

Nutrition Education Resource Guide

for California Public Schools
Kindergarten Through Grade Twelve



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Publishing Information

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A Message

from the State Superintendent of Public Instruction



On behalf of the California Department of Education, I am pleased to introduce the updated *Nutrition Education Resource Guide*, as a valuable tool to assist local educational agencies and after school programs in their efforts to implement high-quality instructional programs in nutrition education that align with the Common Core State Standards.

Research consistently demonstrates that students' academic achievement is directly linked to their nutrition and health status. As many experts know, healthy eating and regular physical activity are essential components of a healthy lifestyle. Yet many of California's students are at risk for obesity, which significantly affects their ability to lead successful lives. Nutrition education is an important part of learning the essential skills needed for a lifestyle that incorporates nutritious eating and physical activity.

I have long been a champion for students' health. Healthy students not only excel academically but also are more likely to be positively engaged in social, community, and extracurricular activities. The benefits of supporting student health are far-reaching. This is why, as State Superintendent of Public Instruction, I launched the Team California for Healthy Kids (TCHK) initiative to make healthy choices the easy choices. My vision for TCHK also aligns with the U.S. Department of Agriculture's HealthierUS School Challenge: Smarter Lunchrooms (HUSSC:SL). Both programs give recognition to schools that create healthier school environments through their delivery of nutritious school meals, nutrition education, and physical activity.

The guide provides many tools to create nutrition education programs that qualify for HUSSC:SL awards and that align with state and national movements for nutrition education. California schools and after school programs can use this guide to ensure that students are taught the nutrition skills they need to lead healthy lives.

We have incredible opportunities to make investments in education that give every child the chance to learn in a safe and healthy school environment. All of us who work with the youths of our state must join together to make the vision for a healthy California a reality for generations to come.

I trust that you will find this publication useful and fun to implement. I look forward to hearing about the results of your nutrition education programs.

A handwritten signature in black ink that reads "Tom Torlakson". The signature is written in a cursive, flowing style.

Tom Torlakson

State Superintendent of Public Instruction

Acknowledgments

Many people helped to develop this guide for use by district leaders, teachers, policymakers, and child-nutrition directors. Their hard work and dedication are gratefully acknowledged.

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Introduction



The purpose of this guide is to provide an instructional resource for California schools, from kindergarten through grade twelve, to implement effective, standards-based nutrition education programs for students. The guide was designed to (1) meet the Health Education Content Standards (HECS) (CDE 2009) in the Nutrition and Physical Activity content area; (2) include the nutrition competencies; and (3) align the nutrition competencies with the Common Core State Standards.

Educators may use it as a resource to plan, implement, and evaluate instructional strategies for a comprehensive nutrition education program. Brief descriptions of the Health Education Content Standards (HECS) and nutrition competencies follow. The “Nutrition Competencies” section provides the details.

- The **HECS**, adopted by the California State Board of Education in 2008, provide guidance to local educators for developing the curriculum instructional strategies for health education. They are divided into six health content areas. Standards for the Nutrition and Physical Activity content area are in kindergarten and grades two, four, five, seven and eight, and nine through twelve.
- **Nutrition competencies** define what students need to know and be able to do at each grade level to build nutrition literacy and to make healthful food choices. Curriculum leaders and nutrition educators in California school districts may use the nutrition competencies to determine a scope-and-sequence for nutrition-related health education curricula and nutrition concepts and skills to emphasize in the classroom. Many nutrition competencies align with the Nutrition and Physical Activity content area of the HECS. The nutrition competencies include a new component in this 2017 edition: the competencies for Food Literacy and Preparation.

CONTENTS OF THE GUIDE

This guide provides the standards and competencies to plan nutrition education as well as recommended nutrition education curricula and instructional materials, guidelines, and resources to implement an effective comprehensive nutrition education program. The main sections are as follows:

- I. Guidance on Implementing a Quality Nutrition Education Program
- II. Nutrition Competencies
- III. Recommended Instructional Resources

Appendix A: Assessing a Local School Wellness Policy

Appendix B: Descriptions of Recommended Instructional Resources

Appendix C: Resources for Enhancing Nutrition Education

Appendix D: Tools for Instructional Planning

Appendix E: Nutrition Education Evaluation Checklist

Appendix F: Nutrition Basics

Glossary

Works Cited

INTENDED AUDIENCE

The resource guide is intended for use primarily by local school district curriculum directors and lead teachers, nutrition education coordinators and specialists, and other school district and staff members who plan nutrition education in elementary, middle, and high schools. Child nutrition directors and managers, after school program directors and curriculum coordinators, and teachers conducting nutrition education will also find this guide useful. In addition, community and government agency personnel who design nutrition programs may find the resources in this guide helpful.



Nutrition Education in Schools

Nutrition education builds healthy behaviors that have an important role in the lives of students. Healthy behaviors support academic success and prepare students to lead healthy and productive lives.

Nutrition education is a continuum of learning experiences to develop knowledge and skills that become lifelong healthy practices. Dr. Isobel R. Contento's (2016) internationally recognized definition of nutrition education underscores the fact that behavioral change demands broad and comprehensive education and support to ensure success.

To develop healthy behaviors, a comprehensive nutrition education program is more likely to teach and promote positive habits than simply disseminating basic nutrition information. Effective nutrition education targets positive behavior as a specified goal, addresses factors influencing behavior, uses theory and evidence, and provides strategies to convey messages and instruction. Furthermore, nutrition education is delivered with sufficient intensity and duration to address levels of influence such as food preferences and sensory–affective factors; person-related factors such as perceptions, beliefs, and attitudes; social norms; and environmental factors.

What are the best practices and strategies within a comprehensive nutrition education program? The Centers for Disease Control and Prevention gathered research and best practices from a variety of resources, including the Dietary Guidelines for Americans (U.S. Department of Health and Human Services and U.S. Department of Agriculture 2015), the Physical Activity Guidelines for Americans, objectives related to healthy eating and physical activity among children, adolescents, and schools. The resulting publication *School Health Guidelines to Promote Healthy Eating and Physical Activity* (CDC 2011) helps schools plan a comprehensive nutrition program that includes physical activity. The nine guidelines are as follows:

1. Use a coordinated approach to develop, implement, and evaluate healthy eating and physical activity policies and practices.
2. Establish school environments that support healthy eating and physical activity.
3. Provide a quality school meal program and ensure that students have only appealing, healthy food and beverage choices offered outside the school meal program.
4. Implement a comprehensive physical activity program with quality physical education as the cornerstone.
5. Implement health education that provides students with the knowledge, attitudes, skills, and experiences needed for lifelong healthy eating and physical activity.
6. Provide students with health, mental health, and social services to address healthy eating, physical activity, and related chronic-disease prevention.
7. Partner with families and community members in the development and implementation of healthy eating and physical activity policies, practices, and programs.
8. Provide a school employee wellness program that includes healthy eating and physical activity services for all school staff members.
9. Employ qualified persons, and provide professional development opportunities for physical education, health education, nutrition services, and health, mental health, and social services staff members, as well as staff members who supervise recess, cafeteria time, and out-of-school-time programs.

IMPACT OF NUTRITION EDUCATION ON STUDENTS

Nutrition education in schools helps prepare students for life. Children who develop healthy habits at an early age are more likely to be well, stay well, and do well in school.

Students who graduate from high school with a strong background in nutrition education will have the skills to make informed nutrition and health decisions. As with any subject, students succeed when they begin building basic skills early, so that by the time they graduate from high school, they can continue to make healthy food choices for themselves. And most important, students who have developed competency in nutrition education will begin adulthood with an appreciation and healthy enjoyment of food, as well as a positive body image.

Studies of school-based nutrition education interventions evaluated the effectiveness of programs to develop healthy habits and prevent childhood obesity. Meta-analyses indicated that nutrition education programs that are run for more than a year can effectively decrease the prevalence of obesity (Gonzalez-Suarez 2009). Moreover, multidisciplinary school-based interventions, including family involvement, are the best and most sustainable approach (Kelishadi 2014).

The prevalence of obesity among children has roughly tripled in the past 30 years. Numerous health risks are associated with obesity; therefore schools have the responsibility to provide effective nutrition education to teach students to navigate a complex world of food and nutrition choices.

LOCAL SCHOOL WELLNESS POLICY

Nutrition education is required in a local school wellness policy (LSWP). The Child Nutrition and Women, Infants, and Children Reauthorization Act of 2004 (Public Law 108-265, Section 204) included a provision requiring all school districts participating in any federal child nutrition program to establish and adopt an LSWP. An LSWP is a document developed by a school district team to establish a school environment that promotes students' health and their ability to learn.

In 2010, Section 204 of the Healthy Hunger-Free Kids Act of 2010 added subsection 9A, "Local School Wellness Policy Implementation." This provision strengthened requirements for ongoing implementation, assessment, and public reporting of wellness policies and expanded the team of collaborators participating in development of the policy. The federal law requires the LSWP, at a minimum, to accomplish the following objectives:

- Involve parents, students, representatives of school food service, the school board, school administrators, physical education teachers, and the community in the development and implementation of the school wellness policy, with periodic review and updates.
- Establish goals for nutrition education, nutrition promotion, physical activity, and other school-based activities designed to promote student wellness.
- Set nutrition guidelines for all food available on each school campus during the school day.
- Provide assurance that guidelines for reimbursable meals will not be less restrictive than federal regulations and guidance issued by the United States Department of Agriculture (USDA).

- Update and inform the public about the content and implementation of the local wellness policies, including compliance, comparison to model policies, and progress in attaining the goals.

In 2016, the USDA Food and Nutrition Service finalized regulations to provide a framework and guidelines to strengthen written wellness policies and increase transparency. Participating local educational agencies (LEAs) must comply with the requirements by the end of June, 2017. The provisions of the final rule require LEAs to establish a school wellness policy that includes goals for nutrition education and nutrition promotion, standards and nutrition guidelines for all foods and beverages, policies for food and beverage marketing, a description of public involvement, and an evaluation plan.

In addition, LEAs must establish wellness policy leadership, involve the public in the policy process, update wellness policies, and provide public updates. State agencies are required to assess compliance every three years and review documentation of the wellness policy and LEA efforts to assess, review, and update the wellness policy. The language in the wellness policy provisions for nutrition education will vary greatly from district to district in terms of strength and specificity. Refer to section I, “Guidance on Implementing a Quality Nutrition Education Program,” and appendix A for more direction on how to assess the strength of the nutrition component of a district’s wellness policy and make policy provisions more robust. See the USDA Food and Nutrition Service Web pages for more information about the regulations: <http://www.fns.usda.gov/school-meals/local-school-wellness-policy> (accessed August 31, 2016).

INDICATORS OF QUALITY NUTRITION EDUCATION

High-quality nutrition education teaches both knowledge and skills in a comprehensive and sequential way, using curriculum based on valid research evidence. Good curriculum is interactive, experiential, and connected to a healthy school environment.

The document *School Nutrition. . . By Design!* (CDE 2015) advocates nine design principles for developing a healthy school nutrition environment. For each design principle, there is a series of quality indicators that represent a best practice for implementation.

Design Principle 4, Nutrition Education, defines an effective nutrition education program as one that:

- a) adheres to the USDA Dietary Guidelines and other science-based nutrition research and evidence-based instructional strategies;
- b) is based on the national or state health education standards;
- c) is taught as part of a comprehensive health education program;
- d) integrates nutrition knowledge and skills across the curriculum at certain grade levels;
- e) values and encourages experiential learning that builds knowledge, skills, attitudes, and behaviors that promote healthy choices;
- f) assesses students’ acquisition of nutrition knowledge, skills, and behaviors;
- g) engages family and community members to reinforce instruction;

- h) incorporates the physical environment to support the concepts promoted through the program.

These indicators set the context for the nutrition competencies, which provide guidance for planning and delivering instruction in nutrition education. To view online the full *School Nutrition . . . By Design!* Document (CDE 2015), please visit the following Web page: <http://www.cde.ca.gov/ls/nu/he/nutredres.asp> (accessed July 30, 2016).

I.

Guidance on Implementing a Quality Nutrition Education Program



I. Guidance on Implementing a Quality Nutrition Education Program

The design and implementation of an effective nutrition education program require consideration of the many influences on food choices, nutrition-related behaviors, and the dietary change process. Classroom strategies need to be based on theory and research evidence and should facilitate behavioral change.

Because the purpose of nutrition education is developing positive lifelong nutrition behaviors, a nutrition education program should first include an assessment of current practices and policies related to nutrition education, including students' behaviors. The instructional plan is built around one or two core nutrition curricula that present nutrition knowledge and skills sequentially to build and reinforce positive practices at each grade level. Depending on the comprehensiveness of the curricula, the educator might supplement an instructional plan with additional activities to address nutrition competencies that are not adequately covered by the core nutrition curricula and to provide further opportunities to practice and reinforce students' skills. This instructional plan needs to be tailored to the specific and often-changing needs of the students, the setting of the nutrition education, and the time and resources available.

Delivery of the nutrition education program must also be consistent with statutes and guidance on nondiscrimination. Nutrition education must be free from discrimination and harassment regardless of a student's disability, gender, nationality, race or ethnicity, religion, or sexual orientation or any other characteristic that is contained in the definition of hate crimes set forth in Section 422.55 of the *California Penal Code*. The education must be provided in a way that addresses the instructional needs of all students, including English learners, advanced learners, students with disabilities, and students with reading skills below grade level. Specific consideration should be given to the cultural appropriateness and the context of the learning. Some resources to provide culturally appropriate education are available at the USDA National Agricultural Library, Food and Nutrition Information Center Web site at <http://fnic.nal.usda.gov/> (accessed July 30, 2016).

PLANNING FOR IMPLEMENTATION

This overview of the planning steps for nutrition instruction in schools was originally developed as a guide for the Nutrition Education Obesity Prevention Project, formerly Network for a Healthy California, project coordinators working with school-based programs. The priorities of the county office of education and the school district may differ from the plan. However, in most settings, these basic steps will help build school relationships, communication, and nutrition education programs that are most likely to succeed and be sustained.

Figure 1 depicts the process for planning nutrition instruction. The steps in figure 1 are described in more detail below.



1. Prepare and Develop a Nutrition Instructional Plan

a. Review the district's or school's wellness policy

A good way to begin implementing nutrition education is by conducting a review of the district's Local School Wellness Policy related to nutrition education. Each school district's Local School Wellness Policy must include a nutrition education component, although the language and guidance in this area are left to the discretion of local authorities. A strong Local School Wellness Policy is useful for implementing an effective nutrition education program because it communicates clearly to administrators and other key stakeholders in a way that makes enforcement possible.

Districts may first assess their Local School Wellness Policy for areas that address nutrition education and then work on strengthening the policy, as needed. An effective nutrition education policy is comprehensive; is expressed in plain language; and contains specific guidance for implementation. Districts may strengthen their Local School Wellness Policy by either revising the policy itself or by developing administrative regulations that add specific wording to guide implementation. To assess a Local School Wellness Policy, see appendix A, “Assessing a Local School Wellness Policy,” for tools and indicators.

Congruence between the policy and its implementation is essential as a key factor in sustaining nutrition education in schools. If possible, participate on the district’s wellness committee or a school site council to support the implementation of the nutrition instructional plan.

b. Become familiar with instructional guidance documents

Review the HECS and the nutrition competencies for guidance on grade-level expectations. Section II, “Nutrition Competencies,” describes the HECS and the nutrition competencies (see the chart on page 21).

c. Understand the district’s and school’s goals and needs

Before developing an instructional plan, consider how the plan will fit with the district’s and school’s instructional process. Meet with the curriculum director to develop a working relationship. Discuss areas of mutual support for student success and well-being. Some suggested activities follow:

- Become familiar with the district’s adopted curriculum for English–language arts, math, science, and health.
- Become familiar with the district’s instructional planning process and tools (e.g., pacing guides) for the grade levels targeted.
- Identify schools or grades already teaching nutrition education and those most likely to become partners in implementation.
- Discuss plans for sequential, developmentally appropriate instruction that targets nutrition behavior change.
- Identify the resources needed, potential costs, and options for funding.
- Identify potential professional development and training opportunities that support nutrition instruction.
- Determine key teachers and staff members to help develop and implement the nutrition instructional plan. Identify key actions.
- Summarize district priorities and recommendations and select priority HECS and nutrition competencies to cover at each grade level. Then choose resources to include in the instructional plan. Section III has a number of recommended curricula and materials (see appendix B for descriptions of the resources).
- Depending on the plan, a nutrition education program may be offered as a separate subject or as a unit within a subject, or be integrated into other subject areas. Regardless of how the program is done, review of a pacing-guide will help identify the best time for offering nutrition education.

- Meet with the curriculum director, key teachers, and others to review the plan and strengthen collaboration through regular communication.

Sample Strategy for Planning Nutrition Instruction Themes

The following example of an instructional plan incorporates nutrition education competencies into the school year.

Season	Topic	Examples of Subtopics	Nutrition Competencies
Summer/start of school year	Nutrition basics	Basic nutrition, food safety	1, 2, 4
Fall	Influences on food choices	Culture, family, holidays and celebrations	1, 6, 7
Winter	Consumer skills	Reading labels, decision making, goal setting	1, 4, 5
Spring	Life cycle, food handling, food systems	Guidelines for life stages, cooking, gardening, California agriculture	1, 3, 8

2. Design Grade-Level Plans and Cultivate Learning Communities

The next step in planning a nutrition instructional plan is to fine-tune the plan for each grade level and for the teachers.

a. Identify school and district readiness

Determine the readiness level by identifying advocates and by assessing the level of school-based and community support for the instructional plan. Identify schools and staff members to implement the plan; this may involve one or more schools, depending on readiness.

b. Support teachers in developing grade-level instructional plans

Ideally, a lead teacher should be identified for each grade. Schedule meetings with each grade level to provide an orientation and sufficient time for teachers to complete the review and alignment for their grade level. Support the teachers in tracking their specific grade-level instruction and month-by-month lessons and assessment strategies. Ask teachers to make recommendations for training, regular meetings, and support for implementation.

3. Develop and Implement a Staff Training Plan

The training plan should include ongoing support, technical assistance, resources, and methods for monitoring the implementation of training.

- a. To design and provide staff training, be sure to assess the needs of the learners in areas such as nutrition knowledge, HECS and nutrition competencies, and nutrition education delivery and learner assessment. The professional development assessment will guide the determination of training goals, objectives, methods, and schedule.
- b. Promote the training; include the lead teachers in the process to ensure they agree to the teacher training. Invite child nutrition staff, health services staff, and other health-related staff as appropriate. Invite community partners and others who have resources to share and collaborate with teachers.
- c. Schedule and deliver staff training. After the training, check with teachers to see if they need other technical assistance or support. Some teachers may prefer one-on-one help; others may like e-mail; some may welcome resources given to them.

4. Implement the Nutrition Instructional Plan and Provide Technical Assistance

To help tailor technical assistance during the implementation, visit classrooms and observe teachers presenting lessons from selected nutrition education materials. Participate in the district's professional learning communities. Solicit feedback in a variety of ways: e-mails, telephone calls, hallway conversations, surveys, and discussions at staff meetings. Students can also be a valuable source of feedback.

5. Promote Nutrition Messages and Build School and Community Support

Develop nutrition messages that reflect and support classroom instruction and positive student behaviors. Connections to the cafeteria, parents, peers, and school environment can reinforce nutrition instruction and messages. (See appendix C for more information.)

6. Refine the Nutrition Instructional Plan and Nutrition Messages

Review the feedback from staff training sessions, implementation, students, parents, and peers and assess the impact of connections to the school environment. Compare the proposed implementation and pacing guides with the actual provision and curriculum maps. See appendix D for ideas about instructional planning tools. If possible, include formal evaluation. One method is to evaluate the overall implementation of the nutrition education provided. Appendix E contains an evaluation checklist.

As the teacher teams for each grade level reconvene, the feedback can be used to revise the instructional plan.

Finally, revisit the nutrition education component of the Local School Wellness Policy. Make recommendations for strengthening the policy or for updating it to reflect current procedures.

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II.

Nutrition Competencies



II. Nutrition Competencies

The nutrition competencies present a comprehensive and grade-specific structure for providing nutrition education in California classrooms. The nutrition competencies define, from kindergarten through grade twelve, the knowledge in nutrition and the skills students need to make healthy food choices for well-being and success in school and throughout their lives. The nutrition competencies also provide a framework for teaching nutrition knowledge and skills that promote lifelong good health.

The competencies are intended to assist educators in the design, selection, implementation, and evaluation of nutrition curriculum responsive to local priorities and needs. Those who plan nutrition education—curriculum directors, nutrition education specialists, and lead teachers—may also use the competencies. The competencies are also useful for those supporting classroom instruction, such as school administrators, school nutrition program directors, school nurses, health educators, physical education specialists as well as parents and the local school and health community.

Relationship to the Health Education Content Standards

The HECS represent a consensus of the essential health knowledge and skills that students should have, from kindergarten through grade twelve, in California's public schools. The full HECS document is posted on the California Department of Education Web site at <http://www.cde.ca.gov/be/st/ss/index.asp> (accessed August 20, 2016).

The scope of the HECS is broader than that of the nutrition competencies. The HECS define the essential skills and knowledge that all students need in order to become literate in the following areas:

- Nutrition and Physical Activity
- Growth, Development, and Sexual Health
- Injury Prevention and Safety
- Alcohol, Tobacco, and Other Drugs
- Mental, Emotional, and Social Health
- Personal and Community Health

The content areas are emphasized at different grade levels. The following table summarizes the minimum recommended grade-level assignments for each of the six content areas:

Health Education, by Grade Level							
Grade-Level Emphasis	Nutrition and Physical Activity	Growth, Development, and Sexual Health		Injury Prevention and Safety	Alcohol, Tobacco, and Other Drugs	Mental, Emotional, and Social Health	Personal and Community Health
		Growth and Development	Sexual Health				
Kindergarten	●	●		●	●	●	●
Grade 1		●		●			
Grade 2	●				●	●	
Grade 3		●				●	●
Grade 4	●			●	●		
Grade 5	●	●	●				●
Grade 6				●	●	●	
Grades 7 and 8	●	●	●	●	●	●	●
High School (Grades 9 Through 12)	●	●	●	●	●	●	●

Nutrition and Physical Activity Content Area of the HECS

The nutrition competencies include all standards identified in the Nutrition and Physical Activity content area of the HECS. They also include other benchmarks of learning, which add specificity to the following core nutrition concepts that are not fully addressed in the HECS:

- Energy expenditure and balance
- Nutrition needs throughout the human life cycle
- Physiological processes in digestion, absorption, and metabolism of nutrients
- Nutrition and food-related careers
- Interactions among nutrition science, ecosystems, agriculture, and social systems that affect health, including local, national, and global perspectives
- Body image and acceptance of body size differences
- Food literacy and preparation

Other content areas of the HECS address some of these topics to varying degrees. For example, body image related to body size is addressed in these content areas: (1) Growth, Development, and Sexual Health; and (2) Mental, Emotional, and Social Health. The Food Literacy and Preparation competencies are new. Using them will help promote lifelong healthy eating patterns and build students' knowledge and skills to choose and prepare foods.

The Nutrition Competencies Chart on page 21 shows the alignment of the nutrition competencies with California's HECS in the Nutrition and Physical Activity content area.

KEY TERMS

In planning curriculum materials and learning activities for students, educators look to several resources. They are defined as follows:

academic content standards. They describe what students are expected to know and be able to do at each grade level. Standards are tools for educators to develop, select, and evaluate curriculum and to assess student achievement. Standards provide a common language and serve as the basis for curriculum frameworks, learning assessments, and instructional resources and materials. However, standards do not prescribe methods of instruction. The California State Board of Education approves all state academic standards.

adopted instructional materials. This resource refers to textbooks, technology-based materials, and materials that are rigorously reviewed for alignment with the *Health Framework* and approved by the State Board of Education for use in California schools.

competencies. They comprise the specific knowledge and skills and the application of that knowledge and those skills to the standard of required performance. Competencies for academic subjects go beyond the content standards to outline comprehensive and grade-level expectations for student learning. Like standards, they do not prescribe methods of instruction. However, they provide specific expectations at every grade grouping and show the sequence of learning and reinforcement over several grade levels.

curriculum frameworks. As blueprints for implementing approved content standards, frameworks guide the development of curricular materials, providing more background information on a subject. Frameworks specify the topics to emphasize at each grade level.

food literacy. This competency focuses on the capacity of an individual to obtain, process, and understand basic information about food and nutrition as well as the skill to use that information in order to make appropriate health decisions. Eating patterns play a major role in health and food preparation, and cooking skills have the potential to affect well-being and health.

health content areas. Health education content is divided into six areas. These areas are based on six types of health-risk behaviors that contribute to the leading causes of death and disability among youths and adults: unhealthy dietary behaviors; inadequate physical activity; sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection; behaviors that contribute to unintentional injuries and violence; tobacco use; and alcohol and other drug use.

Relationship to the Health Framework

The *Health Framework for California Public Schools* (CDE 2003, 2–3) includes a broad outline of health education for kindergarten through grade twelve, focusing on guidance for developing a Coordinated School Health program in schools: “The major goal of this framework is to describe health education and school health promotion strategies that will help children and youths become health-literate with a life-long commitment to healthy living.” (Note: The 2003 *Health Framework* is no longer current. It is being updated to support implementation of the HECS adopted by the State Board of Education in March 2008. The section on Family Living (pages 63–64) in the current Health Framework is inconsistent with existing state law. For current information on HIV/AIDS prevention education, see the Comprehensive Sexual Health & HIV/AIDS Instruction Web page (<http://www.cde.ca.gov/ls/he/se>). The next revision of the *Health Framework* will be released in 2017–18.)

Adoption of Health Instructional Materials

The California State Board of Education adopts health instructional materials for students in kindergarten through grade eight. The most recent adoption was in 2004, and the list of the four state-adopted programs are on the California Department of Education’s health education Web page at <http://www.cde.ca.gov/ci/cr/cf/healthpub.asp> (accessed September 2, 2016). The instructional materials adopted in 2004 do not reflect the HECS adopted by the State Board of Education in March 2008. The next state adoption of health instructional materials has not yet been scheduled. Local school districts have the responsibility to adopt instructional materials for students in grades nine through twelve. The Web page has the criteria used to evaluate instructional materials in the 2004 health adoption. Those criteria may serve as guidance for local districts in the selection and adoption of health education materials.”

KEY TERMS

overarching health education standards.

The knowledge and skills to teach and develop healthy student behaviors areas are organized into eight broad categories. See the Nutrition Competencies Chart on the next page for the eight standards.

overarching nutrition competencies. The knowledge and skills to teach and develop healthy student behaviors are organized into eight broad categories specifically for nutrition and physical activity. See the Nutrition Competencies Chart on the next page for each of the eight competencies.

research-validated. Although all programs available from the California Healthy Kids Resource Center are research-based (i.e., they provide evidence of effectiveness), a limited number of programs have demonstrated credible evidence of effectiveness that identifies them as research-validated. They are characterized as follows:

- Research-validated programs have empirically demonstrated reductions in health-risk behaviors and/or increases in health-promoting behaviors at least six months after the completion of the program.
- Evidence of effectiveness for research-validated programs is published in scholarly peer-reviewed journals.
- Research-validated program materials are complete, available, and ready to be implemented at school sites in California.

Background of the Nutrition Competencies

Nutrition competencies were first developed in the 1970s by the California Department of Education and have gone through several revisions. The 2010 version featured in the first guide was reviewed and revised by panels of stakeholders including teachers, curriculum directors, school administrators, school nutrition directors, nutrition educators, health education specialists, environmental educators, physical education teachers, school nurses, other academic content area experts, physicians, and other health professionals. Teachers from school districts throughout California also participated in the review process. The 2010 revision focuses on aligning the California nutrition competencies with the HECS, which were adopted by the State Board of Education in March 2008.

The *Health Framework* and HECS can be used to guide the development and selection of instructional materials and textbooks, plan curricula scope-and-sequence and instruction, and assess student performance. The nutrition competencies supplement this guidance in the areas of nutrition and physical activity. Teachers may use them to select nutrition curricula and identify additional learning grade-level expectations in nutrition education.

GUIDELINES FOR USE OF THE NUTRITION COMPETENCIES

The eight overarching nutrition competencies correspond to the eight overarching health education content standards (HECS). The first overarching nutrition competency, Essential Nutrition Concepts, includes eight subcompetencies that represent key content areas for nutrition.

The nutrition competencies are clustered by grade levels: kindergarten, grades one and two, grades three and four, grades five and six, grades seven and eight, and grades nine through twelve. Each grade-level cluster matches one of the grade-level assignments for the Nutrition and Physical Activity content area in California's HECS. Under each overarching nutrition competency (and for the subcompetencies in Essential Nutrition Concepts), the related HECS are listed, identified with a ▲ symbol, and cross-referenced to the specific, numbered HECS. Additional nutrition benchmarks, where appropriate, are included under each grade-level cluster, which broadens the nutrition scope beyond the HECS.

The 2017 *Nutrition Education Resource Guide* integrates the new Food Literacy and Preparation competencies and provides support for the California Common Core State Standards and project-based learning.

Nutrition Competencies Chart

Overarching California Health Education Content Standard	Overarching Nutrition Competency
1 Essential health concepts: Comprehend essential concepts related to enhancing health.	Essential nutrition concepts, including knowing the relationships among nutrition, physiology, and health.
2 Analyzing health influences: Demonstrate the ability to analyze internal and external influences that affect health.	Analyzing nutrition influences: Analyze internal and external factors influencing food choices and health outcomes.
3 Accessing valid health information: Demonstrate the ability to access and analyze health information, products, and services.	Accessing valid nutrition information: Demonstrate the ability to access and analyze nutrition information, products, and services and analyze the accuracy and validity of nutrition claims.
4 Interpersonal communication: Demonstrate the ability to use interpersonal communication skills to enhance health.	Interpersonal communication about nutrition: Demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes.
5 Decision making: Demonstrate the ability to use decision-making skills to enhance health.	Decision making for nutrition choices: Demonstrate the ability to use decision-making skills to optimize food choices and health outcomes.
6 Goal Setting: Demonstrate the ability to use goal-setting skills to enhance health.	Goal setting for nutrition: Demonstrate the ability to use goal-setting skills to enhance nutrition and health.
7 Practicing health-enhancing behaviors: Demonstrate the ability to practice behaviors that reduce risk and promote health.	Practicing nutrition-enhancing behaviors: Demonstrate the ability to practice nutrition-related behaviors that reduce risk and promote health.
8 Health promotion: Demonstrate the ability to promote and support personal, family, and community health.	Nutrition promotion: Demonstrate the ability to promote and support a sustainable, nutritious food supply and healthy lifestyles for families and communities.

In 2012–13, the California Department of Education, Nutrition Services Division, and the California Healthy Kids Resource Center (CHKRC) reviewed research and other state and national standards to revise the nutrition competencies to include Food Literacy and Preparation competencies for kindergarten to grade twelve.

The Food Literacy and Preparation competencies were developed to build students’ knowledge and skills to: Demonstrate the ability to explore, acquire, handle, and prepare foods to avoid or reduce health risk and to promote food and eating patterns for lifelong health.

Rationale: The ability to prepare food, follow a recipe, and use the facilities available, can influence food choices. If a person becomes reliant on foods requiring minimal preparation, or food prepared for them, it puts a constraint on his or her choice and results in an increased disconnection from food preparation. Since eating patterns play a major role in health, food preparation and cooking skills have the potential to affect well-being and health.

The CHKRC prepared an online questionnaire for teachers, after school coordinators, and other state, regional, and community leaders to assess the comprehensiveness, completeness, clarity, age-appropriateness, and organization of draft Food Literacy and Preparation competencies. Survey recommendations included revising some of the draft competencies to be more age-appropriate and to incorporate the Food Literacy and Preparation competencies into existing competencies.

The revised Food Literacy and Preparation (FLP) knowledge and skills are included within the eight nutrition competencies. For example, there are FLP-related competencies for nutrition decision making, goal setting, and health promotion. These competencies support the recommendations from the report *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation* (Institute of Medicine Committee on Accelerating Progress in Obesity Prevention 2012). Specifically, the report recommends in Strategy 5.3 that food literacy, nutrition science education, and skill development in kindergarten through grade twelve be implemented sequentially and monitored in schools.

The following pages include the grade-level nutrition competencies organized by Overarching Nutrition Competency, followed by nutrition competencies listed by grade level. The FLP competencies are noted with the initials FLP after each related competency.

Effective Use of the Nutrition Competencies

Educators may use the nutrition competencies, along with related benchmarks or expectations, to determine the scope and sequence of a nutrition education curriculum and to design or select instructional materials or to do both. The nutrition competencies are an important tool for ensuring that instruction is developmentally appropriate and effectively develops and supports positive nutrition behaviors. The following steps can help curriculum planners and teachers make effective use of the competencies.

Step 1: Determine priorities

There are many ways to determine priorities, including reviewing survey results such as the California Healthy Kids Survey and the district’s Local School Wellness Policy.

Review the California Healthy Kids Survey (CHKS) results for a particular district or county to identify student behaviors of concern. Reports are available at <http://chks.wested.org/reports> (accessed September 2, 2016). The CHKS is the largest statewide survey of students' resiliency, protective factors, and risk behaviors in the nation. It has led to a better understanding of the relationship between students' health behaviors and academic performance. Questions can easily be customized to meet local needs. The survey can cover areas such as health risk assessment, school climate, and resilience/social-emotional health assessments. Although school districts are no longer required to administer the CHKS, the CDE recommends that districts administer it every two years. The minimum grade requirements are now grades seven through nine rather than grades five through nine. There is a small administrative fee to complete the survey and obtain reports.

Check the district's Local School Wellness Policy and discuss instructional content with the district's curriculum specialist to identify the competencies for the targeted grade level and to determine the appropriate nutrition concepts and skills to emphasize in the classroom.

Step 2: Identify curriculum

Identify the curricular and assessment resources to facilitate and support student learning. This guide contains an annotated list of recommended curricula and supplemental nutrition materials. The annotation includes the specific nutrition competencies that each resource targets. Appendix B contains descriptions of those resources. Additional resources include California state-adopted health textbooks (<http://www.cde.ca.gov/ci/he/im/>).

The Health Education Curriculum Analysis Tool (HECAT) is an additional resource that can help school districts, schools, and others conduct a clear, complete, and consistent analysis of health education curricula based on the National Health Education Standards and the Centers for Disease Control and Prevention's Characteristics of an Effective Health Education Curriculum.

The HECAT can assist schools in the selection or development of appropriate and effective health education curricula and improve the delivery of health education. The HECAT can also be customized to meet local community needs and conform to state-adopted health education content standards, as well as the curriculum requirements of the state or school district. Go to <https://www.cdc.gov/healthyyouth/HECAT/> (accessed September 2, 2016).

Step 3: Evaluate materials

Evaluate selected instructional materials according to the nutrition competencies. When curricular materials align with the nutrition competencies, staff members can feel confident that their nutrition instructional plans also align with California's health education standards in the Nutrition and Physical Activity content area.

Step 4: Select assessments

Identify ways to assess student learning in nutrition. There are assessment items available to California teachers through the Health Education Assessment Project (HEAP). See the Web site for Toucan Education at <http://www.toucaned.com/HEAP/> for assessment recommendations.

Reinforcement Across Grade Levels

Specific expectations or benchmarks are listed for each overarching nutrition competency at each grade-level cluster, kindergarten through high school. Similar expectations may arise under several grade clusters. This pattern of repetition demonstrates the importance of emphasizing many concepts and skills over several grades, rather than teaching the material just once. Teachers and curriculum leaders can choose how to accomplish this over time. The goal is student mastery of the nutrition competencies by the time students complete the last grade in the cluster.

Integrating Nutrition into Other Subjects

Ideally, educators should teach nutrition education as part of the school’s health education curriculum or as a separate subject to ensure that nutrition is taught in a sequential and comprehensive way. When nutrition is the focus, teachers can adequately prepare, schedule instructional time, work on skill building and behavior change, and give attention to the scope and sequence of basic nutrition concepts and skills.

An interdisciplinary approach should complement, not replace, sequential health and nutrition education within a school curriculum. When educators reinforce nutrition education in other content areas, children have more consistent exposure to nutrition concepts and messages. The exclusive use of an interdisciplinary approach, though, can sacrifice key elements of an effective nutrition education program.

Relationship to the Common Core State Standards

The Common Core State Standards (CCSS) are a set of college- and career-ready standards for kindergarten through grade twelve. The California CCSS were designed for English language arts/literacy and mathematics. Forty-two (42) states, including California, have adopted the CCSS. The goal of the CCSS is to provide shared goals and expectations for the knowledge and skills students need to be successful in college, careers, and life.

The CCSS also comprise College and Career Readiness anchor standards that define cross-disciplinary literacy expectations throughout the grades. In English–language arts, there are four strands of standards: reading, writing, speaking and listening, and language. There are also standards that articulate expectations for literacy in history/social studies, science, and technical subjects.

Educators will find it easy to integrate nutrition concepts into a variety of content areas, such as English–language arts, math, science, chemistry, social science, family and consumer science, and physical education. For example:

- **English–language arts:** Use literature that has appropriate health themes, including nutrition picture books. Highlight nutrition messages in other assigned reading, assign the writing of nutrition-related essays on specific themes, and analyze literature and informational text such as articles promoting products or dieting approaches.
- **Mathematics:** Calculate the nutritional value of foods, analyze nutrients, read and compare food labels, and calculate the contribution of daily nutrients in percentages, graph class food preferences, and expand recipes. In math, the Standards for Mathematical Practice in the CCSS outline expectations for the mathematical skills students should develop from kindergarten through grade twelve. These “practice standards” consist of skills such

as reasoning abstractly and quantitatively and constructing viable arguments. The CCSS also has math content standards outlined for each grade level organized by mathematical domains, such as Counting and Cardinality, Questions and Algebraic Thinking, Number and Operations in Base Ten, Measurement and Data, and Geometry.

- **Science:** Identify the chemical compounds in foods, study the growth of plants, and examine the microscopic structure of plant cells and animal fat cells.
- **Chemistry:** Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed, resulting in a net transfer of energy.
- **Social science:** Research food customs of other countries or historical periods, create a healthy menu based on local food preferences, and grow a garden with a theme based on a culture or a historical period.

Integrating the California Nutrition Competencies with the Common Core State Standards

Implementing the CCSS takes time, which can make it difficult for teachers to cover subject areas outside of English–language arts and mathematics. Integration is a key strategy for fitting other subject areas into the school day. When additional subject areas are addressed through CCSS-aligned lessons, teachers increase engagement while covering multiple subject areas.

Integrating the nutrition competencies with the CCSS can create real-world connections and increase student engagement. When developing integrated lessons, teachers may find it helpful to think about how adults use the competencies. For example, when analyzing nutrition influences, teachers consider advertisements, information from professionals, and online articles and the critical-thinking skills involved. Teachers plan backwards to help students develop similar skills.

Appendix C, “Resources for Enhancing Nutrition Education,” provides ideas for integrated lessons, a flowchart, and a sample template for planning project-based learning.

OVERARCHING NUTRITION COMPETENCIES-AT-A-GLANCE CHART

The following chart provides a summary of the nutrition competencies. The first competency, which is knowledge-based, includes eight subcompetencies of knowledge areas. The remaining seven competencies are skill-based.

Knowledge Level (competency 1)

All students will know:

1. **Essential nutrition concepts:** Know the relationships among nutrition, physiology, and health.
 - a. Know the six nutrient groups and the functions.
 - b. Know nutrition and health guidelines.
 - c. Know the factors affecting energy balance.
 - d. Describe how nutritional needs vary throughout the life cycle.
 - e. Identify the physiological processes in digestion, absorption, and metabolism of nutrients.
 - f. Explain the influence of nutrition and physical activity on health.
 - g. Know the principles of handling (growing, harvesting, transporting, processing, storing, and preparing) foods for optimal food quality and safety.
 - h. Consider the interactions among nutrition science, ecosystems, agriculture, and social systems that affect health, including local, national, and global perspectives.

Skill Levels (competencies 2–8)

All students will demonstrate abilities in the following areas:

2. **Analyzing nutrition influencing food choices and health outcomes:** Demonstrate the ability to analyze internal and external factors influencing food choices and health outcomes.
3. **Accessing valid nutrition information:** Demonstrate the ability to analyze products and services, and analyze the accuracy and validity of nutrition claims.
4. **Interpersonal communication about nutrition:** Demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes.
5. **Decision-making skills:** Demonstrate the ability to use decision-making skills to optimize food choices and health outcomes.
6. **Goal-setting skills:** Demonstrate the ability to use goal-setting skills to enhance nutrition and health.
7. **Practicing nutrition-enhancing behaviors:** Demonstrate the ability to practice nutrition-enhancing behaviors to reduce risk and promote health.
8. **Nutrition promotion:** Demonstrate the ability to promote and support a sustainable, nutritious food supply and healthy lifestyle for families and communities.

GRADE-LEVEL NUTRITION COMPETENCIES, BY OVERARCHING NUTRITION COMPETENCY

1. Overarching Nutrition Competency: Essential Concepts

Know the relationships among nutrition, physiology, and enhancing health.

▲ = Health education content standard in the Nutrition and Physical Activity content area; the specific standard is indicated in parentheses.

FLP = Food Literacy and Preparation Competency. Demonstrate the ability to explore, acquire, handle, and prepare foods to avoid or reduce health risk and to promote food and eating patterns for lifelong health. Rationale: The ability to prepare food, follow a recipe, and use the facilities available may influence food choices. If a person becomes reliant on foods requiring minimal preparation or on prepared food, it limits his or her choices and increases the disconnection from food preparation. Since eating patterns play a major role in health, food preparation and cooking skills have the potential to affect well-being and health.

1a. Know the six nutrient groups and their functions.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Identify the variety of foods of plant origin.</p> <p>Classify plant foods, such as fruits, vegetables, and grains.</p> <p>Identify the variety of foods of animal origin, such as eggs, fish, poultry, beef, and milk.</p>	<p>Describe the main functions of fat, carbohydrate, protein, vitamins, minerals, and water.</p>	<p>▲ Identify and define key nutrients and their functions. (1.1.N)</p>	<p>Classify food products—of plant and animal sources—by the major nutrients they provide.</p>	<p>▲ Identify nutrients and their relationships to health. (1.2.N)</p> <p>▲ Analyze the caloric and nutritional value of foods and beverages. (1.6.N)</p> <p>Name the key nutrients in each food group and investigate how the body uses these nutrients.</p>	<p>Classify nutrients into macronutrients and micronutrients.</p> <p>Explain how the Dietary Reference Intakes may be used to assess dietary quality.</p> <p>Define and analyze the functions of phytochemicals.</p>

1b. Know nutrition and health guidelines.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>▲ Name a variety of healthy foods and explain why they are necessary for energy and good health. (1.1.N)</p> <p>▲ Identify a variety of healthy snacks. (1.2.N)</p> <p>Describe tools used to measure servings of food.</p>	<p>▲ Classify various foods into appropriate food groups. (1.1.N)</p> <p>▲ Identify the number of servings of food from each food group that a child needs daily. (1.2.N)</p> <p>Identify actions key to feeling healthy and maintaining a healthy body.</p> <p>▲ Describe the benefits of drinking water in amounts consistent with current research-based health guidelines. (1.5.N)</p> <p>▲ Identify a variety of healthy snacks. (1.7.N)</p> <p>Identify physical activities that children can enjoy and sustain for 30 minutes every day.</p>	<p>▲ State the recommended number of servings and serving sizes for different food groups. (1.2.N)</p> <p>Identify at least one key nutrient provided by recommended food groups.</p> <p>▲ Explain the importance of drinking plenty of water, especially during vigorous physical activity. (1.6.N)</p> <p>List recommendations for maintaining a healthy body and self-esteem.</p>	<p>▲ Describe the food groups, including recommended portions to eat from each food group. (1.1.N)</p> <p>▲ Identify key components of the “Nutrition Facts” label. (1.2.N)</p> <p>▲ Explain why some food groups have a greater number of recommended portions than other food groups. (1.4.N)</p> <p>▲ Differentiate between more-nutritious and less-nutritious beverages and snacks. (1.6.N)</p> <p>▲ Explain the concept of eating in moderation. (1.7.N)</p> <p>Describe examples of how different cultures may meet dietary guidelines using a variety of foods.</p>	<p>Compare and contrast use of the current Dietary Guidelines for Americans and USDA food guide for planning healthy meals.</p> <p>▲ Analyze the major nutritional benefits of specific plant and animal food products.</p> <p>▲ Analyze the harmful effects of engaging in unscientific diet practices to lose or gain weight. (1.9.N)</p> <p>▲ Explain how to use a body mass index (BMI) score as a tool for measuring general health. (1.13.N)</p> <p>▲ Explain that incorporating daily moderate or vigorous physical activity into one’s life does not require a structured exercise plan or special equipment. (1.15.N)</p> <p>▲ Differentiate between physical activity and exercise and health-related and skill-related fitness. (1.16.N)</p>	<p>▲ Distinguish between facts and myths regarding nutrition practices, products, and physical performance. (1.1.N)</p> <p>▲ Research and discuss the practical use of current research-based guidelines for a nutritionally balanced diet. (1.2.N)</p> <p>▲ Explain the importance of variety and moderation in food selection and consumption. (1.3.N)</p> <p>▲ Describe dietary guidelines, food groups, nutrients, and serving sizes for healthy eating habits. (1.4.N)</p>

▲ = The HECS in the Nutrition and Physical Activity content area; the specific standard is indicated in parentheses.

1c. Know the factors affecting energy balance.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Recognize that we need food for energy.</p> <p>▲ Describe the benefits of active play and other physical activity. (1.3.N)</p> <p>Identify a form of physical activity that children enjoy at school and at home.</p>	<p>Describe how energy is obtained and expended during the day.</p> <p>Describe a variety of physical activities that will help keep children physically fit.</p> <p>▲ Identify opportunities outside of school for regular participation in physical activity. (1.8.N)</p>	<p>Explain reasons for the differences in the amount of food required by individuals.</p> <p>▲ Describe the benefits of moderate and vigorous physical activity. (1.7.N)</p>	<p>Define a calorie and describe how it is used by the body.</p> <p>Explain how energy is obtained and expended during physical activity.</p>	<p>▲ Analyze the caloric and nutritional value of foods and beverages. (1.6.N)</p> <p>Recognize that different foods contain different amounts of energy, which is in the form of calories.</p> <p>Compare caloric values of food according to the percent of fat, protein, and carbohydrate they contain.</p> <p>▲ Identify ways to increase daily physical activity. (1.14.N)</p>	<p>Compare the calorie content of macronutrients and analyze the relationship between calorie intake and expenditure.</p> <p>▲ Describe the amounts and types of physical activity recommended for teenagers' overall health and for the maintenance of a healthy body weight. (1.13.N)</p>

1d. Describe how nutritional needs vary throughout the life cycle.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Identify one reason people of different ages need different foods.</p>	<p>Describe some of the different food needs people have at different ages.</p>	<p>Describe generally the amounts and types of food people need at different ages.</p>	<p>Name five life stages and examples of special nutritional needs at each life stage.</p> <p>Explain the unique nutritional needs of preadolescents and compare these needs with other life stages.</p>	<p>Compare and contrast the specific nutritional needs at each life stage.</p>	<p>▲ Describe nutrition practices that are important for the health of a pregnant woman and her baby. (1.7.N)</p> <p>Identify and compare foods rich in nutrients that are important for adolescent and adult health in a daily diet.</p> <p>Assess how age, gender, activity level, and other factors influence nutritional needs during each of the five life stages.</p>

▲ = The HECS in the Nutrition and Physical Activity content area; the specific standard is indicated in parentheses.

1e. Identify the physiological processes in digestion, absorption, and metabolism of nutrients.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
Describe at least one reason we need food.	Explain that food is used and stored by our bodies to provide energy for growing, learning, and activity.	Illustrate the pathway of food during the process of digestion.	<p>▲ Explain the relationship between the intake of nutrients and metabolism. (1.3.N)</p> <p>Examine the pathway of food and its conversion to energy during the process of digestion.</p> <p>Describe the physiological reasons for differences in nutritional needs at each life stage.</p>	<p>▲ Describe the benefits of eating a variety of foods high in iron, calcium, and fiber. (1.7.N)</p> <p>Illustrate how the different body systems interact.</p>	<p>Analyze the physiological processes involved in the digestion, absorption, and metabolism of nutrients.</p> <p>Analyze the interaction of the different body systems and what happens when these systems do not function properly.</p>

▲ = The HECS in the Nutrition and Physical Activity content area; the specific standard is indicated in parentheses.

1f. Explain the influence of nutrition and physical activity on health.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>▲ Describe the benefits of being physically active. (1.3.N)</p> <p>▲ Recognize the importance of a healthy breakfast. (1.4.N)</p> <p>Recognize that eating healthy foods, such as vegetables and fruits, is beneficial for the body.</p>	<p>▲ Discuss the benefits of eating a nutritious breakfast every day. (1.3.N)</p> <p>▲ List the benefits of healthy eating (including beverages and snacks). (1.4.N)</p> <p>▲ Explain how both physical activity and eating habits can affect a person’s health. (1.9.N)</p>	<p>▲ Describe the relationship between food intake, physical activity, and good health. (1.3.N)</p> <p>▲ Identify ways to increase and monitor physical activity. (1.8.N)</p> <p>Name and explain the benefits of eating fruits and vegetables.</p> <p>Identify the benefits of eating whole grains.</p> <p>Name and explain two disadvantages of beverages high in sugar.</p>	<p>▲ Describe the benefits of eating a nutritionally balanced diet consistent with current research-based dietary guidelines. (1.8.N)</p> <p>▲ Explain how good health is influenced by healthy eating and being physically active. (1.9.N)</p> <p>▲ Describe how physical activity, rest, and sleep are related. (1.10.N)</p> <p>▲ Identify physical, academic, mental, and social benefits of regular physical activity. (1.11.N)</p>	<p>▲ Describe the short- and long-term impact of nutritional choices on health. (1.1.N)</p> <p>▲ Differentiate between diets that are health-promoting and diets linked to disease. (1.5.N)</p> <p>▲ Identify the impact of nutrition on chronic disease. (1.10.N)</p> <p>▲ Analyze the cognitive and physical benefits of eating breakfast daily. (1.11.N)</p> <p>▲ Explain the role of lifelong fitness activities in maintaining personal fitness, blood pressure, weight, and percentage of body fat. (1.15.N)</p>	<p>▲ Describe the relationship between poor eating habits and chronic diseases such as heart disease, obesity, cancer, diabetes, hypertension, and osteoporosis. (1.5.N)</p> <p>▲ Describe the prevalence, causes, and long-term consequences of unhealthy eating. (1.8.N)</p> <p>▲ Evaluate various approaches to maintaining a healthy weight. (1.10.N)</p> <p>▲ Identify the causes, symptoms, and harmful effects of eating disorders. (1.11.N)</p> <p>▲ Explain why people with eating disorders need professional help. (1.12.N)</p> <p>▲ Analyze the harmful effects of using diet pills and anabolic steroids. (1.14.N)</p> <p>▲ Explain the physical, academic, mental, and social benefits of physical activity and the relationship between a sedentary lifestyle and chronic disease. (1.15.N)</p>

▲ = The HECS in the Nutrition and Physical Activity content area; the specific standard is indicated in parentheses.

1g. Know principles of handling (growing, harvesting, transporting, processing, storing, and preparing) foods for optimal food quality and safety.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Describe how to wash hands before handling food.</p> <p>Identify one way of safely preparing foods for eating.</p> <p>Name one way to store food that helps to keep it safe and fresh.</p>	<p>▲ Describe how to keep food safe from harmful germs. (1.6.N)</p> <p>Identify how to safely use kitchen tools to prepare food.</p> <p>Explain why hand washing is important when preparing and eating food.</p> <p>Identify examples of foods that must be stored at cool temperatures: in the refrigerator or freezer.</p> <p>Describe how food is handled safely on its way from farm to table.</p>	<p>▲ Identify how to keep food safe through proper food preparation and storage. (1.4.N)</p> <p>▲ Explain how food can contain germs that cause illness. (1.5.N)</p> <p>Explain what food-borne illnesses are and how those illnesses are contracted.</p> <p>Identify a variety of ways to prepare or include fruits, vegetables, and whole grains in daily meals and snacks.</p>	<p>▲ Describe safe food handling and preparation practices. (1.5.N)</p> <p>Identify symptoms of food-borne illness.</p> <p>Describe ways to prevent food-borne illness.</p> <p>Identify the food temperature danger zone.</p> <p>Explain how food is transported from farm to table, focusing on maintaining nutritional quality.</p> <p>Identify examples of jobs related to food and nutrition.</p>	<p>▲ Examine the health risks caused by food contaminants. (1.3.N)</p> <p>▲ Describe how to keep food safe through proper food purchasing, preparation, and storage practices. (1.4.N)</p> <p>▲ Identify ways to prepare food that are consistent with current research-based guidelines for a nutritionally balanced diet. (1.8.N)</p> <p>Identify careers associated with each phase of the food cycle.</p>	<p>▲ Explain how to keep food safe through proper food purchasing, preparation, and storage practices. (1.6.N)</p> <p>Describe the advantages and disadvantages of food processing, including the effects on food quality, safety, nutrient content, and the environment.</p> <p>Compare and analyze food-related careers, such as jobs related to nutrition, dietetics, food technology, culinary arts, agricultural production, and food safety.</p>
<p>Identify simple words to describe foods by using a variety of senses.</p>	<p>Identify and define vocabulary to describe flavors, textures, and sounds for a variety of foods.</p>	<p>Describe the characteristics of flavor profiles from different regions of the United States (Southwest, Southern, Creole).</p>	<p>Identify and describe the uses of a variety of knives.</p>	<p>Define a variety of food preparation methods and flavor profiles representing diverse countries and cuisines.</p>	<p>Describe the principles, techniques, and terminology of safe food preparation for a healthy, varied, and balanced diet.</p>
<p>Identify utensils and skills for cooking (spoon, stirring, measuring cup, measuring, bowl, rinsing).</p>	<p>Name appropriate tools and methods for chopping soft foods, measuring, cracking eggs, washing fruits and vegetables, grating cheese, and opening cans.</p>	<p>Identify and describe appropriate tools, equipment, and methods for blending, whisking, tossing, microwaving, baking).</p>	<p>Name and describe appropriate tools, equipment, and methods to fold, knead, boil, simmer, and bake foods.</p>	<p>Name and describe appropriate tools, equipment, and methods to stir fry, sauté, steam, blend, and roast foods.</p>	<p>Explain how to change recipes and dishes to make them healthier, either by using different cooking methods or ingredients.</p>

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1g. Know principles of handling (growing, harvesting, transporting, processing, storing, and preparing) foods for optimal food quality and safety. (continued)

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
Describe a variety of eating utensils (fork, spoon, knife, plate, cup, bowl, chopsticks, hands).	Recognize that a food can be grown at home or purchased from local farms and markets, shops, and grocery stores.	Describe safe uses of a variety of small kitchen appliances (toaster, microwave, and blender).	Describe safe uses of a variety of large kitchen appliances (oven, stove, refrigerator).	Describe safe uses of equipment and appliances including being aware of others' safety.	Identify information on food labels for food safety, nutrition, storage, preparation, and allergy information.
Identify places to obtain fresh food (grocery store, farmers market, garden, farm).	Describe materials needed to plant and grow seeds.	Describe tools, seasons, and conditions needed for a variety of herbs.	Describe tools, conditions, and materials to plant different types of fruits and vegetables.	Identify recipe modifications to promote good health.	Compare and contrast cost and quality of a variety of accessible sources of fresh foods and produce (including community gardens, local stores, markets, restaurants).
				Compare costs of food prepared at home and when eating out.	Identify locations of local school and community gardens.

1h. Consider the interactions among nutrition science, ecosystems, agriculture, and social systems that affect health, including local, national, and global perspectives.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Describe what plants and animals need for growth.</p> <p>Identify edible parts of plants and trees.</p>	<p>Identify two ways that geographical factors influence food availability and quality.</p> <p>Identify factors that affect the availability of food, such as economics, location, and culture.</p> <p>Identify foods grown in different regions of California.</p> <p>Name one example of a healthy food item associated with a certain country or cultural group.</p>	<p>Identify foods grown in different regions of the state, the country, and the world and how some of those foods are produced.</p> <p>List examples of foods that are grown in California and in different regions of the United States.</p> <p>Describe the role of food webs within natural systems.</p> <p>Explain the concept of food security.</p> <p>Define nutrition science or explain what the science of nutrition includes.</p>	<p>Describe and illustrate the food cycle.</p> <p>Compare and contrast types of foods produced in specific regions of California and the United States.</p> <p>Describe the relationship between ecosystems and nutrition science.</p> <p>Analyze reasons why an abundance of food crops are grown in California.</p> <p>Recognize different food production systems, such as organic, sustainable, and conventional.</p>	<p>Explain two factors that influence the quality and quantity of food available locally, nationally, and globally.</p> <p>Describe how economics, social systems, and education impact the nutritional status of individuals.</p> <p>Examine the technological factors that help create the quality and quantity of food we need.</p> <p>Examine how local, national, and global factors influence the food cycle.</p> <p>Compare the different food production systems.</p>	<p>Explain how local, national, and global factors influence food intake.</p> <p>Analyze data to determine the local, national, and global influences on the quantity and quality of food.</p> <p>Identify how social conditions may influence food availability.</p> <p>Analyze the effectiveness of the different food production systems, such as organic, sustainable, and conventional.</p> <p>Describe the impact of agriculture on California's economy and how the state's budget influences agriculture.</p>
		<p>Explain the steps to recycle safely.</p>	<p>Explain how composting minimizes waste and the steps to compost safely.</p>		

2. Overarching Nutrition Competency: Analyzing Nutrition Influences

Analyze internal and external factors influencing food choices and health outcomes.

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Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Identify one influence on food choices.</p> <p>▲ Recognize that not all products advertised or sold are good for them. (2.1.N)</p> <p>State the purpose of food advertisements and commercials.</p> <p>Give one example of a favorite food custom or food choice on a special holiday.</p> <p>Identify one practice that makes meal-times enjoyable.</p> <p>Compare the feelings of hunger and fullness.</p>	<p>▲ Discuss how family, friends, and media influence food choices. (2.1.N)</p> <p>Report one historical reason for making certain food choices.</p> <p>Describe three factors that influence personal food choices (seeing, smelling, and tasting).</p> <p>Describe how taste affects personal food choices.</p> <p>Describe body signals that tell people when they are hungry and when they are full.</p>	<p>▲ Identify internal and external influences that affect food choices. (2.1.N)</p> <p>▲ Analyze advertising and marketing techniques used for food and beverages. (2.2.N)</p> <p>Describe the effects of peer influence and social environments on food choices.</p> <p>Identify examples of a food item associated with a neighborhood, city, state, or country.</p> <p>▲ Identify internal and external influences that affect physical activity. (2.3.N)</p>	<p>▲ Describe internal and external influences that affect food choices and physical activity. (2.1.N)</p> <p>▲ Recognize that family and cultural influences affect food choices. (2.2.N)</p> <p>Compare food choices from different cultures.</p> <p>Investigate historical reasons for making certain food choices.</p> <p>▲ Describe the influence of advertising and marketing techniques on food and beverage choices. (2.3.N)</p> <p>Identify how heredity may influence body size and shape.</p> <p>Identify how physical and psychological factors affect taste.</p> <p>Discuss ways to respect an individual's personal decisions about food choices.</p>	<p>▲ Describe the influence of culture and media on body image. (2.1.N)</p> <p>▲ Evaluate internal and external influences on food choices. (2.2.N)</p> <p>Compare experiences of making nutritious food choices within a variety of social settings.</p> <p>Illustrate how food choices from different cultures meet nutrient needs.</p> <p>Identify how emotions influence food choices and how food choices may affect emotions.</p> <p>▲ Analyze the impact of nutritional choices on future reproductive and prenatal health. (2.3.N)</p> <p>▲ Analyze the influence of technology and media on physical activity [and food choices]. (2.4.N)</p> <p>Identify examples of barriers to making healthy food and fitness choices.</p>	<p>▲ Evaluate internal and external influences that affect food choices. (2.1.N)</p> <p>Evaluate successful marketing and advertising techniques.</p> <p>▲ Assess personal barriers to healthy eating and physical activity. (2.2.N)</p> <p>▲ Distinguish between facts and myths about nutrition practices, products, and physical performance. (2.3.N)</p> <p>▲ Analyze the impact of nutritional choices on future reproductive and prenatal health. (2.4.N)</p> <p>▲ Analyze the impact of various influences, including the environment, on eating habits and attitudes toward weight management. (2.5.N)</p> <p>▲ Analyze internal and external influences that affect physical activity. (2.6.N)</p> <p>Explain how factors such as geography, transportation, and world trade agreements influence food choices.</p>

2. Overarching Nutrition Competency: Analyzing Nutrition Influences *(continued)*

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
Identify favorite foods, flavors, textures, smells, and sounds.	Describe favorite ways to prepare food (cook, raw/fresh, barbecue).	Explain why some people eat or avoid certain foods due to allergy or religious belief.	Describe how food preparation may influence food choices (cook, raw/fresh, spices barbecue, serve cold or hot).	Describe how food choice may be influenced by how food is processed or sold (organic, conventional, fair trade).	Describe how personal and lifestyle factors may influence food choice (role models, body image).
	Describe reasons that family or friends may eat or avoid certain foods.	Identify why people choose different types of food, based on who they are with, preference, season, time, source (gardens or stores), and occasion (including celebrations).	Analyze the acceptance by students of fresh fruits and vegetables from school or local gardens.	Analyze the impact of local school and neighborhood gardens on food choices and access.	Analyze the differences in taste, quality, cost, and environmental impact of local gardens, farmers markets, grocery chains, and other sources on food choice.
			Describe how packaging, including ability to recycle, may influence food choice.	Analyze how food costs can impact choices and overall health.	Describe how the environment can influence food choices (fast-food restaurants, school nutrition services, home, neighborhood stores).

3. Overarching Nutrition Competency: Accessing Valid Nutrition Information

Demonstrate the ability to access nutrition information, products, and services and determine the accuracy and validity of nutrition claims.

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Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Distinguish between good advice about food choices and advertisements for products such as high-sugar cereals.</p> <p>Identify trusted adults who can give accurate nutrition information.</p>	<p>▲ Identify resources for reliable information about healthy foods. (3.1.N)</p> <p>Identify how to recognize credible nutrition information.</p>	<p>▲ Identify resources for valid information about safe and healthy foods. (3.1.N)</p> <p>▲ Use food labels to determine nutrient and sugar content. (3.2.N)</p>	<p>▲ Locate age-appropriate guidelines for eating and physical activity. (3.1.N)</p> <p>▲ Interpret information provided on food labels. (3.2.N)</p>	<p>▲ Distinguish between valid and invalid sources of nutrition information. (3.1.N)</p> <p>▲ Evaluate the accuracy of claims about dietary supplements and popular diets. (3.2.N)</p> <p>▲ Describe how to assess nutrition information about foods offered in restaurants in one's community. (3.3.N)</p> <p>▲ Identify places where youths and families can be physically active. (3.4.N)</p> <p>▲ Identify trusted adults in one's family, school, and community for advice and counseling regarding healthy eating and physical activity. (3.5.N)</p>	<p>Describe criteria for assessing the validity of nutrition information.</p> <p>▲ Access sources of accurate information about safe and healthy weight management. (3.1.N)</p> <p>▲ Evaluate the accuracy of claims about food and dietary supplements. (3.2.N)</p> <p>▲ Describe how to use nutrition information on food labels to compare products. (3.3.N)</p> <p>Analyze Nutrition Facts food labels to compare calorie and macronutrient content.</p> <p>▲ Evaluate the accuracy of claims about the safety of fitness products. (3.4.N)</p> <p>▲ Describe community programs and services that help people gain access to affordable, healthy foods. (3.5.N)</p> <p>▲ Describe internal and external influences that affect physical activity. (3.6.N)</p>

3. Overarching Nutrition Competency: Accessing Valid Nutrition Information *(continued)*

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
Name people who can help safely prepare a healthy snack and breakfast.	Identify resources and people to help shop and safely prepare foods and snacks.	Identify sources for obtaining healthy recipes and safe and hygienic preparation.	Identify sources for obtaining small kitchen equipment and tools.	Identify accurate sources of healthy cost-effective recipes (print and online).	Identify accurate sources of information for growing a variety of seasonal local fruits and vegetables.
Identify people who can help with growing a garden.	Identify foods with labels that provide information to help make food choices.	Research accurate information for planting and growing herbs.	Identify sources for materials and tools to plant gardens.	Identify accurate sources of information for growing a variety of seasonal fruits and vegetables.	Identify parts of the food label for nutrition and allergy information.
	Identify sources of materials to plant and grow a garden.				Use valid sources to research and compare different food production and distribution systems (organic, free range, grass fed, local).

4. Overarching Nutrition Competency: Interpersonal Communication about Nutrition

Demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes.

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Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>▲ Explain how to ask family members for healthy food options. (4.1.N)</p> <p>Say or show how to politely say no when refusing food when full or to indicate preferences for some foods.</p>	<p>▲ Demonstrate how to ask family members for healthy food options. (4.1.N)</p> <p>Demonstrate effective ways to say no to more food when full or to indicate preferences for some foods.</p> <p>Demonstrate the ability to respect differences in body shapes and sizes.</p>	<p>▲ Demonstrate effective communication skills to ask for healthy food choices. (4.1.N)</p> <p>Demonstrate effective ways to say no to more food when full or to communicate the reasons for a food preference.</p> <p>Demonstrate the ability to respect differences in body shapes and sizes.</p>	<p>▲ Use communication skills to deal effectively with influences from peers and media regarding food choices and physical activity. (4.1.N)</p>	<p>▲ Demonstrate the ability to use effective skills to model healthy decision making and prevent overconsumption of foods and beverages. (4.1.N)</p> <p>▲ Practice effective communication skills with parents, guardians, or trusted adults regarding healthy nutrition and physical activity choices. (4.2.N)</p>	<p>▲ Analyze positive strategies to communicate healthy eating and physical activity needs at home, at school, and in the community. (4.1.N)</p> <p>▲ Practice how to refuse less-nutritious foods in social settings. (4.2.N)</p> <p>Describe examples of communication techniques to ensure safe, healthy foods are available in our environment.</p>
<p>Explain how to ask family members to prepare a simple snack and breakfast together.</p>	<p>Ask parents or family to participate in preparing a simple recipe in the kitchen.</p>	<p>Ask parents or family members to try a new recipe together.</p>	<p>Ask parents and family to prepare a meal together, including shopping and meal preparation.</p>	<p>Plan meals for a week with family members.</p>	<p>Plan a meal/party with friends based on healthy food choices, shop, and prepare recipes together with friends or family.</p>
<p>Explain how to ask family members for help to set the table.</p>	<p>Create a shopping list with a parent or family member for a meal.</p>	<p>Ask parents, family members, or school leaders to plant and grow seasonal herbs.</p>		<p>Ask family or friends to try a new recipe or a healthier method of preparing a familiar recipe.</p>	<p>Interview a local farmer, gardener, or farmers market vendor and report on their concerns and experiences growing food.</p>
					<p>Use valid sources to research and compare different food production and distribution systems (organic, free range, grass fed, local).</p>

5. Overarching Nutrition Competency: Decision Making

Demonstrate the ability to use decision-making skills to optimize food choices and health outcomes.

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Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>▲ Describe ways to participate regularly in active play and enjoyable physical activities. (5.1.N)</p> <p>Name or show foods that are favorites to eat.</p> <p>Talk about a choice between two foods.</p>	<p>▲ Use a decision-making process to select healthy foods. (5.1.N)</p> <p>▲ Compare and contrast healthy and less-healthy food choices in a variety of settings. (5.2.N)</p> <p>▲ Identify safe ways to increase physical activity. (5.3.N)</p>	<p>▲ Describe how to use a decision-making process to select nutritious foods and beverages. (5.1.N)</p> <p>Compare nutritional values of a variety of similar food items.</p> <p>▲ Describe how to use a decision-making process to select healthy options for physical activity. (5.2.N)</p>	<p>▲ Use a decision-making process to identify healthy foods for meals and snacks. (5.1.N)</p> <p>▲ Use a decision-making process to determine activities that increase physical fitness. (5.2.N)</p> <p>▲ Compare personal eating and physical activity patterns with current age-appropriate guidelines. (5.3.N)</p>	<p>▲ Use a decision-making process to evaluate daily food intake for meeting nutritional requirements. (5.1.N)</p> <p>▲ Identify recreational activities that increase physical activity. (5.2.N)</p> <p>▲ Contrast healthy and risky approaches to weight management. (5.3.N)</p> <p>▲ Analyze the physical, mental, and social benefits of physical activity. (5.4.N)</p>	<p>▲ Demonstrate how nutritional needs are affected by age, gender, activity level, pregnancy, and health status. (5.1.N)</p> <p>▲ Use a decision-making process to plan nutritionally adequate meals at home and away from home. (5.2.N)</p> <p>▲ Demonstrate how to use safe food-handling procedures when preparing meals and snacks. (5.3.N)</p> <p>Assess the advantages and disadvantages of daily multivitamin and mineral supplements.</p>
		Compare the pros and cons of different breakfast and snack recipe choices.	Compare and choose healthy recipes to prepare a breakfast, lunch, and dinner.	Given available equipment and funds, determine appropriate, healthy recipes for a day.	Given the season, equipment, and funds, develop a week's meals and recipes for preparing selected meals.
		Decide on herbs to grow in a family or school garden.	Compare cost and information from food labels to make a snack choice.	Compare nutrition information and cost on restaurant menus to decide on restaurants and food items to order.	Determine optimal fruits and vegetables to grow, based on the season, soil, and growing conditions.
			Decide on seasonal plants for a home, school, or local garden.		Make informed choices about food products, recipes, and methods of preparation to achieve a healthy, varied, and balanced diet.

6. Overarching Nutrition Competency: Goal Setting

Demonstrate the ability to use goal-setting skills to enhance nutrition and health.

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Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
Set a goal to use manners when consuming meals at school.	<ul style="list-style-type: none"> ▲ Set a short-term goal to choose healthy foods for snacks and meals. (6.1.N) ▲ Set a short-term goal to participate daily in vigorous physical activity. (6.2.N) 	<ul style="list-style-type: none"> ▲ Make a plan to choose healthy foods and beverages. (6.1.N) ▲ Make a plan to choose physical activities at school and home. (6.2.N) 	<ul style="list-style-type: none"> ▲ Monitor personal progress toward a nutritional goal. (6.1.N) ▲ Monitor personal progress toward a physical activity goal. (6.2.N) 	<ul style="list-style-type: none"> ▲ Make a personal plan for improving one's nutrition and incorporating physical activity into daily routines. (6.1.N) ▲ Set a goal to increase daily physical activity. (6.2.N) 	<ul style="list-style-type: none"> ▲ Assess one's personal nutrition needs and physical activity level. (6.1.N) ▲ Develop practical solutions for removing barriers to healthy eating and physical activity. (6.2.N) ▲ Create a personal nutrition and physical activity plan based on current guidelines. (6.3.N)
Set a goal to help prepare a snack and breakfast with parents and family for one week.	Describe daily goals for trying new fruits and vegetables.	Make a plan to increase the variety of fruits and vegetables consumed.	Monitor personal progress toward trying a variety of foods and recipes.	Set a long-term goal to increase intake of fresh, local foods.	Develop a personal plan and long-range goal to increase intake of fresh, local, seasonal foods.
Set a goal to help set the table each week.		Make a plan to practice food preparation skills.	Monitor personal progress toward increasing intake of local fresh-prepared foods and fewer processed foods.	Set a goal to participate in a school or community garden project.	
		Make a plan to plant and grow herbs in a home, school, or local garden.	Make a plan to grow fruits or vegetables in a home, school, or local garden.		

7. Overarching Nutrition Competency: Practicing Nutrition-Enhancing Behaviors

Demonstrate the ability to practice nutrition-related behaviors that reduce risk and promote health.

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FLP = Food Literacy and Preparation Competency. Demonstrate the ability to explore, acquire, handle, and prepare foods to avoid or reduce health risk and to promote food and eating patterns for lifelong health. Rationale: The ability to prepare food, follow a recipe, and use the facilities available may influence food choices. If a person becomes reliant on foods requiring minimal preparation or on prepared food, it limits his or her choices and increases the disconnection from food preparation. Since eating patterns play a major role in health, food preparation and cooking skills have the potential to affect well-being and health.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>▲ Select nutritious snacks. (7.1.N)</p> <p>▲ Plan a nutritious breakfast. (7.2.N)</p> <p>Demonstrate hand washing before handling or eating foods.</p> <p>▲ Choose healthy foods in a variety of settings. (7.3.N)</p> <p>Prepare a healthy snack.</p> <p>Practice selecting foods that are in season.</p> <p>Identify and try a new fruit or vegetable.</p>	<p>▲ Examine the importance of eating a nutritious breakfast every day. (7.1.N)</p> <p>▲ Plan a nutritious meal. (7.2.N)</p> <p>▲ Select healthy beverages. (7.3.N)</p> <p>▲ Examine the criteria for choosing a nutritious snack. (7.4.N)</p> <p>Record foods consumed and use the current USDA guide for daily food choices to classify food groups selected.</p> <p>Demonstrate safe practices for handling and preparing foods at school.</p> <p>▲ Participate in physical activities with friends and family. (7.5.N)</p>	<p>▲ Practice how to take personal responsibility for eating healthy foods. (7.1.N)</p> <p>▲ Practice how to take personal responsibility for limiting sugar (and salt) consumption in foods, snacks, and beverages. (7.2.N)</p> <p>Demonstrate the preparation of a nutritious snack.</p> <p>▲ Practice how to take personal responsibility for engaging in physical activity. (7.3.N)</p> <p>▲ Identify ways to establish and maintain healthy eating practices consistent with current research-based guidelines for a nutritionally balanced diet. (7.4.N)</p>	<p>▲ Identify ways to choose healthy snacks based on current research-based guidelines. (7.1.N)</p> <p>▲ Demonstrate how to prepare a healthy meal or snack using sanitary food preparation and storage practices. (7.2.N)</p> <p>▲ Demonstrate the ability to balance food intake and physical activity. (7.3.N)</p> <p>▲ Demonstrate the ability to assess personal physical-activity levels. (7.4.N)</p> <p>Practice using the Nutrition Facts label and ingredient list on food products and explain how the information may help in making food choices.</p>	<p>▲ Make healthy food choices in a variety of settings. (7.1.N)</p> <p>Develop a plan for making informed decisions about food choices using the food cycle.</p> <p>Develop a menu that meets recommendations of the current USDA guide for daily food choices.</p> <p>▲ Explain proper food-handling safety when preparing meals and snacks. (7.2.N)</p> <p>Demonstrate food-preparation skills to enhance the appeal, taste, and nutritional value of foods.</p> <p>Use unit pricing to select the healthiest foods at the best prices.</p> <p>▲ Assess personal physical activity levels. (7.3.N)</p> <p>▲ Examine ways to be physically active throughout a lifetime. (7.4.N)</p>	<p>▲ Select healthy foods and beverages in a variety of settings. (7.1.N)</p> <p>Design menus, based on food guidelines, according to age, gender, and activity level.</p> <p>Demonstrate ways to purchase healthy foods within budget constraints.</p> <p>▲ Critique one's personal diet for overall balance of key nutrients. (7.2.N)</p> <p>Demonstrate the use of the Dietary Reference Intakes to assess dietary quality.</p> <p>▲ Identify strategies for eating more fruits and vegetables. (7.3.N)</p> <p>▲ Describe how to take more personal responsibility for eating healthy foods. (7.4.N)</p> <p>▲ Participate in school and community activities that promote fitness and health. (7.5.N)</p>

7. Overarching Nutrition Competency: Practicing Nutrition-Enhancing Behaviors *(continued)*

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
Taste and explore new foods independently and objectively by using a variety of senses.	Experience and explore tasting a variety of ingredients (herbs, fruit, vegetables, grains, dairy, protein sources, and legumes).	Experience and explore foods with varied flavor profiles from different regions and countries.	Identify and describe terminology used in food preparation (sauté, boil, simmer, fry, bake, roast, toss, blend, fold, etc).	Experiment with and explore preparing and tasting meals with varied flavor profiles from different regions and countries.	Develop positive lifelong perceptions toward trying and preparing new foods and meals.
Use one practice to safely store food (dry foods in cabinet and cold foods in the refrigerator).	Demonstrate ways to keep foods safe from germs (proper handwashing, tie back long hair, use hot and cold storage, cover foods).	Demonstrate proper food preparation, storage, and cleaning techniques to prevent cross contamination, maintain safe temperature zones, and appropriately store dry, hot, and cold foods.	Use and care for large kitchen appliances (oven, stove, refrigerator) safely.	Use cost-effective meal planning and shopping techniques that include safe food selection and handling (selecting quality produce, reading labels, using expiration dates, and food safe shopping).	Incorporate the principles, techniques, and terminology of safe food preparation to create healthy, affordable recipes based on one or more food groups.
Select appropriate tools for simple food preparation tasks (spoon, fork, spatula, knife [not sharp] bowl, towels, soap, and the like).	Describe the importance of food safety and wash fruits and vegetables safely before eating or preparation.	Handle, use, and care for small kitchen appliances (blender, mixer, and microwave) appropriately and safely.	Handle, use, and care for knives safely.	Alter recipes accurately for number of servings and to improve health (increasing and decreasing recipe yield and make substitutions or additions to lower fat, sugar, or sodium).	Plan and shop for foods to include in a healthy menu to increase fruit and vegetable intake or lower fat, sugar or sodium for three meals a day for family or friends.
Demonstrate simple cooking skills (rinse/wash, tear foods, peel, squeeze, stir, slice soft foods).	Select appropriate kitchen equipment for food preparation tasks (graters, measuring spoons and cups, can opener, cutting boards, and knives for soft foods).	Properly measure dry and wet ingredients using weight, whole and fractions of cups, tablespoons, and teaspoons.	Recognize and demonstrate different styles of meal service for a variety of cultures.	Safely demonstrate a range of food preparation techniques when cooking, stir-frying, sautéing, steaming, and blending, keeping in mind others' safety.	Plan meals for a week for a family of four (include selecting recipes, preparing appropriate shopping lists), and estimate costs. Compare with restaurant or fast-food options.
Apply safe and proper food-preparation skills to prepare a simple snack.	Prepare foods safely using appropriate kitchen equipment (grating foods, cutting soft foods, opening cans, measuring with spoons and cups).	Properly and safely perform common food preparation techniques (cracking an egg, whisking, kneading, and mixing).	Properly perform food preparation, service, and safe cleaning techniques (chopping vegetables, slicing and setting meal service, and washing surfaces, utensils, and equipment).	Identify shopping and cleaning techniques that are environmentally safe and sustainable.	Describe roles and responsibilities of culinary staff in a quantity food establishment (school, restaurant, hospital).

7. Overarching Nutrition Competency: Practicing Nutrition-Enhancing Behaviors *(continued)*

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
	Prepare a nutritious breakfast (with adult assistance) using an individual-serving recipe and safe and appropriate food preparation skills.	Follow recipe instructions and work within a group to prepare a meal item for breakfast, lunch, or dinner.	Plan, prepare, and serve a healthy meal that includes independently following a recipe, preparing meal items using safe food handling practices, and cleaning during and after the meal.	Independently plan and prepare one balanced meal for a group or family using recipes, proper food handling techniques, meal service, and cleaning.	Plan a kitchen with basic food preparation and storage equipment for an individual or family; include utensils, ingredients, and small and large appliances.
	Demonstrate how to properly plant a seed and raise a seedling.	Plant, care for, and harvest herbs in a home, school, or local garden.	Plant, care for, harvest, and prepare a variety of plants from a school or local garden.	Plan and plant a garden, and prepare recipes using foods harvested from a school or local garden.	Participate in planning and growing a production garden for school, community, or retail use.
		Demonstrate how to use information on product labels to safely store and handle foods.	Demonstrate safe and effective composting methods to reduce food waste.	Use cost and nutrition information to make healthy choices when eating out.	Practice food safety when handling, storing, preparing, cooking, and serving meals.
		Demonstrate recycling food packaging and being careful not to waste food.		Use recycling and composting methods to reduce waste at home, school, and in the community.	Demonstrate the ability to change recipes and dishes to make them healthier by using different cooking methods and ingredients.

8. Overarching Nutrition Competency: Nutrition Promotion

Demonstrate the ability to promote and support a sustainable, nutritious food supply and healthy lifestyles for families and communities.

▲ = The HECS in the Nutrition and Physical Activity content area; the specific standard is indicated in parentheses.

FLP = Food Literacy and Preparation Competency. Demonstrate the ability to explore, acquire, handle, and prepare foods to avoid or reduce health risk and to promote food and eating patterns for lifelong health. Rationale: The ability to prepare food, follow a recipe, and use the facilities available may influence food choices. If a person becomes reliant on foods requiring minimal preparation or on prepared food, it limits his or her choices and increases the disconnection from food preparation. Since eating patterns play a major role in health, food preparation and cooking skills have the potential to affect well-being and health.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Tell others about trying a healthy snack or new fruit and vegetable.</p> <p>Encourage others when they select healthy foods.</p>	<p>▲ Practice making healthy eating choices with friends and family. (8.1.N)</p> <p>▲ Explain to others what is enjoyable about physical activity. (8.2.N)</p> <p>Explain to others what is enjoyable about eating healthy foods.</p> <p>Try foods that are grown locally.</p>	<p>▲ Support others in making positive food and physical activity choices. (8.1.N)</p> <p>Demonstrate how to offer support to someone who is teased because of weight or body shape.</p>	<p>▲ Encourage and promote healthy eating and increased physical activity opportunities at school and in the community. (8.1.N)</p> <p>Use different cultural traditions to plan meals.</p>	<p>▲ Encourage nutrient-dense food choices in school. (8.1.N)</p> <p>▲ Support increased opportunities for physical activity at school and in the community. (8.2.N)</p> <p>▲ Encourage peers to eat healthy foods and to be physically active. (8.3.N)</p> <p>Explain how our food choices influence the food supply of the future.</p> <p>Educate family and peers about the advantages of selecting locally grown seasonal foods.</p> <p>Evaluate various approaches to maintaining a healthy weight.</p>	<p>▲ Advocate enhanced nutritional options in the school and community. (8.1.N)</p> <p>▲ Educate family and peers about choosing healthy foods. (8.2N)</p> <p>Examine who makes food policy and how consumers may influence food policy.</p> <p>Develop an action plan to increase awareness of the local, national, and global factors that influence the quantity and quality of food.</p> <p>Describe an example of a nutritional problem in another country and a possible solution.</p> <p>Discuss methods consumers may use to influence the food industry.</p>

8. Overarching Nutrition Competency: Nutrition Promotion *(continued)*

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
	Encourage friends and family to try new fruits and vegetables.	Promote and support participation in school garden activities.	Support and promote family to explore a range of new healthy foods and flavors.	Support and promote family's and peers' exploration of a range of new healthy foods and flavors.	Promote healthy, accessible food in a neighborhood (gardens, food pantries, food banks).
		Promote fresh-made snack foods instead of processed food choices.	Encourage family members to shop for local and seasonal fruits and vegetables (gardens, farmers markets and stores).	Encourage friends and family to eat fresh cooked meals and fewer fast food or processed meals.	Develop a campaign to promote purchase of local seasonal foods.
		Encourage family members, friends, and schools to recycle.	Promote family members, friends, and schools to compost to reduce waste.	Promote recycling and composting programs at home, school, and within the community.	

NUTRITION COMPETENCIES, BY GRADE LEVEL

Kindergarten

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
Identify the variety of foods of plant origin. Classify plant foods, such as fruits, vegetables, and grains. Identify the variety of foods of animal origin, such as eggs, fish, poultry, beef, and milk.	<ul style="list-style-type: none"> ▲ Name a variety of healthy foods and explain why they are necessary for energy and good health. (1.1.N) ▲ Identify a variety of healthy snacks. (1.2.N) Describe tools used to measure servings of food.	Recognize that we need food for energy. <ul style="list-style-type: none"> ▲ Describe the benefits of active play and other physical activity. (1.3.N) Identify a form of physical activity that children enjoy at school and at home.	Identify one reason people of different ages need different foods.	Describe at least one reason we need food.	<ul style="list-style-type: none"> ▲ Describe the benefits of being physically active. (1.3.N) ▲ Recognize the importance of a healthy breakfast. (1.4.N) Recognize that eating healthy foods, such as vegetables and fruits, is beneficial for the body.	Describe how to wash hands before handling food. Identify one way of safely preparing foods for eating. Name one way to store food that helps to keep it safe and fresh.	Describe what plants and animals need for growth. Identify edible parts of plants and trees.
						Identify simple words to describe foods by using a variety of senses. Identify utensils and skills for cooking (spoon, stirring, measuring cup, measuring, bowl, rinsing). Describe a variety of eating utensils (fork, spoon, knife, plate, cup, bowl, chopsticks, hands). Identify places to access fresh food (grocery store, farmers market, garden, and farm).	

Kindergarten

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>Identify one influence on food choices.</p> <p>▲ Recognize that not all products advertised or sold are good for them. (2.1.N)</p> <p>State the purpose of food advertisements and commercials.</p> <p>Give one example of a favorite food custom or food choice on a special holiday.</p> <p>Identify one practice that makes mealtimes enjoyable.</p> <p>Compare the feelings of hunger and fullness.</p>	<p>Distinguish between good advice about food choices and advertisements for products such as high-sugar cereals.</p> <p>Identify trusted adults who can give accurate nutrition information.</p>	<p>▲ Explain how to ask family members for healthy food options. (4.1.N)</p> <p>Say or show how to politely say no when refusing food when full or how to indicate preferences for some foods.</p>	<p>▲ Describe ways to participate regularly in active play and enjoyable physical activities. (5.1.N)</p> <p>Name or show foods that are favorites to eat.</p> <p>Talk about a choice between two foods.</p>	<p>Set a goal to use manners when consuming meals at school.</p>	<p>▲ Select nutritious snacks. (7.1.N)</p> <p>▲ Plan a nutritious breakfast. (7.2.N)</p> <p>Demonstrate hand washing before handling or eating foods.</p> <p>▲ Choose healthy foods in a variety of settings. (7.3.N)</p> <p>Prepare a healthy snack.</p> <p>Practice selecting foods that are in season.</p> <p>Identify and try a new fruit or vegetable.</p>	<p>Tell others about trying a healthy snack or new fruit and vegetable.</p> <p>Encourage others when they select healthy foods.</p>
<p>Identify favorite foods, flavors, textures, smells, and sounds.</p>	<p>Name people who can help safely prepare a healthy snack and breakfast.</p> <p>Identify people who can help with growing a garden.</p>	<p>Explain how to ask family members to prepare a simple snack and breakfast together.</p> <p>Explain how to ask family members for help to set the table.</p>		<p>Set a goal to help prepare a snack and breakfast with parents and family for one week.</p> <p>Set a goal to help set the table each week.</p>	<p>Taste and explore new foods independently and objectively using a variety of senses.</p> <p>Use one practice to safely store food (dry foods in cabinet and cold foods in the refrigerator).</p> <p>Select appropriate tools for simple food-preparation tasks (spoon, fork, spatula, knife [not sharp] bowl, towels, soap, and the like)</p> <p>Demonstrate simple cooking skills (rinsing/washing, tearing foods, peeling, squeezing, stirring, slicing soft foods).</p> <p>Apply safe and proper food preparation skills to prepare a simple snack.</p>	

Grades 1–2

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
Describe the main functions of fat, carbohydrate, protein, vitamins, minerals, and water.	<ul style="list-style-type: none"> ▲ Classify various foods into appropriate food groups. (1.1.N) ▲ Identify the number of servings of food from each food group that a child needs daily. (1.2.N) Identify actions key to feeling healthy and maintaining a healthy body. ▲ Describe the benefits of drinking water in amounts consistent with current research-based health guidelines. (1.5.N) ▲ Identify a variety of healthy snacks. (1.7.N) Identify physical activities that children can enjoy and sustain for 30 minutes every day. 	<p>Describe how energy is obtained and expended during the day.</p> <p>Describe a variety of physical activities that will help keep children physically fit.</p> <ul style="list-style-type: none"> ▲ Identify and explore opportunities outside of school for regular participation in physical activity. (1.8.N) 	Describe some of the different food needs people have at different ages.	<p>Explain that food is used and stored by our bodies to provide energy for growing, learning, and activity.</p>	<ul style="list-style-type: none"> ▲ Discuss the benefits of eating a nutritious breakfast every day. (1.3.N) ▲ List the benefits of healthy eating (including beverages and snacks). (1.4.N) ▲ Explain how both physical activity and eating habits can affect a person's health. (1.9.N) 	<ul style="list-style-type: none"> ▲ Describe how to keep food safe from harmful germs. (1.6.N) Identify how to safely use kitchen tools to prepare food. Explain why hand washing is important when preparing and eating food. Identify examples of foods that must be stored at cool temperatures, in the refrigerator, or freezer. Describe how food is handled safely on its way from farm to table. 	<p>Identify two ways that geographical factors influence food availability and quality.</p> <p>Identify factors that affect the availability of food, such as economics, location, and culture.</p> <p>Identify foods grown in different regions of California.</p> <p>Name one example of a healthy food item associated with a certain country or cultural group.</p>
						<p>Identify and define vocabulary to describe flavors, textures, and sounds for a variety of foods.</p> <p>Name appropriate tools and methods for chopping soft foods, measuring, cracking eggs, washing fruits and vegetables, grating cheese, and opening cans.</p> <p>Recognize that a food can be grown at home or purchased from local farms and markets, shops, and grocery stores.</p> <p>Describe materials needed to plant and grow seeds.</p>	

Grades 1–2

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>▲ Discuss how family, friends, and media influence food choices. (2.1.N)</p> <p>Report on one historical reason for making certain food choices.</p> <p>Describe three factors that influence personal food choices (seeing, smelling, and tasting).</p> <p>Describe how taste affects personal food choices.</p> <p>Describe body signals that tell people when they are hungry and when they are full.</p>	<p>▲ Identify resources for reliable information about healthy foods. (3.1.N)</p> <p>Identify how to recognize credible nutrition information.</p>	<p>▲ Demonstrate how to ask family members for healthy food options. (4.1.N)</p> <p>Demonstrate effective ways to say no to more food when full or how to indicate preferences for some foods.</p> <p>Demonstrate the ability to respect differences in body shapes and sizes.</p>	<p>▲ Use a decision-making process to select healthy foods. (5.1.N)</p> <p>▲ Compare and contrast healthy and less-healthy food choices in a variety of settings. (5.2.N)</p> <p>▲ Identify safe ways to increase physical activity. (5.3.N)</p>	<p>▲ Set a short-term goal to choose healthy foods for snacks and meals. (6.1.N)</p> <p>▲ Set a short-term goal to participate daily in vigorous physical activity. (6.2.N)</p>	<p>▲ Examine the importance of eating a nutritious breakfast every day. (7.1.N)</p> <p>▲ Plan a nutritious meal. (7.2.N)</p> <p>▲ Select healthy beverages. (7.3.N)</p> <p>▲ Examine the criteria for choosing a nutritious snack. (7.4.N)</p> <p>Record foods consumed and use the current USDA guide for daily food choices to classify food groups selected.</p> <p>Demonstrate safe practices for handling and preparing foods at school.</p> <p>▲ Participate in physical activities with friends and family. (7.5.N)</p>	<p>▲ Practice making healthy eating choices with friends and family. (8.1.N)</p> <p>▲ Explain to others what is enjoyable about physical activity. (8.2.N)</p> <p>Explain to others what is enjoyable about eating healthy foods.</p> <p>Try foods that are grown locally.</p>

Grades 1–2 (continued)

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>Describe favorite ways to prepare food (cooking, raw/fresh, barbecuing).</p> <p>Describe reasons that family or friends may eat or avoid certain foods.</p>	<p>Identify resources and people to help shop for and safely prepare foods and snacks.</p> <p>Identify foods with labels that provide information to help make food choices.</p> <p>Identify sources of materials to plant and grow a garden.</p>	<p>Ask parents or family to participate in preparing a simple recipe in the kitchen.</p> <p>Create a shopping list with a parent or family member for a meal.</p>		<p>Describe daily goals for trying new fruits and vegetables.</p>	<p>Experience and explore tasting a variety of ingredients (herbs, fruit, vegetables, grains, dairy, protein sources, and legumes).</p> <p>Demonstrate ways to keep foods safe from germs (proper hand washing, tie back long hair, use hot and cold storage, and cover foods).</p> <p>Describe the importance of food safety and wash fruits and vegetables safely before eating or preparation.</p> <p>Select appropriate kitchen equipment for food preparation tasks (graters, measuring spoons and cups, can opener, cutting boards, and knives for soft foods.)</p> <p>Prepare foods safely using appropriate kitchen equipment (grating foods, cutting soft foods, opening cans, measuring with spoons and cups).</p> <p>Prepare a nutritious breakfast (with adult assistance) using an individual-serving recipe and safe and appropriate food-preparation skills.</p> <p>Demonstrate how to properly plant a seed and raise a seedling.</p>	<p>Encourage friends and family to try new fruits and vegetables.</p>

Grades 3–4

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
<p>▲ Identify and define key nutrients and their functions. (1.1.N)</p>	<p>▲ State the recommended number of servings and serving sizes for different food groups. (1.2.N)</p> <p>Identify at least one key nutrient provided by recommended food groups.</p> <p>▲ Explain the importance of drinking plenty of water, especially during vigorous physical activity. (1.6.N)</p> <p>List recommendations for maintaining a healthy body and self-esteem.</p>	<p>Explain reasons for the differences in the amount of food required by individuals.</p> <p>▲ Describe the benefits of moderate and vigorous physical activity. (1.7.N)</p>	<p>Describe generally the amounts and types of food people need at different ages.</p>	<p>Illustrate the pathway of food during the process of digestion.</p>	<p>▲ Describe the relationship between food intake, physical activity, and good health. (1.3.N)</p> <p>▲ Identify ways to increase and monitor physical activity. (1.8.N)</p> <p>Name and explain the benefits of eating fruits and vegetables.</p> <p>Identify the benefits of eating whole grains.</p> <p>Name and explain two disadvantages of beverages high in sugar.</p>	<p>▲ Identify how to keep food safe through proper food preparation and storage. (1.4.N)</p> <p>▲ Explain how food may contain germs that cause illness. (1.5.N)</p> <p>Explain what food-borne illnesses are and how those illnesses are contracted.</p> <p>Identify a variety of ways to prepare or include fruits, vegetables, and whole grains in daily meals and snacks.</p>	<p>Identify foods grown in different regions of the state, the country, and the world and how some of those foods are produced.</p> <p>List examples of foods that are grown in California and in different regions of the United States.</p> <p>Describe the role of food webs within natural systems.</p> <p>Explain the concept of food security.</p> <p>Define nutrition science or explain what the science of nutrition includes.</p>
						<p>Describe the characteristics of flavor profiles from different regions of the United States (Southwest, Southern, and Creole).</p> <p>Identify and describe appropriate tools, equipment, and methods for blending, whisking, tossing, microwaving, baking).</p> <p>Describe safe uses of a variety of small kitchen appliances (toaster, microwave, and blender).</p> <p>Describe tools, seasons, and conditions needed for a variety of herbs.</p>	<p>Explain the steps to recycle safely.</p>

Grades 3–4

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>▲ Identify internal and external influences that affect food choices. (2.1.N)</p> <p>▲ Analyze advertising and marketing techniques used for food and beverages. (2.2.N)</p> <p>Describe the effects of peer influence and social environments on food choices.</p> <p>Identify examples of a food item associated with a neighborhood, city, state, or country.</p> <p>▲ Identify internal and external influences that affect physical activity. (2.3.N)</p>	<p>▲ Identify resources for valid information about safe and healthy foods. (3.1.N)</p> <p>▲ Use food labels to determine nutrient and sugar content. (3.2.N)</p>	<p>▲ Demonstrate effective communication skills to ask for healthy food choices. (4.1.N)</p> <p>Demonstrate effective ways to say no to more food when full or how to communicate the reasons for a food preference.</p> <p>Demonstrate the ability to respect differences in body shapes and sizes.</p>	<p>▲ Describe how to use a decision-making process to select nutritious foods and beverages. (5.1.N)</p> <p>Compare nutritional values of a variety of similar food items.</p> <p>▲ Describe how to use a decision-making process to select healthy options for physical activity. (5.2.N)</p>	<p>▲ Make a plan to choose healthy foods and beverages. (6.1.N)</p> <p>▲ Make a plan to choose physical activities at school and home. (6.2.N)</p>	<p>▲ Practice how to take personal responsibility for eating healthy foods. (7.1.N)</p> <p>▲ Practice how to take personal responsibility for limiting sugar [and salt] consumption in foods, snacks, and beverages. (7.2.N)</p> <p>Demonstrate the preparation of a nutritious snack.</p> <p>▲ Practice how to take personal responsibility for engaging in physical activity. (7.4.N)</p> <p>▲ Identify ways to establish and maintain healthy eating practices consistent with current research-based guidelines for a nutritionally balanced diet. (7.3.N)</p>	<p>▲ Support others in making positive food and physical activity choices. (8.1.N)</p> <p>Demonstrate how to offer support to someone who is teased because of weight or body shape.</p>

Grades 3–4 (continued)

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>Explain why some people eat or avoid certain foods due to allergy or religious belief.</p> <p>Identify why people choose different types of food, based on who they are with, preference, season, time, source (gardens or stores), and occasion (including celebrations).</p>	<p>Identify sources for healthy recipes and safe and hygienic preparation.</p> <p>Research accurate information for planting and growing herbs.</p>	<p>Ask parents or family members to try a new recipe together.</p> <p>Ask parents, family members, or school leaders to plant and grow seasonal herbs.</p>	<p>Compare the pros and cons of different breakfast and snack recipe choices.</p> <p>Decide on herbs to grow in a family or school garden.</p>	<p>Make a plan to increase the variety of fruits and vegetables consumed.</p> <p>Make a plan to practice food preparation skills.</p> <p>Make a plan to plant and grow herbs in a home, school, or local garden.</p>	<p>Experience and explore foods with varied flavor profiles from different regions and countries.</p> <p>Demonstrate proper food-preparation, storage, and cleaning techniques to prevent cross contamination, maintain safe temperature zones, and appropriately store dry, hot, and cold foods.</p> <p>Handle, use, and care for small kitchen appliances (blender, mixer, and microwave) appropriately and safely.</p> <p>Properly measure dry and wet ingredients using weight, whole amounts, and fractions of cups, tablespoons, and teaspoons.</p> <p>Properly and safely perform common food preparation techniques (cracking an egg, whisking, kneading, and mixing).</p> <p>Follow recipe instructions and work within a group to prepare a meal item for breakfast, lunch, or dinner.</p> <p>Plant, care for, and harvest herbs in a home, school, or local garden.</p> <p>Demonstrate how to use information on product labels to safely store and handle foods.</p> <p>Demonstrate recycling food packaging and being careful not to waste food.</p>	<p>Promote and support participation in school garden activities.</p> <p>Promote making a snack of fresh food instead of processed food.</p> <p>Encourage family members, friends, and schools to recycle.</p>

Grades 5–6

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
Classify food products—of plant and animal sources—by the major nutrients they provide.	<ul style="list-style-type: none"> ▲ Describe the food groups, including recommended portions to eat from each food group. (1.1.N) ▲ Identify key components of the “Nutrition Facts” label. (1.2.N) ▲ Explain why some food groups have a greater number of recommended portions than other food groups. (1.4.N) ▲ Differentiate between more-nutritious and less-nutritious beverages and snacks. (1.6.N) ▲ Explain the concept of eating in moderation. (1.7.N) <p>Describe examples of how different cultures may meet dietary guidelines using a variety of foods.</p>	Define a calorie and describe how it is used by the body. Explain how energy is obtained and expended during physical activity.	Name five life stages and examples of special nutritional needs at each life stage. Explain the unique nutritional needs of preadolescents and compare these needs with other life stages.	<ul style="list-style-type: none"> ▲ Explain the relationship between the intake of nutrients and metabolism. (1.3.N) Examine the pathway of food and its conversion to energy during the process of digestion. Describe the physiological reasons for differences in nutritional needs at each life stage. 	<ul style="list-style-type: none"> ▲ Describe the benefits of eating a nutritionally balanced diet consistent with current research-based dietary guidelines. (1.8.N) ▲ Explain how good health is influenced by healthy eating and being physically active. (1.9.N) ▲ Describe how physical activity, rest, and sleep are related. (1.10.N) ▲ Identify physical, academic, mental, and social benefits of regular physical activity. (1.11.N) 	<ul style="list-style-type: none"> ▲ Describe safe food-handling and preparation practices. (1.5.N) Identify symptoms of food-borne illness. Describe ways to prevent food-borne illness. Identify the food temperature danger zone. Explain how food is transported from farm to table, focusing on maintaining nutritional quality. Identify examples of jobs related to food and nutrition. 	Describe and illustrate the food cycle. Compare and contrast types of foods produced in specific regions of California and the United States. Describe the relationship between ecosystems and nutrition science. Analyze reasons why an abundance of food crops are grown in California. Recognize different food production systems, such as organic, sustainable, and conventional.
						Identify and describe the uses of a variety of knives. Name and describe appropriate tools, equipment, and methods to fold, knead, boil, simmer, and bake foods. Describe safe uses of a variety of large kitchen appliances (oven, stove, and refrigerator). Describe tools, conditions, and materials to plant different types of fruits and vegetables.	Explain how composting minimizes waste and the steps to compost safely.

Grades 5–6

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>▲ Describe internal and external influences that affect food choices and physical activity. (2.1.N)</p> <p>▲ Recognize that family and cultural influences affect food choices. (2.2.N)</p> <p>Compare food choices from different cultures.</p> <p>Investigate historical reasons for making certain food choices.</p> <p>▲ Describe the influence of advertising and marketing techniques on food and beverage choices. (2.3.N)</p> <p>Identify how heredity may influence body size and shape.</p> <p>Identify how physical and psychological factors affect taste.</p> <p>Discuss ways to respect an individual's personal decisions about food choices.</p>	<p>▲ Locate age-appropriate guidelines for eating and physical activity. (3.1.N)</p> <p>▲ Interpret information provided on food labels. (3.2.N)</p>	<p>▲ Use communication skills to deal effectively with influences from peers and media regarding food choices and physical activity. (4.1.N)</p>	<p>▲ Use a decision-making process to identify healthy foods for meals and snacks. (5.1.N)</p> <p>▲ Use a decision-making process to determine activities that increase physical fitness. (5.2.N)</p> <p>▲ Compare personal eating and physical activity patterns with current age-appropriate guidelines. (5.3.N)</p>	<p>▲ Monitor personal progress toward a nutritional goal. (6.1.N)</p> <p>▲ Monitor personal progress toward a physical activity goal. (6.2.N)</p>	<p>▲ Identify ways to choose healthy snacks based on current research-based guidelines. (7.1.N)</p> <p>▲ Demonstrate how to prepare a healthy meal or snack using sanitary food preparation and storage practices. (7.2.N)</p> <p>▲ Demonstrate the ability to balance food intake and physical activity. (7.3.N)</p> <p>▲ Demonstrate the ability to assess personal physical-activity levels. (7.4.N)</p> <p>Practice using the Nutrition Facts label and ingredient list on food products and explain how the information may help in making food choices.</p>	<p>▲ Encourage and promote healthy eating and increased physical activity opportunities at school and in the community. (8.1.N)</p> <p>Use different cultural traditions to plan meals.</p>

Grades 5–6 (continued)

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>Describe how food preparation may influence food choices (cooked, raw/fresh, spiced, barbecued, served cold or hot).</p> <p>Analyze the acceptance by students of fresh fruits and vegetables from school or local gardens.</p> <p>Describe how packaging, including ability to recycle, may influence food choice.</p>	<p>Identify sources for obtaining small kitchen equipment and tools.</p> <p>Identify sources for obtaining materials and tools to plant gardens.</p>	<p>Ask parents and family to prepare a meal together, including shopping and meal preparation.</p>	<p>Compare and choose healthy recipes to prepare a breakfast, lunch, and dinner.</p> <p>Compare cost and information from food labels to make a snack choice.</p> <p>Decide on seasonal plants for a home, school, or local garden.</p>	<p>Monitor personal progress toward trying a variety of foods and recipes.</p> <p>Monitor personal progress toward increasing intake of local fresh-prepared foods and fewer processed foods.</p> <p>Make a plan to grow fruits or vegetables in a home, school, or local garden.</p>	<p>Identify and describe terminology used in food preparation (sauté, boil, simmer, fry, bake, roast, toss, blend, fold, etc.)</p> <p>Use and care for large kitchen appliances safely (oven, stove, refrigerator).</p> <p>Handle, use, and care for knives safely.</p> <p>Recognize and demonstrate different styles of meal service for a variety of cultures.</p> <p>Properly perform food preparation, service, and safe cleaning techniques (chopping vegetables, slicing and setting meal service, and washing surfaces, utensils, and equipment).</p> <p>Plan, prepare, and serve a healthy meal that includes independently following a recipe, preparing meal items using safe food handling practices, and cleaning during and after the meal.</p> <p>Plant, care for, harvest, and prepare a variety of plants from a school or local garden.</p> <p>Demonstrate safe and effective composting methods to reduce food waste.</p>	<p>Support and promote family to explore a range of new healthy foods and flavors.</p> <p>Encourage family members to shop for local and seasonal fruits and vegetables (gardens, farmers markets, and stores).</p> <p>Promote composting to family members, friends, and schools to reduce waste.</p>

Grades 7–8

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
<p>▲ Identify nutrients and their relationships to health. (1.2.N)</p> <p>▲ Analyze the caloric and nutritional value of foods and beverages. (1.6.N)</p> <p>Name the key nutrients in each food group and investigate how the body uses these nutrients.</p>	<p>Compare and contrast use of the current Dietary Guidelines for Americans and USDA food guide for planning healthy meals.</p> <p>Analyze the major nutritional benefits of specific plant and animal food products.</p> <p>▲ Analyze the harmful effects of engaging in unscientific diet practices to lose or gain weight. (1.9.N)</p> <p>▲ Explain how to use a body mass index (BMI) score as a tool for measuring general health. (1.13.N)</p> <p>▲ Explain that incorporating daily moderate or vigorous physical activity into one's life does not require a structured exercise plan or special equipment. (1.15.N)</p> <p>▲ Differentiate between physical activity and exercise and health-related and skill-related fitness. (1.16.N)</p>	<p>▲ Analyze the caloric and nutritional value of foods and beverages. (1.6.N)</p> <p>Recognize that different foods contain different amounts of energy, which is expended in the form of calories.</p> <p>Compare caloric values of food according to the percent of fat, protein, and carbohydrate they contain.</p> <p>▲ Identify ways to increase daily physical activity. (1.14.N)</p>	<p>Compare and contrast the specific nutritional needs at each life stage.</p>	<p>▲ Describe the benefits of eating a variety of foods high in iron, calcium, and fiber. (1.7.N)</p> <p>Illustrate how the different body systems interact.</p>	<p>▲ Describe the short- and long-term impact of nutritional choices on health. (1.1.N)</p> <p>▲ Differentiate between diets that are health-promoting and diets linked to disease. (1.5.N)</p> <p>▲ Identify the impact of nutrition on chronic disease. (1.10.N)</p> <p>▲ Analyze the cognitive and physical benefits of eating breakfast daily. (1.11.N)</p> <p>▲ Explain the role of lifelong fitness activities in maintaining personal fitness, blood pressure, weight, and percentage of body fat. (1.15.N)</p>	<p>▲ Examine the health risks caused by food contaminants. (1.3.N)</p> <p>▲ Describe how to keep food safe through proper food purchasing, preparation, and storage practices. (1.4.N)</p> <p>▲ Identify ways to prepare food that are consistent with current research-based guidelines for a nutritionally balanced diet. (1.8.N)</p> <p>Identify careers associated with each phase of the food cycle.</p>	<p>Explain two factors that influence the quality and quantity of food available locally, nationally, and globally.</p> <p>Describe how economics, social systems, and education impact the nutritional status of individuals.</p> <p>Examine the technological factors that help create the quality and quantity of food we need.</p> <p>Examine how local, national, and global factors influence the food cycle.</p> <p>Compare the different food production systems.</p>

Grades 7–8 *(continued)*

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
						<p>Define a variety of food preparation methods and flavor profiles representing diverse countries and cuisines.</p> <p>Name and describe appropriate tools, equipment, and methods to stir-fry, sauté, steam, blend, and roast foods.</p> <p>Describe safe uses of equipment and appliances, including being aware of others' safety.</p> <p>Identify recipe modifications to promote good health.</p> <p>Compare costs of food prepared at home and when eating out.</p>	

Grades 7–8

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>▲ Describe the influence of culture and media on body image. (2.1.N)</p> <p>▲ Evaluate internal and external influences on food choices. (2.2.N)</p> <p>Compare experiences of making nutritious food choices within a variety of social settings.</p> <p>Illustrate how food choices from different cultures meet nutrient needs.</p> <p>Identify how emotions influence food choices and how food choices may affect emotions.</p> <p>▲ Analyze the impact of nutritional choices on future reproductive and prenatal health. (2.3.N)</p> <p>▲ Analyze the influence of technology and media on physical activity [and food choices]. (2.4.N)</p> <p>Identify examples of barriers to making healthy food and fitness choices.</p>	<p>▲ Distinguish between valid and invalid sources of nutrition information. (3.1.N)</p> <p>▲ Evaluate the accuracy of claims about dietary supplements and popular diets. (3.2.N)</p> <p>▲ Describe how to assess nutrition information about foods offered in restaurants in one's community. (3.3.N)</p> <p>▲ Identify places where youths and families can be physically active. (3.4.N)</p> <p>▲ Identify trusted adults in one's family, school, and community for advice and counseling regarding healthy eating and physical activity. (3.5.N)</p>	<p>▲ Demonstrate the ability to use effective skills to model healthy decision making and prevent overconsumption of foods and beverages. (4.1.N)</p> <p>▲ Practice effective communication skills with parents, guardians, or trusted adults regarding healthy nutrition and physical activity choices. (4.2.N)</p>	<p>▲ Use a decision-making process to evaluate daily food intake for meeting nutritional requirements. (5.1.N)</p> <p>▲ Identify recreational activities that increase physical activity. (5.2.N)</p> <p>▲ Contrast healthy and risky approaches to weight management. (5.3.N)</p> <p>▲ Analyze the physical, mental, and social benefits of physical activity. (5.4.N)</p>	<p>▲ Make a personal plan for improving one's nutrition and incorporating physical activity into daily routines. (6.1.N)</p> <p>▲ Set a goal to increase daily physical activity. (6.2.N)</p>	<p>▲ Make healthy food choices in a variety of settings. (7.1.N)</p> <p>Develop a plan for making informed decisions about food choices using the food cycle.</p> <p>Develop a menu that meets recommendations of the current USDA guide for daily food choices.</p> <p>▲ Explain proper food-handling safety when preparing meals and snacks. (7.2.N)</p> <p>Demonstrate food-preparation skills to enhance the appeal, taste, and nutritional value of foods.</p> <p>Use unit pricing to select the healthiest foods at the best prices.</p> <p>▲ Assess personal physical activity levels. (7.3.N)</p> <p>▲ Examine ways to be physically active throughout a lifetime. (7.4.N)</p>	<p>▲ Encourage nutrient-dense food choices in school. (8.1.N)</p> <p>▲ Support increased opportunities for physical activity at school and in the community. (8.2.N)</p> <p>▲ Encourage peers to eat healthy foods and to be physically active. (8.3.N)</p> <p>Explain how our food choices influence the food supply of the future.</p> <p>Educate family and peers about the advantages of selecting locally grown seasonal foods.</p> <p>Evaluate various approaches to maintaining a healthy weight.</p>

Grades 7–8 *(continued)*

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>Describe how food choice may be influenced by how food is processed or sold (organic, conventional, fair trade).</p> <p>Analyze the impact of local school and neighborhood gardens on food choices and access.</p> <p>Analyze how food costs can impact choices and overall health.</p>	<p>Identify accurate sources of healthy cost-effective recipes (print and online).</p> <p>Identify accurate sources of information for growing a variety of seasonal local fruits and vegetables.</p>	<p>Plan meals for a week with family members.</p> <p>Ask family or friends to try a new recipe or a healthier method of preparing a familiar recipe.</p>	<p>Given available equipment and funds, determine appropriate, healthy recipes for a day.</p> <p>Compare nutrition information and cost on restaurant menus to decide on restaurants and food items to order.</p>	<p>Set a long-term goal to increase intake of local, fresh foods.</p> <p>Set a goal to participate in a school or community garden project.</p>	<p>Experiment with and explore preparing and tasting meals with varied flavor profiles from different regions and countries.</p> <p>Use cost-effective meal planning and shopping techniques that include safe food selection and handling (e.g., select quality produce, read labels, and check expiration dates).</p> <p>Alter recipes accurately for number of servings and to improve health (increase and decrease recipe yield and make substitutions or additions to lower fat, sugar, or sodium).</p> <p>Safely demonstrate a range of food-preparation techniques when cooking, stir-frying, sautéing, steaming, and blending, keeping in mind others' safety.</p> <p>Identify shopping and cleaning techniques that are environmentally safe and sustainable.</p> <p>Independently plan and prepare one balanced meal for a group or family using recipes, proper food-handling techniques, meal service, and cleaning.</p> <p>Plan and plant a garden and prepare recipes using foods harvested from a school or local garden.</p> <p>Use cost and nutrition information to make healthy choices when eating out.</p> <p>Use recycling and composting methods to reduce waste at home, school, and in the community.</p>	<p>Support and promote friends to explore a range of new healthy foods and flavors.</p> <p>Encourage friends and family to eat fresh cooked meals and fewer fast food or processed meals.</p> <p>Promote recycling and composting programs at home, school, and within the community.</p>

Grades 9–12

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
<p>Classify nutrients into macronutrients and micronutrients.</p> <p>Explain how the Dietary Reference Intakes may be used to assess dietary quality.</p> <p>Define and analyze the functions of phytochemicals.</p>	<p>▲ Distinguish between facts and myths regarding nutrition practices, products, and physical performance. (1.1.N)</p> <p>▲ Research and discuss the practical use of current research-based guidelines for a nutritionally balanced diet. (1.2.N)</p> <p>▲ Explain the importance of variety and moderation in food selection and consumption. (1.3.N)</p> <p>▲ Describe dietary guidelines, food groups, nutrients, and serving sizes for healthy eating habits. (1.4.N)</p>	<p>Compare the calorie content of macronutrients and analyze the relationship between calorie intake and expenditure.</p> <p>▲ Describe the amounts and types of physical activity recommended for teenagers' overall health and for the maintenance of a healthy body weight. (1.13.N)</p>	<p>▲ Describe nutrition practices that are important for the health of a pregnant woman and her baby. (1.7.N)</p> <p>Identify and compare foods that are rich in nutrients that are important for adolescent and adult health in a daily diet.</p> <p>Assess how age, gender, activity level, and other factors influence nutritional needs during each of the five life stages.</p>	<p>Analyze the physiological processes involved in the digestion, absorption, and metabolism of nutrients.</p> <p>Analyze the interaction of the different body systems and what happens when these systems do not function properly.</p>	<p>▲ Describe the relationship between poor eating habits and chronic diseases such as heart disease, obesity, cancer, diabetes, hypertension, and osteoporosis. (1.5.N)</p> <p>▲ Describe the prevalence, causes, and long-term consequences of unhealthy eating. (1.8.N)</p> <p>▲ Explain various approaches to maintaining a healthy weight. (1.10.N)</p> <p>▲ Identify the causes, symptoms, and harmful effects of eating disorders. (1.11.N)</p> <p>▲ Explain why people with eating disorders need professional help. (1.12.N)</p> <p>▲ Analyze the harmful effects of using diet pills and anabolic steroids. (1.14.N)</p> <p>▲ Explain the physical, academic, mental, and social benefits of physical activity and the relationship between a sedentary lifestyle and chronic disease. (1.15.N)</p>	<p>▲ Explain how to keep food safe through proper food purchasing, preparation, and storage practices. (1.6.N)</p> <p>Describe the advantages and disadvantages of food processing, including the effects on food quality, safety, nutrient content, and the environment.</p> <p>Compare and analyze food-related careers, such as jobs related to nutrition, dietetics, food technology, culinary arts, agricultural production, and food safety.</p>	<p>Explain how local, national, and global factors influence food intake.</p> <p>Analyze data to determine the local, national, and global influences on the quantity and quality of food.</p> <p>Identify how social conditions may influence food availability.</p> <p>Analyze the effectiveness of the different food production systems, such as organic, sustainable, and conventional.</p>

Grades 9–12 *(continued)*

Essential Concept 1a	Essential Concept 1b	Essential Concept 1c	Essential Concept 1d	Essential Concept 1e	Essential Concept 1f	Essential Concept 1g	Essential Concept 1h
						<p>Describe the principles, techniques, and terminology of safe food preparation for a healthy, varied, and balanced diet.</p> <p>Explain how to change recipes and dishes to make them healthier, either by using different cooking methods or ingredients.</p> <p>Identify information on food labels for food safety, nutrition, storage, preparation, and allergy information.</p> <p>Compare and contrast cost and quality of a variety of accessible sources of fresh foods and produce (including community gardens, local stores, markets, restaurants).</p> <p>Identify locations of local school and community gardens.</p>	<p>Describe the impact of agriculture on California's economy and how the state's budget influences agriculture.</p>

Grades 9–12

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<ul style="list-style-type: none"> ▲ Evaluate internal and external influences on food choices. (2.1.N) Evaluate successful marketing and advertising techniques. ▲ Assess personal barriers to healthy eating and physical activity. (2.2.N) ▲ Distinguish between facts and myths about nutrition practices, products, and physical performance. (2.3.N) ▲ Analyze the impact of nutritional choices on future reproductive and prenatal health. (2.4.N) ▲ Analyze the impact of various influences, including the environment, on eating habits and attitudes toward weight management. (2.5.N) ▲ Analyze internal and external influences on physical activity. (2.6.N) Explain how factors such as geography, transportation, and world trade agreements influence food choices. 	<p>Describe criteria for assessing the validity of nutrition information.</p> <ul style="list-style-type: none"> ▲ Access sources of accurate information about safe and healthy weight management. (3.1.N) ▲ Evaluate the accuracy of claims about food and dietary supplements. (3.2.N) ▲ Describe how to use nutrition information on food labels to compare products. (3.3.N) Analyze Nutrition Facts food labels to compare calorie and macronutrient content. ▲ Evaluate the accuracy of claims about the safety of fitness products. (3.4.N) ▲ Describe community programs and services that help people gain access to affordable, healthy foods. (3.5.N) ▲ Describe internal and external influences that affect physical activity. (3.6.N) 	<ul style="list-style-type: none"> ▲ Analyze positive strategies to communicate healthy eating and physical activity needs at home, at school, and in the community. (4.1.N) ▲ Practice how to refuse less-nutritious foods in social settings. (4.2.N) Describe examples of communication techniques to ensure safe, healthy foods are available in our environment. 	<ul style="list-style-type: none"> ▲ Demonstrate how nutritional needs are affected by age, gender, activity level, pregnancy, and health status. (5.1.N) ▲ Use a decision-making process to plan nutritionally adequate meals at home and away from home. (5.2.N) ▲ Demonstrate how to use safe food-handling procedures when preparing meals and snacks. (5.3.N) Assess the advantages and disadvantages of daily multi-vitamin and mineral supplements. 	<ul style="list-style-type: none"> ▲ Assess one's personal nutrition needs and physical activity level. (6.1.N) ▲ Develop practical solutions for removing barriers to healthy eating and physical activity. (6.2.N) ▲ Create a personal nutrition and physical activity plan based on current guidelines. (6.3.N) 	<ul style="list-style-type: none"> ▲ Select healthy foods and beverages in a variety of settings. (7.1.N) Design menus, based on food guidelines, according to age, gender, and activity level. Demonstrate ways to purchase healthy foods within budget constraints. ▲ Critique one's personal diet for overall balance of key nutrients. (7.2.N) Demonstrate the use of the Dietary Reference Intakes to assess dietary quality. ▲ Identify strategies for eating more fruits and vegetables. (7.3.N) ▲ Describe how to take more personal responsibility for eating healthy foods. (7.4.N) ▲ Participate in school and community activities that promote fitness and health. (7.5.N) 	<ul style="list-style-type: none"> ▲ Advocate enhanced nutritional options in the school and community. (8.1.N) ▲ Educate family and peers about choosing healthy foods. (8.2.N) Examine who makes food policy and how consumers may influence food policy. Develop an action plan to increase awareness of the local, national, and global factors that influence the quantity and quality of food. Describe an example of a nutritional problem in another country and a possible solution. Discuss methods consumers may use to influence the food industry.

Grades 9–12 (continued)

2. Analyzing Nutrition Influences	3. Accessing Valid Nutrition Information	4. Interpersonal Communication	5. Decision Making	6. Goal Setting	7. Practicing Health-Enhancing Behaviors	8. Nutrition Promotion
<p>Describe how personal and lifestyle factors may influence food choice (role models, body image). Analyze the differences in taste, quality, cost, and environmental impact of a local garden, farmers market, grocery chains, and other sources on food choice. Describe how the environment can influence food choices (fast food restaurants, school nutrition services, home, neighborhood stores).</p>	<p>Identify accurate sources for information on food safety, food allergies, nutrition, and preparation for a healthy, varied, and balanced diet. Identify parts of the food label for nutrition and allergy information. Use valid sources to research and compare different food production and distribution systems (organic, free range, grass fed, and local).</p>	<p>Plan a meal/party with friends based on healthy food choices, shop and prepare recipes together with friends or family. Interview a local farmer, gardener, or farmers market vendor and report on their concerns and experiences growing food. Use valid sources to research and compare different food production and distribution systems (organic, free range, grass fed, and local).</p>	<p>Given season, equipment, and funds develop a week's meals and recipes for preparing selected meals. Based on the season, soil, and growing conditions, determine optimal fruits and vegetables to grow. Make informed choices about food products, recipes, and methods of preparation to achieve a healthy, varied, and balanced diet.</p>	<p>Develop a personal plan and long-range goal to increase intake of fresh, local, seasonal foods.</p>	<p>Develop positive lifelong perceptions toward trying and preparing new foods and meals. Incorporate the principles, techniques, and terminology of safe food preparation to create healthy, affordable recipes based on one or more food groups. Plan and shop for foods to include in a healthy menu to increase fruit and vegetable intake or lower fat, sugar, or sodium for three meals a day for family or friends. Plan meals for a week for a family of four; (include selecting recipes, preparing appropriate shopping lists) and estimate costs. Compare with restaurant or fast-food options. Describe roles and responsibilities of culinary staff in a food establishment (school, restaurant, hospital). Plan a kitchen with basic food-preparation and storage equipment for an individual or family; include utensils, ingredients, and small and large appliances. Participate in planning and growing a production garden for school, community, or retail use. Practice food safety when handling, storing, preparing, cooking, and serving meals. Demonstrate the ability to change recipes and dishes to make them healthier by using different cooking methods and ingredients.</p>	<p>Promote healthy accessible food in the neighborhood (gardens, food pantries, food banks). Develop a campaign to promote purchase of local seasonal foods.</p>

III.

Recommended Instructional Resources



III. Recommended Instructional Resources

As mentioned in previous sections, the nutrition competencies are an essential tool for identifying and selecting grade-appropriate resources for planned, sequential instruction. The California Department of Education, the American Cancer Society, the California Department of Public Health, the Centers for Disease Control and Prevention, and other leaders in health and nutrition recommend a planned, sequential, and standards-based nutrition education curriculum for kindergarten through grade twelve. Using a standards-based approach is especially important because schools can ensure that students develop the knowledge, attitudes, and skills needed to avoid risky nutrition behaviors and maintain and improve their lifelong health.

Lessons and activities from this section may be selected to form the core nutrition curriculum and to provide supplemental activities for students to practice skill development in nutrition education.

The recommended instructional resources are divided into categories: nutrition education curricula and supplemental instructional materials, or “activity sets.”

The list shows the overarching nutrition competencies addressed in each resource. The instructional resources are described more fully in appendix B, “Descriptions of Recommended Instructional Resources.”

DEVELOPMENT OF THE RECOMMENDED INSTRUCTIONAL RESOURCE LISTS AND MATRIXES

The recommended instructional resource lists represent a sample of resources that have been reviewed for accuracy and effective use of research-based strategies for instruction. Materials include curricula and activity sets that may be used to develop planned sequential instruction or to support a comprehensive nutrition education program.

Additionally, a team of nutrition experts from the California Department of Education, California Healthy Kids Resource Center, and the Nutrition Education Obesity Prevention Program of the California Department of Public Health, along with other experts in the field, evaluated the nutrition education curricula and activity sets for meeting the nutrition competencies. The materials in this guide were reviewed for support of the 2015-2020 Dietary Guidelines for Americans and MyPlate,* the Nutrition Facts label, and grade-level Nutrition and Physical

* See appendix F for information about the 2015 Dietary Guidelines for Americans, MyPlate, and additional nutrition background information.

There is a distinction between “curriculum” and “activity set.” For example, for a resource to be categorized as “curriculum” rather than an “activity set,” the author must recommend that the nutrition education resource be taught sequentially. In curriculum resources, the authors provide lessons for specific grade levels; planned, sequential instruction; and connections with other content standards (e.g., science, mathematics, language arts). Therefore, other nutrition instructional materials are considered “activity sets” because the authors do not include a recommendation for teaching them in a sequential manner, or the materials may focus more narrowly on a specific area of nutrition, such as gardening.

Activity standards in the HECS. The list is by no means exhaustive; other nutrition education curricula and materials might meet the criteria described previously but were not reviewed at the time this guide went to press.

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Recommended Nutrition Education Curricula and Activity Sets

The following matrix displays the recommended curricula and activity sets and the nutrition education competencies they address. Some curricula and activity sets contain lessons for particular grade levels. In those cases, the curriculum for that grade level was reviewed for how well it matched a similar grade-level cluster for the nutrition competencies.

X = addresses competency.

P = partially meets competency.

C = Curricula (see the list of icons on page 92 and definitions of *curriculum* in the glossary and of *activity set* on page 97)

AS = Activity Set

Kindergarten															
Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Balance My Day! (C) <i>Audience:</i> Kindergarten–grade 5 Healthy Kids Challenge	X	X	X	X	X	X	X		X	X	X	X		X	X
Building a Healthy Me (C) <i>Audience:</i> Kindergarten Dairy Council of California	X	X			X			X	X		X	X		X	X
CATCH Jump Into Health (C) <i>Audience:</i> Kindergarten Regents of the University of California and Flaghouse, Inc.	X	X	X			X	X				X	X	X	X	X

Kindergarten (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<i>Cooking with Kids (AS)</i> <i>Audience:</i> Kindergarten and grades 2–5 Santa Fe Partners in Education Lessons evaluated: Kindergarten		X					X	X	X						X
<i>Discover MyPlate (C)</i> <i>Audience:</i> Kindergarten United States Department of Agriculture Lessons evaluated: Kindergarten	X	X	X			X					X		X	X	X
<i>Eating Healthy from Farm to Fork (C)</i> <i>Audience:</i> Kindergarten–grade 2 University of California Cooperative Extension, Agriculture and Natural Resources Evaluated for kindergarten	X	X	X	X	X	X	X	X	X		X	X		X	X
<i>Harvest of the Month (AS)</i> <i>Audience:</i> Kindergarten–grade 12 California Department of Public Health	P	P	X		X	X	X	X	P	X	X	X		P	X
<i>Healthy Classrooms, Healthy Schools (C)</i> <i>Audience:</i> Kindergarten–grade 2; grades 3–5 Michigan Fitness Foundation	X	X	X			X			X	X	X	X	X	X	X
<i>Kids Cook Farm-Fresh Food (AS)</i> <i>Audience:</i> Kindergarten–grade 8, with applications for grades 9–12 California Department of Education	P				X		X	X				P			X
<i>Linking English Language Arts and Nutrition (AS)</i> <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health, Nutrition Education Obesity Prevention Program. Evaluated for kindergarten						X					X			X	
<i>Linking Mathematics and Nutrition (AS)</i> <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health, Nutrition Education Obesity Prevention Program. Evaluated for kindergarten		X				X			X					X	
<i>Linking Science and Nutrition (AS)</i> <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health, Nutrition Education Obesity Prevention Program. Evaluated for kindergarten		X				X			X					X	

Grades 1–2

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Balance My Day! (C) <i>Audience:</i> Kindergarten–grade 5 Healthy Kids Challenge	X	X	X	X	X	X	X		X	X	X	X	X	X	X
CATCH Celebrate Health (C) <i>Audience:</i> Grade 2 Regents of the University of California and Flaghouse, Inc.	X	X	X							X		X	X	X	X
CATCH Everyday Foods for Health (C) <i>Audience:</i> Grade 1 Regents of the University of California and Flaghouse, Inc.	X	X	X		X	X	X				X	X	X	X	X
Cooking with Kids (AS) <i>Audience:</i> Grades 2–3 Santa Fe Partners in Education		X					X	X	P					X	
Eating Healthy from Farm to Fork (C) <i>Audience:</i> Kindergarten–grade 2 University of California Cooperative Extension, Division of Agriculture and Natural Resources Lessons evaluated: Grade 1	X	X				X	X	X	X	X	X	X	X	X	X
Eating Healthy from Farm to Fork (C) <i>Audience:</i> Kindergarten–grade 2 University of California Cooperative Extension, Division of Agriculture and Natural Resources Lessons evaluated: Grade 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
The Growing Classroom (AS) <i>Audience:</i> Grades 2–6 National Gardening Association Lessons evaluated: Grade 2	X	X	X			X			X	X	X			X	X
Growing Healthy Kids (C) <i>Audience:</i> Grades 2–3 Oregon Nutrition Education Program, Extension Family and Community Health, College of Public Health and Human Services Evaluated for grade 2	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Harvest of the Month (AS) <i>Audience:</i> Kindergarten–grade 12 California Department of Public Health	X	P	P			P		P	P		P	X	P	P	X

Grades 1–2 (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Healthy Choices, Healthy Me! (C) <i>Audience:</i> Grades 1–2 Dairy Council of California Lessons evaluated: Grade 1	X	P	X	X	X	X	X	X	X			X		X	X
Healthy Choices, Healthy Me! (C) <i>Audience:</i> Grades 1–2 Dairy Council of California Lessons evaluated: Grade 2	X	X	X	X	X	X	X	X	X		X	X	X	X	X
Healthy Classrooms, Healthy Schools (C) <i>Audience:</i> Grades K–2 and 3–5 Michigan Fitness Foundation	X	X	X			X			X	X	X	X	X	X	X
How to Teach Nutrition to Kids (C) <i>Audience:</i> Grades 1–6 24 Carrot Press	X	X	X		X	X	P	X	X		X			X	X
Kids Cook Farm-Fresh Food (AS) <i>Audience:</i> Kindergarten–grade 8, with applications for grades 9–12 California Department of Education							X	X	P					X	X
Linking English Language Arts and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health, Nutrition Education Obesity Prevention Evaluated for grade 2		X							X			X		X	
Linking Mathematics and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health, Nutrition Education Obesity Prevention Evaluated for grade 2		X									X	X		X	
Linking Science and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health, Nutrition Education Obesity Prevention Evaluated for grade 2		X							X	X		X			
Serving Up MyPlate: A Yummy Curriculum (C) <i>Audience:</i> Grades 1–2 United States Department of Agriculture Team Nutrition		X	X		X	X						P		X	

Grades 3–4

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<i>Balance My Day! (C)</i> <i>Audience:</i> Kindergarten–grade 5 Healthy Kids Challenge Lessons evaluated: Grades 3–4	X	X	X	X	X	X	X		X	X	X	X	X	X	X
<i>CATCH Hearty Heart & Friends (C)</i> <i>Audience:</i> Grade 3 Regents of University of California and Flaghouse, Inc.	X	X	X			X			X	X	X	X	X	X	X
<i>CATCH Taking Off (C)</i> <i>Audience:</i> Grade 4 Regents of University of California and Flaghouse, Inc.		X	X			X		X	X	X		X	X	X	X
<i>Children’s Power Play! Community Youth Organization and Resource Kit (AS)</i> <i>Audience:</i> Grades 4–5 California Department of Public Health Lessons evaluated: Grade 4		P	P			P	P		X		X		X		X
<i>Children’s Power Play! School Idea and Resource Kit (AS)</i> <i>Audience:</i> Grades 4–5 California Department of Public Health Lessons evaluated: Grade 4	X	P	X		P	X			P	X		X	X	X	X
<i>Cooking with Kids (AS)</i> <i>Audience:</i> Kindergarten and grades 2–5 Santa Fe Partners in Education Lessons evaluated: Grade 3		X					X	X	P						X
<i>Eat Well & Keep Moving (C)</i> <i>Audience:</i> Grades 4–5 Harvard School of Public Health/Human Kinetics	X	X	X			X	X		P	X	X	X	X	X	X
<i>Fruits and Vegetables for Health (C)</i> <i>Audience:</i> Grades 4–6 California Foundation for Agriculture in the Classroom	X	X				X	X	X	X	X		X	X	X	X
<i>The Great Garden Detectives (C)</i> <i>Audience:</i> Grades 3–4 United States Department of Agriculture Team Nutrition	X	X	X	X		X	X	X	X	X	X	X	X	X	X
<i>The Growing Classroom (AS)</i> <i>Audience:</i> Grades 2–6 National Gardening Association	X	X	X			X	X	X	X	X				X	X

Grades 3–4 (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Growing Food (C) <i>Audience:</i> Grades 4–5 Teachers College, Columbia University Evaluated for grade 4								X	X	X	X	X	X	X	X
Growing Healthy Kids (C) <i>Audience:</i> Grades 2–3 Oregon Nutrition Education Program, Extension Family and Community Health, College of Public Health and Human Services Evaluated for grade 3	X	X	X			X	X	X	X		X		X	X	X
Harvest of the Month (AS) <i>Audience:</i> Kindergarten–grade 12 California Department of Public Health	X	X	X			X	X	X	P	X	X		P		X
Healthalicious Cooking <i>Audience:</i> Grades 4–7 University of California, Agriculture and Natural Resources Evaluated for Grades 4		X	X			X	X	X	X	X	X	X	X	X	X
Healthy Classrooms, Healthy Schools (C) <i>Audience:</i> Grades K–2 and 3–5 Michigan Fitness Foundation	X	X	X				X		X	X	X	X	X	X	X
How to Teach Nutrition to Kids (C) <i>Audience:</i> Grades 1–6 24 Carrot Press	X	X	X		X	X			X	X	X	X		X	X
Kids Cook Farm-Fresh Food (AS) <i>Audience:</i> Kindergarten–grade 8, with applications for grades 9–12 California Department of Education							X	X	P					X	X
Linking English Language Arts and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Reviewed for grade 4	X											X		X	
Linking Mathematics and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Reviewed for grade 4		X					X		X	X		X			

Grades 3–4 (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Linking Science and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Reviewed for grade 4	X				X		X			X		X	X	X	X
Nutrition Pathfinders (C) <i>Audience:</i> Grades 4–5 Dairy Council of California	X	X	X	X		X	X		X	X	X	X	X	X	X
Nutrition to Grow On (C) <i>Audience:</i> Grades 4–6 California Department of Education	X	X	X			X	X	X	X	X	X	X	X	X	X
Serving Up MyPlate: A Yummy Curriculum (C) <i>Audience:</i> Grades 3–4 United States Department of Agriculture Team Nutrition	X	X	X		X	X						P		X	
Shaping Up My Choices (C) <i>Audience:</i> Grade 3 Dairy Council of California	X	X	X			X	X		X						X
SMART (Student Media Awareness to Reduce Television) (C) <i>Audience:</i> Grades 3–4		X				X			X	X	X	X	X	X	X

Grades 5–6

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<i>Balance My Day! (C)</i> <i>Audience:</i> Kindergarten–grade 5 Healthy Kids Challenge	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>CATCH Breaking Through Barriers (C)</i> <i>Audience:</i> Grade 5 Regent of the University of California and Flahouse, Inc.	X	X	X			X			X	X	X	X	X	X	X
<i>Children’s Power Play! Community Youth Organization Idea and Resource Kit (AS)</i> <i>Audience:</i> Grades 4–5 California Department of Public Health Lessons evaluated: Grade 5							P		X		X				X
<i>Children’s Power Play! School Idea and Resource Kit (AS)</i> <i>Audience:</i> Grades 4–5 California Department of Public Health Lessons evaluated: Grade 5		X		P		P	X		X	X	X	X	X	X	X
<i>Choice, Control, & Change (C)</i> <i>Audience:</i> Grades 6–8 Teachers College, Columbia University		X	X		X	X			X	X	X	X	X	X	
<i>Cooking with Kids (AS)</i> <i>Audience:</i> Kindergarten and grades 2–5 Santa Fe Partners in Education Lessons evaluated: Grade 5			X	X		X	X		P		X	X	X	X	X
<i>Dig In! Standards-based Nutrition Education from the Ground Up! (C)</i> <i>Audience:</i> Grades 5–6 United States Department of Agriculture		X				X	X	X	X	X	X	X	X	X	X
<i>Do More, Watch Less (C)</i> <i>Audience:</i> Grades 6–8 California Department of Public Health Lessons evaluated: Grade 6						P			X		P	P	X	X	X
<i>EatFit (C)</i> <i>Audience:</i> Grades 6–8 University of California Cooperative Extension, Division of Agriculture and Natural Resources Lessons evaluated: Grade 6		X	X		X	X	P		X	X	X	X	X	X	X

Grades 5–6 (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<i>Eat Well & Keep Moving (C)</i> <i>Audience:</i> Grades 4–5 Harvard School of Public Health/Human Kinetics	X	X	X			X	X		P	X	X	X	X	X	
<i>Empowering Youth with Nutrition and Physical Activity (C)</i> <i>Audience:</i> Grades 6–12 United States Department of Agriculture Food and Nutrition Service Lessons evaluated: Grades 5–6		X				X			X	X	X	X	X	X	X
<i>Exercise Your Options (C)</i> <i>Audience:</i> Middle School Dairy Council of California Lessons evaluated: Grade 6	X	X	X			X			X	P	X	X	X	P	X
<i>Farm to Table & Beyond (C)</i> <i>Audience:</i> Grades 5–6 Teachers College, Columbia University							X	X	X	X	X	X	X	X	X
<i>Finding Solutions to Hunger (AS)</i> <i>Audience:</i> Grades 6–8 World Hunger Year			X							X				X	X
<i>Food Safety: From Farm to Fork (AS)</i> <i>Audience:</i> Grades 5–7 California Foundation for Agriculture in the Classroom Evaluated for grades 5–6							X							P	
<i>Fruits and Vegetables for Health (AS)</i> <i>Audience:</i> Grades 4–6 California Foundation for Agriculture in the Classroom	X	X				X	X	X	X	X		X		X	X
<i>The Growing Classroom (AS)</i> <i>Audience:</i> Grades 2–6 National Gardening Association Lessons evaluated: Grades 5–6	X	X	X			X	X	X	X	X			X	X	X
<i>Growing Food (C)</i> <i>Audience:</i> Grades 4–5 Teachers College, Columbia University Evaluated for grade 5								X	X	X		X	X	X	X
<i>Harvest of the Month (AS)</i> <i>Audience:</i> Kindergarten–grade 12 California Department of Public Health		P	X			P		P	X	X	X		X	P	X

Grades 5–6 (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Healthlicious Cooking <i>Audience:</i> Grades 4–7 University of California, Agriculture and Natural Resources Evaluated for grades 5–6	X	X	X	X		X	X		X	X	X	X	X	X	X
Healthy Bodies: Teaching Kids What They Need to Know (C) <i>Audience:</i> Grades 4–6 Body Image Health		X				X	X	X	X	X	X	X	X	X	X
Health Smart (C) <i>Audience:</i> Grades 6–8 Education, Training, and Research (ETR) Evaluated for grade 6	X	X	X		X	X	X		X	X	X	X	X	X	X
Healthy Classrooms, Healthy Schools (C) <i>Audience:</i> Grades 3–5 Michigan Fitness Foundation	X	X	X			X			X	X	X	X	X	X	X
How to Teach Nutrition to Kids (C) <i>Audience:</i> Grades 1–6 24 Carrot Press	X	X	X		X	X			X	X	X	X		X	X
Integrating Concepts about Food, Nutrition, Physical Activity into Middle School Curriculum <i>Audience:</i> Grades 6–8 Community Voices for Health Evaluated for grade 6	X	X			X	X		X	X	X			X	X	X
Kids Cook Farm-Fresh Food (AS) <i>Audience:</i> Kindergarten–grade 8, with applications for grades 9–12 California Department of Education							X	X	P			P		P	
Linking English Language Arts and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Evaluated for grade 5		X			X	X				X	X				X
Linking Mathematics and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Evaluated for grade 5		X			X	X				X	X	X			

Grades 5–6 (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<p>Linking Science and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Evaluated for grade 5</p>		X			X	X			X	X		X		X	
<p>Media-Smart Youth (AS) <i>Audience:</i> Grades 6–8 National Institute of Child Health and Human Development</p>		X				X			X	X			X	X	X
<p>Nourish: Food + Community (AS) <i>Audience:</i> Middle school, with applications for high school WorldLink Initiative</p>							X	X	X		X				X
<p>Nutrition Pathfinders (C) <i>Audience:</i> Grades 4–5 Dairy Council of California</p>	X	X	X	P	X	X	P		X	X	P	X	X	X	X
<p>Nutrition to Grow On (C) <i>Audience:</i> Grades 4–6 California Department of Education</p>	X	X	X			X	X	X	X	X	X	X	X	X	X
<p>Serving Up MyPlate: A Yummy Curriculum (C) <i>Audience:</i> Grades 5–6 United States Department of Agriculture Team Nutrition</p>	X	X	X	X	P	X	P	P	X	X	X	P	X	X	X

Grades 7–8

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<i>Choice, Control, & Change (C)</i> <i>Audience:</i> Grades 6–8 Teachers College, Columbia University	X	X	X		X	X		X	X	X	X	X	X	X	
<i>Do More, Watch Less (C)</i> <i>Audience:</i> Grades 6–8 California Department of Public Health Lessons evaluated: Grades 7–8				P					X		P	X	X	X	X
<i>EatFit (C)</i> <i>Audience:</i> Grades 6–8 University of California Cooperative Extension, Agriculture and Natural Resources	X	X	X			X	P		X	X	X	X	X	X	X
<i>Empowering Youth with Nutrition and Physical Activity (C)</i> <i>Audience:</i> Grades 6–12 United States Department of Agriculture, Food and Nutrition Service Lessons evaluated: Grades 7–8	X					X			X	X	X	X	X	X	X
<i>Exercise Your Options (C)</i> <i>Audience:</i> Middle School Dairy Council of California Lessons evaluated: Grades 7–8	X	X	X		X	X	X		X	P	X	X	X	P	X
<i>Finding Solutions to Hunger (AS)</i> <i>Audience:</i> Grades 6–8 World Hunger Year	X	P	P	X		X		X	X	X	X	P			P
<i>Food Safety: From Farm to Fork (AS)</i> <i>Audience:</i> Grades 5–7 California Foundation for Agriculture in the Classroom Evaluated for grade 7							X							P	
<i>Harvest of the Month (AS)</i> <i>Audience:</i> Kindergarten–grade 12 California Department of Public Health	P		P		P	P	X	P	P					X	X
<i>Health Smart – Middle School</i> <i>Audience:</i> Grades 6–8 Education, Training, and Research Evaluated for grades 7–8	X	X	X		X	X	X		X	X	X	X	X	X	X
<i>Healthalicious Cooking</i> <i>Audience:</i> Grades 4–7 University of California, Agriculture and Natural Resources Evaluated for Grade 7	X	X	X			X	X		X	X	X	X	X	X	X

Grades 7–8 (Continued)

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<p>Integrating Concepts about Food, Nutrition, Physical Activity into Middle School Curriculum <i>Audience:</i> Grades 6–8 Community Voices for Health Evaluated for grades 7–8</p>	X	X	X		X	X	X	X	X	X	X		X	X	X
<p>Kids Cook Farm-Fresh Food (AS) <i>Audience:</i> Kindergarten–grade 8, with applications for grades 9–12 California Department of Education</p>							X	X						X	X
<p>Linking English Arts and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Lessons evaluated: Grade 8</p>	X		X			X	X			X	X	X		X	X
<p>Linking Mathematics and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Lessons evaluated: Grade 8</p>	X		X		X	X				X	X	X			
<p>Linking Science and Nutrition (AS) <i>Audience:</i> Kindergarten–grade 8 California Department of Public Health and Nutrition Education Obesity Prevention Program Lessons evaluated: Grade 8</p>	X		X		X	X	X		X	X	X	X			
<p>Media-Smart Youth (AS) <i>Audience:</i> Grades 6–8 National Institute of Child Health and Human Development</p>	X	X				X			X	X			X	X	X
<p>Nourish: Food + Community (AS) <i>Audience:</i> Middle school, with applications for high school WorldLink Initiative</p>							X	X	X		X		X	X	X
<p>Nutrition Voyage: The Quest to Be Our Best (C) <i>Audience:</i> Grades 7–8 United States Department of Agriculture Team Nutrition</p>		X	X			X	X	X	X	X		X	X	X	X
<p>Planet Health (C) <i>Audience:</i> Middle School Harvard School of Public Health/Human Kinetics</p>	X	X	X			X			X	X	X	X	X	X	X

Grades 9–12

Title of Recommended Resource	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Activity + Eating (C) <i>Audience:</i> Grades 11–12, Adults Dairy Council of California	X	X	X	X		X			X	X			X	X	
Empowering Youth with Nutrition and Physical Activity (C) <i>Audience:</i> Grades 6–12 United States Department of Agriculture Food and Nutrition Service Lessons evaluated: Grades 9–12		X				X			X	X	X	X	X	X	X
Finding Solutions to Hunger (AS) <i>Audience:</i> Grades 6–8 and 9–12 World Hunger Year	P	P	P	X		P	P	X	P	P	P	P		X	X
Harvest of the Month (AS) <i>Audience:</i> Kindergarten–grade 12 California Department of Public Health	P		P			P	P	P		P	P		P	X	X
Health Smart – High School <i>Audience:</i> Grades 9–12 Education, Training, and Research	X	X	X	X		X	X	X	X	X	X	X	X	X	X
Jump Start Teens (AS) <i>Audience:</i> Grades 9–12 California Project LEAN		X	P			X			X	X	X	X	X	X	X
Kids Cook Farm-Fresh Food (AS) <i>Audience:</i> Kindergarten–grade 8, with applications for grades 9–12 California Department of Education Evaluated for grades 9–12							P	P	P			P		P	
Nourish: Food + Community (AS) <i>Audience:</i> Middle school, with applications for high school WorldLink Initiative								P	X		X			X	X
ReThink Your Drink (C) <i>Audience:</i> 9–12 California Department of Public Health Nutrition Education Obesity Prevention Program		X				X			X	X		X	X	X	
SuperTracker Nutrition Plans for High School Students (C) <i>Audience:</i> Grades 9–12 United States Department of Agriculture, Center for Nutrition Policy and Promotion		X	X	X		X			X	X			X	X	



Appendixes



Appendix A

Assessing a Local School Wellness Policy

This appendix provides guidance and resources for ensuring that the Local School Wellness Policy addresses quality nutrition education.

1. ENSURE COMPREHENSIVENESS IN THE NUTRITION EDUCATION POLICY

The first part of assessing the nutrition education component of the policy is to ensure that all required and/or desirable sections related to nutrition education are included and appropriately addressed.

Examination of the overview is the first task. This section should support the overall nutrition education component by describing the importance of nutrition education and the role that good nutrition plays in promoting childhood growth, health, and learning. The overview establishes definable goals and publicly commits the district to providing adequate time for a nutrition education program. Other aspects to include are a commitment to serving healthy and appealing foods at school, developing food-use guidelines for teachers, supporting healthy school meals, and establishing links with nutrition service providers.

For example, an effective overview would:

- discuss the role of child and adolescent nutrition in reducing the risk for chronic diseases of adulthood;
- identify the importance of establishing a school environment that supports healthy eating choices by young people.

Support for the Local School Wellness Policy may be generated by identifying how improvements in student nutrition can satisfy the needs of different constituents of the school community (e.g., students, teachers, and food service personnel).

The next step is to identify all the sections in the Local School Wellness Policy that address nutrition education. Generally, a section devoted specifically to nutrition education is best. In addition, the Local School Wellness Policy may address nutrition education in:

- connection to the cafeteria and classroom;
- policies related to healthy fund-raising, classroom celebrations, and prohibitions on the use of food as a reward or punishment;
- professional development of staff;
- parent education;
- coordination of nutrition education with other areas of student health, such as physical activity, physical education, and health education.

2. STRENGTHEN THE WORDING IN THE LOCAL SCHOOL WELLNESS POLICY

The language with which the policy is expressed is critical. A strong policy can be monitored and is specific enough to be enforced. Below are some useful definitions as a guide for assessing and strengthening the wording of the policy related to nutrition education.

Robust policies define the requirements and have language that specifies an implementation plan or strategy. Strong policy provisions include words such as *shall, must, will, require, comply, and enforce*.

Weak policies are those that include vague terms, suggestions, or recommendations as well as those that require action but note exceptions for certain grade levels or certain times of the day. Weak policy provisions are characterized by words such as *should, might, encourage, some, promote, make an effort, partial, and try*.

Bridging the Gap, a research program of the Robert Wood Johnson Foundation, assesses and documents the quality of school wellness policies nationwide and defines the quality of wellness policies. The reports may be viewed at http://www.bridgingthegapresearch.org/_asset/13s2jm/WP_2013_report.pdf (accessed October 2, 2015).

3. INCLUDE SPECIFIC LANGUAGE IN THE POLICY PROVISIONS

Specificity strengthens a policy. A policy should include guidance on what is taught, when, how often, and by whom. A Local School Wellness Policy that has specific language regarding the structure and implementation of nutrition education makes it easier to enforce the policy. Specific policies accomplish the following purposes:

- Address the importance of quality nutrition education, the academic achievement of students, and their overall well-being.
- Require the use of curricula that adhere to the Dietary Guidelines and other science-based nutrition research and evidence-based instructional strategies.
- Require a sequential, standards-based nutrition education program that meets the California HECS and the nutrition competencies and uses curriculum that is comprehensive, sequential, and taught at each grade level.
- Specify the number of nutrition education courses or contact hours. Fifty hours of nutrition education per year is highly recommended to achieve behavioral change. The courses should be provided primarily as a separate health or nutrition subject. At a minimum, 10 hours should be provided to support an increase in nutrition knowledge.
- Specify that the selected nutrition education curricula teach skills focused on behavior, or be participatory. The lessons should encourage experiential learning (e.g., menu planning, food preparation, gardening) that builds knowledge, skills, attitudes, and behaviors that promote healthy food choices in a positive way. The curricula should use state-of-the-art nutrition education methods that integrate many of the behavioral-change techniques used in other health education domains.

- Address integration of nutrition education into other subjects, besides health education, as a supplement to a core health or nutrition education program.
- Link nutrition and physical activity, stressing the importance of combining regular physical activity with sound nutrition as part of a healthy lifestyle. Physical education classes, in turn, should include guidance in food selection. The model content standards for physical education address nutrition for improving health and performance in the Overarching Standard 3 in kindergarten through grade eight and Overarching Standard 2 in high school.
- Adopt a Whole School, Whole Community, Whole Child (WSCC) model approach (CDC and ASCD 2014) to supporting nutrition education and well-being. The model combines and expands on the eight elements of the original coordinated school health approach to include the whole child framework. Ten elements make up the WSCC model: Health Education, Physical Education and Physical Activity; Nutrition Environment and Services; Health Services; Counseling, Psychological, & Social Services; Social and Emotional Climate; Physical Environment; Employee Wellness; Family Engagement; and Community Involvement.
- Require provision of staff training in nutrition education and staff wellness. Ten hours of annual professional development is highly recommended.
- Require the use of the cafeteria as a learning laboratory to apply critical-thinking skills. It encourages linkages between the classroom and cafeteria, including providing nutrition education during meal and snack times.
- Include youth input and leadership.
- Identify ways to extend nutrition education into after school programs.
- Outline a plan to coordinate and extend nutrition education beyond the school environment, including to families, and to coordinate with the larger school community, involving community groups for input, resources, and delivery.
- Include ongoing evaluation of the effectiveness of the nutrition education program, including assessment of student learning and a process for making changes to improve the effectiveness of instruction.

4. REVIEW THE LOCAL SCHOOL WELLNESS POLICY WITH A CHECKLIST

The checklist, which was adapted from Wellness School Assessment Tool 2.0 (WellSAT2.0) at <http://www.wellsat.org> (accessed October 2, 2015), can be used to assess the nutrition education components of a district's Local School Wellness Policy. The checklist can help identify strengths of the policy and areas where the policy could be more definitive. After evaluation, it is important to continually align the implementation of nutrition education with the language in the policy, working toward the most effective nutrition education program and the clearest, most enforceable wellness policy. This effort will enhance the sustainability of the nutrition education program.

Evaluating Wellness Policies—Nutrition Education and Promotion

This tool can be used to evaluate the nutrition education components of a district’s local school wellness policy.

Category	Rating Guidance	
<p>1. Provides nutrition education for each grade level.</p> <p><i>For this item, integrating nutrition education into other subjects beyond health education does NOT qualify for a “1” or “2.”</i></p>	0	<p>Not Mentioned</p> <p>Addresses “wellness education” or health education without including nutrition or healthy eating as part of the education components.</p>
	1	<p>Vague and or Suggested (Weak Statement)</p> <ul style="list-style-type: none"> • Mentions “standards-based nutrition” without mentioning curriculum/program. • Describes general health curriculum for “K–12” or “all levels,” and/or is unclear if each grade will receive nutrition education. <p>Examples:</p> <ul style="list-style-type: none"> • “Enable students to acquire the knowledge and skills necessary to make healthful food choices for a lifetime.” (Not clear that nutrition education is actually taught at each grade level.) • “Nutrition and physical activities lessons will be designed for integration into the health education program.”
	2	<p>Meets or Exceeds Expectations</p> <p>Clear that district has nutrition education in each grade and specifies the number of hours and/or lessons to be taught.</p> <p>Example:</p> <p>“Nutrition topics shall be integrated within the comprehensive health education curriculum and taught at every grade level (K–12) for a minimum of 10 lessons per year and ideally 50 hours per year.”</p>
<p>2. Nutrition education teaches skills that are behavior-focused.</p>	0	<p>Not Mentioned or Addresses Only Knowledge Acquisition</p>
	1	<p>Vague and or Suggested (Weak Statement)</p> <p>Any of the following:</p> <ul style="list-style-type: none"> • Suggests skill-based nutrition education. • Mentions specific behavioral skills, but requires none. • Suggests skill-based health education outside of the nutrition education sections of the policy. <p>Example:</p> <p>“All students should have necessary skills to make nutritious food choices.”</p>
	2	<p>Meets or Exceeds Expectations</p> <p>Clear that the nutrition education curriculum is skill-based, behavior-focused and should include hands-on and/or experiential activities.</p> <p>Examples:</p> <ul style="list-style-type: none"> • “Students will receive nutrition education that fosters the adoption and maintenance of healthy eating behaviors.” • “Activities that build goal-setting and decision-making skills that promote self-management related to diet, physical activity, and safe food handling will be included in nutrition education.”

Source: Adapted by the California Department of Education with permission from Wellness School Assessment Tool 2.0 at www.wellsat.org.

Wellness School Assessment Tool *(continued)*

Category	Rating Guidance	
<p>3. Nutrition education curricula is sequential, comprehensive in scope, and adheres to the latest USDA Dietary Guidelines and other science-based nutrition research and evidence-based instructional strategies.</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested (Weak Statement)</p> <p>Encourages the district to use nutrition education curricula or materials that are based on current science or research or suggests that the education is comprehensive.</p> <p>Example:</p> <p>“The district should provide high-quality nutrition education based on current research.”</p>
	2	<p>Meets or Exceeds Expectations</p> <p>Includes language that requires the use of sequential curricula that is science-based and uses evidence-based instructional strategies.</p> <p>Example:</p> <p>“Schools will use district-approved, sequential nutrition education curricula that are based on scientifically accurate nutrition content and the current Dietary Guidelines and aligned with state and federal learning objectives and scope.”</p>
<p>4. Requires a standards-based, nutrition curriculum, health education curriculum, or other curriculum that includes nutrition.</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested (Weak Statement)</p> <p>Example:</p> <p>“Enable students, through a comprehensive curriculum, to acquire the knowledge and skills necessary to make healthy lifestyle choices.”</p>
	2	<p>Meets or Exceeds Expectations</p> <p>Clear that the district has a nutrition curriculum, or health education curriculum that includes nutrition.</p> <p>Examples:</p> <p>“Nutrition education shall be provided within the sequential, comprehensive health education program in accordance with the <i>Health Education Content Standards for California Public Schools</i>.”</p> <p>“Nutrition education is integrated into the health education program.”</p>
<p>5. Links nutrition education with the school food environment.</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested (Weak Statement)</p> <p>Example:</p> <p>“The entire school environment, not just the classroom, shall be aligned with healthy school goals to positively influence a student’s understanding, beliefs, and habits as they relate to good nutrition and regular physical activity.”</p>
	2	<p>Meets or Exceeds Expectations</p> <p>Requires that nutrition education be integrated into the larger school environment in concrete ways.</p> <p>Examples:</p> <p>“The nutrition education program shall work with the school meal program to develop school gardens and use the cafeteria as a learning lab.”</p> <p>“Students will have the opportunity to visit local farms where produce is purchased for school meals.”</p>

Wellness School Assessment Tool *(continued)*

Category	Rating Guidance	
<p>6. Encourages staff to be role models for healthy behaviors.</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested Suggests that staff should be encouraged to model healthy behavior. Example: “Each school in the district should encourage staff to model healthy behaviors.”</p>
	2	<p>Meets or Exceeds Expectations Requires staff to model healthy behavior in concrete ways and/or requires staff development in health. Example: “Staff will be encouraged through annual professional development to model healthy eating and physical activity as a valuable part of daily life. Staff will be provided with water bottles and will not consume unhealthy food or beverages in the classroom.”</p>
<p>7. Specifies <i>how</i> district will engage families to provide nutrition information <i>and/or</i> solicit input to meet district wellness goals (e.g., through Web site, e-mail, parent conferences, or events).</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested (Weak Statement) Any of the following:</p> <ul style="list-style-type: none"> • Methods are vague. • Mentions specific methods, but does not require them. • Mentions specific methods, but unclear if school will engage families. <p>Examples:</p> <ul style="list-style-type: none"> • “Nutrition information and links to relevant resources in the community should be provided to families through newsletters, publications, health fairs, and other channels.” • “Feedback from parents on nutrition education should be encouraged through stakeholder meetings.”
	2	<p>Meets or Exceeds Expectations Clear that the district or schools will engage families, and lists specific methods. Even if it is unclear that each method listed will be used, if it requires engagement, rate as “2.”</p> <p>Examples:</p> <ul style="list-style-type: none"> • “Nutrition education will be provided to parents through handouts, the school Web site, articles and information provided in district or school newsletters, presentations that focus on nutrition and healthy lifestyles, and any other appropriate means available to reach parents.” • “The school will consider students’ needs in planning for a healthy school nutrition environment. Students will be asked for input and feedback through the use of student surveys, and attention will be given to their comments.” • “The food service director will be available to speak with parents during open house.” • “Parents will be provided the opportunity to give feedback on wellness goals.”

Wellness School Assessment Tool *(continued)*

Category	Rating Guidance	
<p>8. Specifies marketing to promote <i>healthy choices</i>.</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested (Weak Statement)</p> <p>Example: "Marketing strategies, such as taste tests and signage in the cafeteria, should be used to promote healthy food and beverages throughout the school."</p>
	2	<p>Meets or Exceeds Expectations Required and is specific (posters, pricing structures, etc.).</p> <p>Examples:</p> <ul style="list-style-type: none"> • "Schools shall label/mark available healthy food items so students know which items are healthy." • "The healthiest choices, such as salads and fruit, will be prominently displayed in the cafeterias to encourage making healthy choices." • "Schools shall promote healthy food items and offer promotions that will include monthly taste tests, posters and signage, highlighting healthy items on the menu during morning announcements."
<p>9. Specifies restricting marketing of <i>unhealthful choices</i>.</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested (Weak Statement) Suggests restrictions or weakened by exceptions such as time, location, or a principal's discretion.</p> <p>Example: "Display and advertising of foods with minimal nutritional value is strongly discouraged on school grounds."</p>
	2	<p>Meets or Exceeds Expectations Required</p> <p>Examples:</p> <ul style="list-style-type: none"> • "Education materials shall be free of brands and illustrations of unhealthful foods." • "Soft drink logos are not allowed on school materials or on school property."
<p>10. Addresses food not being used as reward.</p>	0	<p>Not Mentioned</p>
	1	<p>Vague and/or Suggested (Weak Statement) Discourages food as a reward.</p> <p>Example: "Strongly discourage the use of food/beverages as a reward." "Encourage the use of non-food alternatives as a reward."</p>
	2	<p>Meets or Exceeds Expectations Prohibts food as a reward.</p> <p>Examples:</p> <ul style="list-style-type: none"> • "Food rewards or incentives shall not be used in classrooms to encourage student achievement or desirable behavior." • "The use of food or candy as a classroom reward in any school is prohibited."
<p>Total Score/10=</p>		

Scoring:

Assign a score for each of the numbered items. Total the score and divide by ten.

- **A score of less than 1** indicates that overall, the wellness policy for nutrition education is very weak and/or key areas are not mentioned in adequate detail.
- **A score of 1 to 1.5** indicates that the policy for nutrition education might either be weak or vague overall or that there might be several key areas that are vague and would benefit from strengthening.
- **A score of 1.5 to 2.0** indicates that the policy for nutrition education is strong overall and/or has many key areas that meet or exceed expectations.

Appendix B

Descriptions of Recommended Instructional Resources

The list of recommended instructional resources is not exhaustive; many other effective nutrition education curricula and instructional materials are not included. The California Healthy Kids Resource Center reviewed the resources for accuracy and effective use of research-based instructional strategies.

The Recommended Instructional Resources List includes selected nutrition-specific curricula and activity sets noted by icons. The versions reviewed for this guide support the 2015-2020 USDA Dietary Guidelines for Americans, MyPlate, the Nutrition Facts label, and grade-level nutrition and physical activity standards in the HECS.

Materials noted by a Curriculum icon provide lessons for particular grade levels; state that lessons are organized for planned, sequential instruction; and include connections with other content standards (e.g., science, math, English–language arts). Curriculum materials can form the foundation, or the core, for planning instruction.

Activity Sets are noted by a separate icon. These materials provide additional grade-level opportunities for skill development and reinforcement. They include materials developed by the California Department of Education and the California Department of Public Health, as well as other nutrition and physical activity titles. The versions reviewed for this guide also align with the 2015-2020 USDA Dietary Guidelines for Americans, MyPlate, and the Nutrition Facts label and include lessons and activities to support the grade-level nutrition and physical activity content areas in the HECS. However, the resources do not meet the criteria for “curricula.”

Materials identified as appropriate for use after school underwent additional review using criteria from the California After School Resource Center (CASRC). The CASRC Materials Review Board uses research to evaluate materials for use in after-school programs.

The following section lists recommended materials for each grade level with icons noting nutrition education strategies included in the resource. The subsequent section provides descriptions of the materials, with the titles in alphabetical order.

RECOMMENDED INSTRUCTIONAL RESOURCES, BY GRADE LEVEL AND ICON


The key below identifies each icon used to indicate characteristics and nutrition strategies included in the resource. See page 97 for the criteria used to determine the icons assigned.


The Accessible Alternative Version for pages 92–96 is located at <http://www.cde.ca.gov/ls/nu/he/nergaav.asp>.


The symbol **(C)** indicates a Curriculum.

The symbol **(AS)** indicates an Activity Set.


The symbol () indicates an After School resource.


The symbol () indicates the resource includes Cafeteria Connections.


The symbol () indicates a resource with Food Literacy and Cooking activities.


The symbol () indicates a Garden-Based resource.


The symbol () indicates the resource includes Healthy School Environment.


The symbol () indicates the resource Integrates Subject Areas.




The symbol () indicates the resource includes Media Literacy.

The symbol () indicates the resource addresses MyPlate.

The symbol () indicates the resource includes Parent and Family Involvement.

The symbol () indicates the resource includes Physical Activity.

The symbol () after the title indicates the resource is validated by research (please see the glossary for a definition).

Title of Resource	Related Icons											
	C	AS	After School	Cafeteria Connections	Food Literacy Cooking	Garden-Based	Healthy School Environment	Integrates Subject Areas	Media Literacy	MyPlate	Parent & Family Involvement	Physical Activity
Activity + Eating	✓		✓							✓	✓	✓
Balance My Day!	✓		✓	✓			✓	✓		✓	✓	✓
Building a Healthy Me!	✓		✓	✓	✓					✓	✓	✓
CATCH Breaking through Barriers	✓		✓	✓	✓					✓	✓	✓
CATCH Celebrate Health	✓		✓	✓	✓					✓		✓
CATCH Everyday Foods for Health 	✓		✓	✓	✓			✓		✓		✓
CATCH Hearty Heart and Friends 	✓		✓	✓	✓			✓		✓		✓
CATCH Jump into Health 	✓		✓	✓	✓			✓		✓		✓
CATCH Taking Off	✓		✓	✓	✓					✓		✓
Children's Power Play! Community Youth Empowerment Kit		✓	✓	✓	✓		✓	✓	✓	✓		✓
Children's Power Play! School Idea & Resource Kit		✓	✓	✓	✓		✓	✓	✓	✓		✓
Choice, Control, & Change	✓			✓						✓		✓
Cooking with Kids		✓	✓	✓	✓					✓	✓	
Dig In! Standards-Based Nutrition Education from the Ground Up	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Discover MyPlate	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Title of Resource	Related Icons											
	C	AS	After School	Cafeteria Connections	Food Literacy Cooking	Garden-Based	Healthy School Environment	Integrates Subject Areas	Media Literacy	MyPlate	Parent & Family Involvement	Physical Activity
Do More, Watch Less!	✓		✓						✓			✓
EatFit	✓		✓		✓			✓	✓			✓
Eat Well & Keep Moving	✓			✓			✓	✓		✓		✓
Eating Healthy from Farm to Fork	✓		✓	✓	✓	✓	✓			✓	✓	✓
Empowering Youth with Nutrition and Physical Activity	✓		✓	✓								✓
Exercise Your Options	✓		✓	✓				✓		✓		✓
Farm to Table and Beyond	✓		✓	✓	✓	✓		✓	✓			
Finding Solutions to Hunger		✓	✓				✓				✓	
Food Safety from Farm to Fork		✓	✓	✓	✓					✓	✓	
Fruits and Vegetables for Health		✓	✓	✓		✓					✓	
Growing Food	✓			✓	✓	✓						
The Great Garden Detective	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
The Growing Classroom		✓		✓	✓	✓			✓	✓		
Growing Healthy Kids	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
Harvest of the Month		✓	✓	✓	✓	✓	✓			✓	✓	✓
Health Smart for Middle School	✓						✓					✓
Healthalicious Cooking	✓		✓		✓		✓		✓		✓	✓

Title of Resource	Related Icons											
	C	AS	After School	Cafeteria Connections	Food Literacy Cooking	Garden-Based	Healthy School Environment	Integrates Subject Areas	Media Literacy	MyPlate	Parent & Family Involvement	Physical Activity
Healthy Bodies: Teaching Kids What They Need to Know	✓						✓	✓	✓		✓	✓
Healthy Choices, Healthy Me!	✓			✓				✓		✓	✓	
Healthy Classrooms, Healthy Schools	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓
How to Teach Nutrition to Kids	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓
Integrating Concepts about Food, Nutrition, and Physical Activity into Middle School Curriculum		✓	✓	✓	✓	✓		✓				✓
Jump Start Teens		✓	✓	✓					✓	✓		✓
Kids Cook Farm-Fresh Food		✓	✓	✓	✓							
Linking English Language Arts and Nutrition		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Linking Mathematics and Nutrition		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Linking Science and Nutrition		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Media Smart Youth: Eat, Think, and Be Active!		✓						✓	✓	✓	✓	✓
Nourish: Food + Community		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nutrition Pathfinders	✓		✓	✓						✓	✓	

Title of Resource	Related Icons											
	C	AS	After School	Cafeteria Connections	Food Literacy Cooking	Garden-Based	Healthy School Environment	Integrates Subject Areas	Media Literacy	MyPlate	Parent & Family Involvement	Physical Activity
Nutrition to Grow On	✓		✓	✓	✓	✓		✓		✓	✓	
Nutrition Voyage: The Quest to Be Our Best	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Planet Health	✓			✓	✓		✓	✓		✓	✓	✓
ReThink Your Drink	✓		✓			✓	✓			✓	✓	✓
Serving Up MyPlate: A Yummy Curriculum	✓		✓	✓			✓		✓	✓	✓	✓
Shaping Up My Choices	✓		✓	✓	✓		✓		✓	✓	✓	✓
S.M.A.R.T. (A Curriculum for Youth)	✓							✓		✓	✓	✓
SuperTracker Lesson Plans for High School Students		✓	✓				✓		✓			✓

The table below describes the topic area, criteria, and icon used to identify characteristics and nutrition education strategies included in each resource.












Table of Icons by Topic Area and Criteria		
Topic Area	Criteria	Icon
Curriculum	In curriculum, the authors provide lessons for particular grade levels and guidance for planned, sequential instruction.	C
Activity Set	Other nutrition instructional materials are identified as an “activity set” because the authors do not include a recommendation for teaching them in a sequential manner, or they may focus more narrowly on a specific area of nutrition, such as gardening.	AS
After School	Lessons and activities are accessible to after school staff and appropriate for after school settings.	
Cafeteria Connections	Includes multiple lessons and activities for students to learn how school meals contribute to health and to reinforce nutrition concepts and skills and messaging in both classroom and cafeteria.	
Food Literacy and Cooking Activities	Provides opportunities for students to acquire food literacy and practice cooking skills.	
Garden-Based	Provides students with hands-on experiences in gardens and growing food, and/or brings gardens into classrooms. Includes instructional nutrition activities that expose students to a variety of fruits and vegetables. Strengthens the connection between growing and eating food.	
Healthy School Environment	Provides guidance for designing policies and instruction for students to assess and improve the classroom, school, and community nutrition environment.	
Integrates Subject Areas	Includes multiple lessons and activities that support health and nutrition standards and competencies with standards from one or more other subject areas.	
Media Literacy	Includes lessons and activities for students to critically analyze a variety of media.	

Table of Icons by Topic Area and Criteria *(Continued)*

Topic Area	Criteria	Icon
MyPlate	Includes lessons/activities to teach MyPlate food groups, recommendations, and messaging.	
Parent/Family Involvement	Lessons provide materials and activities for students and teachers to engage families in learning and support for healthy eating patterns and physical activity.	
Physical Activity	Provides opportunities for physical activities to reinforce, practice, or acquire nutrition content.	
Research-Validated	School districts that implement evidence-based programs are more likely to achieve positive student behavior outcomes. Although all of the programs available are evidence-based (i.e., they use or support strategies for which research provides evidence of effectiveness), a limited number of programs demonstrate credible evidence of effectiveness that identifies them as research-validated.	

Activity + Eating



Publisher: Dairy Council of California

Web site: <http://www.healthyeating.org/Health-Wellness-Providers/Nutrition-Education-Booklets/Activity-Eating-for-Teens.aspx> (accessed September 30, 2016)

Target audience: Grades 11–12

Nutrition competencies: 1a–d, 1f, 2–3, 6, 7

Common Core State Standards – English Language Arts:

Reading Standards for Informational Text: Craft and Structure

Speaking and Listening Standards: Comprehension and Collaboration

Language: English and Spanish

Number of lesson plans: Determined by the teacher

Amount of time per lesson: 60 minutes

Estimated total time for lessons: 60 minutes minimum

Format: Can be ordered at the Web site.

Cost: Free

This self-instructional booklet provides young adults with action steps to make balanced food choices and add physical activity to their daily routine. It includes information about shopping tips for preparing balanced meals with foods from all five food groups; appropriate portion sizes; label reading; and keeping a food diary. Users create specific eating and physical activity goals for themselves. The booklet uses a behavior change model that helps users translate health recommendations into small, yet “doable” changes to improve health. More information on the booklet evaluation can be found [here](#).

What’s inside: These booklets are self-instructional and designed for a variety of settings, for example group classes.

Activity highlight: Students take a quick and easy assessment to identify areas to improve eating habits. Students use online tools to learn calories needed, their body mass index, and to determine how much to eat from each food group.

Balance My Day!



Publisher: Healthy Kids Challenge

Web site: <https://www.healthykidschallenge.com/catalog> (accessed September 20, 2016)

Target audience: Kindergarten–grade 5

Nutrition competencies:

Kindergarten: 1a–g; 2–5, 7–8

Grades 1–2: 1a–g; 2–8

Grades 3–4: 1a–g, 2–8

Grade 5: 1a–g, 2–8

Common Core State Standards – English Language Arts:

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Phonological Awareness

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics:

Counting and Cardinality

Operations and Algebraic Thinking

Measurement and Data

Language: English and recipes in Spanish

Number of lesson plans: 30 (10 per section; 3 sections total)

Amount of time per lesson: 15–25 minutes

Estimated total time for lessons: 9–12.5 hours

Format: Hard copy inside binder; sample lessons downloadable in PDF

Cost: Available for purchase

The curriculum focuses on behavior themes that help students to eat, move, and enjoy a healthy balance. Lesson plans are provided for kindergarten through grade two and for grades three through five. Lesson plans are divided into three sections: Breakfast GO Power, Meal Appeal, and Snack Attack, each with a series of 10 brief, sequential lesson plans, which include the lessons, food skills, and reproducible pages. The lessons are easy to follow and require only 15 minutes of preparation time (on average). The lessons integrate core subjects such as math, language arts, and science and meet the identified outcomes on the Curriculum Analysis Tool of the Centers for Disease Control and Prevention (health education).

What's inside: An introduction (teacher resource guide, reproducible handouts, suggestions for hands-on activities, background information, and student handouts to take home and complete); classroom curriculum content (talking points, questions and answers, list of needed materials, hands-on activities to reinforce discussion, move-and-learn activities, student assessment by grade level, student worksheets, and reproducible pages); School Nutrition Services section for coordination with the cafeteria and families; physical education section and appendix.

Activity highlight: In Meal Appeal, Lesson 7 (“Smart Servings”) teaches students how to choose healthy foods and beverages when eating out, how to politely refuse less-nutritious foods, and how television ads influence choices. Students discuss their food choices and consider how food-related words in television ads and restaurants influence them. Students hop or do a physical activity for as long as it would take to expend the energy from a teaspoon of sugar.

Building a Healthy Me!



Publisher: Dairy Council of California

Web site: <http://www.healthyeating.org/Schools/Classroom-Programs/Kindergarten.aspx> (accessed September 20, 2016)

Target audience: Kindergarten

Nutrition competencies: 1a–b, 1e, 1h, 2, 4–5, 7–8

Common Core State Standards – English Language Arts

Reading Standards for Informational Text: Key Ideas and Details
Reading Standards for Informational Text: Craft and Structure
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Informational Text: Range of Reading and Level of Text Complexity
Reading Standards for Foundational Skills: Print Concepts
Reading Standards for Foundational Skills: Phonological Awareness
Reading Standards for Foundational Skills: Phonics and Word Recognition
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Counting and Cardinality
Measurement and Data
Mathematical Practices
Geometry

Language: English and Spanish

Number of lesson plans: 6

Amount of time per lesson: 30–60 minutes

Estimated total time for lessons: 4.5 hours

Format: Hard copy

Cost: Free for California teachers; available for purchase from out of state

The curriculum features six nutrition education lessons that introduce children to the food groups and to a variety of healthy eating options. Lessons support California’s English–language arts and math curricula and align with widely used, state-adopted textbooks, including Houghton Mifflin reading, mathematics, and Science Discovery Works textbooks.

What’s inside: A teacher guide, student workbooks, parent brochures, multicultural food pictures, and a poster.

Activity highlight: “Cafeteria Connections” contains seven activities teachers can use to bring nutrition curriculum to life by connecting classroom lessons to the cafeteria. Students take a cafeteria tour, explore nutritious foods provided by the cafeteria, discover how menus are made, and learn how to market healthier food options to fellow students.

CATCH *Breaking Through Barriers*



Publisher: Regents of the University of California and Flaghouse, Inc.

Web site: <http://www.flaghouse.com/display-item-17717> (accessed September 20, 2016)

Target audience: Grade 5

Nutrition competencies: 1a–c, 1f; 2–8

Common Core State Standards – English Language Arts

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Speaking and Listening Standards: Comprehension and Collaboration

Language Standards: Knowledge of Language

Common Core State Standards – Mathematics

Operations and Algebraic Thinking

Number and Operations in Base Ten

Number and Operations—Fractions

Measurement and Data

Language: English

Number of lesson plans: 12

Amount of time per lesson: 36–40 minutes

Estimated total time for lessons: 8 hours

Format: Hard copy and DVD

Cost: Available for purchase

This curriculum takes students on a health trek to learn and practice healthy eating and physical activity habits. Energy balance, getting fit, planning a bag lunch, ideas for breakfast, and preparing for action are covered in this set. Students apply their knowledge of healthy eating and physical activity to help them overcome barriers to a healthier lifestyle.

What's inside: A teacher resource guide, student workbook, reproducible handouts, transparency masters, suggestions for hands-on activities, background on major topics, and activities for students to practice at home what they learned at school. The media disk includes student handouts in English and Spanish, teacher overheads, homework assignments, and snack preparation activities.

Activity highlight: Lesson 11, “Play Out the Options,” involves students in healthy eating and/or physical activity role-play situations. Preparing a role play gives students the opportunity to think about the situation and options to practice what they learned.

CATCH Celebrate Health



Publisher: Regents of the University of California and Flaghouse, Inc.

Web site: [http://www.flaghouse.com/CATCH- Celebrate-Health-Grade-2-item-12227](http://www.flaghouse.com/CATCH-Celebrate-Health-Grade-2-item-12227) (accessed September 20, 2016)

Target audience: Grade 2

Nutrition competencies: 1a–c, 1f, 3, 5–8

Common Core State Standards – English Language Arts

Reading Standards for Literature and Informational Text: Key Ideas and Details

Reading Standards for Literature and Informational Text: Craft and Structure

Reading Standards for Literature and Informational Text: Integration of Knowledge and Ideas

Reading Standards for Literature and Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Phonological Awareness

Reading Standards for Foundational Skills: Phonics and Word Recognition

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Operations and Algebraic Thinking

Number and Operations in Base Ten

Measurement and Data

Language: English and Spanish

Number of lesson plans: 12

Amount of time per lesson: 19–30 minutes

Estimated total time for lessons: 4.2 hours

Format: Hard copy

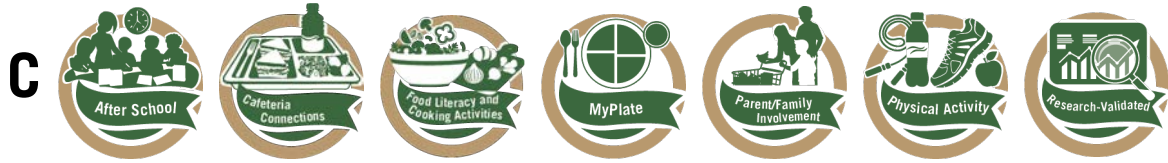
Cost: Available for purchase

This curriculum is part of the CATCH (Coordinated Approach to Child Health) “Go for Health” series that was recently expanded to include second-grade students. This curriculum addresses nutrition and helps students discover how nutrition relates to the heart. Nutrition lessons center on increasing daily intake of dairy and fiber and ways to identify hidden fat in foods and select foods that are low in sodium. Physical activity lessons are also included.

What’s inside: A teacher resource guide, reproducible handouts, transparency masters, suggestions for hands-on activities, background on major topics, and activities for children to practice at home what they learned at school.

Activity highlight: In Session 11 (“Freddy’s Fast Food”), students review the previous lesson on decision making and whether to eat fast foods sometimes or every day, make healthy choices using menus from Freddy’s Fast Food restaurant, and set a goal to order everyday foods when eating in a restaurant.

CATCH *Everyday Foods for Health*



Publisher: Regents of the University of California and Flaghouse, Inc.

Web site: <http://www.flaghouse.com/CATCH-Everyday-Foods-for-Health-Grade-1-item-12221>
(accessed September 20, 2016)

Target audience: Grade 1

Nutrition competencies: 1a–c, 1e–g; 4–8

Common Core State Standards – English Language Arts

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Phonological Awareness

Reading Standards for Foundational Skills: Phonics and Word Recognition

Language: English

Number of lesson plans: 10

Amount of time per lesson: 18–22 minutes

Estimated total time for lessons: 3.3 hours

Format: Hard copy

Cost: Available for purchase

Everyday Foods for Health is part of the CATCH “Go for Health” curriculum series that was recently expanded to include first-grade students. Sessions concentrate on nutrition and physical activity. Students learn how to incorporate fruits and vegetables into all meals and learn about the importance of eating breakfast.

What’s inside: A teacher resource guide, reproducible handouts, transparency masters, suggestions for hands-on activities, background on major topics, and activities for children to practice at home what they learned at school. Songs, rhymes, handouts, games, recipes for use in the classroom, and parent handouts are also included.

Activity highlight: Students learn the importance of breakfast, planning balanced meals, and mealtime manners.

CATCH *Hearty Heart and Friends*



Publisher: Regents of the University of California and Flaghouse, Inc.

Web site: <http://www.flaghouse.com/CATCH-Third-Grade-Curriculum-Manual-DVD-Set-item-11434>
(accessed September 20, 2016)

Target audience: Grade 3

Nutrition competencies: 1a–c, 1f; 2–8

Common Core State Standards – English Language Arts

Reading Standards for Literature and Informational Text: Key Ideas and Details
Reading Standards for Literature and Informational Text: Craft and Structure
Reading Standards for Literature and Informational Text: Integration of Knowledge and Ideas
Reading Standards for Foundational Skills: Phonics and Word Recognition
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Writing Standards: Range of Writing
Speaking and Listening Standards: Comprehension and Collaboration
Language Standards: Conventions of Standard English
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Operations and Algebraic Thinking
Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data

Language: English

Number of lesson plans: 15

Amount of time per lesson: 36–40 minutes

Estimated total time for lessons: 9 hours

Format: Hard copy and DVD

Cost: Available for purchase

This curriculum takes students on an adventure with characters Hearty Heart and Dynamite Diet. The program emphasizes healthy foods and physical activity habits. Each lesson has a series of activities that start with a media disk segment to introduce the topic.

What's inside: A teacher resource guide, student workbook, reproducible handouts, transparency masters, suggestions for hands-on activities, background on major topics, and activities for children to practice at home what they learned at school. Parent letters, including recipes to prepare at home, are also included in the kit.

Activity highlight: The cartoon characters in the Hearty Heart and Friends media disk initiate discussions centering on health and activities—such as the preparation of healthy snacks.

CATCH *Jump into Health*



Publisher: Regents of the University of California and Flaghouse, Inc.

Web site: <http://www.flaghouse.com/CATCH-Jump-into-Health-Grade-K-item-12216> (accessed September 20, 2016)

Target audience: Kindergarten

Nutrition competencies: 1a–c, 1f–g; 4–8

Common Core State Standards – English Language Arts

Reading Standards for Literature and Informational Text: Key Ideas and Details

Reading Standards for Literature and Informational Text: Integration of Knowledge and Ideas

Reading Standards for Literature and Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Common Core State Standards – Mathematics

Counting and Cardinality

Measurement and Data

Geometry

Language: English, Spanish

The CATCH Jump into Health program teaches children about healthy eating and physical activity. Children are introduced to the concepts of “everyday foods” and “sometimes foods” and learn about the importance of eating fruits, vegetables, and fiber and engaging in more physical activity. This program is based on the social learning theory. The curriculum includes instructions and hands-on methods for helping children understand the concept of good health. Activities include taste-testing, singing songs, and group work.

What's inside: A teacher resource guide, reproducible handouts, transparency masters, suggestions for hands-on activities, background on major topics, and activities for children to practice at home what they learned at school. Parent letters, including recipes to prepare at home, are also included in the kit.

Activity highlight: Each lesson provides opportunities to increase students' activity, and opportunities to make healthy snacks with fruits and vegetables.

CATCH Taking Off



Publisher: Regents of the University of California and Flaghouse, Inc.

Web site: <http://www.flaghouse.com/General-Education/CATCH/Curriculum/Elementary-School-Programs/CATCH-Taking-Off-Teacher-s-Manual---Grade-4.axd> (accessed September 20, 2016)

Target audience: Grade 4

Nutrition competencies: 1b–c; 1f, 1h, 2–3, 5–8

Common Core State Standards – English Language Arts

Reading Standards for Informational Text: Craft and Structure
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Informational Text: Range of Reading and Level of Text Complexity
Reading Standards for Foundational Skills: Phonics and Word Recognition
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Speaking and Listening Standards: Comprehension and Collaboration
Language Standards: Knowledge of Language

Common Core State Standards – Mathematics

Operations and Algebraic Thinking
Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data

Language: English, Spanish

Number of lesson plans: 24

Amount of time per lesson: 45 minutes

Estimated total time for lessons: 18 hours

Format: Hard copy

Cost: Available for purchase

This curriculum encourages students to eat healthy foods and make positive changes in their physical activity routines. Students gain the skills necessary to choose healthy foods over unhealthy foods and incorporate them into their daily diet. Important information about how to decrease risk for diabetes is also introduced.

What's inside: A teacher resource guide, reproducible handouts, and transparency masters, suggestions for hands-on activities, background information on major topics, and activities for children to apply at home what they learned at school. The curriculum includes six family activity booklets that allow for parent connection.

Activity highlight: The curriculum includes “Putting a Stop to Diabetes,” which contains four sessions about how to decrease the risks of diabetes.

Children's Power Play! Community Youth Empowerment Kit



Publisher: California Department of Public Health

Web site: <https://www.cdph.ca.gov/programs/CCDPHP/DCDIC/NEOPB/Pages/ChildrenandYouth.aspx> (accessed September 20, 2016)

Target audience: Grades 4–5

Nutrition competencies:

Grade 4: (1b–c), (1f–g); 2, 4, 6, 8

Grade 5: (1g); 2, 4, 8

Common Core State Standards – English Language Arts

Grade 4

Reading Standards for Literature and Informational Text: Craft and Structure

Reading Standards for Literature and Informational Text: Integration of Knowledge and Ideas

Reading Standards for Literature and Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Grade 5

Reading Standards for Literature and Informational Text: Craft and Structure
Reading Standards for Literature and Informational Text: Integration of Knowledge and Ideas
Reading Standards for Literature and Informational Text: Range of Reading and Level of Text Complexity
Reading Standards for Foundational Skills: Phonics and Word Recognition
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 4–5

Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data

Language: Teacher resource guide in English, with additional handouts in Spanish

Number of lesson plans: 20

Amount of time per lesson: 30 minutes

Estimated total time for lessons: 10 hours

Format: Free downloadable PDF; qualifying schools can obtain a free printed copy and promotional items

Designed for youth leaders working with children, this kit includes 20 activities to encourage fruit and vegetable consumption and to promote physical activity. Through classroom-style lessons and physical activity games, students explore new flavors and build skills as they grow, taste, and cook fruits and vegetables. Movement activities feature tag, basketball, and a fitness circuit. Links to the California Health Education Content Standards and nutrition competencies are provided. The activities align with the *California Common Core Standards: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects*; the *California Common Core State Standards: Mathematics*; and *Health Education Content Standards*.

What's inside: This leader's guide features reproducible handouts, suggestions for hands-on activities, background information, extension ideas, and "bringing it home" suggestions, as well as handouts for students. The activities use a Ready, Set, Go format.

Activity highlight: In Activity 12, "Grow Your Own," students learn how to grow and care for vegetables and plant their own vegetables with seeds or seedlings. Children discuss their gardening experiences. The activity includes a planting demonstration and information about the kind of plant the children will grow. Each child is given supplies and does his or her own planting. The activity ends with a discussion about how to care for the plants and includes extension ideas.

Children's Power Play! School Idea and Resource Kit



Publisher: California Department of Public Health

Web site: <https://www.cdph.ca.gov/programs/CCDPHP/DCDIC/NEOPB/Pages/ChildrenandYouth.aspx> (accessed September 20, 2016)

Target audience: Grades 4–5

Nutrition competencies:

Grade 4: 1a, (1b), 1c, (1e), 1f, (2), 3, 5–8

Grade 5: 1b, (1d), (1f), 1g; 2–8

Common Core State Standards – English Language Arts

Grade 4

Writing Standards: Range of Writing

Language Standards: Conventions of Standard English

Grades 4–5

Reading Standards for Literature and Informational Text: Craft and Structure

Reading Standards for Literature and Informational Text: Integration of Knowledge and Ideas

Reading Standards for Literature and Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 4–5

Number and Operations in Base Ten

Number and Operations—Fractions

Measurement and Data

Language: Teacher resource guide in English, with additional handouts in Spanish

Number of lesson plans: 10

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 6.3 hours

Format: Downloadable PDF

Cost: Free; qualifying schools can obtain promotional items

The resource includes activities that promote increased physical activity and consumption of fruits and vegetables. The activities are easy to follow and require only 15 minutes of preparation time (on average). There are separate curricula for grades four and five.

What's inside: A teacher resource guide, reproducible handouts, suggestions for hands-on activities, background information, and handouts for students to take home and complete. Activities are formatted in a Ready, Set, Go format.

Activity highlight: In “Power of Advertising,” students learn about the effects of advertising. They create their own advertisements to help a friend to increase consumption of fruits and vegetables.

Choice, Control & Change



Publisher: Teachers College, Columbia University

Web site: <http://www.kidsgardening.org/kidsgardening-books-and-curricula/> (accessed September 30, 2016)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1b–c, 1e–f; 2–7

Grades 7–8: 1a–c, 1e–f, 1h; 2–7

Common Core State Standards – English Language Arts

Grades 6–8

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 6–7

Ratios and Proportional Relationships

The Number System

Expressions and Equations

Statistics and Probability

Language: English

Number of lesson plans: 19

Amount of time per lesson: 45 minutes

Estimated total time for lessons: 14.3 hours

Format: Hard copy

Cost: Available for purchase

Choice, Control, & Change is curriculum that uses a scientific approach to learning about health and diets. Lessons engage students in an investigation of how scientific evidence can be used to make sound decisions about physical activity and nutrition. Lessons include examinations of energy intake and expenditure, food preference, and the food environment. Teachers are given helpful information about each topic to better prepare them for each day of instruction.

What's inside: A teacher resource guide, background information, teaching tips, tools for assessment, student activity sheets and readings, a matrix that maps the curriculum to the National Science Education Standards and Benchmarks for Science Literacy.

Activity highlight: “Keeping the Flow” is a lesson in which students assess the impact of diet on the cardiovascular system. Students conduct experiments in groups and learn how the clogging of blood vessels affects the flow of blood through the body. They use “blood” prepared from a corn-starch mixture with red food color. Additionally, they discover how cardiovascular disease develops and learn ways to maintain a healthy cardiovascular system. Students discuss what they can do to maintain a healthy cardiovascular system, including making healthy food choices, and articulate how they plan to apply what they have learned. Homework includes interviewing family members.

Cooking with Kids

AS



Publisher: Santa Fe School of Cooking

Web site: <http://www.cookingwithkids.org/cooking-with-kids-store> (accessed March 30, 2017)

Target audience: Kindergarten and grade 1, grades 2–3, 4–5

Nutrition competencies:

Kindergarten and grade 1: 1g–h; 2, 7

Grades 2–3: 1g–h; 2, 7

Grades 4–5: 1g, 2, 7

Common Core State Standards – English Language Arts

Kindergarten and Grade 1

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Language Standards: Vocabulary Acquisition and Use

Grades 2–3 and 4–5

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Kindergarten and Grades 1–2

Number and Operations in Base Ten
Measurement and Data

Grade 3

Number and Operations in Base Ten
Number and Operations—Fractions

Grade 4

Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data

Grade 5

Number and Operations in Base Ten
Number and Operations—Fractions

Language: Teacher resource guide in English, with additional handouts in Spanish

Number of lesson plans: 10

Amount of time per lesson: 1–2 hours

Estimated total time for lessons: 15 hours

Format: Hard copy

Cost: Available for purchase; some lessons also available as free downloadable PDFs

Children explore a variety of healthy foods, including food from diverse cultures, through tasting and cooking activities. Healthy eating habits are introduced through hands-on activities. Lessons include Cafeteria Meals, Super Chefs, and Farmers in the School. This resource may be used on its own or may be integrated with other elementary school curriculum.

What’s inside: A teacher resource guide, instruction for hands-on food preparation, recipes for classroom use, food history and nutrition information, student activities, and take-home recipes.

Activity highlight: In the “Salad Tasting Lesson,” students taste salad ingredients and record their comments on a tasting chart. The lesson also includes reading of a farmer letter, worksheets with salad-related vocabulary words, drawing activities, a salad-dressing recipe, and an enrichment activity in which children grow sunflower sprouts.

Dig In! Standards-Based Nutrition Education from the Ground Up



Publisher: United States Department of Agriculture (USDA), TEAM Nutrition

Web site: <http://www.fns.usda.gov/tn/dig-standards-based-nutrition-education-ground> (accessed September 20, 2016)

Target audience: Grades 5–6

Nutrition competencies: 1b, 1f–h, 2–8

Common Core State Standards – English Language Arts

Grades 5–6

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grade 5

Operations and Algebraic Thinking

Number and Operations in Base Ten

Measurement and Data

Grade 6

Ratios and Proportional Relationships

The Number System

Geometry

Language: English and Spanish (parent materials)

Number of lesson plans: 10

Amount of time per lesson: 95–185 minutes for two to three sessions per lesson

Estimated total time for lessons: 24 hours

Format: Print copies are available for free loan or can be downloaded from the Web site.

This standards-based curriculum presents an educational journey through the world of gardening and nutrition. Developed under the United States Department of Agriculture’s (USDA’s) Team Nutrition initiative, this supplemental unit is designed to encourage fifth- and sixth-graders to eat more fruits and vegetables and develop an awareness of how these foods are grown. Activities support national Common Core standards for math and English language arts, National Academy of Sciences standards for science, and national standards for health. Students learn knowledge and skills to develop healthy eating habits. Lesson includes taste testing and food-preparation activities for fruits or vegetables, including chickpeas, strawberries, cantaloupe, black beans, broccoli, bell peppers, and others.

What’s inside: The curriculum includes 10 lessons with standards alignment and reproducible student handouts, a gardening guide, a home activity booklet, six mini-posters, menu graphics, and handwashing and food safety guidelines.

Activity highlight: Lesson 10, “Harvest Celebration,” is a culminating event to showcase what students have learned throughout the unit and will allow them to share the garden and harvest with the rest of the school, families, and their local community.

Discover MyPlate



Publisher: United States Department of Agriculture, Team Nutrition

Web site: <http://www.fns.usda.gov/tn/discover-myplate-teachers-guide> (accessed September 20, 2016)

Target audience: Kindergarten

Nutrition competencies: K: 1a–c, 1f; 4, 6–8

Common Core State Standards – English Language Arts

Kindergarten

Reading Standards for Literature and for Informational Text: Key Ideas and Details

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Phonological Awareness

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Kindergarten

Counting and Cardinality

Measurement and Data

Geometry

Language: English, Spanish worksheets and parent materials

Number of lessons: 6 lessons with 3–8 activities in each unit

Amount of time per activity: 20–60 minutes

Estimated total time for all lessons: 16 hours

Format: Free download

This inquiry-based nutrition lesson set develops healthy food choices and promotes physically active lifestyles. Students explore healthy choices from each of the MyPlate food groups, discover fruits and vegetables and how they grow, identify feelings of hunger and fullness, select balanced meals and healthy snacks, and experience the importance of being physically active. Six interactive lessons include connections with the health, math, science, English language arts, and science standards.

What's inside: Lesson 1 gives students an understanding of the five food groups and is recommended as the first lesson; the remaining lessons can be taught over six weeks or over several months. Each lesson provides a variety of activities that address different learning styles. Lessons are divided into five sections: Introduction, Core Learning Activities, Center Time, Reflection & Assessment, and Extra Helpings (extension activities). Choose from small-group and whole-class activities. Minibooks, food cards, recipes, student workbooks, parent handouts, and a poster are included in the set.

Activity highlight: In lesson 4, “Planting the Seeds for Healthier Eating,” students discover that all fruits and vegetables start as seeds and grow into plants. Activities include a seed growing activity that can be completed indoors any time of the year. Students describe how edible fruits and vegetables grow from a seed to a plant and name the three things a plant needs to grow. Some teachers prefer to teach this lesson with other school garden activities during their region’s growing season.

Do More, Watch Less



Publisher: California Department of Public Health

Web site: https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/NEOPB/Pages/Nutrition_Education_Obesity_Prevention_Branch.aspx(accessed September 20, 2016)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: (1f); 2, (4), (5), 6–8

Grades 7–8: (1d); 2, (4), 5–8

Common Core State Standards – English Language Arts

Grades 6–8

Speaking and Listening Standards: Comprehension and Collaboration

Language: English and Spanish

Number of lesson plans: 4

Amount of time per lesson: 30–45minutes

Estimated total time for lessons: 2.75 hours

Format: Downloadable free PDF

This toolkit promotes increased physical activity and reduced screen time. It is intended primarily for use in after school programs and by organizations serving children ages ten through fourteen. Children track the time they spend in front of televisions and computers, participate in a challenge that limits screen time, set goals to participate in no more than two hours of screen-based activities per day, increase amount of time spent on activities away from a screen, and celebrate their hard work with a party that includes music and healthy food.

What’s inside: Teacher resource guide, brief background for each lesson, reproducible handouts, and additional optional activities.

Activity highlight: Students track their screen-based activities and identify ways to spend their time apart from a computer or television and be physically active.

Eat Well & Keep Moving



Publisher: Harvard School of Public Health/Human Kinetics

Web site: <http://www.eatwellandkeepmoving.org> (accessed September 20, 2016)

Target audience: Grades 4–5

Nutrition competencies:

Grades 3–4: 1a–c, 1f–g; (2), 3–7

Grades 5–6: 1a–c, 1f–g; (2), 3–7

Common Core State Standards – English Language Arts

Grades 4–5

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 4–5

Operations and Algebraic Thinking

Number and Operations in Base Ten

Number and Operations—Fractions

Measurement and Data

Language: English

Number of lesson plans: 46

Amount of time per lesson: 50–105 minutes

Estimated total time for lessons: 15 hours

Format: Hard copy and CD, with access to online resources

Cost: \$69.00 (Check for current pricing with publisher, Human Kinetics)

The *Eat Well & Keep Moving* curriculum contains 46 nutrition and physical activity lessons that teach students how to eat a balanced diet, plan meals, select healthy snacks, eat more fruits and vegetables, and increase fitness. The program helps academic, physical education, and health education teachers guide upper elementary school students in learning about nutrition and physical activity while building skills in language arts, math, science, and social studies. Students develop an understanding of how health behaviors are related and learn techniques to choose healthy foods, increase physical activity, and limit TV and other screen time. The supplemental Web site offers detailed information on usage, as well as resources for teachers, food service managers, staff members, and parents and guardians. It also includes additional resources.

What's inside: A teacher resource guide; more than 300 ready-to-use worksheets; schoolwide campaign ideas; a self-assessment tool to help students track their activity levels; and access to the companion Web site. The media disk can be used to customize instruction.

Activity highlight: In “Healthy Living,” students learn about the food groups and why it is important to eat a balanced diet. Students construct “Building Blocks of Life” with dice and discuss how messages on healthy living can be applied to their lives.

EatFit



Publisher: University of California Cooperative Extension,
Division of Agriculture and Natural Resources

Web site: <http://www.eatfit.net> (accessed September 20, 2016)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1b–c, 1e–f; (1g), 2–8

Grades 7–8: 1a–c, 1f, (1g), 2–8

Common Core State Standards – English Language Arts

Grade 6

Reading Standards for Literature: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Grade 7

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Grade 8

Speaking and Listening Standards: Comprehension and Collaboration

Common Core State Standards – Mathematics

Grade 6

The Number System

Ratio and Proportional Relationships

Expressions and Equations

Statistics and Probability

Grade 7

Ratio and Proportional Relationships

Expressions and Equations

Grade 8

Statistics and Probability

Language: English

Number of lesson plans: 9

Amount of time per lesson: 46–67 minutes

Estimated total time for lessons: 7.6 hours

Format: Hard copy; online

Cost: Free curriculum available for qualifying schools; available for purchase (print) by nonqualifying schools; online analysis program with paper version available free upon request

This nine-week curriculum has individualized, hands-on activities that focus on behavioral strategies to help students understand the importance of changing their food behaviors. An online analysis tool allows students to enter and analyze their daily dietary intake. The analysis tool enables students to identify problem areas related to foods and nutrients and provides students with goals for areas in which they sense a need for improvement.

What's inside: A teacher resource guide and student workbook. Online resources are also available and include an eating analysis, games, recipes, and exercise tips.

Activity highlight: In “EatFit at Fast Food,” students learn how to choose menu items at restaurants and meet their personal nutritional goals.

Eating Healthy from Farm to Fork



Publisher: University of California Cooperative Extension,
Division of Agriculture and Natural Resources

Web site: http://efnep.ucanr.edu/Programs/Youth_EFNEP_82/Youth_Curriculum/ (Accessed September 20, 2016)

Target audience: Kindergarten, grades 1 and 2

Nutrition competencies:

Kindergarten: 1a–h; 2, 4, 5, 7, 8

Grade 1: 1a–b, 1f–h; 2–8

Grade 2: 1a–h; 2–8

Common Core State Standards – English Language Arts

Kindergarten

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Phonological Awareness

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Grade 1

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Speaking and Listening Standards: Comprehension and Collaboration

Language Standards: Conventions of Standard English
Language Standards: Vocabulary Acquisition and Use

Grade 2

Reading Standards for Informational Text: Key Ideas and Details
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Informational Text: Range of Reading and Level of Text Complexity
Reading Standards for Foundational Skills: Print Concepts
Reading Standards for Foundational Skills: Phonological Awareness
Reading Standards for Foundational Skills: Phonics and Word Recognition
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Kindergarten

Counting and Cardinality
Measurement and Data

Language: English

Number of lesson plans: 28 total: 8 for kindergarten, 10 for first grade, and 10 for second grade

Amount of time per lesson: 30–45 minutes if not using extensions

Estimated total time for lessons: 6.3 hours for kindergarten, 5 hours each for grades 1 and 2

Format: Downloadable PDF

Cost: Free to eligible agencies. Check the Web site for pricing.

This nutrition education curriculum connects local food systems, garden-based learning, and school food service to healthy habits. Lessons in kindergarten, first grade, and second grade engage children in developing a positive attitude toward healthy food and fitness choices. Separate lessons are included for kindergarten and grades one and two. The materials support the development of a positive school-wellness environment that recognizes the relationship between health and nutrition and academic achievement and school success. Lessons focus on expanding the consumption of fruits, vegetables, and grains and on diet variety. Use of MyPlate as a guide to eating healthy and exercise is emphasized.

What's inside: A teacher resource guide contains lesson introduction, objectives, nutrition competencies, and background information. Each lesson includes two hands-on activities that build on one another and include extensions for making connections between farms, school, gardens, and nutrition. Other components include a quiz for review, a recipe activity, and parent letter. Instructional materials include lesson display boards, sample name tags, flyers, PowerPoint presentations, curriculum training evaluation form, and certificate for participation in curriculum training.

Activity highlight: For second grade, Lesson 2 (“Grains Get You Going,” Activity 1, “Make Time to Refuel”) gives background on the importance of breakfast. Children name foods in the grain group and name foods they would eat at each meal. Using a car analogy, children perform traffic actions based on foods (for example, go on green and stop on red). They discuss mealtimes and review what they have learned.

Empowering Youth with Nutrition and Physical Activity



Publisher: USDA, Food and Nutrition Service

Web site: <http://www.fns.usda.gov/empowering-youth-nutrition-physical-activity> (accessed September 20, 2016)

Target audience: Grades 6–12

Nutrition competencies:

Grades 5–6: 1b, 1f; 2–8

Grades 7–8: 1a, 1f; 2–8

Grades 9–12: 1b, 1f; 2–8

Common Core State Standards – English Language Arts

Grades 6–12

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 6–7

The Number System

Ratios and Proportional Relationships

Grade 8

The Number System

Grades 9–12

Number and Quantity

Language: English

Number of lesson plans: 10

Amount of time per lesson: 1 hour

Estimated total time for lessons: 10 hours

Format: Downloadable PDF; online Web-based modules; hard copy

Cost: Free downloadable PDF; free curriculum available to middle schools upon request.

This instructional resource is provided as a handbook for use in after-school programs and in classrooms with students from eleven to eighteen years of age. It introduces basic nutrition and physical activity information and provides strategies to incorporate healthy nutrition and physical activity messages into day-to-day activities.

What's inside: A teacher resource guide and student worksheets.

Activity highlight: In “My Physical Activity Options,” students assess their physical activity patterns and set a goal of increasing their physical activity to 60 minutes each day. Chapter 5 includes guidance for planning, implementing, and assessing a youth nutrition or physical activity project. For example, students assess foods served at school functions outside of the cafeteria and work with the school to set health policy for school events and meetings.

Exercise Your Options



Publisher: Dairy Council of California

Web site: <http://www.healthyeating.org/Schools/Classroom-Programs/Middle-School.aspx> (accessed September 20, 2016)

Target audience: Middle-school students

Nutrition competencies:

Grade 6: 1a–c, 1f; 2, (3), 4–6, (7), 8

Grades 7–8: 1a–c, 1e–g; 2–8

Common Core State Standards – English Language Arts

Grades 6–8

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 6–8

Ratios and Proportional Relationships

The Number System

Expressions and Equations

Statistics and Probability

Language: English

Number of lesson plans: 8

Amount of time per lesson: 45–60 minutes

Estimated total time for lessons: 7.8 hours

Format: Hard copy and supplemental DVD

Cost: Free for California teachers; available for purchase from out of state.

Middle-school students assess their nutrition and physical activity in this curriculum that aligns with education standards and is based on a behavior-change model. The program helps students apply decision-making skills to real-life issues that influence their health. The nutrition lessons are skills-based to help students apply problem-solving, reasoning and critical-thinking techniques, making them successful in the classroom and beyond. Ideas for extension activities, questions, and projects for students are included. The media disk provides common scenarios faced by students, such as making choices from food-court menus in shopping malls and choosing realistic portion sizes. Other lesson topics include eating disorders, sports nutrition, bone health, and body image.

What's inside: A teacher guide, student activity booklet, and a media disk with eight video segments that introduce the key issues in each lesson.

Activity highlight: In lesson 5, “Keep Moving, Keep Fit,” students recall the amount of moderate to vigorous physical activity recommended daily, classify a variety of activities as moderate to vigorous or low levels of physical activity, evaluate a record of their physical activity, and make a plan to increase their physical activity levels to meet the recommendations.

Farm to Table and Beyond



Publisher: Teachers College, Columbia University

Web site: <https://www.kidsgardening.org/> (accessed September 20, 2016)

Target audience: Grades 5–6

Nutrition competencies: 1g–h; 2–8

Common Core State Standards – English Language Arts

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Speaking and Listening Standards: Comprehension and Collaboration

Common Core State Standards – Mathematics

Statistics and Probability

Language: English

Number of lesson plans: 30

Amount of time per lesson: N/A

Estimated total time for lessons: N/A

Format: Hard copy

Cost: Available for purchase

This sequential curriculum uses science to explore nutrition and the food environment. Students are led through an investigation of the food system and its relationship to the environment. Students examine their personal food choices and use knowledge gained through the lessons to enhance their ability to make healthy decisions about personal wellness. Students use investigation, Internet research, and experimentation to explore how food is processed, manufactured, packaged, and transported.

What's inside: A teacher resource guide, background information, teaching tips, teacher preparation, materials list, objectives, tools for assessment, conversation guides, and student activity sheets and readings.

Activity highlight: Lesson 5, “Field to Store,” is a lesson in which students review previous homework and share ideas about home-to-school transportation systems. Students then brainstorm about the parts of a system that get food from farm to table. They use an “Apples to Applesauce” concept map, make connections, and examine what would happen if half the apple harvesters stopped working for one day. They complete the lesson by describing the farm-to-table system in their own words and by reading a brief text that explores the food system.

Finding Solutions to Hunger: Kids Can Make a Difference



Publisher: World Hunger Year

Web site: <http://www.kidscanmakeadifference.org> (accessed September 30, 2016)

Target audience: Middle and high school students

Nutrition competencies:

Grade 6: 1c, 3, 7, 8

Grades 7–8: 1a, (1b–c), 1d, 1f, 1h; 2–4, (5), (8)

Grades 9–12: (1a–c), 1d, (1f–g), 1h; (2–5), 7–8

Common Core State Standards – English Language Arts

Grades 6–12

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Writing: Text Types and Purposes

Writing: Production and Distribution of Writing

Writing: Research to Build and Present Knowledge

Writing: Range of Writing

Speaking and Listening: Comprehension and Collaboration

Speaking and Listening: Presentation of Knowledge and Ideas

Language: Conventions of Standard English

Language: Knowledge of Language

Language: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 6–7

Ratios and Proportional Relationships

The Number System

Expressions and Equations

Statistics and Probability

Grade 8

The Number System

Expressions and Equations

Grades 9–12

The Real Number System

Quantities

Seeing Structure in Expressions

Arithmetic with Polynomials and Rational Expressions

Creating Equations

Reasoning with Equations and Inequalities

Language: English

Number of lesson plans: 25

Amount of time per lesson: N/A

Estimated total time for lessons: N/A

Format: Hard copy or downloadable free online

Cost: Available for purchase

This instructional resource helps students to understand the real causes of hunger and how to act to change them. Activities within each of the three units teach about the pain of hunger, the importance of food, inequitable distribution of food, the lack of relationship between hunger and population density, and relationships between poverty, hunger, joblessness, and homelessness in the United States and elsewhere in the world. Students read, write, calculate, analyze, role-play, and figure out for themselves what needs to be done. The curriculum can be streamlined into six lessons.

What's inside: Overview of lesson, list of materials, directions, additional activities, resource guide for fund-raising ideas, list of related organizations, and resources for teachers.

Activity highlight: In the lesson “Hunger Destroys,” students discuss how hunger breaks down the body, compare infant mortality rates for different countries, and discuss how certain areas of the world experience hunger and the devastating consequences.

Food Safety from Farm to Fork



Publisher: California Foundation for Agriculture in the Classroom

Web site: http://learnaboutag.org/resources/table_farmfork.cfm (accessed September 30 2, 2016)

Target audience: Grades 5–7

Nutrition competencies:

Grades 5–6: 1g, (7)

Grade 7: 1g, (7)

Common Core State Standards – English Language Arts

Grade 5

Reading Standards for Informational Text: Key Ideas and Details

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Vocabulary Acquisition and Use

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Grades 6–7

Reading Standards for Informational Text: Key Ideas and Details

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grade 5

Operations and Algebraic Thinking

Number and Operations in Base Ten

Number and Operations—Fractions

Measurement and Data

Grade 6

The Number System

Expressions and Equations

Statistics and Probability

Grade 7

Ratios and Proportional Relationships

The Number System

Expressions and Equations

Statistics and Probability

Language: English

Number of lesson plans: 5

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 6.6 hours

Format: Downloadable free PDF; available in hard copy with CD upon request

This instructional resource unit provides students with a better understanding of food safety through real-life examples and enjoyable activities. Students learn that everyone has a responsibility in minimizing food-borne illness: farmers, transporters, restaurants, grocery stores, and consumers. Through books, games, puzzles, math problems, and science investigations, participants identify the roles each person plays in ensuring that food is safe to eat. Hands-on activities and real-life examples are included for students.

What's inside: Background information about food safety, lesson plans with time frames, related materials, Web links to core subject standards, directions for activities, reproducible handouts and game pieces, and a resource list.

Activity highlight: In “Mighty Microbes,” students are introduced to epidemiology; they use epidemiological techniques to assess an outbreak and determine the cause of an illness that makes picnickers sick. Students use data tables, classify data, and read information to solve the mystery. They write a short article on their findings for a fictitious local newspaper and complete a quiz.

Fruits and Vegetables for Health



Publisher: California Foundation for Agriculture in the Classroom

Web site: http://learnaboutag.org/resources/table_fruits.cfm (accessed September 20, 2016)

Target audience: Grades 4–6

Nutrition competencies:

Grades 3–4: 1a–b, 1f–h; 2–3, 5–8

Grades 5–6: 1a–b, 1f–h; 2–3, 5, 7–8

Common Core State Standards – English Language Arts

Grade 4

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Grade 5

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Grade 6

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Common Core State Standards – Mathematics

Grade 4

Number and Operations—Fractions
Measurement and Data

Grade 5

Number and Operations—Fractions
Measurement and Data
Geometry

Grade 6

Ratios and Proportional Relationships
The Number System

Language: English

Number of lesson plans: 5

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 4.2 hours

Format: Downloadable free PDF

Cost: Hard copy available for purchase

This resource contains five lessons designed to teach students about the production, distribution, and nutritional value of California-grown produce. Students gain knowledge about the importance of eating fresh produce, California geography, and planning healthy meals. Another activity lends itself to project-based learning and includes students working in small groups to craft a formal letter to a chosen agriculture commodity board to gather information about a fruit or vegetable, including nutrition data. Students then write and present important facts about their crop to the class. Students also practice evaluating data tables and graphing as they study the nutritional value of fruits and vegetables. A simple chemistry experiment involving observation, prediction, data gathering, and summarizing is also included. To complete the unit, students write a creative story that details the path a particular fruit or vegetable takes to get from the farm to the table. Alignment with the Common Core State Standards is noted.

What's inside: A teacher resource guide, detailed descriptions on how to organize fruit and vegetable taste-testing, worksheets, food chemistry activities, and activities to enhance agricultural awareness in California are included in the resource. Each lesson identifies the time, preparation, materials, procedures, and grade-level Common Core State Standards.

Activity highlight: In the “Nutritional Value of Fresh Produce” lesson, students learn that fresh produce is a good source of vitamin A, vitamin C, and fiber, and that all fruits and vegetables do not contain the same quantities of each nutrient.

The Great Garden Detective Adventure



Publisher: United States Department of Agriculture, Team Nutrition

Web site: <http://www.fns.usda.gov/tn/great-garden-detective> (accessed September 20, 2016)

Target audience: Grades 3–4

Nutrition competencies: Grades 3–4: 1a–c, 1f–1h; 2–8

Common Core State Standards – English Language Arts

Reading Standards for Literature and for Informational Text: Key Ideas and Details
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Informational Text: Range of Reading and Level of Text Complexity
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Number and Operations in Base Ten
Operations and Algebraic Thinking
Measurement and Data

Language: English

Number of lessons: 11

Amount of time per activity: 50–120 minutes

Estimated total time for all lessons: 16 hours

Format: Available as a free download

This standards-based curriculum integrates gardening experiences and nutrition education to empower children to make healthful food choices and develop an awareness of how fruits and vegetables are grown. Exploratory lessons are built around five easy-to-grow vegetables and two fruits and provide students with the opportunity to learn about and harvest fruits and vegetables; share and taste simple recipes, support a healthy school environment, and take the information home. The 11 interactive lessons include connections to the health, mathematics, English language arts, and science standards.

What's inside: Lessons include a summary with key messages, garden connection, school food service connection, home connection, and community connection. Each lesson includes teacher background and vocabulary, student handouts and materials, and a newsletter with information and activities for parents. The lesson is divided into sections, including “Standards,” “Learning Objectives,” “Time,” “Materials,” “Preparation,” and a step-by-step “Instructional Process.” Bulletin board materials, veggie dice, fruit and vegetable flash cards, and 10 issues of “Garden Detective News” for parents/caregivers are included in the set.

Activity highlight: In lesson 5, “Trace the Fruit and Vegetable Trail,” students read a story about how fruits and vegetables are grown and transported from the farm to school or home. Activities include answering questions and completing mathematics questions to determine the cost and amount of vegetables needed to prepare recipes at school and home.

The Growing Classroom



Publisher: National Gardening Association

Web site: <https://www.kidsgardening.org/> (accessed September 20, 2016)

Target audience: Kindergarten and grades 2–6

Nutrition competencies:

Grade 2: 1a–c, 1f; 2–4, 7–8

Grades 3–4: 1a–c, 1f–h; 2–3, 7–8

Grades 5–6: 1a–c, 1f–h; 2–3, 6–8

Common Core State Standards – English Language Arts

Kindergarten

Reading Standards for Informational Text and for Literature: Key Ideas and Details

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Grade 2

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Fluency

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Vocabulary Acquisition and Use

Grade 3

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Grades 4–5

Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas

Grade 6

Reading Standards for Informational Text: Integration of Knowledge and Ideas
Writing Standards: Text Types and Purposes
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas

Common Core State Standards – Mathematics

Kindergarten

Number and Operations in Base Ten
Operations and Algebraic Thinking
Measurement and Data

Grade 3

Numbers and Operations—Fractions
Measurement and Data

Grades 5–6

Geometry

Language: Instructional guide in English, with additional handouts in Spanish

Number of lesson plans: 140

Amount of time per lesson: 30–40 minutes

Estimated total time for lessons: 70 hours

Format: Hard copy

Cost: Available for purchase

The resource is divided into six units: food choices; the basic four food groups; nutrients; digestion; food consumerism; and recipes for snacks based on information from the preceding lesson. The teacher’s handbook covers nutrition, food systems, and a variety of other garden topics. Topics include working together in the garden, growing nutrients, garden ecology, climate, nutrition, gardening tips, and food choices.

What’s inside: Outdoor classroom activities and step-by-step instructions for developing a garden-based science program.

Activity highlight: For grades 3–6, the “Six of One, Half Dozen of the Other” lesson plan helps students use the senses to identify and classify objects in the garden. Students search for objects and opposites in the garden and classify the objects by using their senses to discern the characteristics, such as wet or dry. Small groups work together to collect 12 items that can be paired into opposites. Groups exchange their collections and try to determine the opposite categories used by other groups.

Growing Food



Publisher: Teachers College, Columbia University, and the National Gardening Association

Web site: <http://www.tc.columbia.edu/tisch/resources-overview/curricula/life-pages/growing-food/>
(accessed September 20, 2016)

Target audience: Grades 4–5

Nutrition competencies:

Grade 4: 1h; 2–8

Grade 5: 1h; 2–3, 5–8

Common Core State Standards – English Language Arts

Grades 4–5

Reading Standards for Informational Text and for Literature: Key Ideas and Details

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 4–5

Number and Operations in Base Ten

Measurement and Data

Language: English

Number of lessons: 20 lessons

Amount of time per activity: approximately 60 minutes

Estimated total time for all lessons: 20 hours

Format: Hard copy

Cost: \$32.95; check online for current pricing.

This inquiry-based curriculum explores the science behind food production and its connection to nutrition. Students investigate foods made from corn and grapes, taste edible plant parts, and learn about composting, soil, photosynthesis, food webs, and more. The five overarching units address being a food scientist, plant systems, food webs, agricultural systems, and using science to make choices. Lessons address regional and seasonal influences on agriculture, and help students to create food-choice guidelines based on seasonal, local, and food variety factors. A matrix with connections to science standards is included.

What's inside: Units are composed of two to three lessons with teacher background and vocabulary, student pages and activity sheets, and assessment strategies. Each lesson includes the purpose and objectives, and scientific processes supported. Lessons sections are divided into questioning, experimenting, searching and reading, theorizing, and applying the lessons to life.

Activity highlight: In lesson 3, “Making Grape Juice,” students conduct a class experiment for making grape juice, then theorize on how store-bought grape juice is produced. They compare the process of making grape juice in class with the factory process and discuss their thoughts and actions related to grapes and grape juice.

Growing Healthy Kids



Publisher: Oregon Nutrition Education Program, Extension Family and Community Health, College of Public Health and Human Sciences (revised 2017)

Web site: http://extension.oregonstate.edu/nep/garden_nutrition (accessed September 20, 2016)

Target audience: Grades 2–3

Nutrition competencies:

Grade 2: 1a–1c, 1e–1h, 2–8

Grade 3: 1a–1c, 1f–1h, 2, 4, 6–8

Common Core State Standards – English Language Arts

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Vocabulary Acquisition and Use

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Common Core State Standards – Mathematics

Grade 2

Number and Operations in Base Ten

Measurement and Data

Grade 3

Number and Operations in Base Ten

Number and Operations—Fractions

Measurement and Data

Language: English

Number of lesson plans: 7

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 6 hours

Format: Available for purchase of hard copy or may be downloaded for free from Web site.

This garden-based, seven-lesson curriculum includes engaging activities for students in grades two to three. Lessons focus on nutrition education and its connection to plants and uses gardening as a vehicle to expose children to a variety of vegetables and fruits and to encourage increased consumption of vegetables and fruits. The lessons are designed to be used in an indoor, outdoor, or wall mural garden where students learn to grow, prepare, and enjoy fruits and vegetables; create a garden; conduct cooking activities; and increase physical activity.

What's inside: The materials include an overview of the curriculum, evaluation materials, and seven lessons. Each lesson has objectives, overview, lists of materials needed, teaching outline and script, student worksheets, recipes, supplemental activities, recipe sheets, and family letters.

Activity highlight: In lesson 2, “Root, Root Hooray!” students participate in five activities. They report on the results of their Food Adventurer mission, review the six plant parts, examine the parts of a carrot, taste a healthy carrot and jicama salsa recipe, and work on their mural or indoor or outdoor garden.

Harvest of the Month



Publisher: California Department of Public Health, Nutrition Education and Obesity Prevention

Web site: <http://www.harvestofthemonth.cdph.ca.gov> (accessed September 30, 2016)

Target audience: Kindergarten–grade 12

Nutrition competencies:

- Kindergarten: (1a–b), 1e–h, (2), 3–5, (7), 8
- Grades 1–2: 1a, (1b–c); (1f), (1h), (2), (4), 5, (6–7), 8
- Grades 3–4: 1a, 1b–c, 1f–h, (2), 3–4, (6), 8
- Grades 5–6: (1b), 1c, (1f), (1h), 2–4, 6, (7), 8
- Grades 7–8: (1a), (1c), (1e), (1f), 1g, (1h), (2), 7–8
- Grades 9–12: (1a), (1c), (1f–h), (3–4), (6), 7–8

Common Core State Standards – English Language Arts

Kindergarten and Grade 1

- Reading Standards for Literature and for Informational Text: Craft and Structure
- Reading Standards for Literature for Informational Text: Integration of Knowledge and Ideas
- Reading Standards for Literature and for Informational Text: Range of Reading and Level of Text Complexity
- Reading Standards for Foundational Skills: Fluency
- Writing Standards: Text Types and Purposes
- Writing Standards: Production and Distribution of Writing
- Writing Standards: Research to Build and Present Knowledge
- Speaking and Listening Standards: Comprehension and Collaboration
- Speaking and Listening Standards: Presentation of Knowledge and Ideas
- Language Standards: Conventions of Standard English
- Language Standards: Vocabulary Acquisition and Use

Grades 2–5

- Reading Standards for Literature and for Informational Text: Craft and Structure
- Reading Standards for Literature and for Informational Text: Integration of Knowledge and Ideas
- Reading Standards for Literature and for Informational Text: Range of Reading and Level of Text Complexity
- Reading Standards for Foundational Skills: Fluency
- Writing Standards: Text Types and Purposes
- Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Grades 6–12

Reading Standards for Literature and for Informational Text: Craft and Structure
Reading Standards for Literature and for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Literature and for Informational Text: Range of Reading and Level of Text Complexity
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Kindergarten

Counting and Cardinality
Operations and Algebraic Thinking
Number and Operations in Base Ten
Measurement and Data
Geometry

Grades 1–2

Operations and Algebraic Thinking
Number and Operations in Base Ten
Measurement and Data
Geometry

Grades 3–4

Operations and Algebraic Thinking
Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data

Grade 5

Operations and Algebraic Thinking
Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data
Geometry

Grades 6–7

Ratios and Proportional Relationships

The Number System

Statistics and Probability

Grade 8

The Number System

Grades 9–12

Algebra 1 – Statistics and Probability

Language: Instructional guide in English, with additional in handouts Spanish; family newsletters in Chinese, Vietnamese, Hmong, and Russian

Number of lesson plans: 36

Amount of time per lesson: N/A

Estimated total time for lessons: N/A

Format: Downloadable free PDFs

Harvest of the Month is an online resource with access to tools and materials that can be used widely in school environments. The materials are based on the USDA Dietary Guidelines for Americans and promote consumption of seasonal fruits and vegetables, as well as physical activity. Lesson plans are organized by the produce of the month. Three yearly cycles have been developed. Activities in each lesson plan can be organized according to teacher preference and include taste-testing, cooking, student sleuth activities, physical activities, literature links and cafeteria connections, gardening, field-trip ideas, and advocacy opportunities. Materials are designed for low-income schools and communities and may be used in a variety of settings: the classroom, cafeteria, home, and community.

What's inside: The Web site provides free access to educator newsletters, family newsletters, Menu Slicks, press-release templates, activities, and additional resources. Information on how to connect with the community and grocery stores is also included.

Activity highlight: The apple activity featured for autumn includes the tasting of several varieties of apples; graphing for class evaluation of appearance, texture, smell, flavor, and sound; an apple yogurt trifle recipe; student sleuth activity; apple history and growth information; garden activity; and physical activity called “Grab the Apple!” During the cafeteria connection, students identify types of apples used in the cafeteria and write letters to staff about the benefits of other varieties.

Health Smart for Middle School



Publisher: Education, Training, and Research (ETR), Scotts Valley, California

Web site: <http://www.etr.org/healthsmart/> (accessed September 20, 2016)

Target audience: Grades 6–8

Nutrition competencies: Grades 6–8: 1a–c, 1e–1g; 2–8

Common Core State Standards – English Language Arts

Grades 6–8

Reading Standards for Literature and for Informational Text: Key ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Language: English

Number of lessons: 18

Amount of time per activity: 45–60 minutes

Estimated total time for all lessons: 14–18 hours

Format: Available in print or digital version

Cost: \$91.99 for teacher’s guide and \$3.00 for a student workbook

The program goal is to give youths the knowledge and skills to make healthy choices and establish lifelong healthy behaviors. HealthSmart supports the National Health Education Standards, and includes characteristics of effective health education curricula defined by the Centers for Disease Control and Prevention. Lessons feature clear, concise teaching steps and cover topics such as nutrients, assessing eating habits, eating breakfast, snacking, food safety, eating disorders and body image, getting and staying fit, and setting and tracking nutrition and physical activity goals. Activities are grade-level appropriate, challenge students in a variety of ways, and present approaches for a range of learning styles.

What's inside: Lessons include an overview, the National Health Education Standards addressed, objectives, and materials and preparation. Each lesson has an introduction, teaching steps, assessment and closure, and support for diverse learner sections. The student workbook contains activity sheets identified in the Teacher's Guide with check boxes to remind students of assessment requirements. Family letters, scenarios, and talk show guides are among the masters featured in the Teacher's Guide.

Activity highlight: In lesson 7, "Eating Healthy at Fast Food Restaurants," students learn about problems with typical fast foods and learn to analyze the amount of calories, fat, and sodium in four fast-food meals. They find out how to get nutrition information at restaurants and choose healthier options.

Health Smart for High School



Publisher: Education, Training, and Research (ETR), Scotts Valley, California

Web site: <http://www.etr.org/healthsmart/> (accessed September 20, 2016)

Target audience: Grades 9–12

Nutrition competencies: Grades 9–12: 1a–d, 1f–1h; 2–8

Common Core State Standards – English Language Arts

Grades 9–12

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Language: English

Number of lessons: 16

Amount of time per activity: 60–90 minutes

Estimated total time for all lessons: 16–24 hours

Format: Available in print or digital version

Cost: \$91.99 for teacher’s guide and \$3.00 for a student workbook

This curriculum is part of a comprehensive health series. The goal is to promote healthy growth and development of youths and give them skills for making healthy choices for a lifetime. Lessons contain an overview of the learning objectives, teacher preparation, new health terms, ideas for supporting students with a range of learning styles, and the National Health Education Standards. Activities cover guidelines for nutrition and physical activity, food labels, setting eating and activity goals and tracking progress, finding accurate information, food safety, weight management, and disordered eating.

What's inside: Lessons include an overview, objectives, and materials and preparation needed. Each lesson has an introduction, teaching steps, assessment and closure, and support for diverse learners sections. The student workbook contains activity sheets identified in the Teacher's Guide with check boxes to remind students of assessment requirements. Unit assessments, scoring rubrics, a glossary of health terms, and a CD with PowerPoint presentations, worksheet masters, and teacher keys are included.

Activity highlight: In lesson 14, "Managing Weight in Healthy Ways," students review the myths and facts about dieting. They take a quiz about losing weight and learn to recognize the dangers of fad diets. Students then apply their learning to advise others on how to lose or maintain weight safely.

Healthalicious Cooking



Publisher: University of California, Agriculture and Natural Resources, Richmond, California

Web site: <http://anrcatalog.ucanr.edu/Details.aspx?itemNo=8449> (accessed September 20, 2016)

Target audience: Grades 4–7

Nutrition competencies:

Grade 4: 1b–c, 1f–1h; 2–8

Grades 5–6: 1a–d, 1f–1g; 2–8

Grade 7: 1a–c, 1f–1g; 2–8

Common Core State Standards – English Language Arts

Grades 4–5

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Grades 6–7

Reading Standards for Informational Text: Craft and Structure

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 4–5

Number and Operations in Base Ten

Number and Operations—Fractions

Measurement and Data

Grades 6–7

The Number System

Language: English

Number of lessons: 6

Amount of time per activity: Lessons can be presented in 6 weeks (2.5 hours/lesson) or 12 weeks (1.5 hours/lesson)

Estimated total time for all lessons: 15–18 hours

Format: Free download

This curriculum is designed for after school settings to teach students how to make healthy food choices. The program objectives are to develop student skills in food preparation, recipe reading, menu planning, and cleanup; introduce new foods; enjoy simple physically active games; and develop students' self-confidence to prepare meals and be physically active. Each lesson contains a short, fun introductory activity; an active game; preparation, sharing, and cleanup of a meal; time to reflect; and goal setting. Activities cover guidelines for nutrition and physical activity, balancing meals, eating whole grains, choosing fruits and vegetables, planning and balancing meals, and eating and sharing meals.

What's inside: Lesson delivery options and content background are explained for program leaders. The program includes tips for asking open-ended questions and encouraging healthy eating behaviors; a student self-assessment for rating cooking skills; physical activities, shopping lists, and goal setting activities for each lesson; and how to be a healthy role model. Handouts, evaluations, measurement tables, and take-home family letters are included.

Activity highlight: Lesson 3, "Make It Crunchy: Go for Whole Grains," includes a physical activity, goal-setting discussion, health activities, a cooking and eating activity, cleanup, quick-write, and new goal-setting activity. Students learn to identify the parts of a whole grain, recognize foods containing whole grains, and explain the importance of eating whole grains. They then work as a team to prepare a meal and clean up.

Healthy Bodies: Teaching Kids What They Need to Know



Publisher: Body Image Health

Web site: <http://bodyimagehealth.org> (accessed September 20, 2016)

Target audience: Grades 4–6

Nutrition competencies:

Grades 3–4: 1b, 1f, 2–8

Grades 5–6: 1b, 1f, 2–8

Common Core State Standards – English Language Arts

Grades 4–5

Reading Standards for Literature and Informational Text: Key Ideas and Details

Reading Standards for Literature and Informational Text: Craft and Structure

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grade 4

Operations and Algebraic Thinking

Language: English

Number of lesson plans: 11

Amount of time per lesson: 25–60 minutes

Estimated total time for lessons: 11 hours

Format: Print copy available for purchase at the Web site.

Cost: \$65.00 (Check the Web site for current pricing.)

This curriculum is designed to prevent eating disorders, distorted body image, and obesity. Students learn to appreciate their size and shape and to make healthy choices that promote self-esteem, well-being, and good health. The 11 lessons teach elementary students to maintain a caring connection to their bodies; develop an identity based on who they are rather than how they look; reject overweight stigma; respect diversity of body size and shape; understand body changes with puberty; defend against unhealthy pressures regarding looks, weight, food choices, and dieting; choose positive role models that support their deeper values; actively embrace health and vitality through positive eating and physical activity; support one another to have a healthy body image and eat well to stay fit.

What's inside: Eleven scripted lessons for grades 4–6 can be adapted for a variety of venues. Background for teachers, lesson objectives, vocabulary, lesson main point, suggested script, student worksheets, parent information and home education, and recommended readings are included in this thorough curriculum.

Activity highlight: In lesson 10, “Compared to Whom? Selecting a Standard for Choosing Role Models,” students choose role models for admirable qualities deep inside and who make students feel good about who they are. Students identify how fads and fashions may influence their choice of role models and learn to select positive, realistic role models. They consider “daring” to stay true to their authentic selves even in the face of peer and cultural pressures and reflect on their current and future role models. In an activity that supports project-based learning, students develop arguments for a hearing and present to administrators their case to promote health at every size and to include zero-tolerance for size discrimination in written policy.

Healthy Choices, Healthy Me!



Publisher: Dairy Council of California

Web site: <http://www.healthyeating.org/Schools/Classroom-Programs/1st-Grade.aspx> (accessed September 20, 2016)

Target audience: Grades 1–2

Nutrition competencies:

Grade 1: 1a, (1b), 1c–h; 2, 5, 7, 8

Grade 2: 1a–h; 2, 5–8

Common Core State Standards – English Language Arts

Grade 1

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Grade 2

Reading Standards for Literature and for Informational Text: Key Ideas and Details

Reading Standards for Literature and for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English
Language Standards: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grade 1

Operations and Algebraic Thinking
Number and Operations in Base Ten
Measurement and Data
Geometry

Grade 2

Operations and Algebraic Thinking
Measurement and Data
Geometry

Language: English and Spanish

Number of lesson plans: 10

Amount of time per lesson: 30–60 minutes

Estimated total time for lessons: 6.6 hours

Format: Hard copy

Cost: Free for California teachers; available for purchase by others.

This curriculum engages students by providing opportunities to personalize health and nutrition concepts. In the first-grade program, students learn basic skills to identify healthy choices for eating and physical activity. The second-grade program is built around “The Market Mystery,” a story about agriculture and how food gets from the farm to the grocery store. It aligns with the most popular and widely used textbooks adopted by the state for language arts, math, and science (published by Houghton Mifflin, Open Court, and Harcourt).

What’s inside: Teacher guide with cafeteria connections, student workbooks, and a box of multicultural food pictures; MyPlate food poster; materials storage box; cafeteria connections activity; and the Market Mystery storybook.

Activity highlight: Activity 5 for second grade, “What’s for Breakfast,” features pictures of common breakfast foods that students select to create a healthy breakfast. Students work in pairs to combine food pictures into what they believe is a healthy breakfast. Students read part of the Market Mystery story to analyze what the family in the storybook ate. Students complete their workbooks to select foods that would be part of a healthy breakfast, and they discuss the reasons for their food choices.

Healthy Classrooms, Healthy Schools



Publisher: Michigan Fitness Foundation

Web site: <http://www.michiganfitness.org/healthy-classrooms-healthy-schools> (accessed October 2, 2016)

Target audience: Grades K to 2 and grades 3 to 5

Nutrition competencies:

Grades K: 1a–c, 1f; 2–8

Grades 1 to 2: 1a–c, 1f; 2–8

Grades 3 to 4: 1a–c, 1f; 2–8

Grade 5: 1a–c, 1f; 2–8

Common Core State Standards – English Language Arts

Grades 2–5

Reading Standards for Informational Text: Key ideas and Details

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Speaking and Listening Standards: Vocabulary Acquisition

Language Standards: Conventions of Standard English

Common Core State Standards – Mathematics

Grades 2–5

Measurement and Data

Language: English

Number of lessons: 10 units with 2 to 4 activities in each unit

Amount of time per activity: 20 to 30 minutes

Estimated total time for all lessons: 10.5 hours

Format: Print copy of curriculum:

Cost: \$160 for curriculum set, or Contact the Michigan Fitness Foundation for pricing

This grade-level set includes 10 units that consist of one to four classroom nutrition and physical activity lessons, a physical activity, snack preparation, a family letter, and a reinforcing school wide announcement. The lessons engage students in assessing the classroom environment, creating a healthy plate based on MyPlate, practicing proper handwashing, planning healthy snacks and parties, touring the school cafeteria, and developing a list of healthy classroom rewards. The set also includes eight grade-appropriate storybooks, a CD with lesson masters, and a poster to assess the classroom nutrition and physical activity environment.

What's inside: The program starts by students assessing how their program environment supports healthy eating and physical activity. Students learn concepts and skills to improve their environment as they complete each unit. Each unit includes two to three activities that address each concept, a physical activity related to the concepts, a healthy snack activity, and a family letter in English only, and suggestions for integrating across other subject areas.

Activity highlight: In Unit 2, “Fill Your Plate with Colors” Activity 1, students are introduced to MyPlate and the students make a classroom collage. Activity 2 gives students the opportunity to create a healthy plate using pictures from magazines and other sources to create a plate that is half filled with fruits and vegetables. In Activity 3, students create a classroom book featuring colorful fruits and vegetables.

How to Teach Nutrition to Kids



Publisher: NCES

Web site: <https://www.nutritionforkids.com> (accessed October 1, 2016)

Target audience: Grades 1–6

Nutrition competencies:

Grades 1–2: 1a–c, 1e–f, (1g), 1h, 2, 4, 7–8

Grades 3–4: 1a–c, 1e–f, 2–4, 5, 7–8

Grades 5–6: 1a–c, 1e–f, 2–4, 5, 7–8

Common Core State Standards – English Language Arts

Grade 1

Reading Standards for Literature and for Informational Text: Key Ideas and Details

Reading Standards for Literature and for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Grade 2

Reading Standards for Literature and for Informational Text: Key Ideas and Details

Reading Standards for Literature and for Informational Text: Range of Reading and Text Complexity

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Grade 3

Reading Standards for Literature and for Informational Text: Key Ideas and Details

Reading Standards for Literature and for Informational Text: Range of Reading and Text Complexity

Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Grades 4 and 5

Reading Standards for Literature and for Informational Text: Key Ideas and Details
Reading Standards for Literature and for Informational Text: Range of Reading and Level of Text Complexity
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standard: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Grade 6

Reading Standards for Literature and for Informational Text: Key Ideas and Details
Reading Standards for Literature and for Informational Text: Range of Reading and Level of Text Complexity
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Foundational Skills: Fluency
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 1–2

Number and Operations in Base Ten
Measurement and Data
Geometry

Grades 3–5

Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data

Grade 6

Ratios and Proportional Relationships
The Number System
Statistics and Probability

Language: English

Number of lesson plans: 200+

Amount of time per lesson: Varies

Estimated total time for lessons: Varies

Format: Hard copy available from Web site.

Cost: \$19.95 (Check the Web site for current pricing)

This instructional resource set includes a teacher’s guide and two activity books that are packed with more than 200 nutrition education activities and strategies to integrate nutrition into classroom, cafeteria, and home environments. Activities support multiple subject areas, including math, language arts, science, social studies, art, and physical education. Students learn to assess their food intake by using MyPlate, identify appropriate serving sizes, set realistic goals, read labels, plan and grow a garden, and prepare simple snacks.

What’s inside: Ideas for creating nutrition learning centers, recipes, and student activity sheets.

Activity highlight: “What Would You Do?” is a lesson in which students work in small groups and act out solutions to various situations involving food choices. The realistic scenarios allow children to think critically and solve problems—from making healthy snack choices to helping a friend who makes poor food choices and often gets sick.

Integrating Concepts about Food, Nutrition, and Physical Activity into Middle School Curriculum



Publisher: Community Voices for Health

Web site: <https://healthymeals.fns.usda.gov/integrating-concepts-about-food-nutrition-and-physical-activity-middle-school-curriculum> (accessed September 20, 2016)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1a–b, 1e, 1f, 1h, 2–3, 6–8

Grades 7–8: 1a–c, 1e–h, 2–4, 6–8

Common Core State Standards – English Language Arts

Grades 6–8

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 6–7

Ratios and Proportional Relationships

The Number System

Expressions and Equations

Statistics and Probability

Grade 8

The Number System

Expressions and Equations

Statistics and Probability

Language: English

Number of lessons: 8

Amount of time per activity: 60–90 minutes or more

Estimated total time for all lessons: 8–12 hours

Format: Available as a free download

The objectives are to provide schoolwide emphasis on health by supporting teachers to integrate nutrition concepts in their lessons, allow flexibility for teachers to adapt nutrition themes to their curriculum, emphasize practical application of nutrition concepts, and empower students to make individual and community nutrition-related choices that promote health. The activity set provides topic prompts about food, food production, gardening, and nutrition to include in science, history, mathematics, and English language arts instruction. Lessons are organized into nutrient content areas: carbohydrate, protein, fat, vitamins, minerals, and water. Prompts connect subject areas and nutrition content through themes about growing and eating food.

What's inside: The introduction outlines the program goal and objectives, and tips are provided for engaging the whole school and coordinating and implementing nutrition and health across grades and subjects. Each unit includes an At-a-Glance overview and background about each nutrient. Additional information for using the Nutrition Facts label and the food label ingredient list is provided, with tips for selecting healthy options. Lesson prompts and ideas are given for history, science, mathematics, and English language arts. Lesson tracking forms are provided for teachers to record when and how they integrate nutrition and health during the week and to share their ideas with other teachers.

Activity highlight: In the Carbohydrates and History Lesson Ideas, students compare the amount of sugar and corn syrup eaten in 1950 and in 2000 and compare the way children in other countries eat with the way children eat now. They research and describe why fruits and vegetables are part of a healthy meal pattern in many cultures.

Jump Start Teens



Publisher: California Project LEAN

Web site: <http://californiaprojectlean.org/doc.asp?id=170> (accessed September 2, 2016)

Target audience: Grades 9–12

Nutrition competencies: 1b, (1c), 1f; 2–8

Common Core State Standards – English Language Arts

Grades 9–10 and grades 11–12

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Type and Purposes

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 9–10 and grades 11–12

Statistics and Probability

Language: Instructional guide in English, with additional handouts in Spanish

Number of lesson plans: 8

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 6.6 hours

Format: Downloadable free PDF

This instructional resource provides lessons that integrate nutrition, physical activity, and the media to encourage teens to live healthier lives. Lessons are cross-curricular and apply to real life. Students also gain skills to advocate healthy communities. Each activity can be taught in one class period.

What's inside: Easy-to-follow lessons and worksheets. Lesson plans include teacher background information, lists of materials to assemble, curriculum links, and extension ideas.

Activity highlight: “Hidden Messages” discusses the influence of advertising. Students describe examples of advertisements that use a variety of marketing techniques, such as appeals to status, physical attraction, testimonials, peer approval, and celebrity endorsements. Extension activities include hosting guest speakers from local advertising agencies, developing marketing ideas for lunches, and creating a cafeteria display that identifies hidden messages.

Kids Cook Farm-Fresh Food



Publisher: California Department of Education

Web site: <http://www.cde.ca.gov/ls/nu/he/kidscook.asp> (accessed September 30, 2016)

Target audience: Kindergarten–grade 8; can also be used effectively with grades 9–12

Nutrition competencies:

Kindergarten: (1a), (1c-d), 1f–h; (2); 4, (5), 7–8

Grades 1–2: 1g–h; (2), 7–8

Grades 3–4: 1g–h; (2), 7–8

Grades 5–6: 1g–h, (2), (5), (7)

Grades 7–8: 1g–h; 7-8

Grades 9–12: (1g–h); (2), (5), (7)

Common Core State Standards – English Language Arts

Kindergarten–Grade 1

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Craft and Structure

Writing Standards: Text and Purposes

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Grade 2

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Writing Standards: Text and Purposes

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Grade 3

Reading Standards for Informational Text: Key Ideas and Details

Writing Standards: Text Types and Purposes

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Grades 4–6

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas

Grade 7

Reading Standards for Informational Text: Craft and Structure
Reading Standards for Informational Text: Range of Reading and Level of Text Complexity
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Range of Writing
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas

Grades 8–12

Reading Standards for Informational Text: Craft and Structure
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Range of Writing
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Kindergarten

Counting and Cardinality
Operations and Algebraic Thinking
Numbers and Operations in Base Ten
Measurement and Data

Grade 1

Operations and Algebraic Thinking
Numbers and Operations in Base Ten
Measurement and Data

Grade 2

Number and Operations in Base Ten
Measurement and Data

Grade 3

Number and Operations—Fractions
Measurement and Data
Geometry

Grades 4–5

Number and Operations—Fractions
Measurement and Data

Grades 6–7

Ratios and Proportional Relationships
The Number System

Grade 8

The Number System

Grades 9–12

Number and Quantity

Language: English

Number of lesson plans: 57

Amount of time per lesson: 1 hour

Estimated total time for lessons: 57 hours

Format: Downloadable free PDF

This resource comprises 18 chapters evenly divided among the California growing seasons. Each chapter focuses on one fruit or vegetable and includes two or three related recipes. The activity guide engages teachers and students in exploration of fresh, seasonal, and locally grown produce through direct experience. Along with instructional school gardening experiences, this guide helps students develop a deeper understanding of where food comes from and how farmers bring life from the land. It is designed to be flexible in use with teachers' curriculum. The activities can be used to teach about cooking and nutrition, sustainable agriculture, and environmental science or to supplement language arts or social science programs.

What's inside: Contains activities, profiles of local farmers, recipes, and links to content standards, student assessments, teaching tips, and resources.

Activity highlight: In the Pear section, students compare the taste, smell, texture, and appearance of ingredients in a salad and discover how the salad ingredients and flavors enhance each other. Students also learn how to wash produce.

Linking English Language Arts and Nutrition



Publisher: California Department of Public Health, Nutrition Education Obesity Prevention Branch
Web site: https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/NEOPB/Pages/Nutrition_Education_Obesity_Prevention_Branch.aspx (accessed September 20, 2016)

Target audience: Kindergarten–grade 2, and grades 4, 5, 7, and 8

Nutrition competencies:

- Kindergarten: 1f, 4, 7
- Grade 2: 1b, 2, 5, 7
- Grade 4: 1a, 5, 7
- Grade 5: 1b, 1e, 1f, 3, 4, 8
- Grade 7: 1a, 1c, 1f, 1g, 4–8
- Grade 8: 1a, 1c, 1f–g, 3–5, 7, 8

Common Core State Standards – English Language Arts

Kindergarten

- Reading Standards for Literature and for Informational Text: Key Ideas and Details
- Writing Standards: Text Types and Purposes
- Speaking and Listening Standards: Comprehension and Collaboration

Grade 2

- Reading Standards for Literature: Key Ideas and Details
- Writing Standards: Text Types and Purposes
- Writing Standards: Production and Distribution of Writing
- Speaking and Listening Standards: Comprehension and Collaboration

Grade 4

- Reading Standards for Informational Text: Integration of Knowledge and Ideas
- Writing Standards: Text Types and Purposes
- Speaking and Listening Standards: Comprehension and Collaboration

Grade 5

- Reading Standards for Literature and for Informational Text: Key Ideas and Details
- Writing Standards: Text Types and Purposes
- Language Standards: Conventions of Standard English

Grade 7

- Reading Standards for Literature and for Informational Text: Key Ideas and Details
- Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Language Standards: Conventions of Standard English

Grade 8

Reading Standards for Literature and for Informational Text: Key Ideas and Details
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Language Standards: Conventions of Standard English

Language: English

Number of lesson plans: 7 English language arts

Amount of time per lesson: 60–65 minutes

Estimated total time for lessons: 12–13 hours

Format: Downloadable PDF

The lessons were designed to address the California Health Education Content Standards for nutrition and physical activity and grade-level standards for kindergarten and grades two, four, five, seven, and eight in English language arts. There are one to three lessons for each grade level. Each lesson fosters student acquisition of health and English–language arts concepts and skills. Students interpret factual information from poems and books, understand the content presented in informational text, and produce brochures and other written materials. They are also asked to apply their integrated learning to real-life choices. Lesson extension and assessment activities encourage students to influence the school nutrition environment positively.

What’s inside: These lesson sets include an At-a-Glance matrix showing links to content standards; instructor tips for success; nutrition facts; glossary; and resources. Lessons contain background, Web sites, and activity overview. Each lesson identifies content standards, steps for preparation, materials, and ideas for extension. Student worksheets and student assessment sheets are included.

Activity highlight: In the lesson for grade seven, “Menu Swap,” Students create a healthy menu for one day, including a healthy snack. If they want, they may give their dishes clever names to make them more appealing (e.g., Red Pepper Pizazz, or Awesome Saucy Chicken). Students may include nutritional and/or caloric information for each meal. Students include suggestions for burning off calories with physical activity. The teacher makes six copies of each menu for the next day’s menu swap, and students display their six extra copies in the style of a gallery walk. Student will select six more menus from the stacks to create a menu for a whole week.

Linking Mathematics and Nutrition



Publisher: California Department of Public Health, Nutrition Education Obesity Prevention Branch
Web site: https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/NEOPB/Pages/Nutrition_Education_Obesity_Prevention_Branch.aspx (accessed September 20, 2016)

Target audience: Kindergarten–grade 2, and grades 4, 5, 7, and 8

Nutrition competencies:

- Kindergarten: 1b, (f); 2, 7
- Grade 2: 1b, 4, 5, 7
- Grade 4: 1b, 1g, 3, 5
- Grade 5: 1b, 1g, 3, 5
- Grade 7: 1a, 1c, 1f, 1g, 2, 4

Common Core State Standards – Mathematics

Kindergarten

- Measurement and Data
- Geometry

Grade 8

- Algebra
- Statistics and Probability

Language: English

Number of lesson plans: 11 mathematics lessons

Amount of time per lesson: 60–65 minutes

Estimated total time for lessons: 12–13 hours

Format: Downloadable PDF

The lessons were designed to address the California Health Education Content Standards for nutrition and physical activity and grade-level standards for kindergarten and grades two, four, five, seven, and eight in mathematics. There are two or three lessons for each grade. Each lesson fosters student acquisition of health, and mathematics concepts and skills. Using easily accessible supplies and nutrition information, students question, collect, and examine data; explore and derive conclusions; and reflect on and evaluate results. They are also asked to apply their integrated learning to real-life choices. Lesson extension and assessment activities encourage students to positively influence the school nutrition environment.

What's inside: These lesson sets include an At-a-Glance matrix showing links to content standards; instructor tips for success; nutrition facts; glossary; and resources. Lessons contain background, Web sites, and an activity overview. Each lesson identifies content standards, steps for preparation, materials, and ideas for extension. Student worksheets and student assessment sheets are included.

Activity highlight: Students learn the days of the week and plan healthy snacks in the lesson “7 Snacks for 7 Days.” Students use MyPlate to understand foods in the different food groups and identify healthy snacks from a variety of food groups. They design and create a class cookbook with healthy snacks featuring foods from two or more food groups for each day.

Linking Science and Nutrition



Publisher: California Department of Public Health, Nutrition Education Obesity Prevention Branch
Web site: https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/NEOPB/Pages/Nutrition_Education_Obesity_Prevention_Branch.aspx (accessed September 20, 2016)

Target audience: Kindergarten–grade 2, and grades 4, 5, 7, and 8

Nutrition competencies:

- Kindergarten: 1b, (f); 2, 7
- Grade 2: (1f); 2, 3, and 5
- Grade 4: 1a, (1e), 1g; 3, 5–8
- Grade 5: (1b), 1e–f; 3, 5, and 7
- Grade 7: 1a, 1c, 1f, 1g; 2–8
- Grade 8: 1a, 1c, 1e–g, 2–3, 7–8

Common Core State Standards – English Language Arts

Kindergarten

- Reading Standards for Informational Text: Integration of Knowledge and Ideas
- Reading Standards for Foundational Skills: Print Concepts
- Reading Standards for Foundational Skills: Phonological Awareness
- Writing Standards: Text Types and Purposes
- Writing Standards: Production and Distribution of Writing
- Writing Standards: Research to Build and Present Knowledge
- Speaking and Listening Standards: Comprehension and Collaboration
- Speaking and Listening Standards: Presentation of Knowledge and Ideas
- Language Standards: Conventions of Standard English

Grades 2, 4, and 5

- Reading Standards for Informational Text: Key Ideas and Details
- Reading Standards for Informational Text: Craft and Structure
- Reading Standards for Informational Text: Integration of Knowledge and Ideas
- Reading Standards for Foundational Skills: Phonics and Word Recognition
- Reading Standards for Foundational Skills: Fluency
- Writing Standards: Text Types and Purposes
- Writing Standards: Production and Distribution of Writing
- Writing Standards: Research to Build and Present Knowledge
- Speaking and Listening Standards: Comprehension and Collaboration
- Speaking and Listening Standards: Presentation of Knowledge and Ideas
- Language Standards: Conventions of Standard English
- Language Standards: Vocabulary Acquisition and Use

Grades 7–8

Reading Standards for Informational Text: Key Ideas and Details
Reading Standards for Informational Text: Craft and Structure
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Kindergarten

Counting and Cardinality
Operations and Algebraic Thinking
Number and Operations in Base Ten
Measurement and Data

Grade 2

Operations and Algebraic Thinking
Number and Operations in Base Ten
Geometry

Grade 4

Operations and Algebraic Thinking
Number and Operations in Base Ten
Number and Operations—Fractions

Grade 5

Operations and Algebraic Thinking
Number and Operations in Base Ten
Number and Operations—Fractions
Measurement and Data

Grade 7

The Number System
Statistics and Probability

Grade 8

Statistics and Probability

Language: English

Number of lesson plans: 17 science, 11 mathematics, and 7 reading language arts

Amount of time per lesson: 60–65 minutes

Estimated total time for lessons: 12–13 hours

Format: Available as a downloadable PDF

The lessons were designed to address the California Health Education Content Standards for nutrition and physical activity and grade-level standards for kindergarten and grades two, four, five, seven, and eight in science. Most grades have two or three lessons. Each lesson fosters student acquisition of health and science concepts and skills. Using easily accessible supplies and nutrition information, students question, collect, and examine data; explore and derive conclusions; and reflect on and evaluate results. They are also asked to apply their integrated learning to real-life choices. Lesson extension and assessment activities encourage students to influence the school nutrition environment positively.

What's inside: Each lesson includes an At-a-Glance matrix of content standards, instructor tips for success, nutrition facts, glossary, and resources. Lessons contain background, Web sites, and activity overview. Each lesson identifies content standards, steps for preparation, materials, and ideas for extension. Student worksheets and student assessment sheets are included.

Activity highlight: In lesson 8 for grade five, “Fiber Race Tract,” student teams compare the rates at which high-fiber versus low-fiber foods move through a simulated digestive system. Students then plan a menu to include more fiber daily.

Media Smart Youth: Eat, Think, and Be Active!



Publisher: National Institute of Child Health and Human Development

Web site: <https://www.nichd.nih.gov/health/education/Pages/index.aspx> (accessed September 30, 2016)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1b, 1f; 2–3, 6–8

Grades 7–8: 1a–b, 1f, 2–3, 6–8

Common Core State Standards – English Language Arts

Grades 6–8

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Language: English

Number of lesson plans: 10

Amount of time per lesson: 90 minutes (can be shortened)

Estimated total time for lessons: 15 hours

Format: Downloadable PDF teacher resource guide available for free

Designed for use in after school environments, this flexible resource uses examples of nutrition and physical activity to help youths learn about the connection between health and the media. Students gain skills to analyze, evaluate, and create media messages. Participants become critical and creative thinkers and learn how to make smart, positive choices about nutrition and physical activity every day. Topics include thinking about media, asking questions, defining what it means to be active, “nutrition know-how,” the power of advertising, and “super snacks.” The resource includes a new community service opportunity for teens and young adults interested in teaching youths about media’s influence on health.

What’s inside: A teacher resource guide, pre- and post-curriculum activities, media-questions poster, and a media disk. Lessons are formatted with total time, overview, objectives, materials needed, and preparation tips.

Activity highlight: In lesson 6, “Visiting a Grocery Store,” students visit a virtual grocery store. Activities include studying a food label, taking snack breaks, writing a song, conducting an Internet scavenger hunt, and engaging in playground games. Take-home ideas and recipes are included.

Nourish: Food + Community



Publisher: WorldLink, developed in partnership with the Center for Ecoliteracy

Web site: <http://www.nourishlife.org> (accessed September 30, 2016)

Target audience: Middle-school grades with applications for upper elementary and high school

Nutrition competencies:

Grades 5–6: 1g, 1h; 2, 4, 8

Grades 7–8: (1g), 1h; 2, 4, (6), 7, 8

Grades 9–12: (1h); 2, 4, 7, 8

Common Core State Standards – English Language Arts

Grades 6–8

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Common Core State Standards – Mathematics

Grades 6–8

Statistics and Probability

Language: English, with handouts in Spanish

Number of lesson plans: 6 (plus Action Projects)

Amount of time per lesson: 50–100 minutes

Estimated total time for lessons: 8–10 hours plus project time

Format: Downloadable PDF; DVD; short films online

Cost: Free guide; DVD free for a limited time to California K–12 classrooms

This instructional resource contains a curriculum guide and companion DVD that offers a rich set of resources to open a meaningful conversation about food and sustainability. The activities are interactive, well organized, and easy to follow. Overall objectives are listed in the curriculum. Students engage in the “story of food,” use critical-thinking skills to reflect on current food practices and explore more sustainable ones, and link their learning to relevant action. The activities can be used in any sequence. The Nourish film traces the relationship to food from a global perspective to personal action steps. The DVD contains a half-hour PBS special and 11 short films, featuring author Michael Pollan, British chef Jamie Oliver, pediatrician Dr. Nadine Burke, Edible Schoolyard founder Alice Waters, and others. The Nourish curriculum and a companion DVD may be used in social studies, science, health, or English classes. A chart of national standards identifies correlations by activity. A correlation to California standards is available online.

What’s inside: The curriculum and DVD include a viewing guide, six learning activities, suggestions for action projects, student handouts (available in English and Spanish), bibliography, and glossary. Activity themes include The Story of Food; Seasonal, Local Food; Food Traditions; Food and Ecosystems; Analyzing Food Ads; and School Lunch Survey. Each activity contains an essential question, background information, a list of required materials, estimated time, vocabulary, preparation guidelines, and directions for the activity, as well as assessment and extension ideas. Additional short films are available online.

Activity highlight: In Activity 2, “Seasonal, Local Food,” students define what a food “in season” means and discuss two foods brought into the classroom—one that is in season and one that is not. The class may engage in a tasting, and students can generate descriptive adjectives of the food. Students can also draw a circle with a 150-mile radius around their community and discuss what “local food” means. They make a “seasonal circle” and resource booklet to help them and their families find local, seasonal food in their community. The curriculum includes Nourish Action Projects with directions for choosing, planning, implementing, and reflecting on projects that could be the foundation for project-based learning activities.

Nutrition Pathfinders



Publisher: Dairy Council of California

Web site: <http://np.dairycouncilofca.org> (accessed September 20, 2010)

Target audience: Grades 4–5

Nutrition competencies:

Grades 3–4: 1a–d, 1f–g, 2–8

Grades 5–6; 1a–c, 1d), 1e–f, (1g), 2–3), (4), 5–8

Common Core State Standards – English Language Arts

Grades 4–5

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Writing Standards: Range of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 4–5

Operations and Algebraic Thinking

Number and Operations in Base Ten

Number and Operations—Fractions

Measurement and Data

Geometry

Statistics and Probability

Language: English and Spanish

Number of lesson plans: 7 lessons for grade 4 and 7 lessons for grade 5

Amount of time per lesson: 40 minutes

Estimated total time for lessons: 4.7 hours

Format: Hard copy

Cost: Free for California teachers; available for purchase by others

This curriculum provides a range of lessons that focus on fundamental concepts about healthy eating and physical activity. The lessons foster the development of personal responsibility for making healthy diet and lifestyle choices that promote classroom achievement and lifelong good health. Lessons support standards in physical education, English language arts, and mathematics.

What's inside: A teacher resource guide and student worksheets as well as a companion Web site are included. Also provided is a family newsletter in Spanish and English.

Activity highlight: In lesson 2 for grade five, students explain the importance of eating balanced meals and drinking adequate fluids every day. They analyze sample meals based on their prior knowledge of food groups and nutrients. Students then plan balanced meals and practice applying the knowledge to other lessons in the series.

Nutrition to Grow On



Publisher: California Department of Education

Web site: <https://www.cde.ca.gov/ls/nu/he/nrttogrow.asp> (accessed September 20, 2016) **Target audience:** Grades 4–6

Nutrition competencies:

Grade 4: 1a–c, 1f–h, 2–8

Grades 5–6: 1a–c, 1f–h, 2–8

Common Core State Standards – English Language Arts

Grades 4–6

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Reading Standards for Foundational Skills: Phonics and Word Recognition

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Range of Writing

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 4–6

Operations and Algebraic Thinking

Number and Operations—Fractions

Measurement and Data

Statistics and Probability

Language: English

Number of lesson plans: three units with three lessons for each grade level

Amount of time per lesson: 1–1.5 hours

Estimated total time for lessons: 9 hours

Format: Order print copies or download lessons from the Web site.

Cost: PDF available free of charge; print available for purchase

The curriculum directly links gardens and nutrition education. The curriculum uses gardens to integrate disciplines (science, mathematics, language arts, history, environmental studies, nutrition, and health) while reinforcing the California academic content standards. Lessons are sequential and designed to teach children and their families about nutrition; each lesson relates to a garden activity and can be taught independently. The lessons focus on nutrition and gardening, essential nutrients, MyPlate, and food math, and food labels are included with additional activities and optional snack activities. Outdoor activities center on gardening and farming to teach concepts and objectives.

What's inside: Each lesson includes a brief review, icebreaker, discussion questions, and a garden activity, as well as additional activities: thinking of snack ideas, conducting research, and creating food diaries. Quizzes are built in, and Journal Prompts are suggested. The curriculum also includes background information for teachers, assessment ideas, and family newsletters.

Activity highlight: Lesson 2, “Nutrients We Need,” includes a review of the previous lesson, discussion about nutrients that humans and plants need, and an activity, “nutrient sandwich.” Also includes a handout, nutrient word, gardening activity with a plastic bottle and worms, and additional activities such as making a snack or “edible worm bottles,” or using photo cards that display fresh fruits and vegetables.

Nutrition Voyage: The Quest to Be Our Best



Publisher: United States Department of Agriculture (USDA), TEAM Nutrition

Web site: <http://www.fns.usda.gov/tn/nutrition-voyage-quest-be-our-best> (accessed September 20, 2016)

Target audience: Grades 7–8

Nutrition competencies: Grade 7–8: 1b–c, 1f–h, 2–3, 5–8

Common Core State Standards – English Language Arts

Grades 7–8

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Common Core State Standards – Mathematics

Grades 7–8

Statistics and Probability

Language: English

Number of lesson plans: 18, three units with three lesson for each grade level

Amount of time per lesson: 40 minutes

Estimated total time for lessons: 12 hours

Format: Order print copies; download free of charge from Web site

This resource gives teachers an opportunity to take students on a journey to school wellness. The 18 lessons provide students with opportunities to investigate, participate in a challenge, evaluate, and reflect on their nutrition and physical activity behaviors. Activities include conducting a school survey, becoming an agent of change, finding fitness, and consuming locally grown fresh fruits and vegetables. Each lesson has some project-based learning components, such as collecting and evaluating diet and physical activity data from classmates and the student body. The students then brainstorm ideas to address problems and design campaigns to address the issues they identify.

What's inside: This resource includes standards alignment with science, mathematics, and reading language arts; the time required; supplies; lesson overview; student objectives; and student worksheets.

Activity highlight: In “Backpack Full of Snacks,” students learn to evaluate the snack options at school by using the Nutrition Facts label and the Dietary Guidelines for Americans. They use mathematical analyses to evaluate the most nutritious snacks available at school and think critically about how the school could offer healthier snack choices. By the end of the lesson, students better understand what constitutes a healthy snack and will have made a direct impact on their school environment.

Planet Health



Publisher: Harvard School of Public Health – Health Prevention Research Center

Web site: <http://www.hsph.harvard.edu/prc/projects/planet/> (accessed September 20, 2016)

Target audience: Middle-school students

Nutrition competencies: Grades 7–8: 1a–c, 1f, 2–8

Common Core State Standards – English Language Arts

Grades 6–8

Reading Standards for Literature and for Informational Text: Key Ideas and Details
Reading Standards for Literature and Informational Text: Craft and Structure
Reading Standards for Literature: Range of Reading and Level of Text Complexity
Reading Standards for Informational Text: Integration of Knowledge and Ideas
Reading Standards for Informational Text: Range of Reading and Level of Text Complexity
Writing Standards: Text Types and Purposes
Writing Standards: Production and Distribution of Writing
Writing Standards: Research to Build and Present Knowledge
Speaking and Listening Standards: Comprehension and Collaboration
Speaking and Listening Standards: Presentation of Knowledge and Ideas
Language Standards: Conventions of Standard English
Language Standards: Knowledge of Language
Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grade 6–7

Ratios and Proportional Relationships
The Number System
Expressions and Equations
Statistics and Probability

Grade 8

Expressions and Equations
Statistics and Probability

Language: English

Number of lesson plans: 30–32

Amount of time per lesson: 1–1.5 hours

Estimated total time for lessons: 35 hours

Format: Hard copy with online resources

Cost: \$66.00 (Check current pricing with publisher)

This interdisciplinary curriculum uses math, science, language arts, physical education, and health as a platform to teach students about the importance of nutrition and physical activity. It encourages students to reduce screen time and increase consumption of fruits and vegetables. Lessons use investigations, cooperative learning, decision making, and goal setting to build student skills in choosing an active lifestyle and healthful food. The book provides access to a separate Web site that offers additional resources and training materials for teachers.

What's inside: 30 physical education micro-units; 32 classroom lessons; fitness self-assessment tool for students; CD-ROM

Activity highlight: Lesson 11, “Problem Solving: Making Healthy Food Choices,” focuses on types of fat in the diet and highlights where and how students can choose foods with healthy fat. Students work cooperatively to solve problems based on concepts taught in an earlier lesson. They also review five steps of problem solving, work in small groups to analyze a menu from a fast-food restaurant, use math skills to determine food needs, and debrief about the activity. Extension activities include creating, maintaining, and analyzing a food log and going to a shopping mall to record menu items offered at fast-food restaurants.

ReThink Your Drink—High School Lessons



Publisher: California Department of Public Health, Nutrition Education Obesity Prevention

Web site: <https://www.cdph.ca.gov/programs/CCDPHP/DCDIC/NEOPB/Pages/RethinkYourDrink.aspx>(accessed September 20, 2016)

Target audience: Grades 9 to 12

Nutrition competencies: Grades 9–12: 1b, 1f, 2–3, 5–7

Common Core State Standards – English Language Arts

Grades 9–10 and grades 11–12

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Writing Standards: Text Types and Purposes

Speaking and Listening Standards: Comprehension and Collaboration

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 9–10 and grades 11–12

Statistics and Probability

Language: English

Number of lesson plans: 3 lessons with multiple activities, 7 activities total

Amount of time per lesson: 40–105 minutes

Estimated total time for lessons: 8.6 hours

Format: Hard copy and downloadable free from the Web site.

The curriculum is based on the essential nutrition concepts and skills outlined in the California Health Education Content Standards and the California nutrition competencies. These lessons incorporate nutrition and physical activity recommendations from the United States Department of Agriculture's and Department of Health and Human Services' Dietary Guidelines for Americans, 2010 and the 2008 Physical Activity Guidelines. The guidelines emphasize the importance of balancing caloric intake with physical activity. One significant recommendation includes limiting caloric intake from soda, energy, and sports drinks—a major source of added sugar and calories in the American diet.

What's inside: Teacher background, lesson plans, alignment with the California Health Education Content Standards and the California nutrition competencies, student worksheets, and materials for activities are included. Tips for instructional success, guidelines, fact sheets, and feedback forms are also provided.

Activity highlight: In lesson one, “What’s in Your Drink?” students go on a Nutrition Facts scavenger hunt at home to record information from food labels and bring their results back to class to compare the amount of sugar in products.

Serving Up MyPlate: A Yummy Curriculum



Publisher: United States Department of Agriculture

Web site: <http://www.fns.usda.gov/tn/serving-myplate-yummy-curriculum> (accessed September 20, 2016)

Target audience: Grades 1 and 2, grades 3 and 4, grades 5 and 6

Nutrition competencies:

Grades 1–2: 1b, 1c, 1e, 1f, (5), 7

Grades 3–4: 1a–c, 1e–f, (5), 7

Grades 5–6: 1a–d, (1e), 1f, (1g–h), 2–8

Common Core State Standards – English Language Arts

Reading Standards for Foundational Skills: Print Concepts

Reading Standards for Foundational Skills: Fluency

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Writing Standards: Research to Build and Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Vocabulary Acquisition and Use

Common Core State Standards – Mathematics

Grades 1 and 5

Measurement and Data

Grade 2

Number and Operations in Base Ten

Measurement and Data

Grade 3

Number and Operations—Fractions

Grade 4

Number and Operations in Base Ten

Measurement and Data

Language: English, Spanish, Chinese, and French

Number of lesson plans: Nine lessons with three sessions each, for a total of 27 sessions

Amount of time per lesson: 30 to 60 minutes per session

Estimated total time for lessons: 13.5 to 27 hours for all lessons

Format: Print copies can be ordered from the publisher or downloaded from the Web site.

Cost: Free

This collection of classroom materials helps elementary school teachers integrate nutrition education into math, science, English language arts, and health. This curriculum introduces the importance of eating from all five food groups using the MyPlate icon and a variety of hands-on activities. Students also learn the importance of physical activity to good health.

What's inside: Each grade level includes a teacher's guide with three inquiry-driven lessons that help children discover nutrition, explain their understandings, and reflect upon their experiences; activities with original songs that help students learn about healthy choices in an engaging and memorable way; posters show the MyPlate icon and foods in the five food groups; parent handouts to reinforce the class lessons at home, as well as additional games and resources.

Activity highlight: In the fifth-grade lesson "Decisions, Decisions," students identify ways to limit the consumption of solid fats, added sugars, and sodium; read, compare, and analyze Nutrition Facts labels to determine which snack is a healthier alternative; and summarize the benefits of limiting the consumption of solid fats, added sugars, and sodium.

Shaping Up My Choices



Publisher: Dairy Council of California

Web site: <http://www.healthyeating.org/Schools/Classroom-Programs/3rd-Grade.aspx> (accessed September 20, 2016)

Target audience: Grade 3

Nutrition competencies: 1a–c, 1f–g; 2, 8

Common Core State Standards – English Language Arts

Grade 3

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Reading Standards for Informational Text: Range of Reading and Level of Text Complexity

Language: English and Spanish

Number of lesson plans: 10

Amount of time per lesson: 30–60 minutes

Estimated total time for lessons: 7.5 hours

Format: Hard copy

Cost: Free for California teachers; available for purchase by others

This resource teaches students the skills they need to apply problem-solving, reasoning, and critical thinking techniques to their food choices. The program aligns with education standards, uses a proven behavior-change model, and helps students develop healthy eating habits that will help them succeed in the classroom and beyond.

What's inside: Teacher guide; student workbooks; poster; transparencies; and a CD-ROM with vocabulary cards, color master documents, and food pictures. The curriculum also includes cafeteria connections in the extension activities, and home connections.

Activity highlight: Lesson 9, “Test Your Beverage Choice,” presents students with healthier beverage choices that they can make after physical activity or with any meal/snack. Pre- and post-assessment activities and guidance for presenting the lesson with the whole class together with individual work are provided to support student knowledge gain and behavior change.

S.M.A.R.T. (Student Media Awareness to Reduce Television): A Curriculum for Youth



Publisher: Stanford Health Promotion Research Center

Web site: <http://notv.stanford.edu> (accessed September 20, 2016)

Target audience: Grades 3 and 4

Nutrition competencies: Grades 3–4: 1b, 1f, 2–8

Common Core State Standards – English Language Arts

Reading Standards for Literature: Key Ideas and Details

Writing Standards: Text Types and Purposes

Writing Standards: Production and Distribution of Writing

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Common Core State Standards – Mathematics

Measurement and Data

Language: English

Number of lesson plans: 16

Amount of time per lesson: 25–60 minutes

Estimated total time for lessons: 12 hours

Format: Print copies available for purchase. Sample lesson available for free download.

Cost: \$199.00 or check the Web site for current pricing.

Vast scientific literature indicates that television viewing has substantial negative effects on children’s health and behaviors. Several key research studies conducted at the Stanford Prevention Research Center have identified effective methods to decrease children’s TV watching and have demonstrated the real benefits of cutting back on TV. This curriculum includes lessons to motivate students to monitor their viewing habits and to set a goal to reduce viewing. Lessons promote independent thinking and cooperative problem solving, and students use their learning, skills, and experience to tackle real-life situations. Students are recognized and rewarded for their efforts as the classroom, school community, and community work together to support limits on screen time viewing.

What's Inside: This kit includes a teachers manual and CD ROM, sample calendar for implementing the lessons and activities, student worksheets, support materials, research on the importance of reducing screen time, and optional activities with puzzles and classroom activities.

Activity Highlight: In lesson 1, "Awareness of TV Watched Yesterday," students become aware of how much television they watch and graph the time the class spends watching television. Students decipher a word scramble, calculate the amount of time they watch television or screen time they have in one day, graph the television or screen viewing time for the class, and discuss the graph and their viewing habits. At the end of the year, students reflect upon this graph to look for reductions in TV viewing.

SuperTracker Lesson Plans for High School



Publisher: United States Department of Agriculture, Team Nutrition

Web site: <https://www.choosemyplate.gov/teachers> (accessed September 20, 2016)

Target audience: Grades 9–12

Nutrition competencies: Grades 9–12: 1b–1d, 1f; 2, 3, 6, 7

Common Core State Standards – English Language Arts

Reading Standards for Informational Text: Key Ideas and Details

Reading Standards for Informational Text: Craft and Structure

Reading Standards for Informational Text: Integration of Knowledge and Ideas

Writing Standards: Text Types and Purposes

Writing Standards: Research to Build Present Knowledge

Speaking and Listening Standards: Comprehension and Collaboration

Speaking and Listening Standards: Presentation of Knowledge and Ideas

Language Standards: Conventions of Standard English

Language Standards: Knowledge of Language

Language: English

Number of lessons: 6

Amount of time per activity: 40–45 minutes

Estimated total time for all lessons: 4 hours

Format: Free download

This set gives high school students the tools to make decisions that positively influence their health and wellness. The United States Department of Agriculture Center for Nutrition Policy and Promotion developed the lesson plans based on the interactive SuperTracker tool. SuperTracker is a comprehensive, state-of-the-art online food and physical activity tracking resource. Based on the Dietary Guidelines for Americans, the resource assists students to set nutrition and physical activity goals and track their food and physical activity from a database of about 8,000 foods and 900 physical activities. They can build, track, and analyze personal recipes; track their weight; sign up for tips and support; and share successes with friends and family by using social media.

What's inside: Six lesson plans provide hands-on opportunities for students to analyze their food intake and discuss ways to make healthier choices. The lesson plans can be used in order or out of sequence and individually. Each lesson provides preparation steps, learning objectives, teaching instructions and a student handout. Students track their snacks, create a personalized eating plan, keep a three-day food record, practice building healthy meals, and learn to balance calories from food they eat and calories burned off by physical activity. The SuperTracker activities give students recommendations, tools, and practice to reflect on their personal eating style and make goals for improvement.

Activity highlight: In lesson 4, “Build Healthy Meals,” students watch a video on how to use the Food Tracker. Students enter foods and beverages to create a daily menu with breakfast, lunch, dinner, and snacks. As they enter their choices, the Food Tracker notes whether they meet all the food group targets within their daily calorie allowance. Students will compare their daily meal plan with what they typically eat and complete the Build Healthy Meals handout to reflect on what they have learned.

Appendix C

Resources for Enhancing Nutrition Education

Nutrition education programs may be enriched by expanding connections with

- (1) the cafeteria,
- (2) Farm to School programs and instructional gardens,
- (3) food-tasting activities,
- (4) cooking experiences, and
- (5) core curricula.

Integrating a nutrition education program with core subjects during the day and in after school programs can further enhance what students are learning.

1. CAFETERIA CONNECTIONS

The school cafeteria is an ideal setting for students to practice healthy eating. Coordinating the school food-service program with classroom lessons allows students to apply critical-thinking and decision-making skills they learn in the classroom. Teachers can link their classrooms with the cafeteria, and the school's food-service director or cafeteria manager can link the meal service with classroom instruction. When planning a nutrition education program, teachers can be sure that both of these connections will broaden students' application of nutrition education.

Linking the Classroom with the School Nutrition Program

The following ideas for teachers may help students to make connections:

- Request a guided tour of the cafeteria, identify food groups represented in the meal choices, and discuss the importance of eating foods from each group. Have student report on their experience.
- Invite the school nutrition director or manager to visit a class and talk about the foods served in the cafeteria.
- Consult the food service director on food safety issues when classroom cooking experiences are planned. The food service director is the district's designated expert on food safety.
- Work with and purchase foods for nutrition education lessons from the School Nutrition Services program.
- Coordinate student projects or poster contests in the school cafeteria that promote the nutritional value of school menu items served, including the salad bar.
- Share student artwork on cafeteria bulletin boards or menus or at food stations.

Example of how a fourth-grade teacher can link nutrition and history–social science with the cafeteria:
Students identify food groups represented on the lunch menu and suggest substitutes within the same food groups that California Native Americans or people living in the early California missions might have eaten.

- Encourage teachers and administrative staff to subscribe to ChooseMyPlate e-mail nutrition announcements and tips.
- Include posters in the classroom with key nutrition messages or have students develop posters and messaging related to United States Department of Agriculture (USDA) ChooseMyPlate quarterly themes.
- Institute a family night where school nutrition personnel can showcase how knowledge in the classroom is applied at mealtimes.
- Include lessons and activities for students to learn about school meal and menu planning requirements and how meals contribute to student health.
- Invite parents and guardians to share their favorite recipes or to speak about foods from their cultural background.
- Start a school garden. Students love to plant, care for, harvest fruits and vegetables, and enjoy eating produce that they have grown. This activity fosters an appreciation for the process of growing produce. Ask the food service staff to serve the foods grown by the students in the cafeteria.
- Invite a local farmer to conduct a classroom presentation.

Linking the School Nutrition Program with the Classroom

The following ideas for food-service directors or cafeteria managers may help students to make connections between food served in the cafeteria and classroom education.

- Provide meals that are tasty and appealing to students and that meet USDA nutrition standards and the Dietary Guidelines for Americans.
- Include posters and messaging related to USDA ChooseMyPlate quarterly themes. Encourage school nutrition staff to subscribe to ChooseMyPlate e-mail nutrition announcements and tips.
- Support classroom lessons by featuring foods that illustrate key messages from the classroom; for example, serve whole-wheat rolls to reinforce a classroom lesson on whole grains or fiber.
- Offer expertise in food safety to teachers planning classroom cooking.
- Coordinate menus with school events; for example, serve foods from other countries on an “international day.”
- Decorate the cafeteria with commercial educational posters or ones created by students.
- Organize a classroom door contest in which students decorate their doors with nutrition education themes.
- Post the nutritional content of foods served.
- Coordinate activities with classroom and physical education teachers and with other staff.

- Involve students and families in the planning of school menus.
- Ask older students to compare the prices of, and nutrients in, school meals with fast-food restaurant menus.
- Offer meals in the cafeteria that reflect the cultural diversity and preferences of students.
- Participate in training sessions on nutrition education and on how to market school meals.
- Invite parents to lunch and give them information about the nutritional value of the meal.
- Post interesting and relevant nutritional information in the serving area so that students can read it while waiting in line.
- Offer samples of new fruits and vegetables to students who wait in the cafeteria line, or use a new way of serving foods while providing nutrition information.

Example of how a cafeteria manager can link nutrition with the classroom: *The manager identifies the food groups associated with the foods offered on the lunch menu and at serving stations. He or she posts a cafeteria bulletin board to display the foods and/or photos of students involved in related nutrition education activities. If possible, the cafeteria should prepare meals that feature produce grown in instructional school gardens.*

Useful Nutrition and School Nutrition Services Web Sites	
ORGANIZATION	WEB SITE
School Nutrition Association offers “Keys to Excellence for Nutrition Education” that can help food service directors coordinate with classrooms.	http://www.schoolnutrition.org/keys/ (accessed October 14, 2016)
Bridges to Wellness cafeteria-to-classroom lessons for grades 5–12	docs.schoolnutrition.org/files/anc2007presentations/Tami_Cline-Bridges_to_Wellness.ppt (accessed October 14, 2016)
CANFIT Snack Guide for After School Programs	http://canfit.org/downloads/#after_school_resources (accessed October 14, 2016)
Eat Well & Keep Moving cafeteria connections include menu cards to review with students.	http://www.eatwellandkeepmoving.org (accessed October 14, 2016)
Farm to School, Seven Generations Ahead	https://sevengenerationsahead.org/schools/fresh-from-the-farm (accessed October 14, 2016)
Food Clip Art	http://www.clipartguide.com/_search_terms/food.html (accessed October 14, 2016)
National Dairy Council resources	http://www.nationaldairycouncil.org (accessed October 14, 2016)
Nutrition.gov provides easy, online access to government information on food and human nutrition for consumers.	http://www.nutrition.gov/ (accessed October 14, 2016)

2. FARM TO SCHOOL/GARDEN-ENHANCED NUTRITION EDUCATION WEB SITES

Farm to School and garden-enhanced nutrition education introduce children—through direct experience—to the pleasures of fresh, seasonal, locally grown produce. By exploring local produce and by cooking seasonal foods in class, students learn about the ecological, financial, and social benefits of sustainable agriculture and about the many different types of produce available in California. The following Web sites feature useful resources.

Useful Nutrition and School Nutrition Services Web Sites	
ORGANIZATION	WEB SITE
California Farm to School Task Force	http://www.cafarmtoschool.org (accessed October 14, 2016)
California School Garden Network	http://www.csgn.org/ (accessed October 14, 2016)
Center for Ecoliteracy	http://www.ecoliteracy.org/downloads/rethinking-school-lunch-guide (accessed October 14, 2016)
Farm to School Extension and Research Program, Cornell University	http://farmtoschool.cce.cornell.edu/ (accessed October 14, 2016)
Farm to School Urban and Environmental Policy Institute at Occidental College	http://www.oxy.edu/urban-environmental-policy-institute/programs/food/california-farm-school (accessed October 14, 2016)
Kids Gardening (National Gardening Association)	http://www.kidsgardening.org/ (accessed October 14, 2016)
Local Harvest	http://www.localharvest.org/ (accessed October 14, 2016)
National Gardening Association (NGA)	http://assoc.garden.org/ (accessed October 14, 2016)
USDA Healthy Meals Resource System (HMRS)	http://healthymeals.nal.usda.gov (accessed October 14, 2016)
USDA Know Your Farmer, Know Your Food	http://www.usda.gov/wps/portal/usda/knowyourfarmer?navid=knowyourfarmer (accessed October 14, 2016)

3. FOOD TASTINGS IN THE CLASSROOM

Food-tasting activities are a great way to introduce students to nutrition education and to cooking in the classroom. Tastings engage students and are easy for teachers to organize. The district's food safety expert and the food service director should be consulted to ensure a fun but safe experience. The California Department of Public Health and California Department of Education (CDE) developed "Harvest of the Month" materials that are a useful resource for classroom tastings. The materials may be downloaded at <http://harvestofthemonth.cdph.ca.gov/Pages/Downloads.aspx> (accessed October 14, 2016).

4. COOKING IN THE CLASSROOM

Nutrition education takes on a completely new life when combined with cooking projects. Teaching children about nutrition may be accomplished through the most direct route: through the stomach. Children are more willing to try new, healthful foods when nutrition principles are taught in conjunction with classroom cooking. Cooking in school can be fun for students, and cooking activities that relate to classroom lessons make concepts relevant to students.

Why Cook with Kids?

Children are becoming more self-reliant at earlier ages; they are often the caretakers of their own nutrition. In a recent survey, 87 percent of the fourth- through eighth-graders sampled said they cook or make some of their own meals. Eighty-three (83) percent said they sometimes prepare their own snacks, and 80 percent reported that they sometimes cook or make their own breakfast. Children who do not know how to cook often rely on prepackaged foods of questionable nutritional quality. With the increasing popularity of convenience foods, some food experts worry that we are raising a generation of noncooks, skilled only at using a microwave oven to heat food.

For this growing number of youngsters, there are many opportunities for "teachable moments" that can strengthen food-related life skills. Nutrition education can be effective when it focuses on practical concepts such as sanitation, safe food handling, and basic food preparation. (Seek advice from the district's food service director for tips on how to ensure that the students and adults handle the food safely.) Cooking projects can increase children's confidence, expose them to new and healthful foods, stimulate their curiosity, and motivate them to continue cooking as they move through life.

The following resources provide student-tested recipes for classroom cooking and information on handling food safely:

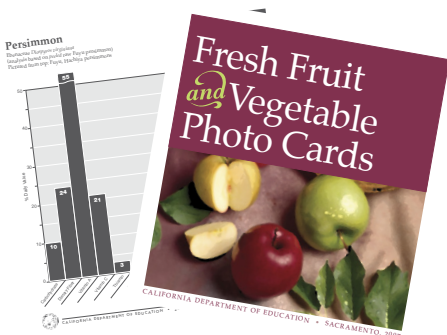
CDE Classroom Cooking: <http://www.cde.ca.gov/ls/nu/he/cookwithkids.asp> (accessed October 14, 2016)

Kids Cook Farm-Fresh Food: <http://www.cde.ca.gov/ls/nu/he/documents/kidscookcomplete.pdf> (accessed October 14, 2016)

Cook with Kids!

The California Department of Education provides online trainings, including Cook with Kids! This free, 30-minute training is accessible any time, and participants receive a certificate of completion after passing a brief quiz. They learn how cooking with children benefits their health and school performance. There are four simple steps to plan, prepare, and present a successful cooking activity for a classroom or after school program. A cooking event planner, key tips, and resources to keep students safe while cooking are included. The online training module, PDF of the PowerPoint, resource list, and handouts are at <https://www.cde.ca.gov/ls/nu/he/olt.asp> (accessed October 14, 2016).

Fresh Fruit and Vegetable Photo Cards



Another good resource for classroom cooking and tasting activities is a set of photo cards displaying fresh fruits and vegetables. The CDE's Fresh Fruit and Vegetable Photo Cards consist of 140 color photographs suitable for framing. The front of each fully laminated, 8¾ inch by 9½ inch card displays a color photograph of a fruit or vegetable with its name in English and Spanish. On the reverse is a bar graph displaying an analysis of nutrients, suggested serving sizes, and other useful information.

The set includes ideas using the cards with students of all ages. Cost (as of April 28, 2016): \$50 plus shipping and handling. To order, contact the CDE Press Sales Office at sales@cde.ca.gov or 916-445-1260 or visit the CDE Press Web site at <http://www.cde.ca.gov/re/pn/rc/ap/pubdisplay.aspx?ID=001650> (accessed October 14, 2016).

5. RESOURCES FOR INTEGRATING NUTRITION INTO CORE CURRICULA

The following resources provide strategies for integrating nutrition into core subject curricula. They emphasize the use of a sequential, comprehensive approach based on core nutrition concepts.

Note: The core subject standards of other states are different from California's state-adopted standards, so these resources may not be aligned with California's standards. Before using a lesson plan or activity designed by another state, California educators should determine whether the core subject standard being addressed covers content found in the California standards.

Food for Thought (North Carolina Nutrition Services)

Food for Thought is a K–5 curriculum that teaches the nutrition objectives of North Carolina's Healthful Living Standard Course of Study. It integrates the concepts of healthy eating and physical activity into math and English–language arts. Effective nutrition education can motivate and enable students to adopt healthful dietary patterns and healthy lifestyles. <http://www.eatsmartmovemorenc.com/FoodForThought/FoodForThought.html> (accessed October 14, 2016)

Recipe for Success: Integrating Academics into Nutrition Online Training (California Department of Education)

This free, 30-minute training is accessible any time. Participants receive a certificate of completion after passing a brief quiz. The module presents ideas for seamless integration of nutrition education with the core academic standards. Participants learn to use children’s books with healthy themes to support nutrition competencies, and the mathematics and science standards. Featured literature-based activities include classifying and categorizing various foods, comparing/contrasting nutritional food values, using fractions and measurement in food recipes. This module was developed with funding from the California Department of Education, After School Division. Access the online training module, PDF of the PowerPoint, resource list, and handouts at <http://www.cde.ca.gov/ls/nu/he> (accessed May 9, 2017).

Using the integrated lesson planning template helps teachers make authentic connections to the CCSS. The integrated lesson planning template walks teachers through alignment of the nutrition competencies with the CCSS. It breaks down lessons into five key components: introduction, modeling, guided practice, independent practice, and closing.

The table below shows ideas for an integrated lesson. For more information on integration, see “Integrating Nutrition into Other Subjects” in section II, “Nutrition Competencies.”

Nutrition Competency	Integration Idea
<p>Essential Nutrition Concepts: Know the relationships among nutrition, physiology, and health.</p>	<p>Kindergarten ELA <i>CCSS: RL.K.3, RL.K.9, W.K.1, SL.K.2*</i></p> <ul style="list-style-type: none"> <i>RL.K.3: With prompting and support, identify characters, settings, and major events in a story.</i> <i>RL.K.9: With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.</i> <p>Use literature to teach about essential nutrition concepts, as in this “Breakfast for Frances” lesson that teaches about the components of a healthy breakfast through the book <i>Breakfast for Frances</i>. After a read-aloud, students identify the characters in the story and what they ate for breakfast. Students use the characters’ breakfasts as a catalyst for learning about the components of a healthy breakfast.</p>
<p>Analyzing Nutrition Influences: Analyze internal and external factors influencing food choices and health outcomes.</p>	<p>Grade 7 Math <i>CCSS: 7.SP.2†</i></p> <ul style="list-style-type: none"> <i>7.SP.2: Use data from a random sample to draw inferences about a population with an unknown characteristic of interest.</i> <p>Conduct surveys to analyze nutrition influences and display data, as in this “Power Drinks” lesson, where students make scatter plots to investigate if a correlation exists between the number of sugary drinks consumed and number of cavities and a correlation between amount of milk consumed and cavities.</p>
<p>* RL.K.3 Reading literature, kindergarten, standard 3 W.K.1 Writing, kindergarten, standard 1 SL.K.2 Speaking and listening, kindergarten, standard 2</p> <p>† 7.SP.2 Grade 7, Statistics and Probability, standard 2</p>	

Nutrition Competency	Integration Idea
<p>Accessing Valid Nutrition Information: Demonstrate the ability to access and analyze nutrition information, products, and services and analyze the accuracy and validity of nutrition claims.</p>	<p>Grade 5 ELA <i>CCSS: RI.5.2, RI.5.3, RI.5.9, W.5.2, W.5.7, L.5.1, L.5.2*</i></p> <ul style="list-style-type: none"> • <i>W.5.2: Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</i> <p>Use informational texts for research purposes, as in this “Children’s Almanac for Healthy Eating” lesson, which asks students to research, interpret, and communicate choices around health-promoting food. After examining sample pages, students will each create an almanac page for a food from one of the five food groups.</p>
<p>Interpersonal Communication about Nutrition: Demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes.</p>	<p>High School Algebra II <i>CCSS: S-IC.1, S-IC.4†</i></p> <ul style="list-style-type: none"> • <i>S-IC.1: Understand statistics as a process for making inferences about population parameters based on a random sample from that population.</i> • <i>S-IC.4: Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.</i> <p>Survey random samples of people about their nutrition choices and analyze that data using knowledge of statistics. Generalize the information found out from the random sample to make inferences about the nutrition habits of the general population.</p>
<p>Decision Making for Nutrition Choices: Demonstrate the ability to use decision-making skills to enhance health.</p>	<p>Grade 4 Math <i>CCSS: 4.NBT.2, 4.NBT.4‡</i></p> <ul style="list-style-type: none"> • <i>4.NBT.2: Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.</i> • <i>4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.</i> <p>Use data to make nutrition decisions, such as making healthy beverage choices after analyzing the nutrition information of different beverages as in this lesson called “How Sweet is It?” Students use beverage data to make and interpret bar graphs showing how many teaspoons of sugar are in popular drinks.</p>
<p>Goal Setting: Demonstrate the ability to practice behaviors that reduce risk and promote health.</p>	<p>Grade 7 ELA <i>CCSS: RL.7.1, W.7.1, W.7.2§</i></p> <ul style="list-style-type: none"> • <i>RL.7.1: Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</i> • <i>W.7.1: Write arguments to support claims with clear reasons and relevant evidence.</i> <p>Read about and analyze typical food choices and set goals for healthy food choices, as in this “What’s for Lunch?” lesson about healthy lunch choices. After learning about lunch choices, students will pick one of three cooperative writing assignments to share what they learned.</p>

* RI.5.2 Reading informational text, grade 5, standard 2
RI.5.3 Reading informational text, grade 5, standard 3
RI.5.9 Reading informational text, grade 5, standard 9
W.5.2 Writing, grade 5, standard 2
W.5.7 Writing, grade 5, standard 7
L.5.1 Language, grade 5, standard 1
L.5.2 Language, grade 5, standard 2

† S-IC.1 Statistics: Making Inferences and Justifying Conclusions, standard 1
S-IC.4 Statistics: Making Inferences and Justifying Conclusions, standard 4

‡ 4NBT.2 Grade 4, Number and Base Operations in Base Ten, standard 2

§ RL.7.1 Reading literature, grade 7, standard 1
W.7.1 Writing, grade 7, standard 1
W.7.2 Writing, grade 7, standard 2

Nutrition Competency	Integration Idea
<p>Practicing Nutrition-Enhancing Behaviors: Demonstrate the ability to practice nutrition-related behaviors that reduce risk and promote health.</p>	<p>Grade 2 ELA <i>CCSS: RI.2.1, RL.2.2, W.2.2, SL.2.2*</i></p> <ul style="list-style-type: none"> • <i>RI.2.1: Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.</i> • <i>RL.2.2: Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.</i> <p>Use literature to teach about the importance of eating foods from all food groups, as in this “Dinner Buffet” lesson about the book <i>Stone Soup</i>. After reading the book, students will discuss the central message and be introduced to the five food groups. Students will collectively plan a collective dinner buffet that represents a balanced meal.</p>
<p>Health Promotion: Demonstrate the ability to promote and support personal, family, and community health.</p>	<p>High School ELA <i>CCSS: W.11–12.2†</i></p> <ul style="list-style-type: none"> • <i>W.11–12.2: Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</i> <p>Read about nutrition and healthy habits then write an informative piece that shares information about health-promoting behaviors with the community. This could be a brochure, script for a commercial, or text for a display at a community event.</p>
<p>* RI.2.1 Reading informational text, grade 2, standard 1 RL.2.2 Reading literature, grade 2, standard 2 † W.11–12.2 Writing, grades 11–12, standard 2</p>	

Using Project-Based Learning to Connect the California Nutrition Competencies and the Common Core State Standards

Although integrated lessons are a great way to introduce the nutrition competencies in the classroom, integrated projects allow students to go deeper into the content. Project-based learning can provide students with an opportunity to increase engagement through long-term study.

Project-based learning is an approach where students work for an extended period of time to investigate and respond to a relevant question, problem, or challenge. Through investigation, students learn real-world skills as they ask and answer questions. Project-based learning is a strategy for teaching the nutrition competencies that allows students to develop more in-depth knowledge of nutrition and how it connects to other subject areas, college, careers, and life.

Like integrated lessons, planning projects can save teachers time by teaching multiple subject areas simultaneously. When planning projects, teachers may find the Project-Based Learning template useful. They begin by thinking about one to three essential questions that students will investigate. Projects should culminate with performances of understanding that allow students to demonstrate what they have learned over the course of the project. To learn more about project-based learning, check out the training “Building 21st Century Skills Through Play and Project-Based Learning” [here](#).

The chart below shows ideas for project-based learning.

Project Name, Grade Level, and Subject	Nutrition Competencies	CCSS	Project Description
<p>What is healthy eating? Grade 1 ELA</p>	<p>Essential Nutrition Concepts: Know the relationships among nutrition physiology and health</p> <p>Accessing Valid Nutrition Information: Demonstrate the ability to access and analyze nutrition information, products, and services and analyze the accuracy and validity of nutrition claims</p> <p>Interpersonal Communication about Nutrition: Demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes</p>	<p>ELA: W.1.1, RI.1.1, RI.1.2, RI.1.7</p> <ul style="list-style-type: none"> W.1.1: Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure. RI.1.1: Ask and answer questions about key details in a text. 	<p>Essential Questions:</p> <ul style="list-style-type: none"> What is healthy eating? What does a day of healthy eating look like? <p>During the first part of the project, students begin by reading informational texts about food groups and different ideas about healthy eating. They ask and answer questions about what they read, taking notes about healthy eating.</p> <p>Students write opinion pieces on what they think healthy eating means. They then plan out what a day of healthy eating might look like to them. Students give each other feedback on their writing and their nutrition plans.</p> <p>Students test out their nutrition plans and report how well they followed them. As a culminating performance of understanding, students create informational brochures about healthy eating to share with others at school.</p>
<p>What Are the Chances? Grade 7 Math</p>	<p>Goal Setting: Demonstrate the ability to practice behaviors that reduce risk and promote health</p> <p>Decision Making for Nutrition Choices: Demonstrate the ability to use decision-making skills to enhance health.</p>	<p>Math: 7.SP.C.5, 7.SP.C.7</p> <ul style="list-style-type: none"> 7.SP.C.5: Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. 7.SP.C.7: Develop a probability model and use it to find probabilities of events. 	<p>Essential Questions:</p> <ul style="list-style-type: none"> How often do people eat the recommended servings of food groups? Can you predict how many people in a group will have eaten certain foods? <p>Students begin by reviewing the recommended servings of different food groups. They track how many servings of each food group they eat daily for one week, then come back together, and compare the data.</p> <p>Using the collected data, students develop a probability model that they can use it to determine the likelihood of people eating or not eating the recommended amount of each food group.</p> <p>Students apply their probability model to a larger group and report back on their findings. As a final performance of understanding, students use their findings to write an essay describing their nutrition goals for themselves and sharing goals for the broader community.</p>

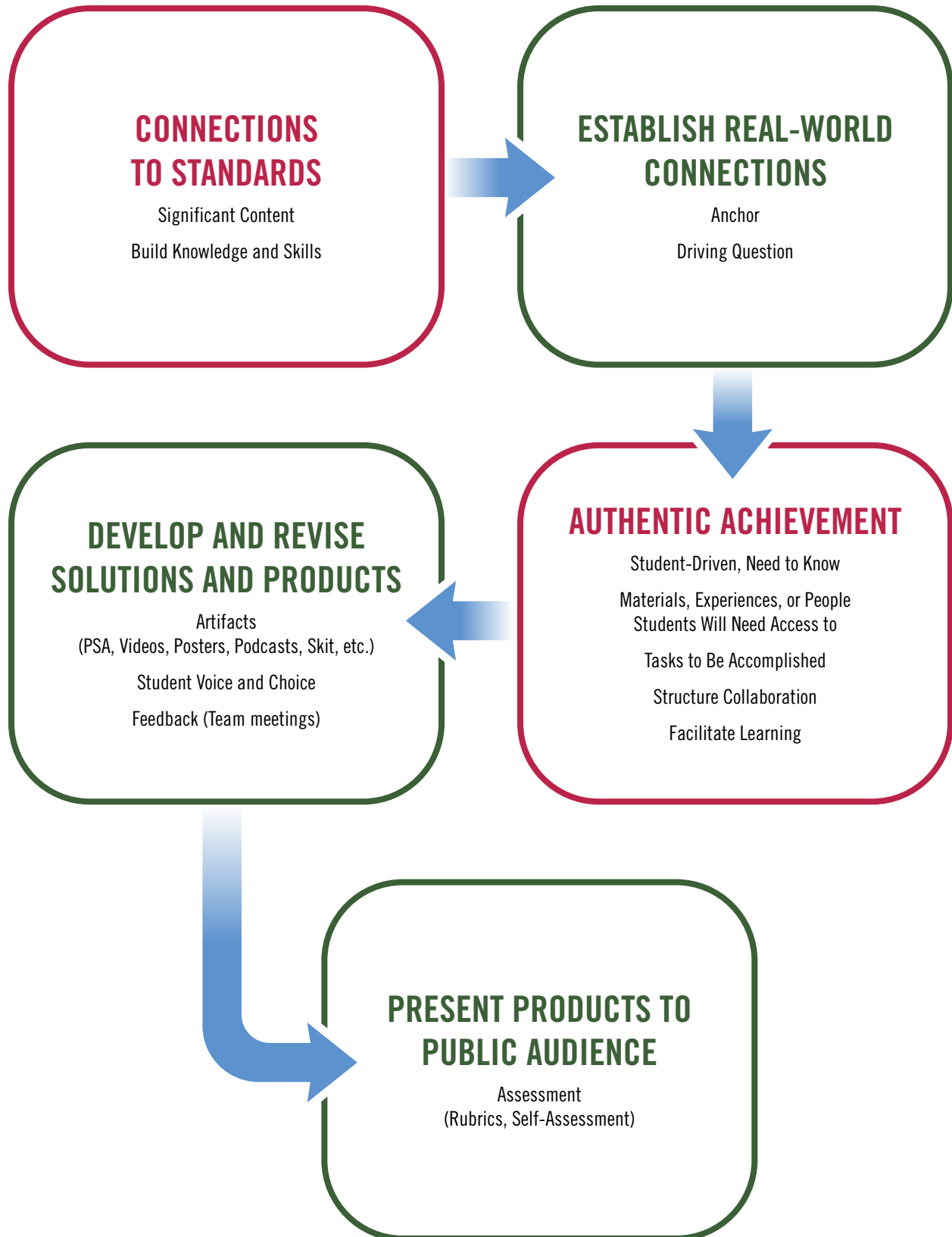
Project Name, Grade Level, and Subject	Nutrition Competencies	CCSS	Project Description
Everyone's Doing It Grade 10 ELA	Analyzing Nutrition Influences: Analyze internal and external factors influencing food choices and health outcomes Accessing Valid Nutrition Information: Demonstrate the ability to access and analyze nutrition information, products, and services and analyze the accuracy and validity of nutrition claims	ELA: W.9-10.7, W.9-10.9, RI.9-10.1 <ul style="list-style-type: none"> W.9-10.7: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem W.9-10.9: Draw evidence from literary or informational texts to support analysis, reflection, and research. RI.9-10.1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. 	Essential Questions: <ul style="list-style-type: none"> What messages do advertisements convey about healthy eating? How do those messages compare with nutrition recommendations? Students begin by analyzing a variety of food-related advertisements and identifying the messages conveyed. Students then read informational text on dietary guidelines and compare/contrast it with what they saw in the advertisements. When analyzing the advertisements, students examine how the advertisements use rhetorical devices (ethos, pathos, logos) to persuade consumers. As a final performance of understanding, students create their own advertisement that uses rhetorical devices to convince consumers to buy and eat healthy food.

Project-based learning involves five elements as shown in figure C.1, the Project-Based Learning Flowchart. The first step identifies the alignment of the Common Core State Standards with the nutrition competencies and students' knowledge and skills achieved through the lesson. Establishing Real-World Connections includes an *anchor* (see the glossary) that draws students' attention to a real-world issue.

The Driving Question is the meaningful issue or question that the groups work to solve. The Driving Question is often developed by the teacher in the beginning and later by the students as they become more practiced in project-based learning. Authentic Achievement is the step that brings the project groups together to identify what they need to know, assign group roles, and create a realistic timeline and approach to solve the problem or question. During this step, students are encouraged to brainstorm, collaborate, and take virtual or actual study trips to get more in-depth information related to the project.

Students are given a voice and choice throughout the process to build ownership and gain meaningful engagement as they Develop and Revise a Solution and Products. The group projects are presented in the class, to another class, to parents, or to a public agency to further develop speaking and listening skills and authenticity. Assessment is included during and at the end of the project to keep students on track and check their knowledge and skill development. Web 2.0 is a term that implies going beyond using technology to access information—learners actually contribute to new knowledge through collaboration and the use of technology. The sample Project-Based Learning Template combines these steps to demonstrate the careful planning necessary to make instruction successful.

Figure C1: Project-Based Learning Flowchart



Sample

PROJECT-BASED LEARNING: A PLANNING TEMPLATE

Name of Project:

What is healthy eating?

CONNECT LESSONS TO THE STANDARDS

Nutrition Competencies Addressed through the Lesson:

Essential nutrition concepts, including knowing the relationships among nutrition, physiology, and health

Accessing valid nutrition information: Demonstrate the ability to access and analyze nutrition information, products, and services and analyze the accuracy and validity of nutrition claims

Interpersonal communication about nutrition: Demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes

Common Core State Standards Addressed through the Lesson:

W.1.1: Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.

RI.1.1: Ask and answer questions about key details in a text.

ANCHOR

How do the nutrition competencies and CCSS work together in real life? Why is this project important to students? Provide an example of this and what motivates student curiosity and questions.

In real life, people read information about nutrition and make decisions about what they eat. Having literacy skills is critical to help students make informed decisions about healthy eating. This project will engage students because they will read real-world materials and become empowered to make nutrition choices for themselves.

DRIVING QUESTION

(Usually one question that students will investigate throughout the unit)

What is healthy eating?

AUTHENTIC ACHIEVEMENT

Tasks to be accomplished

Materials, experiences, or people students will need access to

During the first part of the project, students will begin by reading informational texts about food groups and different ideas about healthy eating. They will ask and answer questions about what they read, taking notes about healthy eating.

Students will write opinion pieces on what they think healthy eating means. They will then plan what a day of healthy eating might look like to them. Students give each other feedback on their writing and nutrition plans. Students will test out their nutrition plans and report how well they followed them.

DEVELOP AND REVISE SOLUTIONS AND PRODUCTS

Anticipated artifacts (see glossary for definition) or results (e.g., game, dinner for parents, cookbook, Web page, video, skit, Public Service Announcement, guidelines, poster, report)

Notetaking papers

Opinion pieces

Nutrition plans

Informational brochures

PRESENT PRODUCTS TO PUBLIC AUDIENCE

ASSESSMENT

Performance of understanding—How will you assess (e.g., rubrics, peer assessment, self-assessment) what students learned through the project?

Students will create informational brochures about healthy eating to share with others at school.

Total Days/Lessons:

Six lessons

HOW TO PROMOTE

Student brainstorming: Students will brainstorm ideas about healthy eating and compare/contrast their ideas with others.

Student voice and choice: Students will be empowered to make their own healthy eating choices.

Expeditionary Learning: Students will interview the school nutrition manager to learn how school meals support healthy eating.

Web 2.0: Students will do research about healthy eating using age-appropriate online articles.

Project Lesson Planner

Think about the lessons needed in order for students to demonstrate performance of understanding.

What is the context for this project? Think about the lessons you taught before and what to teach to narrow the focus of lessons that should take place over the course of this project.

Lesson	Date	Description
Gathering Information		Students read a variety of articles about healthy eating and take notes.
Comparing Information		Students use their notes and learning from the articles they read to synthesize their learning and compare/contrast with others.
Opinion Writing		Students will write opinion pieces about what they think healthy eating means.
Peer Feedback		Students will give each other feedback on their opinion pieces.
Nutrition Plans		Students will write and test nutrition plans.
Informational Brochures		Students will create and share brochures about healthy eating.

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Appendix D

Instructional Planning Tools

Teachers use instructional planning tools to organize their work. These tools identify concepts and skills in curricula, specific lessons, and supplementary materials to provide instruction. They often include an outline of the scope and sequence for the subject and set a schedule for classroom instruction. Teachers can plan and chart their instructional progress to ensure that they stay on track for delivering expected content to students. Instructional tools can be useful for educators planning to integrate health and nutrition. These tools may be used to better identify where to integrate nutrition concepts into what teachers are already planning. For example, Open Educational Resources Commons has a sample tool for a Nutrition and Human Rights unit at the high school level. It addresses learning objectives, standards, instructional approach, assessment, and much more.

Appendix E

Nutrition Education Evaluation Checklist

This checklist may be used to evaluate a school's nutrition education program.

Effectiveness

- Considers what students know, need to learn, and are interested in learning.
- Addresses aspects of culture and provides universal access to learning.
- Evaluates changes in knowledge, skills, and behavior.
- Evaluates effectiveness of the implementation process, instructional strategies, and delivery.

Planned, sequential instruction

- Incorporates scope—what students need to learn.
- Incorporates sequence—how and when to present the information.

Behavioral changes

- Includes self-assessment.
- Teaches decision-making skills.
- Focuses on skill development.

Developmentally appropriate strategies

- Provides for sufficient exposure.
- Introduces as a distinct unit (ideal).
- Uses food and nutrition content and strategies to support core content standards (e.g., science, math, language arts).

Staff development (classroom and cafeteria personnel)

- Schedules ongoing in-service training on skill-building and instructional strategies to change behavior.

School environment

- Plans and implements activities and lessons in partnership.

Social support

- Provides opportunities for parent involvement, which is particularly important for elementary-school children.
- Includes peer involvement for middle and high school students.
- Reinforces throughout the school and community environment the nutrition messages that are taught at school.
- The nutrition education program receives ongoing support from administrators and school staff who recognize the link between nutrition and academic performance.

Source: Adapted from *Making Nutrition Education Effective for Children: A Needs Assessment*—Report for the Nutrition Education and Training Program, 1998. Sacramento: California Department of Education. Prepared by Health & Education Communication Consultants, Berkeley CA.

In addition, the Team California for Healthy After Schools developed assessment and planning tools for creating a healthy after school environment that supports national and state goals to reduce childhood obesity. The California Department of Education, Nutrition Services Division, designed and piloted a two-year training program called Team California for Healthy After Schools (TCHAS). TCHAS focuses on training and coaching strategies to develop healthy after school environments and mentoring skills. The work of the TCHAS staff members is guided by five leading principles:

1. **Wellness Policy**—The After School Program (ASP) implements a wellness policy (or the school wellness policy), which was developed by a team of school and after school staff, students, family members, and community representatives.
2. **Nutrition Education**—All students participate in regular, sequential nutrition education based on the nutrition competencies and health education standards. The after school environment promotes healthy nutrition behaviors.
3. **Physical Activity**—All students participate in regular, inclusive physical activity that is aligned with the CDE After School Physical Activity Guidelines. The after school environment promotes an active lifestyle.
4. **Healthy Food Choices**—The ASP provides only healthy food and beverage choices to students. The ASP serves the at-risk after school meal or is actively working toward doing so.
5. **Mentorship and Coaching**—The ASP mentors and coaches staff members at after school sites to effectively support and expand creating healthy environments based on the TCHAS leading principles.

The TCHAS assessment provides criteria for rating and prioritizing nutrition education planning in after school programs.

Appendix F

Nutrition Basics

This appendix, assembled for teachers and staff members who provide nutrition education, presents resources for obtaining background information about nutrition.

1. NUTRITION AND HEALTH GUIDELINES

The Dietary Guidelines for Americans 2015–2020 is a science-based reference designed for use by nutrition educators, nutritionists, health providers, and policymakers. Recommendations in the guidelines promote health, reduce calorie consumption, increase physical activity, and decrease the risk of chronic disease. For more information, visit <http://www.cnpp.usda.gov/dietary-guidelines> (accessed June 14, 2016).

Dietary Reference Intakes (DRIs) include recommended intakes, as well as upper limits of intake, developed by the Food and Nutrition Board of the National Academy of Sciences. The DRIs are based on scientific knowledge. For more information, visit <http://fnic.nal.usda.gov/dietary-guidance/dietary-reference-intakes> (accessed October 14, 2016).

MyPlate is a tool released by the United States Department of Agriculture to accompany the *2015–2020 Dietary Guidelines for Americans* (U.S. HHS and USDA 2015). The ChooseMyPlate.gov Web site <http://www.choosemyplate.gov> (accessed October 14, 2016) features practical information and tips to help everyone build healthier diets, as well as instructional and promotional materials. It features selected messages and materials to help focus on key behaviors. Check the site regularly for updates to materials for children and schools.

The Nutrition Facts Label provides consumers with information about the ingredients of food items and helps consumers make informed food choices and maintain healthy dietary practices. The FDA has approved revisions to update the Nutrition Facts label with a new design and updated Serving Size Requirements and New Labeling Requirements for Certain Package Sizes. For more information, visit <http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/> (accessed October 14, 2016).

2. NUTRIENT GROUPS

Nutrients are substances that come from foods and are required by the body for energy, building, maintenance, repair of body tissues, and the regulation of body functions. The six nutrient groups are carbohydrates, proteins, fats, vitamins, minerals, and water. They can be grouped in the following way:

- **Macronutrients** are carbohydrates, proteins, and fats. They provide the body with energy and build, maintain, and repair body tissues.

- **Micronutrients** include vitamins and minerals that the body requires in smaller amounts than macronutrients. Unlike macronutrients, they do not provide energy; however, they are essential for the support of many processes in the body.
- **Water** is the most abundant constituent of the human body and is essential for maintaining body temperature and transporting nutrients and waste.

For related information on nutrition basics and healthy eating, visit the following Centers for Disease Control and Prevention (CDC) Web page: <http://www.cdc.gov/nutrition> (accessed October 14, 2016).

3. PHYTOCHEMICALS

Phytochemicals can be defined as chemicals produced by plants. However, the term is generally used to describe plant-derived chemicals that may affect health but are not essential nutrients. Because plant-based foods are complex mixtures of bioactive compounds, information on the potential health effects of individual phytochemicals is linked to information on the health effects of foods that contain those phytochemicals. For additional information, consult the American Cancer Institute at http://www.aicr.org/reduce-your-cancer-risk/diet/elements_phytochemicals.html (accessed October 14, 2016)

4. ONLINE PROFESSIONAL DEVELOPMENT IN NUTRITION

The California Department of Education and the Dairy Council of California provide online resources for professional development.

California Department of Education

The California Department of Education, Nutrition Services Division, provides online trainings in nutrition, physical activity, and nutrition services. All online training modules are approximately 30 minutes each and are available free 24 hours a day. They include case studies to apply learning and are accessible to all users (text-only training versions are available). Participants earn certificates after completing a brief quiz on a module. The following health, nutrition, physical activity, and nutrition services modules are available at <http://www.cde.ca.gov/ls/nu/he/> (accessed February 17, 2017).

Dairy Council of California, Teacher Training Program

The 30-minute, online teacher training modules provided by the Dairy Council of California provide basic nutrition information to teach nutrition. In addition, there is an in-depth look at each grade-level program, including objectives and student outcomes, the materials in the program, helpful teacher tips, and best practices. View the trainings at <http://www.dairycouncilofca.org/Educators/Teacher-Training.aspx> (accessed October 14, 2016).

Nutrition

A Call to Action-Improving Nutrition, Physical Activity, and Learning

Nutrition, physical activity, and health are essential for student learning. In this interactive module, participants will learn to identify how to create a healthy nutrition and physical activity environment in their classroom and at school, as well as gain resources and tools to promote healthy environments and practices that support learning.

Action 4 Nutrition: Assessing Your Snack Program

In this interactive online training, participants learn how to assess their snack program and take simple steps to prepare for Federal Program Monitoring. Participants learn about the legal requirements for healthy snacks, how to analyze a nutrition label, how to obtain snacks to pay for themselves through government reimbursement and partnerships, and more.

Cook with Kids!

Cooking with children benefits their health and school performance. There are four simple steps to plan, prepare, and present a successful cooking activity for a classroom or after school program. The cooking event planner, key tips, and resources keep students safe while cooking.

Create Healthy After School Environments

Participants learn how expanded learning programs throughout California applied the Team California for Healthy After School (TCHAS) leading principles and professional development components to improve nutrition and physical activity practices. They will be able to obtain tools and resources to implement TCHAS in their programs and connect with the California Quality Standards for Expanded Learning and the Continuous Quality Improvement Cycle.

Engage Youths to Live Healthy Lives and Build Healthy Communities

Youths learn how to make healthy individual choices and become advocates for health in their schools, after school programs, and communities. Participants learn successful advocacy strategies and how to help students identify and overcome challenges.

Foundations of Nutrition: Dietary Guidelines for Americans, 2010

Participants find out about the purpose of the Dietary Guidelines and how the key recommendations help Americans create a healthy diet and active lifestyle. Participants will gain an understanding of the guidelines, lessons, and resources to put these guidelines into action in the classroom.

Foundations of Nutrition: Five Things Students Need to Know to Read the Food Label

Participants learn to help students see past the advertising by using the food label and five steps to discover what products really contain. Participants will learn the sections of the food label and the five-and-twenty rule. They practice applying these tools to make informed food and beverage choices. Resources are also provided for integrating food label reading into mathematics and language arts, conducting fund-raising by offering healthy choices, and identifying whole-grain foods.

Foundations of Nutrition: MyPlate

In this Interactive training, participants will learn about the MyPlate recommendations for a healthier lifestyle and how to apply them to everyday choices. Resources to transfer the concepts and key messages to students through classroom events and activities are also included. Finally participants reflect on the MyPlate communication message calendar and identify classroom and after school activities to support key messages.

Hands-On STEM: Garden-Based Nutrition Education

This training presents how to incorporate garden-based nutrition education as a part of science, technology, engineering, and mathematics (STEM) in expanded learning programs. Participants obtain an overview of how garden-based nutrition education supports the Next Generation Science Standards. Ideas and resources to use in the programs are provided.

Making Sense of Expanded Learning Meal and Snack Programs and Requirements

This module assists participants in identifying meal and snack options available to expanded learning programs. Participants learn to assess which options are best for their programs, know the steps needed in order to implement any or all of the options, and be able to obtain resources to assist with implementing meal and snack options.

Recipe for Success: Integrating Academics and Nutrition

This module presents ideas for seamless integration of nutrition education with the core academic standards. Participants learn how to use children's books with healthy themes to support nutrition competencies, mathematics and science skills. Literature-based activities include classifying and categorizing various foods, comparing and contrasting nutritional food values, and using fractions and measurement in food recipes.

Snack Time: Providing Healthy Snacks in Your After School Program

Participants learn why healthy snacks are important and how to create healthy snacks, including the best time to serve snacks, the components of healthy snacks, and how to create a week-long menu of healthy snacks.

Teaching to Standards in Nutrition

Participants learn about the overarching and grade-level California Health Education Content Standards for Nutrition and Physical Activity. They follow four steps to identify risky student nutrition behaviors, select appropriate standards and lessons, and monitor students' skill development and application to real-life situations. A guide for teaching to standards in nutrition, sample lessons, and resources to develop positive student nutrition behaviors are included.

Nutrition Services

Calculating Grains for School Meals

This training shows school nutrition staff how to calculate and credit grains in school meals using ounce equivalents for grains. Participants learn to determine the daily and weekly ounce equivalents of grains for sample school menus and gain access to resources for calculating grain contributions to the meal pattern.

Calculating Meal Components for a Recipe

Participants learn about the importance of correctly calculating ingredients in recipes and gain access to tools to assist with calculations. The tools help them to complete accurate meal component calculations. Standardized recipes with meal component analyses and other resources are included for school nutrition programs.

Color the Tray with Vegetable Subgroups!

In this module, participants identify the vegetable component requirements for the new lunch meal pattern, classify vegetables by subgroup, evaluate a menu for daily vegetable and weekly vegetable subgroup requirements, and receive resources to support the new meal pattern requirements.

Culinary Basics

Training is provided about the importance of portion control in food preparation and meal service and the benefits of using proper equipment and utensils to measure and control portions. Participants will also be able to compare weight versus volume measurements and receive references and resources to accurately prepare standardized recipes and control portions for school food service.

Determining Whole-Grain-Rich Items in School Meals

Participants learn about whole-grain-rich requirements, why whole grains are critical to children's health, how to identify whole-grain-rich products for school breakfast and lunch, and how to get resources to meet the requirements.

How to Use the Food Buying Guide

This training presents the benefits of the Food Buying Guide and ways to apply the Food Buying Guide and the Web-based Food Buying Guide calculator to determine amounts of food to purchase for school recipes. Participants obtain access to the Food Buying Guide and other resources to support accurate recipe development, purchasing, and production for school food service.

Introduction to the School Lunch Meal Pattern

Participants learn about the importance of school lunch to children's health and the school lunch requirements. They apply these requirements to evaluate a daily and weekly school lunch menu to determine compliance. Resources to implement the lunch meal pattern requirements in a district are presented.

School Breakfast: The Most Important Meal of the Day!

This training describes how breakfast relates to children's health and academic achievement, the benefits of eating breakfast, and the daily and weekly requirements for a reimbursable breakfast. Types of breakfast service are included as well as resources to provide and promote nutritious school breakfasts.

Standardizing Recipes

Standardizing recipes for school meal programs is key to ensuring students receive the calories and variety of nutrients they need daily. Participants will learn to identify steps to recipe standardizing, to accurately increase or decrease recipe yield to meet student participation needs, and receive sample standardized recipes and resources to create standardized recipes for any school district.

Physical Activity

Fitness: Everyone's Business

Physical fitness is a shared responsibility among parents, teachers, businesses, and other societal institutions. Participants examine their own lifestyles and identify small changes they can make to model the importance of making healthy choices for their students. In addition, the roles played by family, the media, and the food industry are analyzed to help students have a better understanding of the factors that influence their ability to be in good physical shape. Resources and strategies to improve fitness will include simple ways to increase physical activity and nutrition in after-school programs.

Kids on the Go: Promoting Active Lives Every Day

Ideas to promote and encourage youths to be physically active every day are presented. Participants will learn how to plan successful physical activity events, such as a walking “school bus” or bike “train.”

Learning in Motion

In this interactive online training, participants learn how to boost academic achievement and help close the achievement gap with physical activity. They learn icebreakers to start the day, energizers to break up sedentary time, and games to reinforce academic concepts. Participants also learn how to obtain resources with additional physical activities that can boost student achievement.

Physical Activity: Ability Awareness

Ways to create a physical activity environment that is engaging and fun for everyone are presented. Participants learn how to adapt and modify physical activity for students with disabilities. This training provides resources, strategies, and tools to ensure that every student can be active.

Physical Activity 1: Up and Running

Strategies for starting a high-quality physical activity program are presented. These strategies include promoting emotional and physical safety, boosting staff confidence and involvement, and using physical activity to foster youth development.

Physical Activity 2: Maximize Potential

Ways to maximize an existing physical activity program are presented by setting meaningful, achievable goals. Participants learn to set goals to provide students with 30 to 60 minutes of daily physical activity and a variety of activity options.

Physical Activity 3: Going the Distance

Ways to help all students develop essential physical activity skills are presented. Participants learn to implement locomotor, manipulative, and nonmanipulative skills through simple, effective methods. Strategies to get the community and families involved in physical activity are presented.

Glossary

adopted instructional materials. Textbooks and materials that are rigorously reviewed for alignment with the Health Framework and approved by the State Board of Education are adopted for use in California schools.

anchor. An attention-getting device to engage students in a question or problem that will be the focus of a project-based learning experience. An anchor may be a news article, a video, a song, a problem observed by the teacher, or the students.

artifact. Evidence of project work and outcomes, such as data or a poster, presentation, research summary, report, or model for the project.

competency. Competency comprises the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance required in employment. Competencies for academic subjects go beyond the minimum standards to outline comprehensive, sequential, and grade-level expectations for student learning. As with standards, they do not prescribe methods of instruction. However, they provide specific details at each grade grouping and show the sequence of learning as it is reinforced over several grade levels.¹

content standards. They describe the minimum knowledge and skills that students are expected to master at selected grade levels. Standards provide a common language and serve as the basis of curriculum frameworks, learning assessments, and instructional resources and materials but do not prescribe methods of instruction. In California, content standards are approved by the State Board of Education.

coordinated school health. An approach to school health that requires collaboration with various agencies and community groups to coordinate and provide the following elements: health education, physical education, nutrition services, health services, a safe and healthy school environment, parent and community involvement, health promotion for staff, and psychological and counseling services for students.

curriculum. Instruction that is planned, coordinated, and articulated in a manner designed to result in students' acquisition of specific knowledge and skills and the application of this knowledge. California has developed a set of standards that are intended to guide curriculum and instruction. The final decision about school curriculum is the responsibility of the local school board. This term usually refers to a written plan outlining what students will be taught (a course of study). Curriculum documents often include detailed directions or suggestions for teaching the content. *Curriculum* may refer to all the courses offered at a given school or all the courses offered at a school in a particular area of study.

curriculum framework. A framework is a blueprint for implementing academic content standards

1. Terminology from Northeastern Illinois University (<http://homepages.neiu.edu/~dbehrlic/hrd408/glossary>) (accessed October 14, 2016)

approved by the State Board of Education. Frameworks guide the development of curricular materials, providing background about an academic subject. Topics for teachers to emphasize at each grade level are suggested.

curriculum map. A chart, or map, of the content, skills, and assessments that describes learning in the classroom. Curriculum maps provide an overview from grade to grade (kindergarten to grade five) and a within-a-grade of curriculum, instruction, and assessment.

curriculum standards. Curriculum standards describe what students are expected to know and be able to do at a grade level. Standards are tools for educators to develop, select, and evaluate curriculum and to assess student achievement. Standards provide a common language and serve as the basis for curriculum frameworks, learning assessments, and instructional resources and materials. However, standards do not prescribe methods of instruction. The California State Board of Education approves all state academic standards.

evidence-based programs. Programs that have been found to be effective based on the results of rigorous evaluations.²

food literacy. Understanding the story of one's food—from farm to table and back to the soil—and the knowledge and ability to make informed choices that support one's health, community, and the environment.

food system. All processes involved in feeding people: growing, harvesting, processing (or transforming or changing), packaging, transporting, marketing, consuming and disposing of food and food packages. It also includes the inputs needed and outputs generated at each step. The food system operates within and is influenced by social, political, economic and natural environments. Each step is also dependent on human resources that provide labor, research and education. (<http://www.discoverfoodsys.cornell.edu/primer.html> [accessed October 14, 2016])

health content areas. Health education content is divided into six areas. These areas are based on six types of health-risk behaviors that contribute to the leading causes of death and disability among youth and adults. They include behaviors that contribute to unintentional injuries and violence; sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection; alcohol and other drug use; tobacco use; unhealthy dietary behaviors; and inadequate physical activity.

health education. A planned, sequential curriculum from kindergarten to grade twelve that addresses the physical, mental, emotional, and social dimensions of health. The curriculum is designed to motivate and help students maintain and improve their health, prevent disease, and reduce health-related risk behaviors. It allows students to develop and demonstrate increasingly sophisticated health-related knowledge, attitudes, skills, and practices. In California, comprehensive health education addresses nine content areas: personal health; consumer and community health; injury prevention and safety; alcohol, tobacco, and other drugs; nutrition, environmental health; family living; individual growth and development; and communicable and chronic diseases.

2. Siobhan M. Cooney, Mary Huser, Stephen Small, and Cailin O'Connor, "Evidence-Based Programs: An Overview." *What Works, Research to Practice Series* Issue number 6, University of Wisconsin–Madison Extension, October 2007.

instructional materials. Resources used for student instruction or teaching or to provide direct instruction. (Direct instruction is a model for teaching that emphasizes well-developed and carefully planned lessons designed around small learning increments and clearly defined and prescribed teaching tasks. It is based on the theory that clear instruction eliminating misinterpretations can greatly improve and accelerate learning.)³

integrated curriculum. Instruction that delivers engaging, relevant, and meaningful standards-based content across multiple subject areas to develop students' knowledge and skills in both subjects.

learning activity. An assignment or exercise that assesses students' understanding about the content, generates class discussions, or gathers student perspectives and opinions regarding the topic or accomplishes all those purposes. Activities should be designed to reinforce and apply content as part of an overall lesson plan and curriculum. Generally, a lesson may contain several learning activities, which in turn contain learning tasks.

learning tasks. Specify the type of work to be completed by the student, the techniques used, associated tools and resources, the interaction and roles of those involved, and the learning objectives and assessments associated with the learning activity.

lesson. A structured segment of instruction that contains a learning objective and information or skills to be imparted to the student. Usually contains one or more learning activities.

lesson plan. A written guide to achieve the intended learning outcomes. It defines the learning objectives, equipment, instructional materials, media requirements, instructional method, and method for evaluating the instruction or training.

nutrition. The process by which the body uses food for maintenance, growth, sustenance of normal functions, and energy.

nutrition education. Nutrition education is any combination of instructional strategies, accompanied by environmental supports, designed to facilitate the voluntary adoption of food choices and other food- and nutrition-related behaviors conducive to health and well-being. Nutrition education is delivered in many ways and involves activities at the individual, community, and policy levels.

nutrition science. The study of food systems, foods and drinks and their nutrients, and other constituents; and of their interactions within and between all relevant biological, social, and environmental systems. Nutrition science should be the basis of food and nutrition policies, which should be designed to identify, create, conserve, and protect rational, sustainable, and equitable communal, national, and global food systems to sustain the health, well-being, and integrity of humankind and of the world.

overarching health education standards. The eight broad categories for organizing the knowledge and skills to teach and develop healthy student behaviors within each of the health content areas. See the Overarching Health Education Standards and Nutrition Competencies Chart on page 21 for the descriptions and rationale for each of the eight standards.

overarching nutrition competencies. The eight broad categories for organizing the knowledge and

3. California Department of Education. Instructional Materials FAQ, at <http://www.cde.ca.gov/re/di/fq/> (accessed October 14, 2016).

skills to teach and develop healthy student behaviors specifically for nutrition and physical activity. See the Overarching Health Education Standards and Nutrition Competencies Chart for the descriptions and rationale for each of the eight competencies (see page 21).

pacing guide. A planning tool that helps teachers chart instructional progress so students can learn the content expected of them at their grade level by the end of a school year. It outlines the concepts and skills related to curriculum. This tool can be useful for nutrition educators to integrate health and nutrition into core subjects.

project-based learning. An approach where students work for an extended period of time to investigate and respond to a relevant question, problem, or challenge. Through this investigation, students learn real-world skills as they ask and answer and present solutions to questions.

promotional material. A resource designed to publicize or advertise a product, information, cause, institution, and the like. Examples include brochures, free samples, posters, television or radio ads, and personal appearances.

research-based. A growing body of research has demonstrated that certain approaches and strategies for working with youths and their families can positively impact important health and social problems (such as inactivity, teen pregnancy, substance abuse, and family violence). Research-based or evidence-based programs include many of these approaches and strategies to target outcomes specific to individuals, schools, families, and communities.

research-validated. Although all of the programs available from the California Healthy Kids Resource Center are research-based (i.e., they use or support strategies for which research provides evidence of effectiveness), a limited number of programs have demonstrated the level of credible evidence of effectiveness that identifies them as research-validated. The characteristics of research-validated programs are as follows:

- Research-validated programs have empirically demonstrated reductions in health-risk behaviors and/or increases in health-promoting behaviors at least six months after the completion of the program.
- Evidence of effectiveness for research-validated programs is published in scholarly peer-reviewed journals.
- Research-validated program materials are complete, available, and ready to be implemented at school sites in California.

student-driven instruction. This type of instruction emphasizes student engagement and responsibility to direct learning while teachers act as facilitators and guides to ensure accurate and effective learning and skill development. Some examples of student-driven instructional strategies include role-playing and participation in simulated situations, writing assignments, team projects, self-paced assignments, and service-learning assignments.

whole school, whole community, whole child. The Whole Child approach is the next evolution of the coordinated school model. Developed by the Centers for Disease Control and Prevention and the Association for the Supervision of Curriculum Development (2014), the model aims to align the policies, processes, and practices of education, public health, and school health to improve children's learning and health.

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