



Integrating Nutrition Education into the School Curriculum

Division of Health and Wellness

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About Me

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Agenda |

- Webinar objectives
- Nutrition education
- Incorporating nutrition education into other curricula
- Standard alignment
- Resources
- Questions



Objectives

- Understand the evidence supporting the link between healthy eating and academic achievement.
- Recognize ways for teachers to incorporate nutrition education into existing lesson plans.
- Identify resources and tools that can be used to choose appropriate nutrition education curricula.



Nutrition Education



Whole School Whole Community Whole Child Model¹

- Created by the Centers for Disease Control and Prevention (CDC)



Definition

- Nutrition education is “any combination of educational strategies designed to facilitate voluntary adoption of food choices and other food- and nutrition-related behaviors conducive to health and well-being...it is delivered through multiple venues and involves activities at the individual, community, and policy levels”²
 - Isobel Contento, 2007



Importance

- Helps students maintain a healthy weight
- Establishes healthy eating behaviors
- Promotes an overall healthier lifestyle
- 12 percent of high school students ate vegetables at least three times in the previous week (down from 15 percent in 2012)³

Healthier students are better learners!⁴



Dietary Behaviors and Academic Achievement⁵

Dietary Behavior/Issue	Related Academic Achievement Outcomes
Participation in the National School Breakfast Program	<ul style="list-style-type: none">- Increased academic grades and standardized test scores- Reduced absenteeism- Improved cognitive performance
Skipping breakfast	<ul style="list-style-type: none">- Decreased cognitive performance
Lack of adequate consumption of specific nutrients	<ul style="list-style-type: none">- Lower grades
Deficits in specific nutrients	<ul style="list-style-type: none">- Lower grades- Higher rates of absenteeism and tardiness
Insufficient food intake	<ul style="list-style-type: none">- Lower grades- Higher rates of absenteeism- Repeating a grade- Inability to focus



Effective Nutrition Education

- Effective nutrition education:
 - Focuses on behavior change⁶
 - Is delivered for an adequate amount of time
 - 40-50 hours of education over the school year are needed to change general knowledge on a subject, and impact practices and attitudes⁶
 - 10-15 hours of education over a period of one to four months enhances overall subject knowledge but creates minimal impact on behavior change^{7,8}
- How are we doing in the District?
 - Healthy Schools Act of 2010 established health education requirements
 - Kindergarten – Grade 8 take 75 minutes of health education per week
 - This includes nutrition education and other health topics

To reach our goal we must incorporate nutrition education into other subjects.



Integrating Nutrition Education Into Core Subjects



Nutrition Education in Science

- Science is a great subject to incorporate nutrition because of all the chemical reactions that take place to grow our food, and those that take place between food and our body.
- Ideas:
 - Use nutrition-themed science fair ideas
 - Food Lab: Explore the science of cooking
 - Photosynthesis: Teach parts of the plant using the school gardens



Nutrition Education in Math

- Math is a great subject to incorporate nutrition because mathematical equations are necessary when calculating necessary calories and food group intakes, as well as when cooking, an essential skill for healthy eating.
- Ideas:
 - Students count fruits/vegetables.
 - Students measure recommended portions with measuring cups and learn about fractions.
 - Students keep a food diary and use SuperTraker to track their nutrient intake.
 - Students create a budget of affordable, healthy foods.



Nutrition Education in English

- Students can learn about proper spelling and reading while learning nutrition concepts.
- Ideas:
 - Incorporate words about nutrition and health into vocabulary learned in class.
 - Paragraph themes centered around wellness.
 - Give a presentation about fruits and vegetables where students must persuade classmates to adopt healthier eating habits.
 - Students read a book from the [Healthy Schools](#) or [Health and Physical Education Booklist](#).



Nutrition Education in Social Studies

- Food history, food origins, and cultures can be topics where nutrition can be easily incorporated.
- Ideas:
 - Students perform a project where they learn about the history of various foods.
 - Students are asked to look at traditional recipes, what their nutrients are, and how nutrient needs have evolved over time.
 - Choose a food item in various stages of processing (i.e., sweet potato, canned sweet potato, sweet potato pie, sweet potato chips). Talk about how the different processing methods came to be because of human desires/needs.



Nutrition Education in Art

- Teach your kids about nutrition while you develop their creativity.
- Ideas:
 - Teach younger children the colors using fruits and vegetables.
 - Have students create a drawing or 3D representation of what the recommended foods and food portions are using MyPlate as their guide.
 - Students create an advertisement promoting the importance of adopting healthy eating behaviors.
 - Students participate in Growing Healthy Schools Month's [Art and Essay Contest](#).



Nutrition Education in Technology

- Students learn nutrition concepts through the use of computers, applications, and virtual games.
- Ideas:
 - Students can play [online games](#) where students make their way through the food groups.
 - [BAM! Dining Decisions App](#) by the CDC.
 - High school students can track their diet using the USDA's online SuperTracker, [lessons](#) are available.
 - Prepare students for research by having students use a variety of online platforms and methods to find reliable sources of nutrition information.



Nutrition Education in Physical Education/Activity

- Students learn physical education concepts while engaging in physical activity.
- Ideas:
 - Students participate in a relay race where they can go from one bag to the next to pick up healthy food items/cards and build a balanced MyPlate meal.
 - Teach your class about the importance of physical activity for optimal brain functioning by participating in the yearly [Brain Boost Competition](#) during Growing Healthy Schools Month.
 - Youth establish a goal to adopt healthier eating and physical activity practices and develop a plan to accomplish it.



Additional Opportunities to Integrate Nutrition Education

- **Around the school**
 - Display infographics about the healthier food items served in school, such as [Smart Snacks](#)
 - Display educational/motivational messages about healthy eating
- **In the school garden**
 - Plan science and nutrition lessons around the local [planting calendar](#)
 - School garden-based [curricula](#) can incorporate math, science, and environmental concepts
- **School assemblies**
 - Speakers
 - Documentaries
- **Field trips**
 - Farm field trips
 - Science or history museums



Aligning the Education to the Learning Standards



2016 DC Health Education Standards



Grade Band



Health Education Standard Category

Category 1 : Mental and Emotional Health							
1 Health Promotion	2 Analyzing Influences	3 Assessing Information	4 Communication	5 Decision-Making	6 Goal Setting	7 Healthy Behaviors	8 Advocacy
K-2.1.1.1 Identify basic emotions and positive and negative ways of dealing with emotions in a variety of situations.	K-2.1.2.5 Identify positive and negative influences on mental and emotional health practices and behaviors.	K-2.1.3.6 Identify trusted persons and how to get help if something is bothering you.	K-2.1.4.7 Demonstrate how to express personal needs and wants appropriately.			K-2.1.7.8 Describe positive and negative ways of acting on emotions.	K-2.1.8.9 Encourage others to appreciate their differences.
K-2.1.1.2 Explain the impact of different emotions on self and others.							K-2.1.8.10 Explain ways children can model healthful behaviors for others.
K-2.1.1.3 Describe what respect is and why it is important.							
K-2.1.1.4 Describe the difference between bullying and teasing.							

Health Education Standard Category

Strand

Standards

Standard example:

K-2.1.7.8: Describe positive and negative ways of acting on emotions.

- K-2 = recommended grade band of implementation.
- 1.7.8 = Category 1, Strand 7, Standard 8.



Category 5: Nutrition

- Organized by strands:
 - Health Promotion
 - Analyzing Influences
 - Accessing information
 - Communication
 - Decision-making
 - Goal Setting
 - Healthy Behaviors
 - Advocacy
- Divided into grade bands
- Builds upon each other
- Other important categories that cover important food concepts:
 - Category 2: Safety Skills
 - Category 4: Disease Prevention



Standard Alignment Example: Nutrition and Science

Grades	NGSS	DC HES
K – 2	2-LS4-1 . Make observations of plants and animals to compare the diversity of life in different habitats.	K-2.5.1.2 Categorize foods according to food sources and food groups (e.g., plant, animal, and processed).
3 – 5	5-ESS2-2 . Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.	3-5.5.1.1 Describe the relationship between physical activity and the need for food and water.
6 – 8	MS-LS1-5 . Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.	6-8.5.1.4 Describe the relationship between diet and chronic disease (e.g., high blood pressure, tooth decay, and obesity) and other health problems (e.g., food allergies and eating disorders).
9 – 12	HS-LS1-6 . Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.	9-12.5.1.3 Describe dietary guidelines, food groups, nutrients, and serving sizes for healthy eating habits.

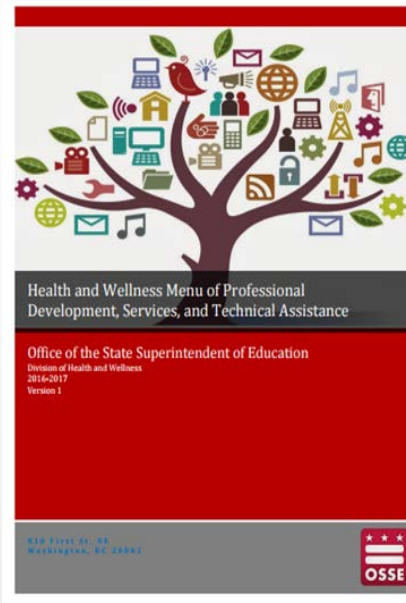


Current Resources and Technical Assistance



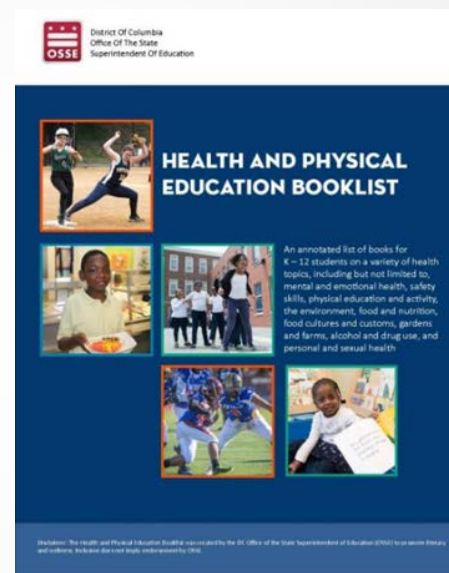
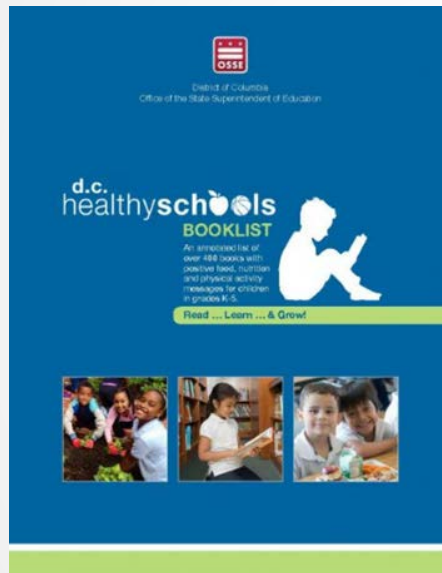
OSSE-Developed Resources

- [DC Health Education Standards](#)
- [Healthy Schools and Wellness Programs Curricula and Resource Library](#)
- [Health and Wellness Menu of Professional Development, Services, and Technical Assistance](#)



- Booklists

- [Healthy Schools Booklist \(K – 5\)](#)
- [Health and Physical Education Booklists \(K – 12\)](#)



- [Nutrition Curriculum Review Guidance Document](#)
- [Health Education Curriculum Analysis Tool \(HECAT\) Crosswalk: Nutrition](#)



Requesting Technical Assistance

- Drop-in technical assistance hours by the Healthy Schools and Wellness Programs team
 - Starting March 2017
 - Receive support on a the WSCC model's school components
 - Health Education;
 - Nutrition Environment Services;
 - Employee Wellness;
 - Physical Environment;
 - Health Services;
 - Community Involvement;
 - Family Engagement; and
 - Physical Education and Physical Activity.
- Place a request through our [Technical Assistance Request Form](#)



Federal Resources

- United States Department of Agriculture
 - [Team Nutrition](#)
 - [Resource library](#)
 - [MyPlate](#)
 - SuperTracker
 - What's Cooking? USDA Mixing Bowl
 - Portion Distortion
 - MyPlate [videos](#) and [print materials](#)
 - [Food Safety](#)





Federal Resources (Cont.)

- Centers for Disease Control and Prevention
 - [Health Education Curriculum Analysis Tool](#)
 - [School Health Index](#)
 - [Handwashing](#)
- Food and Drug Administration
 - Free curricula
 - [Food Safety](#)
 - [Nutrition](#)



Q&A



| Thank you!



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