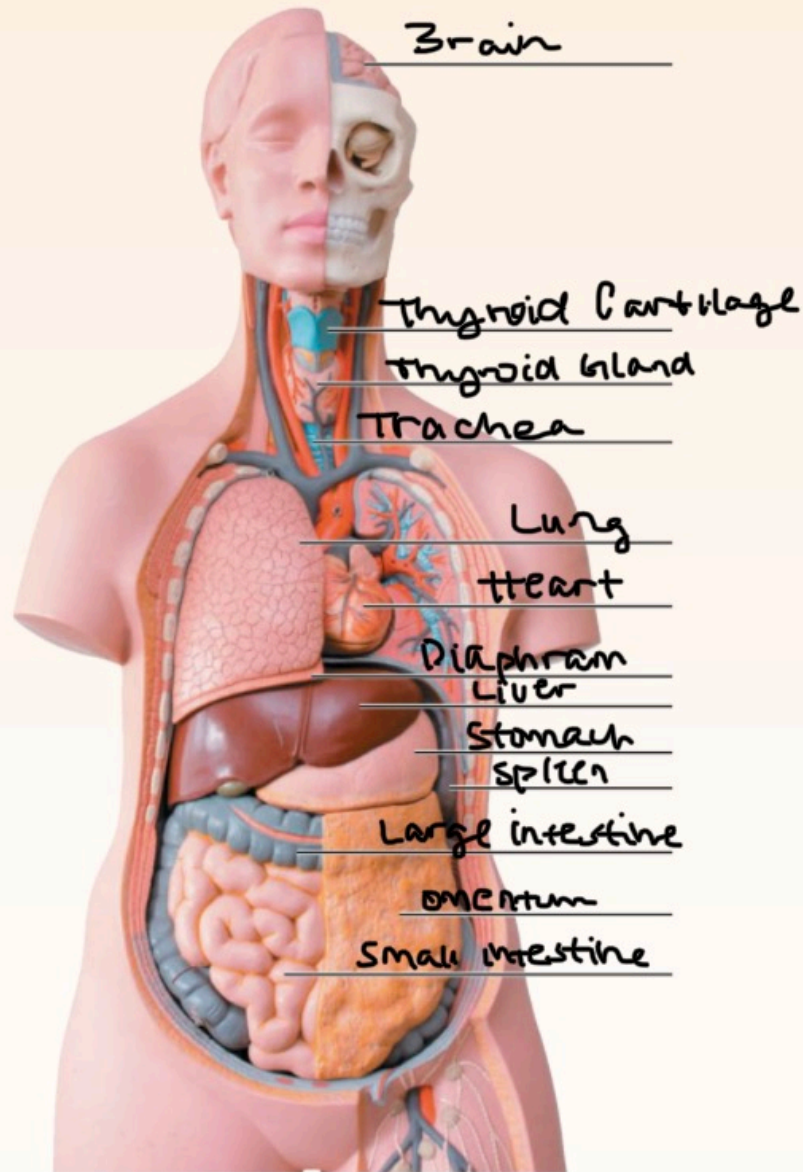


2 REVIEW SHEET

EXERCISE Organ Systems Overview

Name Smarina Bui Lab Time/Date June 3, 2021

1. Label each of the organs at the end of the supplied leader lines.



2. Name the organ system to which each of the following sets of organs or body structures belongs.

- | | | | |
|------------------------|--------------------------------------|-------------------------|---|
| <u>Lymphatic</u> | 1. thymus, spleen, lymphatic vessels | <u>Integumentary</u> | epidermis, dermis, cutaneous sense organs |
| <u>Musculoskeletal</u> | 2. bones, cartilages, tendons | <u>Reproductive</u> | 6. testis, prostate |
| <u>Endocrine</u> | 3. pancreas, pituitary gland | <u>Gastrointestinal</u> | 7. liver, large intestine, rectum |
| <u>Respiratory</u> | 4. trachea, bronchi, lungs | <u>Urinary</u> | 8. kidneys, ureter, urethra |

3. Name the cells that are produced by the testes and ovaries. Gamete cells such as sperm and ovum are produced by testes and ovaries.
4. List the four primary tissue types. Muscular tissue, connective tissue, epithelial tissue, and nervous tissue.
5. Explain why an artery is an organ. An artery is an organ because an organ is a collection of different types of tissue and an artery is made up of different smooth muscles so it is technically an organ.
6. Name the two main organ systems that communicate within the body to maintain homeostasis. Briefly explain their different control mechanisms. The nervous system and the endocrine systems help maintain homeostasis by reacting to the environment triggering "fight or flight" responses in the body like the release of adrenaline or increased heart rate.
7. Explain the role that the skeletal system plays in facilitating cardiovascular system function. The skeletal system produces red blood cells at the distal ends of the bones and protects the heart.
8. + Untreated diabetes mellitus can lead to a condition in which the blood is more acidic than normal. Name two organ systems that play the largest role in compensating for acid-base imbalances. The respiratory system controls the amount of carbon dioxide released and the urinary system which excretes acid and regulate electrolytes.
9. + The mother of a child scheduled to receive a thymectomy (removal of the thymus gland) asks you whether there will be any side effects from the removal of the gland. Which two organ systems would you mention in your explanation? The two organ systems to mention are the lymphatic and the endocrine systems.
10. + Individuals with asplenia are missing their spleen or have a spleen that doesn't function well. It is recommended that these patients talk to their doctor about vaccines that are indicated for their health condition. Explain how this recommendation correlates to their chronic health condition. The spleen helps the body filter blood, protecting against infections. Those without a spleen are therefore more susceptible to infections and reactions from vaccines and should talk to their doctors before doing so.