**7.L.1.4 Summarize the general functions of the major systems of the human body (digestion, respiration, reproduction, circulation, and excretion) and ways that these systems interact with each other to sustain life.**

To burn food for the release of energy stored in it, oxygen must be supplied to cells, and carbon dioxide removed. Lungs take in oxygen for the combustion of food and eliminate the carbon dioxide produced. The urinary system disposes of dissolved waste molecules, the intestinal tract removes solid wastes, and the skin and lungs aid in the transfer of thermal energy from the body. The circulatory system moves all these substances to or from cells where they are needed or produced, responding to changing demands. The human body has a set of systems, which regulate the internal environment and strive to give our cells the necessary conditions they need to function. These systems are made up of organs; each organ system functions in the human body and works in cooperation with other systems to benefit the entire organism. The skeletal system provides the support for movement and protection of internal organs. The muscular system creates the force that enables the body to move and carry out different functions related to movement. The body’s circulatory, respiratory, digestive and urinary systems work in combination to supply all cells with what they need to function properly and remove wastes. The reproductive system enables the organism to make more of its kind. The immune system protects cells from microscopic invaders. The nervous system controls body processes by using electrical impulses via a network of nerves. The endocrine system uses chemical messages called hormones, which are released into the blood and regulate many bodily processes. The endocrine and nervous systems are two control systems that keep the body in balance (homeostasis). Body systems work together in maintaining a constant internal environment. When the balance is disrupted, the body systems may not function properly and human health can suffer.