

**STATE GOAL 23. Understand human body systems and factors that influence growth and development.**

**Why This Goal Is Important:** To achieve healthful individual development, students need to understand human anatomy and physiology, nutrition, stages of growth and development, avoidance of harmful actions, and the characteristics of good health habits. Early learners begin with basic recognition of body systems and growth stages. As students progress, they understand how systems work together and how individual actions affect health. As they themselves grow and develop, students can learn to enhance the process throughout their school years and later life.

**A. Describe and explain the structure and functions of the human body systems and how they interrelate.**

<b>EARLY ELEMENTARY</b>	<b>LATE ELEMENTARY</b>	<b>MIDDLE/JUNIOR HIGH SCHOOL</b>	<b>EARLY HIGH SCHOOL</b>	<b>LATE HIGH SCHOOL</b>
<b>23.A.1a</b> Identify basic parts of body systems and their functions (e.g., heart, lungs, eyes).	<b>23.A.2a</b> Identify basic body systems and their functions (e.g., circulatory, respiratory, nervous).	<b>23.A.3a</b> Explain how body systems interact with each other (e.g., blood transporting nutrients from the digestive system and oxygen from the respiratory system, muscular/skeletal systems [movement] and structure of the brain).	<b>23.A.4a</b> Explain how body system functions can be maintained and improved (e.g., exercise/fitness, nutrition, safety).	<b>23.A.5a</b> Explain how the systems of the body are affected by exercise and the impact that exercise has on learning.

**B. Explain the effects of health-related actions on the body systems.**

<b>EARLY ELEMENTARY</b>	<b>LATE ELEMENTARY</b>	<b>MIDDLE/JUNIOR HIGH SCHOOL</b>	<b>EARLY HIGH SCHOOL</b>	<b>LATE HIGH SCHOOL</b>
<b>23.B.1a</b> Identify healthy actions that influence the functions of the body (e.g., cleanliness, proper diet, exercise).	<b>23.B.2a</b> Differentiate between positive and negative effects of health-related actions on body systems (e.g., drug use, exercise, diet).	<b>23.B.3a</b> Explain the effects of health-related actions upon body systems (e.g., fad diets, orthodontics, avoiding smoking, alcohol use, and other drug use).	<b>23.B.4a</b> Explain immediate and long-term effects of health habits on the body systems (e.g., diet/heart disease, exercise/fat reduction, stress management/emotional health).	<b>23.B.5a</b> Understand the effects of healthy living on individuals and their future generations (e.g., not using alcohol, tobacco, and other drugs during pregnancy).

**C. Describe factors that affect growth and development.**

<b>EARLY ELEMENTARY</b>	<b>LATE ELEMENTARY</b>	<b>MIDDLE/JUNIOR HIGH SCHOOL</b>	<b>EARLY HIGH SCHOOL</b>	<b>LATE HIGH SCHOOL</b>
<b>23.C.1a</b> Identify individual differences in growth and development among people.	<b>23.C.2a</b> Identify physical, mental, social and cultural factors affecting growth and development of children (e.g., nutrition, self-esteem, family, and illness).	<b>23.C.3a</b> Describe the relationships among physical, mental, and social health factors during adolescence (e.g., the effects of stress on physical and mental performance, effects of nutrition on growth).	<b>23.C.4a</b> Describe changes in physical health and body functions at various stages of the life cycle.	<b>23.C.5a</b> Explain how the aging process affects body systems (e.g., vision, hearing, immune system).
	<b>23.C.2b</b> Identify stages in growth and development (e.g., stages in the life cycle from infancy to old age).			

**D. Describe and explain the structures and functions of the brain and how they are impacted by different types of physical activity and levels of fitness**

<b>EARLY ELEMENTARY</b>	<b>LATE ELEMENTARY</b>	<b>MIDDLE/JUNIOR HIGH SCHOOL</b>	<b>EARLY HIGH SCHOOL</b>	<b>LATE HIGH SCHOOL</b>
<b>23. D.1a</b> Locate and identify basic parts of the brain.	<b>23. D.2a</b> Locate, identify and describe functions of the basic parts of the brain.	<b>23. D.3a</b> Explain how the brain is affected by movement.	<b>23. D.4a</b> Explain how brain functions can be maintained and improved through activity.	<b>23. D.5a</b> Analyze and communicate information regarding physical activity and fitness levels and their effects on how the brain functions.