

Summary of Montgomery County Public School Nutrition Education Curriculum November 2013

In Montgomery County public schools (MCPS), regulation states that nutrition education is taught as a component of comprehensive health education and physical education.¹ MCPS has aligned their health education curriculum with the Maryland State Department of Education Voluntary State Curriculum,² which defines eight standards of health education. Nutrition and Fitness is the sixth standard for education, which states “Students will demonstrate the ability to use nutrition and fitness knowledge, skills, and strategies to promote a healthy lifestyle.”²

In elementary school (kindergarten through grade 5), nutrition education is integrated into health education and physical education programs.¹ For elementary school (kindergarten through grade 5), parents guides to the curriculum are available at:
<http://www.montgomeryschoolsmd.org/curriculum/elementary/guides.aspx>.

In middle school (grades six through eight), nutrition education is provided throughout the nine-week comprehensive health education program, physical education curriculum, Family and Consumer science curriculum, and the Grade 7 Science curriculum.¹

In high school, nutrition education is provided through the comprehensive health education class and physical education class, both of which are required for high school graduation.¹

Below is a summary of the nutrition education curriculum provided to students in MCPS, broken down by grade level, kindergarten through high school.

Kindergarten:^{3,4}

Responses to Food

Indicator

- Identify the relationship between food and the senses

Objectives

1. Compare foods that have different smells.
2. Tell why food appearance affects food choices, such as color, shape, and texture.

Food Production

Indicator

- Tell the source of different foods.

Objective

1. Identify foods that come from different sources, such as plant and animal.

Manners

Indicator

- Define proper eating manners

Objective

1. Demonstrate proper eating manners, such as chew with mouth closed, don't talk with mouth full, don't reach across the table, and don't grab food from others' plates.

Food and Health

Indicator

- Recognize the relationship between food and health.

Objectives

1. Explain how food affects the body.
2. Discuss how media influences food choices.

Nutrition and Physical Activity Guidelines

Indicator

- Identify food categories.

Objectives

1. Name the food groups.
2. List examples in each food group.

First Grade^{5,6}

Responses to Food

Indicator

- 1. Demonstrate the relationship between food and the senses.

Objective

1. Differentiate how the five senses affect food choices.

Food and Health

Indicator

- 1. Recognize the relationship between food and health.

Objectives

1. Define physical fitness.
2. Describe how food keeps the body healthy by maintaining strong bones, muscles, and teeth and preventing illness.

Nutrition and Physical Activity Guidelines

Indicator

- 1. Recognize that foods are categorized into groups.

Objectives

1. Recognize the *My Pyramid* as an outline for healthy eating.
2. Explain the location of the food groups on the *My Pyramid*.
3. Demonstrate why it is important to eat at least five servings of fruits and vegetables a day, such as Fruits and Veggies: More Matters.

Second Grade:^{7,8}

Nutrients

Indicator

- 1. Define nutrient.

Objectives

1. List the six major nutrients: water, fat, vitamins, minerals, carbohydrates, and protein.
2. Name a food source for each nutrient.

Food and Health

Indicator

- 2. Explain the relationship between personal fitness and a healthy lifestyle.

Objective

1. Discuss the importance of physical fitness and what it means to each individual.

Nutrition and Physical Activity Guidelines

Indicator

- 1. Demonstrate that foods are categorized into groups.

Objectives

1. Classify foods into groups according to *My Pyramid*.
2. Specify the number of servings recommended per day from each group.
3. Illustrate a serving from each food group.

Indicator

- 2. Identify the Nutrition Facts Label.

Objectives

1. Define the purpose of the Nutrition Facts Label.
2. Identify servings per container/package, calories and fat on a Nutrition facts label.

Third Grade^{9,10}

Nutrients

Indicator

- 1. Identify and define functions of nutrients.

Objectives

1. Describe the six major nutrients and how the body uses them.
2. Describe why the body needs water.

Food and Health

Indicator

- 1. Demonstrate the relationship among food intake, physical activity, and weight management.

Objectives

1. Define healthy weight.
2. Discuss factors that affect a person's weight, such as age, gender, height, family, society, activity level, and illness.
3. Illustrate the importance of balancing food intake with physical activity.

Nutrition and Physical Activity Guidelines

Indicator

- 2. Analyze the Nutrition Facts Label.

Objectives

1. Identify the information provided on the Nutrition Facts Label.
2. Explain why the Nutrition Facts Label is a valid source of information.
3. Compare the relationship between serving size and servings per container.

Body Image

Indicator

- 1. Identify and describe body image.

Objectives

1. Define body image.
2. Explain how internal and external influences impact body image.

Fourth Grade^{11,12}

Nutrients

Indicator

- 1. Identify and define functions of nutrients.

Objectives

1. Describe how nutrients in foods contribute to health.
2. Investigate why the body needs calcium.
3. Summarize why the body needs vitamins and minerals.

Food and Health

Indicator

- 1. Demonstrate the relationship among food intake, physical activity, and weight management.

Objectives

1. Define calorie.
2. Explain how caloric intake impacts exercise.
3. Describe caloric output during exercise.

Indicator

- 2. Explain the relationship between nutrition and physical activity.

Objectives

1. Identify components of physical fitness, including muscular endurance, muscular strength, cardio respiratory endurance, flexibility, and body composition.
2. Explain the effect of nutrition on the five fitness components, including cardiovascular endurance, flexibility, muscular endurance, muscular strength, and body composition.

Nutrition and Physical Activity Guidelines

Indicator

- 1. Summarize the Dietary Guidelines for Americans.

Objectives

1. Explain each of the Dietary Guidelines.
2. Identify factors that influence food choices.
3. Compare personal food choices to the Dietary Guidelines.

Indicator

- 2. Analyze the Nutrition Facts Label.

Objectives

1. Examine the Nutrition Facts Label to locate specific components.
2. Compare nutrient information on a variety of food labels.

Body Image

Indicator

- 1. Analyze influences on body image.

Objective

1. Examine how the media/advertising portrays positive and negative body images.

Fifth Grade^{13,14}

Food and Health

Indicator

- 1. Examine the relationship among food intake, physical activity, and weight management.

Objectives

1. Compare the relationship between caloric intake and output during activity/inactivity.
2. Investigate caloric value of personal meal plan in relation to physical activity.

Body Image

Indicator

- 1. Identify how body image affects eating habits.

Objectives

1. Identify factors that affect eating habits, including body image.
2. Describe harmful eating habits.

Goal Setting

Indicator

- 1. Apply information from the Food Guide Pyramid to choose healthy snacks.

Objectives

1. Identify healthy snacks from each food group.
2. Demonstrate how healthy snacking fits into their daily diet.

Sixth Grade^{15,16}

Food Production

Indicator

- Discuss ways to prevent food borne illness.

Objective

1. Discuss the components of a food sanitation plan such as *Fight Back Campaign*.

Food and Health

Indicator

- 1. Interpret the relationship among food intake, physical activity, and weight management.

Objectives

1. Define and discuss what constitutes a healthful weight based on approved screening and diagnostic tools, such as the Body Mass Index (BMI) or waist to hip circumference.
2. Students will describe the benefits of physical activity in relationship to weight management.

Nutrition and Physical Activity Guidelines

Indicator

- 2. Describe and analyze the Nutrition Facts Label.

Objective

1. Analyze the information on a nutrition facts label.

Indicator

- 3. Identify the Physical Activity Pyramid.

Objective

1. Identify components of the Physical Activity Pyramid.

Body Image

Indicator

- 1. Describe various factors that influence body image.

Objectives

1. Distinguish between body composition and body image.
2. Recognize and examine the factors that contribute to personal eating behaviors, such as hunger vs. appetite, stress, environment, family/culture, media, and peers.

Indicator

- 2. Identify and describe body types.

Objective

1. Identify different body types, including endomorph, mesomorph, and ectomorph

Goal Setting

Indicator

- 1. Apply the Dietary Guidelines for Americans in meal planning.

Objectives

1. Describe the basic principles of meal planning.
2. Explain how to create a healthy meal plan using the Food Guide Pyramid and Dietary Guidelines for Americans

Seventh Grade^{17,18}

Nutrients

Indicator

- 1. Explain the role of nutrients.

Objectives

1. Describe the function of the six major nutrients.
2. List and explain how nutrients affect the risk factors for common chronic diseases, including cancer, cardiovascular disease, osteoporosis, and Type II Diabetes.
3. Describe how nutrient intake can contribute to being overweight or obese.
4. Investigate food sources/groups for nutrients that have a positive and negative effect on the four common chronic diseases and being overweight or obese.

Food and Health

Indicator

- 1. Interpret the relationship among food intake, physical activity, and weight management.

Objectives

1. Describe how to maintain a healthful weight by monitoring calories, energy balance, and physical activity.
2. Predict how insufficient energy balance impacts health.

Nutrition and Physical Activity Guidelines

Indicator

- 1. Investigate the differences in the Dietary Guidelines for Americans related to culture and age groups.

Objectives

1. Compare healthy eating plans from other cultures.
2. Compare different nutritional requirements for various age groups.

Indicator

- 3. Illustrate the Physical Activity Pyramid as it relates to physical activity level.

Objectives

1. Compare personal physical activity level to the components of the Physical Activity Pyramid.
2. Investigate additional forms of physical activity that will lead to 60 minutes of moderate to vigorous physical activity every day.

Body Image

Indicator

- 1. Examine the media for messages that impact body image.

Objectives

1. Compare how various media messages portray males and females.
2. Identify and describe the effect of marketing strategies on consumer choice and body image.

Eating Disorders

Indicator

- 1. Examine various kinds of eating disorders.

Objectives

1. Investigate the three most common eating disorders, Bulimia Nervosa, Anorexia Nervosa, and Binge Eating Disorder.
2. Summarize causes, symptoms, and treatment for the three most common eating disorders.

Indicator

- 2. Analyze internal and external influences that may lead to eating disorders.

Objectives

1. Distinguish between internal and external influences.
2. Demonstrate how knowledge of eating disorders impacts real life situations.

Goal Setting

Indicator

- 1. Apply the Dietary Guidelines for Americans in meal planning.

Objectives

1. Apply the Dietary Guidelines for Americans in making healthy food choices at home meals, school meals, fast food restaurants, restaurants, parties/events, and movies.
2. Develop and assess a healthy eating plan based on the Dietary Guidelines.

Indicator

- 2. Identify and construct a personal weight management plan.

Objective

1. Develop a physical activity plan for weight management.

Eighth Grade^{19,20}

Food and Health

Indicator

1. Explain the relationship among food intake, physical activity, and weight management

Objective

1. Identify positive habits associated with maintaining a healthful weight and engaging in physical activity and the management of weight

Eating Disorders

Indicator

1. Identify and define various eating disorders

Objective

1. Review the most common eating disorders
2. Identify resources for treatment of eating disorders.

High School^{21,22}

Food and Health

Indicator

1. Analyze the benefits of maintaining a healthy weight.

Objectives

1. Discuss what constitutes a healthful weight based on the Body Mass Index (BMI).
2. Assess the benefits of physical activity in relationship to weight management.
3. Describe the concept of energy balance.
4. Evaluate common factors that contribute to excess weight gain.

Indicator

2. Analyze influences on eating and activity behaviors.

Objectives

1. Investigate the influences on personal eating and activity behaviors.
2. Argue the impact of influences on nutrition and activity choices.
3. Determine strategies to maximize positive influences and minimize negative influences.

Indicator

3. Analyze eating and activity behaviors that need improvement.

Objectives

1. Identify areas of personal eating behaviors that need improvement.
2. Assess personal fitness and identify areas of personal physical activity behaviors that need improvement..
3. Determine a plan of action to address areas targeted for improvement.

Body Image

Indicator

1. Explain body image, how it is developed, and how it is influenced.

Objectives

- a. Implement strategies to counteract negative influences on body image.
- b. Describe a variety of eating disorders and the relationship between eating and the body.
- c. Analyze the impact of the media on body image.

¹ "Regulation: Wellness: Physical and Nutritional Health." Montgomery County Public Schools, 2 Mar. 2012. Web.

² "Pre - K – 12 Health Education Curriculum Framework." *Elementary Integrated Curriculum Framework*. Montgomery County Public Schools, Sept. 2010. Web.

³ "Comprehensive Health Education in Kindergarten." *Montgomery County Public Schools*. MCPS, 2013. Web.

⁴ "Using the State Curriculum: Health, Grade K- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

⁵ "Comprehensive Health Education in Grade 1." *Montgomery County Public Schools*. MCPS, 2013. Web.

⁶ "Using the State Curriculum: Health, Grade 1- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

⁷ "Comprehensive Health Education in Grade 2." *Montgomery County Public Schools*. MCPS, 2013. Web.

⁸ "Using the State Curriculum: Health, Grade 2- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

⁹ "Comprehensive Health Education in Grade 3." *Montgomery County Public Schools*. MCPS, 2013. Web.

¹⁰ "Using the State Curriculum: Health, Grade 3- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

¹¹ "Comprehensive Health Education in Grade 4." *Montgomery County Public Schools*. MCPS, 2013. Web.

¹² "Using the State Curriculum: Health, Grade 4- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

¹³ "Comprehensive Health Education in Grade 5." *Montgomery County Public Schools*. MCPS, 2013. Web.

¹⁴ "Using the State Curriculum: Health, Grade 5- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

¹⁵ "Comprehensive Health Education in Grade 6." *Montgomery County Public Schools*. MCPS, 2013. Web.

¹⁶ "Using the State Curriculum: Health, Grade 6- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

¹⁷ "Comprehensive Health Education in Grade 7." *Montgomery County Public Schools*. MCPS, 2013. Web.

¹⁸ "Using the State Curriculum: Health, Grade 7- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

¹⁹ "Comprehensive Health Education in Grade 8." *Montgomery County Public Schools*. MCPS, 2013. Web.

²⁰ "Using the State Curriculum: Health, Grade 8- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.

²¹ "Comprehensive Health Education in High School (Grade 10)." *Montgomery County Public Schools*. MCPS, 2013. Web.

²² "Using the State Curriculum: Health, High School- Standard 6 Nutrition and Fitness." *School Improvement In Maryland*. MDK12, 2013. Web.