

# Grade 8

Adopted 2007

## Functions and Interrelationships of Systems

### 1. Structure and Functions of the Body

#### G. Nervous System

- a. Analyze how learning is influenced by the brain's short term and long term memory, environmental learning styles and learning strategies (e.g., multiple intelligences, cooperative learning, hypothesis, inquiry).

#### J. Endocrine System

- a. Relate a function of each endocrine gland (e.g., thyroid-metabolism; pituitary-master hormonal gland and height; adrenal-fight or flight; pancreas-insulin; ovaries-eggs; testes-sperm) and how it is impacted by lifestyle choices.

#### K. Reproductive System

- a. Describe the impact heredity and lifestyle choices have on the reproductive system functions and disease formation.
- b. Explain how to maintain a healthy reproductive system.
- c. Identify cancer signs and symptoms and explain the importance of monthly self-examinations.

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### 2. Social, Emotional and Mental Health

#### C. Communication Skills

- a. Analyze ways individuals can respond to the various needs and characteristics of diverse people including those with different abilities, chronic diseases, different ethnic and cultural backgrounds.

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## Health Maintenance and Enhancement

### 1. Personal and Family Health

#### A. Personal Health

- a. Analyze how social, emotional, physical, and mental health affect wellness.

#### B. Preventive Care

- a. Assess personal health needs during adolescence and apply strategies to address those needs or problems.

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## 2. Nutrition

- A. Essential Nutrients and Food Groupings
  - a. Justify food sources that supply each of the essential nutrients.
- B. Balance, Variety and Moderation
  - a. Create a meal plan (s) through the selection of appropriate food based on energy needs, food preferences and nutrient requirements as represented in "My Pyramid".

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## 3. Consumer Health and Safety

- A. Media Influence on Health Habits and Decisions
  - a. Analyze marketing and advertising techniques that influence consumer decisions (e.g., bandwagon, beautiful people, good times, status symbols/well known characters).
- B. Consumer Rights and Issues
  - a. Identify and select appropriate consumer protection agencies that address various specific consumer issues.
  - b. Identify and analyze consumer health issues and products to make wise decisions.
- C. Community Services/Careers
  - a. Examine the viewpoints and efforts of individuals, communities, and government regarding societal health issues in order to make decisions that are informed and responsible: managing waste, conserving energy and water, pollution control, tobacco free facilities.
  - b. Analyze how the Department of Health and Senior Services, the Center for Disease Control and Prevention, and other public health agencies are responsible for disease reduction and control prevention, research, education, and enforcement of laws (e.g., food inspection, safe food storage and handling, distributing flu vaccines, and no smoking ordinances).
  - c. Identify career opportunities in health-related professions and how these roles meet the needs of the health consumer (e.g., exercise physiologist, sports therapist, dietician, tertiary care).

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#### 4. Life Management Skills

- A. Decision Making and Problem Solving
  - a. Distinguish between problems that can be solved independently and those that need the help of a peer, adult, or professional.
- E. Harassment/Bullying and Violence Prevention
  - a. Demonstrate strategies to prevent, manage, or report social problems related to abuse, exploitation, harassment, or bullying.
  - b. Investigate resources available to cope with social problems related to abuse, exploitation, harassment, or bullying (e.g., school, police, peers, hotlines, counselors).

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#### Risk Assessment and Reduction

##### 1. Disease Prevention and Control

- A. Communicable vs. Non-Communicable Diseases
  - a. Connect causative factors, symptoms, treatment and preventive measures to their appropriate non-communicable diseases.
  - b. Explain how risk behaviors can contribute to the development of chronic disease (e.g., relationships between smoking and emphysema or alcohol consumption and cirrhosis).
- B. Body Defenses and Recovery
  - a. Describe the body's lines of defense and the stages of disease progression (e.g., incubation).
- C. Types of Pathogens and Transmission
  - a. Hypothesize optimal conditions for growth and transmission of pathogens.
- D. Adolescent Health Issues and Sexually Transmitted Infections
  - a. Analyze the impact non-communicable diseases such as diabetes and asthma, could have on adolescents physical, social, and emotional development.
  - b. Recognize adolescent health issues and select appropriate strategies to solve or prevent problems (e.g., Anorexia, bulimia, acne, scoliosis) including knowing symptoms and causes, early diagnosis and treatment, self-care and management.
- E. HIV/AIDS Prevention Education
  - a. Explain the patterns of transmission, treatment (past and present), and prevention of HIV/AIDS.

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## 2. Injury Prevention and Safety

- A. Safety for Home, School, and Communities
  - a. Recognize problems in daily living that may contribute to self-destructive behaviors and apply strategies to reduce the risks of harm to self and others.
  - b. Identify societal problems (assault, homicide, rape, robbery, gangs, personal safety risks).
- B. First Aid Procedures
  - a. Prioritize and demonstrate the steps involved in assessing an emergency situation including 911 format, check, call, care.
  - b. Analyze why the processes are used in sequential order (i.e., ABC of emergencies).

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## 3. Substance Education

- C. Substance Use vs. Non-Use
  - a. Determine a cause and effect relationship regarding body system functions (i.e., muscular, excretory, nervous, digestive, circulatory, respiratory) and the use of TAOD (e.g., alcohol and impaired judgment, marijuana and short term memory loss, smoking and low birth weight babies).
  - b. Develop an informed decision regarding the use of smoked and smokeless tobacco based on knowledge of short and long-term effects on the body, individual, and society.
  - c. Determine the cause and effect relationship between the use of alcohol, tobacco, and other substances and emergency situations (e.g., motor vehicle accidents, overdose, accidental death, binge drinking).

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## 4. Environmental Health

- A. Effects of Pollution on Health
  - a. Describe ways in which the environment and ecosystems can be damaged and disrupted such as overpopulation, overuse of resources, and pollution.
- B. Individual Responsibility
  - a. Evaluate potential results of an environmental solution considering aesthetics, ethics, societal responsibility.
  - b. Examine existing and potential environmental health problems within their community and create solutions to address them.