

Unit 2 – Cells and Systems – Body Systems Summary

BODY SYSTEM	Organs	Functions	Disorders and Diseases	Coordination of Body Systems
<p>Circulatory</p>  <p>“The Transportation Network”</p>	<p>heart arteries veins capillaries blood</p>	<p>- transports oxygen, food and wastes throughout the body - defends body against disease - connects to all other systems</p>	<p>Arteriosclerosis – build-up of cholesterol High blood pressure - hypertension Heart attack Anemia</p>	<p>The circulatory system works with each of the other systems, supplying the nutrients they need, to perform their functions.</p>
<p>Respiratory</p>  <p>“The Breath of Life”</p>	<p>nose mouth trachea diaphragm bronchi lungs</p>	<p>- transports oxygen from the outside air to the blood inside the body - transports carbon dioxide from the blood inside the body to the air outside of the body</p>	<p>Lung Diseases & Disorders Lung Cancer Respiratory diseases</p>	<p>The muscular system works with the nervous system to move the diaphragm so that gas exchange can take place. The circulatory system carries throughout the body.</p>
<p>Digestive</p>  <p>“The Processing Network”</p>	<p>salivary glands mouth esophagus Stomach liver pancreas gall bladder small intestine large intestine</p>	<p>- breaks down food mechanically in the mouth and then transports them using peristalsis through the other organs breaking down the food into smaller particle, using enzymes, to be absorbed and transported throughout the body.</p>	<p><u>Appendicitis</u> <u>Cirrhosis of the liver</u> <u>Colorectal Cancer</u> <u>Crohn's Disease</u> <u>Digestive Diseases</u> <u>Peptic Ulcer</u> <u>Stomach Disorders</u> <u>Pancreatic Diseases</u></p>	<p>Circulatory system transports the nutrients once they have been chemically broken down by the digestive system and the excretory system removes the wastes. This is coordinated by the nervous system, while the muscular system works with the skeletal system in the process of moving the nutrients.</p>
<p>Nervous</p>  <p>“The Communications Network” http://faculty.washington.edu/chudler/introb.html</p>	<p>brain spinal cord nerves sensory organs (eyes, ears, nose, skin, etc.)</p>	<p>- coordinates and controls the actions of all the organs and organ systems of the body - detects, processes and responds to environmental stimuli that is external or internal</p>	<p><u>Alzheimer's Disease</u> <u>Brain Cancers</u> <u>Epilepsy</u> <u>Meningitis...</u> <u>Multiple Sclerosis...</u> <u>Muscular Dystrophy...</u> <u>Parkinson's Disease...</u> <u>Stroke...</u></p>	<p>The Central Nervous System coordinates the Peripheral Nervous System and all other systems of the body</p>
<p>Excretory</p>  <p>“Waste Removal Network”</p>	<p>kidneys bladder lungs skin liver</p>	<p>- removes chemical and gaseous wastes from the body</p>	<p>Disorders gout renal failure nephritis urinary tract infections kidney stones</p>	<p>The wastes are carried to the excretory system by the circulatory system and the digestive system while the muscular system helps to coordinate the removal of waste with messages from the nervous system</p>
<p>Skeletal/Muscular/Integumentary</p>  <p>“The Structural Network” “Movement Network” “Sensory Network”</p>	<p>bones cartilage</p> <p>muscles tendons</p> <p>skin</p>	<p>- provides a moveable frame of support and protection for the body, soft tissue organs and the body systems throughout the body - senses pain, pressure & Temperature changes</p>	<p>Bone Diseases Bone Cancer Muscular Dystrophy MS Skin Cancer Multiple System Disorders</p>	<p>These systems work together to move the structural frame of the body, with each system intact. The nervous system coordinates these movements and responds to the changes it receives from the environment inside and outside the body.</p>