

Functions and Interrelationships of Systems

1. Structure and Functions of the Body

B. Muscular System

- a. Classify the three different types of muscle tissue (smooth, cardiac, skeletal) and differentiate between voluntary and involuntary muscle movement.

C. Skeletal System

- a. Differentiate among the types of joints in the skeletal system (e.g., ball and socket, hinge, gliding, pivot, moveable, and immovable).

F. Respiratory System

- a. Illustrate air flow through the respiratory system and its relationship to the circulatory system.

G. Nervous System

- a. Investigate how environment affects learning.
- b. Distinguish between the CNS and PNS (Central Nervous System and Peripheral Nervous System).

H. Digestive System

- a. Identify the function of each organ in the digestive system (e.g., stomach-digestive juices, pancreas-insulin, gall bladder-storage of bile, liver-removes toxins, small intestines-absorbs nutrients, large intestines-removes solid waste) as it relates to overall health.

J. Endocrine System

- a. Describe how the endocrine system affects all other body systems.

K. Reproductive System

- a. Describe how hormones are responsible for the development of secondary sex characteristics and for the production and release of reproductive cells, allowing the opportunity for fertilization.

L. Lymphatic-Immune System

- a. Label the major components (i.e., kidneys, ureters, bladder, urethra) and functions of the urinary/excretory system (e.g., removes liquid waste from the body).

2. Social, Emotional and Mental Health

- A. Influence of Family and Peers
 - a. Differentiate between negative and positive peer pressure and discuss reversal techniques.
 - b. Evaluate ideas and perspectives regarding the influence that family, friends, and culture have on health choices and behaviors during adolescence.
 - C. Communication Skills
 - a. Describe how to constructively manage feelings caused by disappointment, stress, separation or loss.
 - b. Model healthy communication skills through exchange of information, questions, and ideas while recognizing the perspective of others.
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Health Maintenance and Enhancement

1. Personal and Family Health

- A. Personal Health
 - a. Identify body changes during puberty and proper hygiene practices (e.g., acne).
 - B. Preventive Care
 - a. Identify various health needs during adolescence (e.g., mental, emotional, social, and physical, hygiene).
 - C. Growth and Development
 - a. Compare and contrast factors that can affect growth and development which one can alter, enhance, or adapt (e.g., heredity, family, environment, physical activity, hormones, disease).
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2. Nutrition

- A. Essential Nutrients and Food Groupings
 - a. Describe and differentiate the contribution specific nutrients make towards growth repair, and cellular needs of the body: fats provide the body with a stored form of energy, warmth and insulation for body organs; carbohydrates provides the body with an immediate source of energy; proteins help the body grow, make muscles strong and repair body tissues; vitamins and minerals help to release energy and help the body fight infections making strong bones and teeth.
- B. Balance, Variety and Moderation
 - a. Discuss the misconceptions projected by society in regard to body image.
- C. Food Labels
 - a. Identify allergy information on food labels.

3. Consumer Health and Safety

- A. Media Influence on Health Habits and Decisions
 - a. Recognize that fads, quackery, and advertising can influence health behaviors and practices.
 - C. Community Services/Careers
 - a. Recognize how the collaboration efforts of individuals, communities, and government affect the health of a community (e.g., recycling effort, pollution centers).
 - b. Identify and explore health-related careers.
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4. Life Management Skills

- A. Decision Making and Problem Solving
 - a. Recognize that life management skills (e.g., stress management, goal setting, decision making, assertive behavior, resisting peer pressure, and conflict resolution) can be applied to personal situations that adolescents encounter.
 - B. Refusal/Assertive Skills and Conflict Resolution
 - a. Apply and assess conflict/mediation strategies to a variety of conflict situations.
 - C. Goal Setting and Asset Development
 - a. Evaluate current assets (positive influences in one's life) and determine ways to enhance those qualities.
 - D. Stress Management and Coping Skills
 - a. Describe positive stress management skills to reduce stress related problems.
 - E. Harassment/Bullying and Violence Prevention
 - a. Formulate a personal and school-wide plan(s) to address and reduce bullying.
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Risk Assessment and Reduction

1. Disease Prevention and Control

- B. Body Defenses and Recovery
 - a. Identify the stages of disease progression (e.g., incubation).
- C. Types of Pathogens and Transmission
 - a. Analyze information about the transmission and prevention of communicable diseases.
- D. Adolescent Health Issues and Sexually Transmitted Infections
 - a. Locate, select, and organize information about non-communicable diseases that may impact adolescents such as diabetes, asthma, joint disease, cancer, mental disorder).
- E. HIV/AIDS Prevention Education
 - a. Explain and discuss the relationship between HIV and AIDS.

2. Injury Prevention and Safety

- B. First Aid Procedures
 - a. Recognize basic aid techniques that help save lives, reduce the severity of an injury and enhance recovery.
- C. Activity Related Injuries and Environmental Conditions
 - a. Apply concepts about weather safety (recognize and attend to changing conditions), exercise precautions during activities, and follow appropriate safety rules and use of equipment.
- D. Water-Related Emergencies
 - a. Investigate the community agencies that provide water safety courses.

3. Substance Education

- A. Safe and Unsafe Substances
 - a. Describe the short and long-term effects of performance enhancing drugs.
- B. Purpose and Guidelines for Prescription, OTC Drugs and Natural Substances
 - a. Differentiate between over the counter (OTC) and prescription drugs, their purpose, precautions and guidelines for use.
- C. Substance Use vs. Non-Use
 - a. Classify drugs based on their effect on the body (e.g., stimulant, depressant, hallucinogen, narcotic).
 - b. Differentiate among various types of drugs and their effect upon the body including the following: how the drug enters the body; how the drug interacts with body chemistry.
 - c. Present different opinions and arguments about the effects of TAOD on individuals, family, and society.