

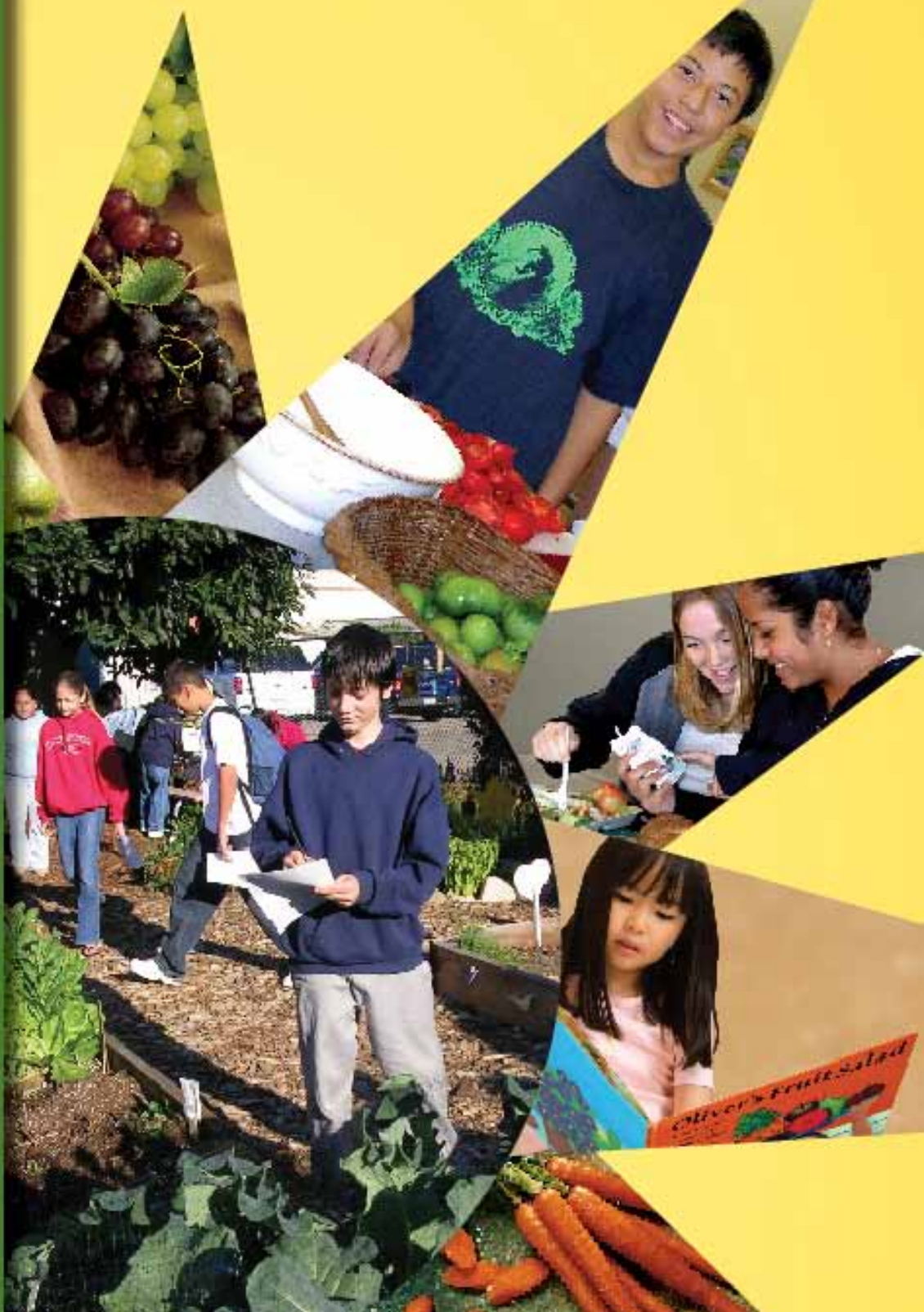
Nutrition Education Resource Guide

for
California
Public
Schools

*Kindergarten
Through
Grade Twelve*



California Department
of Education
Sacramento, 2011



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Publishing Information

The *Nutrition Education Resource Guide for California Public Schools, Kindergarten Through Grade Twelve* was developed by the Nutrition Services Division, California Department of Education. This publication was edited by Faye Ong and John McLean, working in cooperation with Heather Reed, Consultant. It was designed and prepared for printing by Juan D. Sanchez and was published by the Department of Education, 1430 N Street, Sacramento, CA 95814-5901. It was distributed under the provisions of the Library Distribution Act and *Government Code* Section 11096.

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ISBN 978-0-8011-1714-5

Ordering Information

Copies of this publication are available from the Nutrition Services Division, California Department of Education. The nutrition competencies are posted at <http://www.cde.ca.gov/ls/nu/he/ncccindex.asp>.

Notice

The guidance in the *Nutrition Education Resource Guide for California Public Schools, Kindergarten Through Grade Twelve* is not binding on local educational agencies or other entities. Except for the statutes, regulations, and court decisions that are referenced herein, the document is exemplary, and compliance with it is not mandatory. (See *Education Code* Section 33308.5.)

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A Message from the State Superintendent of Public Instruction

On behalf of the California Department of Education (CDE), I am pleased to introduce the *Nutrition Education Resource Guide* as a valuable tool to assist local educational agencies and after-school programs in their efforts to implement well-planned, high-quality instructional programs in nutrition education.

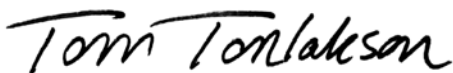
Research consistently demonstrates that students' academic achievement is directly linked to their nutrition and health status. As many experts know, healthy eating and regular physical activity are essential components of a healthy lifestyle. Yet, many of California's students are at risk for obesity, which significantly impacts their ability to lead successful, healthy, and long lives.

Throughout my tenure in public service, I have demonstrated a long-standing commitment to improving student nutrition and physical education, to ensuring that healthy snacks are provided to students, and to promoting nutrition education in after-school programs. As State Superintendent of Public Instruction, "Safe and Healthy Kids" is one of my top four educational priorities.

The CDE's commitment to student health supports the recently released *California Obesity Prevention Plan: A Vision for Tomorrow, Strategic Actions for Today*. The CDE's vision for ensuring "Safe and Healthy Kids" also aligns with the "Let's Move!" campaign championed by First Lady Michelle Obama. The First Lady has partnered with the United States Department of Agriculture's HealthierUS School Challenge (HUSSC) to recognize schools that create healthier school environments through their delivery of nutritious school meals, nutrition education, and physical activity.

The resource guide provides many resources to create nutrition education programs that qualify for HUSSC awards and that align with state and national movements for nutrition education. California schools and after-school programs can use this resource 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 to make the vision for a healthy California a reality for generations to come.



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 acknowledged.

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Reviewers of the 2010 Nutrition Competencies

A random sample of 160 teachers from kindergarten through grade twelve, currently
employed in public schools in California, reviewed the nutrition competencies.

Reviewers of Draft Versions of the Nutrition Competencies

Many thanks go to those who provided input on earlier drafts of the Nutrition Competencies, including the following staff members from the California Department of Education:

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This material was produced by the California Department of Education, Nutrition Services Division, with partial funding provided by the California Department of Public Health, Network for a Healthy California. The Network for a Healthy California is funded by the USDA Supplemental Nutrition Assistance Program (formerly the Food Stamp Program). These institutions are equal-opportunity providers and employers. In California, food stamps provide assistance to low-income households to help families buy nutritious foods for better health. For food stamp information, call 1-877-847-3663. For additional information, visit <http://www.cachampionsforchange.net> (accessed August 25, 2011).



Introduction

About This Guide

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 for California Public Schools, Kindergarten Through Grade Twelve* (California Department of Education 2008) in the Nutrition and Physical Activity content area; and (2) address the nutrition competencies.

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. They are expanded upon in section I, “Nutrition Competencies.”

- **HECS**, which were 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 found 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 can 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 are addressed in the Nutrition and Physical Activity content area of the HECS.



Nutrition education is any combination of educational 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 through multiple venues and involves activities at the individual, community and policy levels.

—Isobel R. Contento, EdD, RD

Nutrition Linking Research: Theory and Practice (2007)

Contents of the Guide

This resource guide provides information about policy and standards related to nutrition education and recommended nutrition education curricula and instructional materials. It also includes useful ideas, guidelines, and resources to help create a quality nutrition education program. The main sections are:

- I, Nutrition Competencies
- II, Recommended Instructional Resources
- III, Guidance on Implementing a Quality Nutrition Education Program
- appendix A, Descriptions of Recommended Instructional Resources
- appendix B, Resources for Enhancing Nutrition Education
- appendix C, Nutrition Basics
- appendix D, Evaluation Checklist
- Glossary
- Works Cited

Intended Audience

The resource guide is primarily intended for use by local school district curriculum directors and lead teachers, nutrition education coordinators and specialists, and other school district staff 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 has an important role in the lives of students; it supports their academic success and prepares them to lead healthy and productive lives.

Nutrition education is a continuum of learning experiences that help people to make informed decisions about nutrition. Dr. Isobel R. Contento's internationally recognized definition of nutrition education underscores the fact that behavioral change demands broad and comprehensive outreach and education to ensure success.

Impact of Nutrition Education on Students

Nutrition education in schools helps prepare students for life. 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 will succeed if they begin building basic skills early, so that by the time they graduate from high school, they can 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. Given the national childhood obesity epidemic, students need nutrition education to navigate a complex world of food choices. Children who develop healthy habits at an early age are more likely to be well, stay well, and do well in school.

Local School Wellness Policy

Nutrition education is not only desirable for students, it is also required by local school wellness policy. The Child Nutrition and WIC 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 a local school wellness policy.

In 2010, Section 204 of the Healthy Hunger-Free Kids Act of 2010 added Section 9A, “Local School Wellness Policy Implementation.” The new provisions strengthened requirements for ongoing implementation, assessment and public reporting of wellness policies and also expanded the team of collaborators participating in development of the policy. In addition, goals for nutrition promotion were now required. For more information, please visit the Food and Nutrition Services Web site at <http://www.fns.usda.gov/tn/healthy/wellnesspolicy.html>.

The federal law requires the local school wellness policy, 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.

As highlighted above, school districts are required to establish a school wellness policy that includes goals for nutrition education and nutrition promotion. However, the language in the policy provisions for nutrition education varies greatly from district to district in terms of strength and specificity. Refer to section IV, “Guidance for Implementing a Quality Nutrition Education Program,” for more direction on how to assess the strength of the nutrition component of a district’s wellness policy and for suggestions for making these policy provisions more definitive.

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.

In the document *School Nutrition . . . By Design!* (2006), the California Department of Education provides nine design principles for developing a healthy school nutrition environment. For each design principle, the document identifies a series of quality indicators that represent a best practice for implementation.

For Design Principle 4, Nutrition Education, an effective nutrition education program is designated as a quality program when it:

1. adheres to the USDA Dietary Guidelines and other science-based nutrition research and evidence-based instructional strategies;
2. is based on the national or state health education standards;
3. is taught as part of a comprehensive health education program;
4. integrates nutrition knowledge and skills across the curriculum at certain grade levels;
5. values and encourages experiential learning that builds knowledge, skills, attitudes, and behaviors that promote healthy choices;
6. assesses students’ acquisition of nutrition knowledge, skills, and behaviors;
7. engages family and community members to reinforce instruction;
8. incorporates the physical environment to support the concepts promoted through the program.

These indicators set the context for the nutrition competencies, which provide a focus for instruction in nutrition education. To view the full *School Nutrition . . . by Design!* document, please visit the following Web page: <http://www.cde.ca.gov/ls/nu/he/documents/schnutrtn071206.pdf> (accessed July 22, 2011).

I. Nutrition Competencies

About the Competencies

The nutrition competencies present a comprehensive and grade-specific structure for providing instruction in nutrition education in California classrooms.

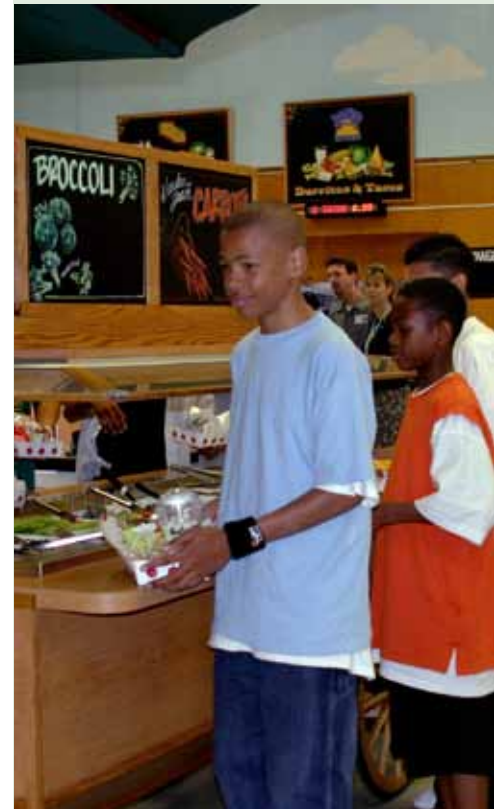
The nutrition competencies define, from kindergarten through grade twelve, the knowledge in nutrition and the skills students need to make healthy food choices for well-being and success in school and throughout their lives. The nutrition competencies also provide a framework of actions for good health and for accessing accurate and current nutrition information.

The competencies are intended to assist educators in designing, selecting, implementing, and evaluating nutrition curriculum responsive to local priorities and needs. Those who plan nutrition education can also use the competencies: curriculum directors, nutrition education specialists, and lead teachers. 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, parents, and the local school and health community.

Relationship to the Health Education Content Standards

The Health Education Content Standards (HECS) represent a consensus of the essential health knowledge and skills that students should have at specific grade levels, 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/documents/healthstandmar08.pdf> (accessed July 22, 2011).

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 health content 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				●	●	●	
Grade 7 and 8	●	●	●	●	●	●	●
High School (Grades 9 Through 12)	●	●	●	●	●	●	●

Nutrition and Physical Activity Content Area of the HECS

The nutrition competencies include all of the standards identified in the Nutrition and Physical Activity content area of the HECS, but they also include other benchmarks of learning, adding 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 accepting body size differences

Some of these topics are addressed in other content areas of the HECS 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 Nutrition Competencies Chart which begins on page 11, shows the alignment of the nutrition competencies with California’s HECS in the Nutrition and Physical Activity content area.

Relationship to the Health Framework

The *Health Framework for California Public Schools* (California Department of Education 2003) 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 lifelong commitment to healthy living” (pages 2–3). In California, the *Health Framework* preceded the development and adoption of health education standards in 2008 and does not reflect California’s HECS.

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 can be found on the California Department of Education’s health education Web page at <http://www.cde.ca.gov/ci/he/im/> (accessed July 22, 2011). For students in grades nine through twelve, local school districts adopt instructional materials. The Web page also has the criteria used to evaluate instructional materials in the 2004 health adoption. These criteria can serve as guidance for local districts in the selection and adoption of health education materials.

Like the *Health Framework*, the nutrition competencies can be used to guide the development of curricular materials and textbooks. The competencies are more detailed than the *Health Framework* in the area of nutrition. Therefore they can be used to select existing nutrition curricula for use in the classroom and to benchmark learning in nutrition education. In addition, the current nutrition competencies are aligned with the HECS, while the *Health Framework* is not (as mentioned above).

Key Terms

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

Content 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.

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

Competencies comprise the specification of 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, sequential, 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 as it is reinforced over several grade levels.

Guidelines for Use of the Nutrition Competencies Chart

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 this 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 new HECS, which were adopted by the State Board of Education in March 2008.

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

The nutrition competencies are described for each of the following **grade-level clusters**: 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.

Effective Use of the Nutrition Competencies Chart

The nutrition competencies can be used, along with related benchmarks or expectations, to determine the scope and sequence of a nutrition education program and to design or select instructional materials or to do both. The nutrition competencies are a useful tool for ensuring that instruction is developmentally appropriate and based on nutrition education research. The following steps can help curriculum planners and teachers make effective use of the competencies.

Step 1: Determine priorities

Review the information in the competencies for the targeted grade level to determine the appropriate nutrition concepts and skills to emphasize in the classrooms.

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 A contains descriptions of those resources. Additional resources include California state-adopted health textbooks (<http://www.cde.ca.gov/ci/he/im/>), the California Healthy Kids Resource Center (<http://www.californiahealthykids.org>), and the California After School

Resource Center (<http://www.californiaafterschool.org> [accessed August 25, 2011]).

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 Effective Health Education Curricula. 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 <http://www.cdc.gov/healthyyouth/HECAT/index.htm> (outside source) (accessed July 22, 2011).

Step 3: Evaluate materials

Evaluate selected instructional materials against 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 is a bank of field-tested assessment items available to California teachers through the California Health Education Assessment Project (HEAP).

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 be listed 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 to assess mastery of the competency by the time students complete the last grade in the cluster.

Integrating Nutrition into Other Subjects

Ideally, nutrition education should be taught 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,

“I had never seen any type of framework for nutrition nor was I aware nutritional standards existed for first grade. I was surprised at how well the [competencies] are structured. As I read through, I was able to think of many nutrition activities that can easily be integrated into my daily routine and curriculum. I think a greater effort needs to be made to ensure teachers are aware of these standards.”

—*California teacher*

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 nutrition education is also reinforced 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.

Nutrition concepts are easily integrated 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 such as articles promoting products or dieting approaches.
- **Mathematics:** Calculate the nutritional value of foods, analyze nutrients, read food labels, and calculate the contribution of daily nutrients in percentages, graph class food preferences, and expand recipes.
- **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:** Determine the chemical changes in recipe ingredients, the chemical regulation of hormones and the effect on digestion and absorption, and the impact of nutrition-influenced chronic diseases on the chemical functioning of the body.
- **Social science:** Research food customs of other countries or time periods, create a healthy menu based on local food preferences, and grow a garden with a theme based on a culture or a time period.

A Child’s Garden of Standards, a California Department of Education publication, shows the relationship of garden-based education activities selected from several published educational materials to specific academic content standards for grades two through six in science, history–social sciences, mathematics, and English–language arts. The document is located at <http://www.cde.ca.gov/ls/nu/he/nutredres.asp> (accessed July 22, 2011).

Additional resources for integration can be found in appendix A, “Descriptions of Recommended Instructional Resources.”

Nutrition Competencies Chart

Overarching Health Education Content Standard		Overarching Nutrition Competency
1	Essential health concepts: Comprehend essential concepts related to enhancing health.	Essential nutrition concepts: Know 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.

1. Overarching Nutrition Competency: Essential Nutrition Concepts

All students will know the relationships among nutrition, physiology, and health.

1a. Know the six nutrient groups and the 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>

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

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 students 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>

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1c. Know 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 to provide 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>

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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 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>

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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 foods by using senses: taste, touch, sight, smell, and sound.	Explain that food is used and stored by our bodies to help us have 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>

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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 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>▲ 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>

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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>

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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
Describe what plants and animals need for growth. Identify edible parts of plants and trees.	Identify two ways that geographical factors influence food availability and quality. Identify factors that affect the availability of food, such as economics, location, and culture. Identify foods grown in different regions of California.	Identify foods grown in different regions of the state, the country, and the world and how some of those foods are produced. List examples of foods that are grown in California and in different regions of the United States. Describe the role of food webs within natural systems. Explain the concept of food security. Define nutrition science or explain what the science of nutrition includes.	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.	Explain two factors that influence the quality and quantity of food available locally, nationally, and globally. Describe how economics, social systems, and education impact the nutritional status of individuals. Examine the technological factors that help create the quality and quantity of food we need. Examine how local, national, and global factors influence the food cycle. Compare the different food production systems.	Explain how local, national, and global factors influence food intake. Analyze data to determine the local, national, and global influences on the quantity and quality of food. Identify how social conditions may influence food availability. Analyze the effectiveness of the different food production systems, such as organic, sustainable, and conventional. Describe the impact of agriculture on California's economy and how the state's budget influences agriculture.

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2. Overarching Nutrition Competency: Analyzing Nutrition Influences

All students will demonstrate the ability to analyze internal and external factors influencing food choices and health outcomes.

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 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 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 on 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 on physical activity. (2.6.N)</p> <p>Explain how factors such as geography, transportation, and world trade agreements influence food choices.</p>

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3. Overarching Nutrition Competency: Accessing Valid Nutrition Information

All students will demonstrate the ability to access and analyze nutrition information, products, and services to analyze the accuracy and validity of nutrition claims.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<p>Demonstrate the difference 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>

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4. Overarching Nutrition Competency: Interpersonal Communication about Nutrition

All students will demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes.

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 how 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 how 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 how 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>

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5. Overarching Nutrition Competency: Decision Making for Nutrition Choices

All students will demonstrate the ability to use decision-making skills to optimize food choices and health outcomes.

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>

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6. Overarching Nutrition Competency: Goal Setting for Nutrition

All students will demonstrate the ability to use goal-setting skills to enhance nutrition and health.

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)

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7. Overarching Nutrition Competency: Practicing Nutrition-Enhancing Behaviors

All students will demonstrate the ability to practice nutrition-related behaviors that reduce risk and promote health.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<ul style="list-style-type: none"> ▲ Select nutritious snacks. (7.1.N) ▲ Plan a nutritious breakfast. (7.2.N) <p>Demonstrate hand washing before handling or eating foods.</p> <ul style="list-style-type: none"> ▲ Choose healthy foods in a variety of settings. (7.3.N) 	<ul style="list-style-type: none"> ▲ Examine the importance of eating a nutritious breakfast every day. (7.1.N) ▲ Plan a nutritious meal. (7.2.N) ▲ Select healthy beverages. (7.3.N) ▲ Examine the criteria for choosing a nutritious snack. (7.4.N) <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> <ul style="list-style-type: none"> ▲ Participate in physical activities with friends and family. (7.5.N) 	<ul style="list-style-type: none"> ▲ Practice how to take personal responsibility for eating healthy foods. (7.1.N) ▲ Practice how to take personal responsibility for limiting sugar (and salt) consumption in foods, snacks, and beverages. (7.2.N) <p>Demonstrate the preparation of a nutritious snack.</p> <ul style="list-style-type: none"> ▲ Practice how to take personal responsibility for engaging in physical activity. (7.3.N) ▲ Identify ways to establish and maintain healthy eating practices consistent with current research-based guidelines for a nutritionally balanced diet. (7.4.N) 	<ul style="list-style-type: none"> ▲ Identify ways to choose healthy snacks based on current research-based guidelines. (7.1.N) ▲ Demonstrate how to prepare a healthy meal or snack using sanitary food preparation and storage practices. (7.2.N) ▲ Demonstrate the ability to balance food intake and physical activity. (7.3.N) ▲ Demonstrate the ability to assess personal physical-activity levels. (7.4.N) <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>	<ul style="list-style-type: none"> ▲ Make healthy food choices in a variety of settings. (7.1.N) <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> <ul style="list-style-type: none"> ▲ Explain proper food-handling safety when preparing meals and snacks. (7.2.N) <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> <ul style="list-style-type: none"> ▲ Assess personal physical activity levels. (7.3.N) ▲ Examine ways to be physically active throughout a lifetime. (7.4.N) 	<ul style="list-style-type: none"> ▲ Select healthy foods and beverages in a variety of settings. (7.1.N) <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> <ul style="list-style-type: none"> ▲ Critique one's personal diet for overall balance of key nutrients. (7.2.N) <p>Demonstrate the use of the Dietary Reference Intakes to assess dietary quality.</p> <ul style="list-style-type: none"> ▲ 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)

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8. Overarching Nutrition Competency: Nutrition Promotion

All students will demonstrate the ability to promote and support a sustainable, nutritious food supply and healthy lifestyles for families and communities.

Kindergarten	Grades 1–2	Grades 3–4	Grades 5–6	Grades 7–8	Grades 9–12
<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>▲ 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 nutritious 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. (8.2.N)</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>

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

II. 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.

Users of this guide can select lessons and activities from this section to form the core nutrition curriculum and to provide supplemental activities for students to practice skill development in nutrition education.

Organization

The recommended instructional resources in this section are divided into two lists: (1) recommended nutrition education curricula, and (2) recommended supplemental instructional materials. Each list shows the overarching nutrition competencies addressed in each resource. The instructional resources are described more fully in appendix A, “Descriptions of Recommended Instructional Resources.”

Development of the Lists and Matrixes

The lists are a subset of research-based resources that the California Healthy Kids Resource Center (CHKRC) identified and reviewed. The items on the lists were reviewed for accuracy and effective use of research-based strategies for instruction set forth by the CHKRC. The criteria are described in this section.

A distinction was made to distinguish between “curriculum” and “instructional materials.” For example, to be categorized as curricula



versus a supplemental instructional material, the nutrition education resource must be comprehensive and taught sequentially. Therefore, some of the recommended instructional materials, although excellent resources, are not included on the curricula list because they do not need to be taught in a sequential manner, or they may focus more narrowly on a specific area of nutrition, such as gardening.

Below is a description of each list:

- **Recommended Nutrition Education Curricula.** The list includes the California-adopted health education programs and selected nutrition-specific curricula. The versions reviewed for this guide support the 2005 *Dietary Guidelines for Americans*, *MyPyramid*,* the Nutrition Facts label, and grade-level Nutrition and Physical Activity standards in the HECS. In addition, the authors provide lessons for specific grade levels; state that lessons are organized for planned, sequential instruction; and include connections with other content standards (e.g., science, math, language arts). Materials from this list can form the foundation of instruction.
- **Recommended Supplemental Instructional Materials.** The list includes 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 2005 *Dietary Guidelines for Americans*, *MyPyramid*, and the Nutrition Facts label and include lessons and activities to support the grade-level nutrition and physical activity in the HECS. However, these resources do not meet the criteria for recommended “curricula.”

A team of nutrition experts from the California Department of Education, CHKRC, and the Network for a Healthy California, along with other experts in the field, evaluated the nutrition education curricula and instructional materials to identify which nutrition competencies were addressed. This information was used to develop the matrixes.

The lists are by no means exhaustive; other nutrition education curricula and materials could meet the criteria described previously but were not reviewed at the time this guide went to press.

About the California Healthy Kids Resource Center Lists. The instructional resource lists from the CHKRC are updated annually and posted on the CHKRC Web site (<http://www.californiahealthykids.org>). To borrow items free of charge from anywhere in California for four weeks, call the CHKRC at 1-888-318-8188 or order online. To obtain descriptions, order numbers, or publisher and purchase infor-

**MyPyramid* has been replaced with *MyPlate*, a new tool released by the USDA to accompany the 2010 *Dietary Guidelines for Americans*. When this publication went to press, the nutrition education resources had not been updated to reflect this change. See item 7 in appendix B to obtain tips on adapting lessons to *MyPlate*.

mation for any of these materials, please see the CHKRC information page linked to each title on the CHKRC Web page.

Criteria for Evaluating Nutrition Curricula. The CHKRC regularly reviews nutrition, physical activity, and health instructional resources for accuracy, instructional design, use of research-based teaching strategies, and alignment with the California HECS. The CHKRC includes an additional review of evaluation research to designate programs with evidence of effectiveness as research-validated. The criteria for evaluating research-based and research-validated nutrition education materials can be found on the CHKRC Web site at <http://www.californiahealthykids.org/c/@y814qZRg5bUdl/Pages/mrb.html> (accessed July 22, 2011).

References

American Cancer Society. 2007. *National Health Education Standards: Achieving Excellence*. 2nd ed.

The National Health Education Standards (NHES) offer educators the framework for planning and implementing comprehensive health education instruction for pre-K through grade twelve. This recognized reference for health education in the United States may be obtained at <http://www.cancer.org/NHES> (accessed August 25, 2011).

U.S. Department of Health and Human Services and the U.S. Department of Agriculture. 2010. *Dietary Guidelines for Americans, 2010*.

The following matrix displays the recommended curricula and the nutrition education competencies they address. Some curricula and textbooks contain lessons targeted toward specific grades. 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. This matrix was created by an expert group of teachers, curriculum specialists, and nutrition educators, using the California Healthy Kids Resource Center’s “Recommended Curricula for Nutrition and Physical Activity Instruction, Kindergarten through Grade Twelve.”

The overarching nutrition competencies are listed on page 49.

Recommended Nutrition Education Curricula

Title of Recommended Curriculum	Kindergarten														
	Overarching Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Balance My Day Audience: Kindergarten–grade 5 Healthy Kids Challenge	X	X	X	X		X	X		X	X	X	X		X	X
Building a Healthy Me Audience: Kindergarten Dairy Council of California	X	X	X		P	X	X		X			X		X	X
CATCH Jump Into Health Audience: Kindergarten Regents of the University of California and Flaghouse, Inc.		X	X			X	X				X	X	X	X	X
Eating Healthy from Farm to Fork Audience: Kindergarten–grade 2 University of California Cooperative Extension, Agriculture and Natural Resources	X	X	X	X	X	X	X	X	X		X	X		X	X
Health & Wellness Audience: Kindergarten–grade 8 Macmillan/McGraw-Hill	X	X	X		X	X	X		X	X	X	X	X	X	X
Linking Science and Nutrition Audience: Kindergarten–grade 8 California Department of Public Health and Network for a Healthy California Lessons evaluated: Kindergarten		X				P				P				X	

X = meets competency. P = partially meets competency.

Grades 1–2

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Balance My Day Audience: Kindergarten–grade 5 Healthy Kids Challenge	X	X	X	X		X	X		X	X	X	X		X	X
CATCH Everyday Foods for Health Audience: Grade 1 Regents of the University of California and Flaghouse, Inc.	X	X	X		X	X	X				X	X	X	X	X
CATCH Celebrate Health Audience: Grade 2 Regents of the University of California and Flaghouse, Inc.	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Eating Healthy from Farm to Fork Audience: Kindergarten–grade 2 University of California Cooperative Extension, Agriculture and Natural Resources Lessons evaluated: Grade 1	X	X	X	X		X	X	X			X			X	X
Eating Healthy from Farm to Fork Audience: Kindergarten–grade 2 University of California Cooperative Extension, Agriculture and Natural Resources Lessons evaluated: Grade 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Health & Fitness Audience: Kindergarten–grade 6 Harcourt Lessons evaluated: Grade 1	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Health & Fitness Audience: Kindergarten–grade 6 Harcourt Lessons evaluated: Grade 2	X	X	X		X	X	X	X	X	X	X	X	X	X	X

X = meets competency. P = partially meets competency.

Grades 1–2 (continued)

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Health & Wellness Audience: Kindergarten–grade 8 Macmillan/McGraw-Hill Lessons evaluated: Grade 1	X	X	X		X	X	X		X	X	X	X	X	X	X
Health & Wellness Audience: Kindergarten–grade 8 Macmillan/McGraw-Hill Lessons evaluated: Grade 2	X	X	X	X	X	X	X		X	X	X	X		X	
Healthy Choices, Healthy Me! Audience: 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! Audience: Grades 1–2 Dairy Council of California Lessons evaluated: Grade 2	X	X	X	X		X	X	X	X			X		X	X
Linking Science and Nutrition Audience: Kindergarten–grade 8 California Department of Public Health and Network for a Healthy California Lessons evaluated: Grade 2						P						P			

X = meets competency. P = partially meets competency.

Grades 3–4

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Balance My Day Audience: Kindergarten–grade 5 Healthy Kids Challenge	X	X	X	X			X	X	X	X	X	X		X	X
CATCH Hearty Heart & Friends Audience: Grade 3 Regents of University of California and Flighthouse, Inc.						X				X	X		X	X	X
CATCH Taking Off Audience: Grade 4 Regents of University of California and Flighthouse, Inc.			X						X	X	X	X	X	X	
Eat Well & Keep Moving Audience: Grades 4–5 Harvard School of Public Health/Human Kinetics	X	X	X			X				X	X	X	X	X	
Fruits and Vegetables for Health Audience: Grades 4–6 California Foundation for Agriculture in the Classroom	X	X				X	X	X	X	X		X	X	X	
Health & Fitness Series Audience: Kindergarten–grade 6 Harcourt Lessons evaluated: Grade 3	X	X	X	X	X	X	X		X	X	X	X		X	X
Health & Fitness Series Audience: Kindergarten–grade 6 Harcourt Lessons evaluated: grade 4	X	X			X		X			X		X	X		
Health & Wellness Audience: Kindergarten–grade 8 Macmillan/McGraw-Hill Lessons evaluated: Grade 3	X	X	X	X	X	X	X		X	X	X	X	X	X	X

X = meets competency. P = partially meets competency.

Grades 3–4 (continued)

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Health & Wellness Audience: Kindergarten–grade 8 Macmillan/McGraw-Hill Lessons evaluated: Grade 4	X	X	X	X	X	X	X	X	X	X	X	X		X	X
Linking Science and Nutrition Audience: Kindergarten–grade 8 California Department of Public Health and Network for a Healthy California Lessons evaluated: Grade 4						X				X	X		X	X	X
Nutrition Pathfinders Audience: Grades 4–5 Dairy Council of California			X							X	X	X	X	X	
Nutrition to Grow On Audience: Grades 4–6 California Department of Education	X	X	X			X				X	X	X	X	X	
Shaping Up My Choices Audience: Grade 3 Dairy Council of California	X	X				X	X	X	X	X			X	X	

X = meets competency. P = partially meets competency.

Grades 5–6

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Balance My Day Audience: Kindergarten–grade 5 Healthy Kids Challenge	X	X	X	X			X	X	X	X	X	X		X	X
Choice, Control, & Change Audience: Grades 6–8 Teachers College, Columbia University		X	X		X	X			X	X	X	X	X	X	
Decisions for Health Audience: Grades 6–8 Holt, Rinehart, & Winston Lessons evaluated: Grade 6	X	X	X		X	X		X	X	X	X	X	X	X	
Eat Well & Keep Moving Audience: Grades 4–5 Harvard School of Public Health/Human Kinetics	X	X	X			X				X	X	X	X	X	
Exercise Your Options Audience: Middle school Dairy Council of California	X	X	X			X			X	P	X	X	X	P	X
Farm to Table & Beyond Audience: Grades 5–6 Teachers College, Columbia University							X	X	X					X	X
Fruits and Vegetables for Health Audience: Grades 4–6 California Foundation for Agriculture in the Classroom	X	X				X	X	X	X	X		X	X	X	
Health and Fitness Series Audience: Kindergarten–grade 6 Harcourt Lessons evaluated: Grade 5	X	X	X		X	X	X	X	X	X			X	X	X
Health and Fitness Series Audience: Kindergarten–grade 6 Harcourt Lessons evaluated: Grade 6	X	X	X		X	X	X	X	X	X			X	X	X

X = meets competency. P = partially meets competency.

Grades 5–6 (continued)

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Linking Science and Nutrition Audience: Kindergarten–grade 8 California Department of Public Health and Network for a Healthy California Lessons evaluated: Grade 5		P			X	X				X		X		X	
Nutrition Essentials Audience: Grades 6–8, with applications for grade 9 United States Department of Agriculture, Team Nutrition		X	X			P				X		X		P	
Nutrition Pathfinders Audience: Grades 4–5 Dairy Council of California	X	P	X			X	X		X	X	X	X	X	X	X
Nutrition to Grow On Audience: Grades 4–6 California Department of Education	X	X	X			X	X	X	X	X	X	X	X	X	X
Power of Choice Audience: Grades 6–12 United States Department of Agriculture		X	X			X	X		X	X	X	X	X	X	X
Teen Health 1, 2, and 3 Audience: Grades 6–8 Glencoe/McGraw-Hill Lessons evaluated: Course 1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

X = meets competency. P = partially meets competency.

Grades 7–8

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Choice, Control, & Change Audience: Grades 6–8 Teachers College, Columbia University	X	X	X		X	X		X	X	X	X	X	X	X	
Decisions for Health Audience: Grades 6–8 Holt, Rinehart & Winston Lessons evaluated: Grade 7	X	X	X		X	X	X		X	X	X	X	X	X	
Decisions for Health Audience: Grades 6–8 Holt, Rinehart & Winston Lessons evaluated: Grade 8	X	X			X	X									
EatFit Audience: Grades 6–8 University of California Cooperative Extension, Agriculture and Natural Resources			X			X			X	X			X	X	X
Exercise Your Options Audience: Middle school Dairy Council of California	X	X	X		X	X	X		X	P	X	X	X	P	X
Health & Wellness Audience: Kindergarten–grade 8 Macmillan/McGraw-Hill Lessons evaluated: Grade 7	X	X			X		X		X	X	X	X	X	X	
Health & Wellness Audience: Kindergarten–grade 8 Macmillan/McGraw-Hill Lessons evaluated: Grade 8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Linking Science and Nutrition Audience: Kindergarten–grade 8 California Department of Public Health and Network for a Healthy California Lessons evaluated: Grade 7	X	X	X			X	X	X	X	X	X	X	X	X	X

X = meets competency. P = partially meets competency.

Grades 7–8 (continued)

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Linking Science and Nutrition Audience: Kindergarten–grade 8 California Department of Public Health and Network for a Healthy California Lessons evaluated: Grade 8	X		X		X	X	X			P				X	
Nutrition Essentials Audience: Grades 6–8, with applications for grade 9 United States Department of Agriculture, Team Nutrition	X	P	P	P		X	P			P			X	P	
Planet Health Audience: Middle school Harvard School of Public Health/Human Kinetics	X	X	X			X			X	X	X		X	X	X
Power of Choice Audience: Grades 6–12 United States Department of Agriculture, Team Nutrition	X		X			X	X		X	X	X		X	X	X
Teen Health 1, 2, and 3 Audience: Grades 6–8 Glencoe/McGraw-Hill 2005 Lessons evaluated: Course 2	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X
Teen Health 1, 2, and 3 Audience: Grade 8 Glencoe/McGraw-Hill 2005 Lessons evaluated: Course 3	X	X	X	X		X			X	X	X	X		X	X

X = meets competency. P = partially meets competency.

Grades 9–12

Title of Recommended Curriculum	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Nutrition Essentials Audience: Grades 6–8, with applications for grade 9 United States Department of Agriculture, Team Nutrition	P	P	X			P				P		P	P	P	
Power of Choice Audience: Grades 6–12 United States Department of Agriculture, Team Nutrition			X			X	X		X		X	X	X	X	

X = meets competency. P = partially meets competency.

Recommended Supplemental Instructional Materials

The following matrix displays the recommended supplemental materials and the overarching nutrition competencies they address. Some instructional materials contain lessons for certain grades. In those cases, the materials for the grade level were reviewed for how well they matched a similar grade-level cluster for the nutrition competencies. As mentioned in the overview of this section, this matrix was created by an expert group of nutrition educators, using the California Healthy Kids Resource Center’s “Supplemental List of Instructional Materials for Nutrition and Physical Activity, Kindergarten through Grade Twelve.”

The overarching nutrition competencies are listed on page 49.

Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Color Me Healthy Audience: Preschool–kindergarten North Carolina State University	P	X	X		X	P		P	X	X		X		P	P
Cooking with Kids Audience: Kindergarten and grades 2–5 Santa Fe Partners in Education Lessons evaluated: Kindergarten		X			X		X	X				X		X	X
Deal Me In! Food and Fitness Audience: Kindergarten–grade 6 Dairy Council of California Lessons evaluated: Kindergarten–grade 2		P	X			X					P	X	X		X
Eat Smart, Play Hard Audience: Kindergarten–grade 4 United States Department of Agriculture, Food and Nutrition Service Lessons evaluated: Ages 3–4 and 5–7	X				X	X					X	P			
Harvest of the Month Audience: Kindergarten–grade 12 California Department of Public Health	P	P			X	X	X	X	P	X	X	X		P	X
Kids Cook Farm-Fresh Food Audience: Kindergarten–grade 8, with applications for grades 9–12 California Department of Education	P				X		X	X				P			X

X = meets competency. P = partially meets competency.

Kindergarten (continued)

Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Project R.E.A.D. Together Audience: Kindergarten Iowa State University, Cooperative Extension					X		X	X		X			X	X	X
Reading Across MyPyramid Audience: Kindergarten–grade 2 University of California Cooperative Extension, Agriculture and Natural Resources Lessons evaluated: Kindergarten/First grade	X	X	X	X	X	X	X		X				X	X	X

X = meets competency. P = partially meets competency.

Grades 1–2

Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Cooking with Kids Audience: Grades 2–3 Santa Fe Partners in Education	P	X			X		X	X	P			X		X	
Deal Me In! Food and Fitness Audience: Kindergarten–grade 6 Dairy Council of California		P	X		X	X					P	X	X		X
Eat Smart, Play Hard Audience: Kindergarten–grade 4 United States Department of Agriculture, Food and Nutrition Service Lessons evaluated: Ages 5–7 and 8–10			X			P							P		
The Growing Classroom Audience: Grades 2–6 National Gardening Association Lessons evaluated: Grade 2	X	X	X			X		X	X	X				X	X
Harvest of the Month Audience: Kindergarten–grade 12 California Department of Public Health	X	P	P			P		P	P		P	X	P	P	X
Kids Cook Farm-Fresh Food Audience: Kindergarten–grade 8, with applications for grades 9–12 California Department of Education							X	X	P					X	
MyPyramid for Kids Audience: Grades 1–6 United States Department of Agriculture Lessons evaluated: Level 1 (grades 1–2)		X	X												
Reading Across MyPyramid Audience: Kindergarten–grade 3 University of California Cooperative Extension, Agriculture and Natural Resources		X	X	X	P	X	X		X	P		X	X	X	
Recharge! Audience: Grades 2–6 Action for Healthy Kids		X	X		X	X				X	X		X	X	X

X = meets competency. P = partially meets competency.

Grades 3–4

Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Children's Power Play! Community Youth Organization and Resource Kit Audience: Grades 4–5 California Department of Public Health Lessons evaluated: Grade 4		P	P			P	P		X		X		X		X
Children's Power Play! School Idea and Resource Kit Audience: Grades 4–5 California Department of Public Health Lessons evaluated: Grade 4	X	P	P			P	P		P	X	X	X	X	P	X
Cooking with Kids Audience: Kindergarten and grades 2–5 Santa Fe Partners in Education Lessons evaluated: Grade 3	X	P				P	P	P				X		X	
Cooking with Kids Audience: Kindergarten and grades 2–5 Santa Fe Partners in Education Lessons evaluated: Grade 4	X	P				P	P	P							
Deal Me In! Food and Fitness Audience: Kindergarten–grade 3 Dairy Council of California Lessons evaluated: Grades 3–6	X	P				P	P							X	
Eat Smart, Play Hard Audience: Kindergarten–grade 4 United States Department of Agriculture, Food and Nutrition Service Lessons evaluated: Ages 8–10	X	X													
The Growing Classroom Audience: Grades 2–6 National Gardening Association	X	X	X			X		X	X	X				X	X
Harvest of the Month Audience: Kindergarten–grade 6 California Department of Public Health	X	X	X			X	X				X				X

X = meets competency. P = partially meets competency.

Grades 3–4 (continued)															
Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
<i>Kids Cook Farm-Fresh Food</i> Audience: Kindergarten–grade 8, with applications for grades 9–12 California Department of Education							X	X	P					X	
<i>MyPyramid for Kids</i> Audience: Grades 1–6 United States Department of Agriculture Lessons evaluated: Level 3 (grades 5–6)	X	X			X						X		X		X
<i>Reading Across MyPyramid</i> Audience: Kindergarten–grade 3 University of California Cooperative Extension, Agriculture and Natural Resources Lessons evaluated: Grade 3	X	X	X			X	X				X		X		X
<i>Recharge!</i> Audience: Grades 2–6 Action for Healthy Kids		X	P			X			P	X	P		X	X	X

X = meets competency. P = partially meets competency.

Grades 5–6

Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Children's Power Play! Community Youth Organization and Resource Kit Audience: Grades 4–5 California Department of Public Health Lessons evaluated: Grade 5							P		X		X				X
Children's Power Play! School Idea and Resource Kit Audience: Grades 4–5 California Department of Public Health Lessons evaluated: Grade 5		X	P			P	X		X	X	X	X	X	X	X
Cooking with Kids Audience: Kindergarten and grades 2–5 Santa Fe Partners in Education Lessons evaluated: Grade 5			X					P				X		X	
Deal Me In! Food and Fitness Audience: Kindergarten–grade 6 Dairy Council of California Lessons evaluated: Grades 3–6	P	P	P			P	P			P		P		P	
Do More Watch Less Audience: Grades 6–8 California Department of Public Health							P				P		P	P	
Empowering Youth Audience: Grades 6–12 United States Department of Agriculture, Food and Nutrition Service		X				X			X	X	X	X	X	X	X
Food Safety from Farm to Fork Audience: Grades 5–7 California Foundation for Agriculture in the Classroom							X							P	
The Growing Classroom Audience: Grades 2–6 National Gardening Association Lessons evaluated: Grades 5–6	X	X	X			X		X	X	X			X	X	X

X = meets competency. P = partially meets competency.

Grades 5–6 (continued)															
Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Harvest of the Month Audience: Kindergarten–grade 12 California Department of Public Health		P	X			P		P	X	X	X		X	P	X
Kids Cook Farm-Fresh Food Audience: Kindergarten–grade 8, with applications for grades 9–12 California Department of Education					X			X	P			P		P	
Media-Smart Youth Audience: Grades 6–8 National Institute of Child Health and Human Development		X				X			X	X			X	X	X
MyPyramid for Kids Audience: Grades 1–6 United States Department of Agriculture Audience: Grades 5–6		X		P					X	X	X			X	X
Nourish: Food + Community Audience: Middle school, with applications for high school WorldLink Initiative								X	X		X				X
Recharge! Audience: Grades 2–6 Action for Healthy Kids		X	X		X	P				X			X	X	X

X = meets competency. P = partially meets competency.

Grades 7–8

Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Do More, Watch Less Audience: Grades 6–8 California Department of Public Health				P		X					P		P		
Empowering Youth Audience: Grades 6–12 United States Department of Agriculture, Food and Nutrition Service	X					X			X	X	X	X	X	X	X
Finding Solutions for Hunger Audience: Middle and high schools World Hunger Year	X	P	P	X		X		X	X	X	X	P			P
Food Safety from Farm to Fork Audience: Grades 5–7 California Foundation for Agriculture in the Classroom							X							P	
Harvest of the Month Audience: Kindergarten–grade 12 California Department of Public Health	P		P		P	P	X	P	P					X	X
Kids Cook Farm-Fresh Food Audience: Kindergarten–grade 8, with applications for grades 9–12 California Department of Education							X	X						X	
Nourish: Food + Community Audience: Middle school, with applications for high school WorldLink Initiative							P	X	X		X		P		X
Media-Smart Youth Audience: Grades 6–8 National Institute of Child Health and Human Development	X	X			X	X			X	X			X	X	X

X = meets competency. P = partially meets competency.

Grades 9–12

Recommended Supplemental Material	Overarching 2010 Nutrition Competencies														
	1a	1b	1c	1d	1e	1f	1g	1h	2	3	4	5	6	7	8
Empowering Youth Audience: Grades 6–12 United States Department of Agriculture, Food and Nutrition Service		X				X			X	X	X	X	X	X	X
Finding Solutions for Hunger Audience: Middle and high schools World Hunger Year	P	P	P	X		P	P	X	P	P	P	P		X	X
Harvest of the Month Audience: Kindergarten–grade 12 California Department of Public Health	P		P			P	P	P		P	P		P	X	X
Healthy Weight for Teens Audience: Grades 9–12 Channing Bete Company		P	X			P			P	P	X	P	X	P	
Jump Start Teens Audience: Grades 9–12 California Project LEAN	P	P	P	P		X			X	X	X	X	X	X	X
Kids Cook Farm-Fresh Food Audience: Kindergarten–grade 8, with applications for grades 9–12 California Department of Education							X	X						X	
Nourish: Food + Community Audience: Middle school, with applications for high school WorldLink Initiative							P	X	P	P	P	P			X

X = meets competency. P = partially meets competency.

Overarching Nutrition Competencies

Knowledge Level (competency 1)

1. All students will 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 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)

2. All students will demonstrate the ability to analyze internal and external factors influencing food choices and health outcomes.
3. All students will demonstrate the ability to access and analyze nutrition information, products, and services and analyze the accuracy and validity of nutrition claims.
4. All students will demonstrate the ability to use interpersonal communication skills to optimize food choices and health outcomes.
5. All students will demonstrate the ability to use decision-making skills to optimize food choices and health outcomes.
6. All students will demonstrate the ability to use goal-setting skills to enhance nutrition and health.
7. All students will demonstrate the ability to practice nutrition-related behaviors that reduce risk and promote health.
8. All students will demonstrate the ability to promote and support a sustainable, nutritious food supply and healthy lifestyles for families and communities.

III. Guidance on Implementing a Quality Nutrition Education Program

General Considerations for Implementation

To be effective, nutrition education needs to be much more comprehensive than disseminating basic nutrition information. Quality nutrition education addresses food preferences and sensory–affective factors; person-related factors such as perceptions, beliefs, and attitudes; meanings and social norms; and environmental factors. Skill development is another focus.

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. Strategies need to be based on theory and research evidence and should facilitate behavioral change.

The development of a nutrition education program should first include an assessment of current practices and policies related to nutrition education. Then, an overall instructional plan needs to be established. Ideally, the education program is built around one or two core nutrition curricula that are used in a sequential manner and reinforced at each grade level. Depending on the comprehensiveness of the curricula, the educator might supplement with additional activities to address nutrition competencies that are not adequately covered by the core nutrition curricula and to provide enrichment activities. This instructional plan needs to be tailored to consider 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.

Cultural appropriateness. The curriculum should be culturally appropriate. Nutrition education presents opportunities for students to learn about and experience cultural diversity related to food and eating. Students from different cultural groups have different health concerns, eating patterns, food preferences, and food-related habits and attitudes. These concerns need to be considered in implementation of the curricula and any discussion of food choices. Students of diverse cultural backgrounds are to be provided with a safe and culturally sensitive learning environment.

Context. The Centers for Disease Control and Prevention (1996) notes that “the context in which students learn about healthy eating behaviors and the feelings students associate with healthy foods are key factors in determining the receptivity to nutrition education.” Students learn better through fun, participatory activities that emphasize the positive aspects of healthy eating and when healthy eating is presented in the context of what is already important to students. In general, students value a healthy self-image about their physical appearance, sense of personal control and independence, and capacity for physical activity.

Some resources to provide culturally appropriate education can be found at the USDA National Agricultural Library, Food and Nutrition Information Center Web site at <http://fnic.nal.usda.gov/> (accessed July 22, 2011).

Ideally, implementation of a quality nutrition education program should involve assessment, planning, monitoring, and evaluation. The four phases are explained further.

Assessing the Local School Wellness Policy

A good way to begin implementation of nutrition education is by conducting a review of the district’s local school wellness policy related to nutrition education and then comparing the policy language with evidence of implementation. An effective nutrition education policy is comprehensive; uses strong, enforceable language; and contains specific guidance for implementation.

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 local discretion. A strong emphasis on nutrition education in the local school wellness policy is useful for implementing an effective nutrition education program because it establishes an enforceable framework that can be communicated clearly to administration and other key stakeholders. Congruence between the policy and its implementation is essential as a key factor in sustaining nutrition education in schools. Districts can first assess their local school wellness policy for areas that address nutrition education and then work on strengthening the policy, as needed. This can be done by either revising the policy itself or by developing administrative regulations that add specific language to guide implementation.

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 sets 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;
- generate support for the local school wellness policy 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 where nutrition education is addressed. Generally, a section devoted specifically to nutrition education is best. In addition, nutrition education may be addressed in connection to the cafeteria and classroom; in policies related to healthy fundraising, classroom

celebrations, and prohibitions on the use of food as a reward or punishment; professional development of staff; parent education; and in 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 provided as a guide for assessing and strengthening the wording of the policy related to nutrition education.

Strong policies are defined as those that are definitely required 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 defined as 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 include 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 can be viewed at http://www.bridgingthegapresearch.org/research/district_wellness_policies/ (accessed October 27, 2010).

3. Include specific language in the policy provisions

Specificity strengthens a policy. Guidance on what is taught, when, how often, and by whom should be included in the policy. A local school wellness policy that has specific language regarding the structure and implementation of nutrition education makes it easier to enforce the policy. Policies that are specific:

- address the importance of quality nutrition education to 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, and 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 also be based on state-of-the-art nutrition education methods that use 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 Coordinated School Health approach to supporting nutrition education and well-being;
- 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 nutrition education, being provided 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 following checklist, adapted with permission from WellSAT at <http://www.wellsat.org> (accessed August 25, 2011), can be used to assess the nutrition education components of a district’s local school wellness policy. This 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.

Category	Assessment 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 “vague and/or suggested” or “meets or exceeds expectations.”</i></p>	<p>Not Mentioned</p> <ul style="list-style-type: none"> • Mentions “standards-based nutrition” without mentioning curriculum/program. • Addresses a “wellness curriculum” or health education curriculum without including nutrition/healthy eating as part of the curriculum components.
	<p>Vague and/or Suggested</p> <p>It describes general health curriculum for “K–12” or “all levels,” and/or is unclear if each grade will receive nutrition education.</p> <p>Example:</p> <ul style="list-style-type: none"> • “Enable students, through a comprehensive curriculum, to acquire the knowledge and skills necessary to make healthful food choices for a lifetime.” (Unclear whether nutrition education is actually taught at each grade level.) • “Nutrition lessons should be integrated into the curriculum and the health education program.”
	<p>Meets or Exceeds Expectations</p> <p>The policy clearly indicates that the school district has a nutrition education curriculum in each grade and specifies the number of hours and/or lessons to be taught.</p> <p>Example: “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.”</p>

Category	Assessment Guidance
<p>2. Nutrition education teaches skills that are behavior-focused.</p>	<p>Not Mentioned or Addresses Only Knowledge Acquisition</p>
	<p>Vague and/or Suggested</p> <p>The policy has any of the following features:</p> <ul style="list-style-type: none"> • Suggests skill-based nutrition education. • Mentions but does not require specific behavioral skills. • Suggests skill-based health education outside the nutrition education sections of the policy. <p>Example: “All students should have the skills necessary to make nutritious food choices.”</p>
	<p>Meets or Exceeds Expectations</p> <p>It is clear that the nutrition education curriculum is skill-based and behavior-focused, and includes hands-on and/or experiential activities.</p> <p>Example:</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 to promote self-management related to diet, physical activity, and safe food handling will be included in nutrition education.”

Category	Assessment Guidance
<p>3. Nutrition education curricula adhere to the latest USDA Dietary Guidelines, science-based nutrition research, and evidence-based instructional strategies.</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>The policy encourages the district to use nutrition education curricula or materials that are based on current science or research.</p> <p>Example: "Nutrition education curricula should be based on current research."</p>
	<p>Meets or Exceeds Expectations</p> <p>The policy has language that requires schools to use science-based curriculum and instructional strategies known to be effective based on evidence.</p> <p>Example: "Schools will use district-approved nutrition education curricula that are based on scientifically accurate nutrition content and the current USDA Dietary Guidelines. Curricula will use instructional strategies that incorporate experiential learning opportunities such as taste testing, cooking demonstrations, tours of farmers markets, and school gardens."</p>
<p>4. Requires a standards-based, sequential nutrition education program that meets health education content standards and/or nutrition education standards or competencies.</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>Example: "Nutrition education should be standards-based."</p>
	<p>Meets or Exceeds Expectations</p> <p>The policy wording requires nutrition education to be part of a comprehensive health education curriculum, based on health education content standards, or as a separate subject, based on health education content standards and/or nutrition standards.</p> <p>Example: "Nutrition education shall be part of a sequential, comprehensive health education program in accordance with the <i>Health Education Content Standards for California Public Schools</i>."</p>

Category	Assessment Guidance
<p>5. Links nutrition education with the school food environment.</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>Example: “The entire school environment, not just the classroom, should 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>
	<p>Meets or Exceeds Expectations</p> <p>The policy requires that nutrition education be integrated into the larger school environment in concrete ways.</p> <p>Example: “The nutrition education program shall work with the school meal program to develop school gardens and use the cafeteria as a learning laboratory.”</p>
<p>6. Encourages staff members to be role models for healthy behaviors.</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>The policy suggests that staff members model healthy behavior.</p> <p>Example: “Each school in the district should encourage staff to model . . .”</p>
	<p>Meets or Exceeds Expectations</p> <p>The policy requires support for staff members to model healthy behavior and/or requires staff development in health.</p> <p>Example: “Staff will receive 10 hours of professional development each year to help them model healthy eating and physical activity as a valuable part of daily life.”</p>

Category	Assessment Guidance
<p>7. Specifies how the district will engage families to provide information and/or solicit input to meet district wellness goals (e.g., through a Web site, e-mail, parent conferences, or events).</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>The policy has any the following characteristics:</p> <ul style="list-style-type: none"> • Methods are vague. • Specific methods are mentioned but not required. • Specific methods are mentioned, but it is unclear if the 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 should be encouraged through stakeholder meetings.”
	<p>Meets or Exceeds Expectations</p> <p>The policy is clear that the district or schools will engage families and names specific methods. Even if it is unclear that each method named will be used, if it requires engagement, rate as meets or exceeds expectations.</p> <p>Examples:</p> <ul style="list-style-type: none"> • “Nutrition education will be provided to parents through hand-outs, 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 ideas 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 with the opportunity to give feedback on wellness goals.”

Category	Assessment Guidance
<p>8. Specifies marketing to promote healthy choices.</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>Example: “It is recommended that organizations operating concessions at school functions market healthy food choices at a lower profit margin to encourage student selection.”</p>
	<p>Meets or Exceeds Expectations</p> <p>Posters show pricing structures, and other specific details are required.</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 fruits, will be prominently displayed in the cafeterias to encourage students to make healthy choices.”
<p>9. Specifies restricting marketing of unhealthy choices.</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>The policy suggests restrictions or is weakened by exceptions such as time, location, or a principal’s discretion.</p> <p>Example: “Advertisement of foods with minimal nutritional value is strongly discouraged on school grounds at the principal’s discretion.”</p>
	<p>Meets or Exceeds Expectations</p> <p>Examples:</p> <ul style="list-style-type: none"> • “Education materials shall be free of brand names and illustrations of unhealthy foods.” • “Soft-drink logos are not allowed on school materials or on school property.”

Category	Assessment Guidance
<p>10. Establishes an advisory committee to address health and wellness that is ongoing beyond policy development.</p>	<p>Not Mentioned</p>
	<p>Vague and/or Suggested</p> <p>The idea of a committee is suggested, and/or it is not clear whether the committee will be ongoing.</p> <p>Example: "A wellness policy committee should be formed in district XYZ."</p>
	<p>Meets or Exceeds Expectations</p> <p>Committee is required and clearly ongoing.</p> <p>Examples:</p> <ul style="list-style-type: none"> • "The Nutrition and Physical Activity Advisory Council shall include (stakeholders) and shall meet a minimum of two times annually to monitor and evaluate the implementation of the policy." • "The school district will create or strengthen school health councils to develop, monitor, review, revise, and advise on nutrition and physical activity policies."

Planning for Implementation

This overview of the planning steps for nutrition instruction in schools was originally developed as a guide for the 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.



Figure 1. Overview of Instructional Planning Process

Steps for Instructional Planning

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 local wellness policy

Evaluate the nutrition education component of the local school wellness policy to determine the requirements for nutrition education.

If possible, participate on the district's wellness committee or a school site council to support the implementation of the nutrition instructional plan. Committees provide an avenue for making recommendations for the wellness policy that relate to nutrition education.

b. Become familiar with instructional guidance documents

Review the HECS and the nutrition competencies for guidance on grade-level expectations. The HECS and the nutrition competencies are described in section I, "Nutrition Competencies."

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 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 you are targeting.
- 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.

Regardless of whether nutrition education is offered as its own subject or integrated into other subjects, a pacing-guide

review will help identify the best time for offering nutrition education.

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. A number of recommended curricula and materials are presented in section II (see appendix A for descriptions of the resources).

Depending on the plan, a nutrition education program can be offered as a separate subject or as a unit within a subject, or can be integrated into other subject areas.

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 a classroom 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 to implement the plan; this may involve one or more schools depending on their readiness.

b. Support teachers in developing grade-level instructional plans

Ideally, a lead teacher for each grade should be identified. Ensure that meetings for each grade are scheduled 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 instructional plan should include training, ongoing support, technical assistance, resources, and methods for monitoring the implementation of training.

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.

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.

Schedule and deliver staff training.

After the training, check in 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, and some may prefer resources to be 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, phone 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

Connections to the cafeteria, parents, peers, and school environment can reinforce nutrition instruction and messages. Some

resources are provided in appendix B, “Resources for Enhancing Nutrition Education.”

6. Refine the Nutrition Instructional Plan, Nutrition Messages, and School and Community Support

Review the feedback from staff training sessions, implementation, 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.

If possible, include formal evaluation. One method is to evaluate the overall implementation of the nutrition education provided. Appendix D 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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Appendix A

Descriptions of Recommended Instructional Resources

The instructional resources recommended in this appendix are by no means exhaustive; there are many other effective nutrition education curricula and instructional materials that are not included in this guide. The California Healthy Kids Resource Center (CHKRC) reviewed the resources in this appendix for accuracy and effective use of research-based instructional strategies. The process for developing this list is described in greater detail in section II, “Recommended Instructional Resources.”

As mentioned previously, to be designated as *recommended curricula* rather than *supplemental instructional materials*, the resources needed to be comprehensive and sequential, as well as meet other CHKRC criteria. Therefore, some of the recommended instructional materials, although excellent resources, were not included on the recommended curricula list because they did not necessarily need to be taught in a sequential manner, or they may have focused more narrowly on a specific area of nutrition (such as gardening).

- **The Recommended Nutrition Education Curricula List** includes the California-adopted health education programs and selected nutrition-specific curricula. The versions reviewed for this guide support the 2005 USDA Dietary Guidelines for Americans, *MyPyramid*, the Nutrition Facts label, and grade-level nutrition and physical activity standards in the HECS. In addition, the authors provide lessons for specific 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). Materials from this list can form the foundation, or the core, for planning instruction.
- **The Recommended Supplementary Nutrition Education Instructional Materials List** includes 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 2005 USDA Dietary Guidelines for Americans, *MyPyramid*, 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 reviews instructional and professional materials for use in after-school programs. The CASRC Materials Review Board uses research to evaluate materials. Materials rated as high-quality are promoted on the CASRC Web site (<http://www.californiaafterschool.org/>) and in the CASRC library catalog and are made available for statewide loan, delivered free of charge anywhere in California.

The following section lists recommended materials for each grade level; the subsequent section provides descriptions of the materials, with the titles in alphabetical order. Many materials from the California Healthy Kids Resource Center (<http://www.californiahealthykids.org/>) can be borrowed free of charge.

*MyPyramid was recently replaced by MyPlate, which reflects the 2010 Dietary Guidelines. See item 7 in appendix B for tips on adapting lessons to MyPlate.

Instructional Resources (by Grade Level)

Kindergarten

Balance My Day ★	Harvest of the Month
Building a Healthy Me ★	Health and Fitness Series ★
CATCH Jump into Health ★	Health & Wellness ★
<i>Children's Power Play!</i> Community Youth Organization Idea and Resource Kit	Healthy Foods from Healthy Soils
Color Me Healthy	Kids Cook Farm-Fresh Food
Cooking with Kids	Linking Science and Nutrition ★
Deal Me In! Food and Fitness	Nutrition EZ
Eat Smart. Play Hard.	Reading Across MyPyramid
Eating Healthy from Farm to Fork ★	

Grade One

Balance My Day ★	Health and Wellness ★
CATCH Everyday Foods for Health	Healthy Choices, Healthy Me! ★
<i>Children's Power Play!</i> Community Youth Organization Idea and Resource Kit ★	Healthy Food from Healthy Soils
Cooking with Kids	How to Teach Nutrition to Kids
Deal Me In! Food and Fitness	Kids Cook Farm-Fresh Food
Eat Smart. Play Hard.	MyPyramid for Kids
Eating Healthy from Farm to Fork ★	Nutrition EZ
Harvest of the Month	Reading Across MyPyramid
Health and Fitness Series ★	

Key: The star symbol (★) indicates recommended curricula.

Grade Two

Balance My Day ★	Health and Wellness ★
CATCH Celebrate Health ★	Healthy Choices, Healthy Me! ★
<i>Children's Power Play!</i> Community Youth Organization Idea and Resource Kit	Healthy Foods from Healthy Soils
Cooking with Kids	How to Teach Nutrition to Kids
Deal Me In! Food and Fitness	Kids Cook Farm-Fresh Food
Eat Smart. Play Hard.	Linking Science and Nutrition ★
Eating Healthy from Farm to Fork ★	MyPyramid for Kids
The Growing Classroom	Nutrition EZ
Harvest of the Month	Reading Across MyPyramid
Health and Fitness Series ★	ReCharge! Energizing After-School

Grade Three

Balance My Day ★	Health and Wellness ★
CATCH Hearty Heart & Friends ★	Healthy Foods from Healthy Soils
<i>Children's Power Play!</i> Community Youth Organization Idea and Resource Kit	How to Teach Nutrition to Kids
Cooking with Kids	Kids Cook Farm-Fresh Food
Deal Me In! Food and Fitness	MyPyramid for Kids
Eat Smart. Play Hard.	Nutrition EZ
The Growing Classroom	Reading Across MyPyramid
Harvest of the Month	ReCharge! Energizing After-School
Health and Fitness Series ★	Shaping up My Choices ★

Key: The star symbol (★) indicates recommended curricula.

Grade Four

CATCH Taking Off ★

Children's Power Play! Community Youth Organization Idea and Resource Kit

Children's Power Play! School Idea and Resource Kit

Cooking with Kids

Deal Me In! ... Food and Fitness

Eat Smart. Play Hard.

Eat Well and Keep Moving ★

Fruits and Vegetables for Health ★

The Growing Classroom

Harvest of the Month

Health and Fitness Series ★

Health and Wellness ★

Healthy Foods from Healthy Soils

How to Teach Nutrition to Kids

Kids Cook Farm-Fresh Food

Linking Science and Nutrition ★

MyPyramid for Kids

Nutrition EZ

Nutrition Pathfinders ★

Nutrition to Grow On ★

ReCharge! Energizing After-School

Grade Five

CANFIT Super Manual

Children's Power Play! Community Youth Organization Idea and Resource Kit

Children's Power Play! School Idea and Resource Kit

Cooking with Kids

Deal Me In! Food and Fitness

Do More, Watch Less

Eat Smart. Play Hard.

Eat Well and Keep Moving ★

Empowering Youth (AS)

Farm to Table and Beyond ★

Food Safety from Farm to Fork ★

Fruits and Vegetables for Health ★

The Growing Classroom

Harvest of the Month

Health and Fitness Series ★

Health and Wellness ★

Healthy Foods from Healthy Soils

How to Teach Nutrition to Kids

Kids Cook Farm Fresh-Food

Linking Science and Nutrition ★

MyPyramid for Kids

Nutrition EZ

Nutrition Pathfinders ★

Nutrition to Grow On ★

ReCharge! Energizing After-School

Key: The star symbol (★) indicates recommended curricula.

Grade Six

CANFIT Super Manual	Fruits and Vegetables for Health ★
Choice, Control, Change ★	The Growing Classroom
<i>Children's Power Play!</i> Community Youth Organization Idea and Resource Kit	Harvest of the Month
Cooking with Kids	Health and Fitness Series ★
Deal Me In! Food and Fitness	Health and Wellness ★
Decisions for Health ★	Healthy Foods from Healthy Soils
Do More, Watch Less	How to Teach Nutrition to Kids
Eat Smart. Play Hard.	Kids Cook Farm-Fresh Food
EatFit ★	Media-Smart Youth
Empowering Youth	MyPyramid for Kids
Exercise Your Options ★	Nutrition Essentials ★
Farm to Table and Beyond ★	Planet Health ★
Finding Solutions to Hunger	Power of Choice ★
Food Safety from Farm to Fork ★	ReCharge! Energizing After-School
	Teen Health ★

Grade Seven

CANFIT Super Manual	Health and Fitness Series ★
Choice, Control, Change ★	Health and Wellness ★
Decisions for Health ★	Kids Cook Farm-Fresh Food
Do More, Watch Less	Linking Science and Nutrition ★
EatFit ★	Media-Smart Youth
Empowering Youth with Nutrition and Physical Activity	Nourish: Food + Community
Exercise Your Options ★	Nutrition Essentials ★
Finding Solutions to Hunger	Planet Health ★
Food Safety from Farm to Fork ★	Power of Choice ★
Harvest of the Month	Teen Health ★

Key: The star symbol (★) indicates recommended curricula.

Grade Eight

CANFIT Super Manual	Health and Wellness ★
Choice, Control, Change ★	Kids Cook Farm-Fresh Food
Decisions for Health ★	Linking Science and Nutrition ★
Do More, Watch Less	Media-Smart Youth
EatFit ★	Nourish: Food + Community
Empowering Youth with Nutrition and Physical Activity	Nutrition Essentials ★
Exercise Your Options ★	Planet Health ★
Finding Solutions to Hunger	Power of Choice ★
Harvest of the Month	Teen Health ★
Health and Fitness Series ★	

Grades 9–12

CANFIT Super Manual	Jump Start Teens
Do More, Watch Less	Kids Cook Farm-Fresh Food
Empowering Youth With Nutrition and Physical Activity	Nourish: Food + Community
Finding Solutions to Hunger	Nutrition Essentials ★
Harvest of the Month	Power of Choice ★
Healthy Weight for Teens	The Snack Shop

Key: The star symbol (★) indicates recommended curricula.

★ Balance My Day Nutrition Education

Publisher: Healthy Kids Challenge

Web site: <http://www.healthykidschallenge.com/content/k-2> (accessed August 25, 2011)

Target audience: Kindergarten–grade 5

Nutrition competencies:

Kindergarten: 1a–d, f–g; 2–5, 7–8

Grades 1–2: 1a–d, f–g; 2–5, 7–8

Grades 3–5: Not reviewed

Language: English

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

Cafeteria connection: Yes

After school: Yes

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 and how to politely refuse less-nutritious foods, as well as 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Building a Healthy Me

Publisher: Dairy Council of California

Web site: <http://www.dairycouncilofca.org/Educators/ClassroomPrograms/ProgramsBHM.aspx> (accessed August 25, 2011)

Target audience: Kindergarten

Nutrition competencies: 1a–c, (e), 1f–h; 2, 5, 7, 8

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; also available for purchase from out of state

Cafeteria connection: Yes

After school: Yes

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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

CANFIT Super Manual

Publisher: CANFIT Program

Web site: <http://www.canfit.org/>
(accessed July 22, 2011)

Target audience: Grades 5–9

Nutrition competencies: Not reviewed

Language: English

Number of lesson plans: 25

Amount of time per lesson: 45–60 minutes

Estimated total time for lessons: 20–25 hours

Format: Hard copy

Cost: Available for purchase or from CASRC on free loan

Cafeteria connection: Yes

After school: Yes

This instructional resource is a manual that offers 25 physical and nutrition activities, as well as background information focused on health issues of low-income, African American, Latino, Asian, and Native American students aged ten to fourteen years. It introduces heart disease, diabetes, fat, cholesterol, sodium, physical activity, and body image and the role of culture in risk and appropriate instruction. Strategies for program planning, developing an organizational philosophy and policy, identifying and applying for funding, working with parents and the community, and evaluating programs are included. Later chapters describe interactive lessons and games, as well as additional resources to promote physical activity, nutrition, snacks, and positive body image.

What's inside: A lesson matrix identifies California Department of Education English–language arts, math, physical education, health, and science content standards aligned with each activity. The manual includes program ideas, tips for evaluation, assessment tools, curriculum standards, and 25 lesson plans. It also supplies handouts, reproducible student activity sheets, and recipes.

Activity highlight: In “My Snack Options,” students identify the influences on their snack choices, assess their environment to determine the types of snack foods that are available, and make plans to make healthy snack choices.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ **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> (accessed July 25, 2011)

Target audience: Grade 2

Nutrition competencies: 1a–c, e–h; 2–8

Language: English

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

Cafeteria connection: Yes

After school: Yes

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, how to identify hidden fat in foods, and how to select foods that are low in sodium. Physical activity lessons are also included.

What’s inside: A teacher resource guide, reproducible handouts, transparency masters, sugges-

tions 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 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ **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 July 25, 2011)

Target audience: Grade 1

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

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

Cafeteria connection: Yes

After school: Yes

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 how to prepare healthy snacks.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ **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 July 25, 2011)

Target audience: Grade 3

Nutrition competencies: 1f; 3–4, 6–8

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

Cafeteria connection: Yes

After school: Yes

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 DVD 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* DVD initiate discussions centering on health and activities—such as the preparation of healthy snacks.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ *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 July 25, 2011)

Target audience: Kindergarten

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

Language: English

Number of lesson plans: 10

Amount of time per lesson: 20–25 minutes

Estimated total time for lessons: 3.3 hours

Format: Hard copy

Cost: Available for purchase

Cafeteria connection: Yes

After school: Yes

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: Students learn how to make healthy snacks.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ CATCH Taking Off

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

Web site: <http://www.flaghouse.com/Taking-Off-4th-Grade-Student-Workbook-item-11450>
(accessed July 25, 2011)

Target audience: Grade 4

Nutrition competencies: 1c; 2–7

Language: English

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

Cafeteria connection: No

After school: Yes

This curriculum encourages students to eat healthy foods and make positive changes in their physical activity routines. Students also 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, transparency masters, sugges-

tions for hands-on activities, background information on major topics, and activities for children to apply at home what they learned at school. The curriculum comprises 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Children’s Power Play! Community Youth Organization Idea and Resource Kit

Publisher: California Department of Public Health

Web site: <http://www.cdph.ca.gov/programs/cpns/Pages/PowerPlayResources.aspx> (accessed July 25, 2011)

Target audience: Grades 4–5

Nutrition competencies:

Grade 4: (1b–c), (f–g); 2, 4, 6, 8

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

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

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

Cafeteria connection: Yes

After school: Yes

The resource focuses on increasing physical activity and consumption of fruits and vegetables. Students learn the correct amount of fruits and vegetables to consume as well as the appropriate amount of physical activity for each day. Activities are intended for after-school programs and diverse age groups; older students are encouraged to assist younger children with complex concepts as needed. Activities integrate physical activity into learning exercises. Little preparation time is necessary for each activity.

What’s inside: A teacher resource guide, 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 11, “Grow Your Own,” students learn how to grow and care for vegetables, and they 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Children's Power Play! School Idea and Resource Kit

Publisher: California Department of Public Health

Web site: <http://www.cdph.ca.gov/programs/cpns/Pages/PowerPlayResources.aspx> (accessed July 25, 2011)

Target audience: Grades 4–5

Nutrition competencies:

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

Grade 5: 1b, (1d), (1f), 1g; 2–8

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

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

Cafeteria connection: Yes

After school: Yes

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 effect of advertising. They create their own advertisements to help a friend to increase consumption of fruits and vegetables.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Choice, Control, & Change

Publisher: Teachers College, Columbia University

Web site: <http://blogs.tc.columbia.edu/cfe/education/nutrition-curriculum/c3/c3-supplemental-resources/choice-control-change-overview/html> (accessed July 25, 2011)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1b, c, e, f; 2–7

Grades 7–8: 1a–c, e, f, h; 2–7

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

Cafeteria connection: No

After school: Not reviewed

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 cornstarch 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Color Me Healthy

Publisher: North Carolina State University

Web site: <http://www.colormehealthy.com/professional/index.html> (accessed July 25, 2011)

Target audience: Primarily preschool but can be used with kindergarten

Nutrition competencies: (1a), 1b–c, 1e, (1f); 2–3, 5, (7–8)

Language: Teacher’s guide in English, with additional Spanish handouts

Number of lesson plans: 14

Amount of time per lesson: N/A

Estimated total time for lessons: N/A

Format: Hard copy and CD

Cost: Available for purchase

Cafeteria connection: Yes

After school: Yes

Lessons teach children about healthy food and physical activity. Activities are designed to be used during circle time. The use of color, music, food, and photos complements the curriculum and stimulates children’s senses. Lessons are quick and easy to follow. The ideas and activities can be easily adapted. The curriculum also has an emphasis on changing the classroom environment to reflect healthy lifestyles.

What’s inside: A teacher resource guide, four sets of picture cards, three classroom posters, a

CD with seven original songs, a hand stamp, 14 reproducible parent newsletters, and two parent posters. A training manual is also available for purchase separately and includes meeting agendas, PowerPoint slides, and handouts.

Activity highlight: In “Eat a Rainbow of Colors,” students sing “Taste the Colors”; teachers use picture cards with a bright color on one side and foods that match the color on the other; and children name foods of different colors that they have eaten.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Cooking with Kids

Publisher: Santa Fe Partners in Education

Web site: <http://www.cookingwithkids.net/>
(accessed July 25, 2011)

Target audience: Kindergarten, grades 2–3, 5

Nutrition competencies:

Kindergarten: 1b, e, g, h; 5, 7, 8

Grade 2: (1a), b, e, g, h; (2), 5, 7

Grade 3: 1a, (b), (f–h)

Grade 5: 1c, (h)

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

Number of lesson plans: 10

Amount of time per lesson: 1–2 hours

Estimated total time for lessons: 15 hours

Format: Hard copy; some lessons also available as downloadable PDFs

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

Cafeteria connection: Yes

After school: Yes

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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Deal Me In! . . . Food and Fitness

Publisher: Dairy Council of California

Web site: <http://www.dairycouncilofca.org/Educators/ClassroomPrograms/> (accessed July 25, 2011)

Target audience: Kindergarten–grade 6

Nutrition competencies:

Kindergarten: (1b), c, f; (4), 5, 6, (8)

Grades 1–2: (1b), 1c, 1e–g, (1g); 3, (4), 5, (7–8)

Grades 3–4: 1a–c, f, g; 7

Grades 5–6: (1a–c), (1f–g); (3), (5), (7)

Language: Instructional guide in English, with additional Spanish handouts

Number of lesson plans: 11

Amount of time per lesson: 15–30 minutes

Estimated total time for lessons: 2.5–5.5 hours

Format: Hard copy

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

Cafeteria connection: No

After school: Yes

This resource is designed primarily for use in after-school programs. It includes lessons for both kindergarten to grade two and for grades three through six. The program provides children with fun, interactive ways to learn about the importance of nutrition and physical activity. Children discover how to identify healthy foods, choose activities that positively impact health, choose healthy portion sizes, and recognize healthy food options outside the home.

What's inside: Student activity books, leader instruction cards, full-color deck of game cards to use with students (food, physical activity, portion size, and food groups), and student and parent brochures.

Activity highlight: Food Bingo game with clues to identify the foods from each of the food groups.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Decisions for Health

Publisher: Holt, Rinehart, & Winston

Web site: <http://holtmcdougal.hmhco.com/hm/detail.htm?ID=1007500000072477> (accessed August 25, 2011)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1a–c, e, f, h; 2–7

Grade 7: 1a–c, e–g; 2–7

Grade 8: 1a, b, e, f

Language: Resource guide and student textbook in English, and handouts available in Spanish

Number of lesson plans: 11

Amount of time per lesson: 45 minutes

Estimated total time for lessons: 8.25 hours

Free supplemental activities: Available at http://go.hrw.com/hrw.nd/gohrw_rls1/pKeywordResults?HD46%20Home (accessed August 25, 2011)

Format: Hard copy

Cost: Available for purchase; some handouts available online

Cafeteria connection: No

After school: Not reviewed

This health curriculum promotes active exploration of health concepts, character building, and life skills by requiring students to apply what they learn within the context of the real world. A separate textbook is available for grades six through eight. Nutrition content develops with each grade level. Lessons begin at the sixth-grade level, with a focus on nutrients and eating throughout the life cycle. More complex topics, such as eating disorders and maintaining a healthy body image, are covered in the eighth grade. Students engage in guided and independent practice, demonstrations, discussions, role plays, skits, poster projects, and study activities to develop decision-making, media-analysis, and communication skills.

What's inside: Teacher resource guide; student worksheets and study guides; online textbook; chapter resources package; teacher planner; and a CD-ROM for students. Free handouts and additional activities are available online.

Activity highlight: Students develop a health behavior contract in which they discuss the reasons they need to change, determine the personal values they possess that will help them meet their goal, create a plan for changing their health behavior, and evaluate their progress.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Do More, Watch Less

Publisher: California Department of Public Health

Web site: <http://www.cdph.ca.gov/programs/schoolhealth/Documents/FINAL%20English%20MWL%204%2007.pdf> (accessed July 25, 2011)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: (1f); (4), (6–7)

Grades 7–8: (1d); (2), (5–7)

Language: English and Spanish

Number of lesson plans: 4

Amount of time per lesson: 30–45 minutes

Estimated total time for lessons: 2.75 hours

Format: Downloadable PDF

Cost: Free

Cafeteria connection: No

After school: Yes

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 healthy food and music.

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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Eat Smart. Play Hard™ — Power Play

Publisher: USDA, Food and Nutrition Service

Web site: <http://teamnnutrition.usda.gov/Resources/eatsmartmaterials.html> (accessed July 25, 2011)

Target audience: Kindergarten, grades 1–4

Nutrition competencies:

Kindergarten (ages 3–4 /5–7): 1a, e, f; 4, 5
Grades 1–2 (ages 5–7/8–10): 1c, (1f); (6–7)
Grades 3–4 (ages 8–10): 1a, b

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

Number of lesson plans: 4 for children; 4 for adults

Amount of time per lesson: 20–40 minutes

Estimated total time for lessons: 1–2 hours (2 can be used with most age groups)

Format: Downloadable PDF

Cost: Free

Connection to cafeteria: N/A

After school: Yes

This Team Nutrition Web site serves as an entry point to a variety of messages and materials based on MyPyramid and the Dietary Guidelines for Americans. Topics include breakfast, snacks, healthy eating, and healthy beverage choices. There is one lesson for each age group with accompanying parent lessons. Target ages are approximate; lessons for the three- to four-year-old students can be used with kindergarten. Lessons for the eight- to ten-year-old can be used with grades one to two.

What’s inside: Campaign materials, lesson plans, songs, public service announcements, scripts, parent lessons, and additional materials.

Activity highlight: The “Choose Drinks That Count” lesson focuses on comparing the nutrient content of beverages. Teachers prepare samples of orange juice and soda for discussion. The lesson includes extension activities. Posters, labels, stickers, and handouts are available on the Web site.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Eat Well & Keep Moving

Publisher: Harvard School of Public Health/Human Kinetics

Web sites: <http://www.eatwellandkeepmoving.org/> and <http://www.humankinetics.com> (accessed July 25, 2011)

Target audience: Grades 4–5

Nutrition competencies:

Grades 3–4: 1a–c, f; 3–7

Grades 5–6: 1a–c, f; 3–7

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: Available for purchase

Cafeteria connection: Yes

After school: Not reviewed

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 CD-ROM 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ EatFit

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

Web site: <https://eatfit.net/teachers.htm> (accessed July 25, 2011)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: Not reviewed

Grades 7–8: 1c, f; 2–3, 5–8

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 non-qualifying schools; online analysis program with paper version available free upon request

Cafeteria connection: No

After school: Yes

A nine-week curriculum with 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Eating Healthy from Farm to Fork

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

Web site: http://cesutter.ucdavis.edu/Nutrition_Education_Program_527/Eating_Healthy_from_Farm_to_Fork/ (accessed July 25, 2011)

Target audience: Kindergarten, grades 1 and 2

Nutrition competencies:

Kindergarten: 1a–h; 2, 4, 5, 7, 8

Grade 1: 1a–d, f–h; 4, 7, 8

Grade 2: 1a–h; 2–8

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

Cafeteria connection: Yes

After school: Yes

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 MyPyramid 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 and how soil helps food grow. Children name foods in the grain group using the MyPyramid poster and name “better at the bottom” 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Empowering Youth with Nutrition and Physical Activity

Publisher: USDA, Food and Nutrition Service

Web site: <http://www.fns.usda.gov/tn/Resources/empoweringyouth.html> (accessed July 25, 2011)

Target audience: Grades 6–12

Nutrition competencies:

Grades 5–6: 1b, f; 2–8

Grades 7–8: 1a, f; 2–8

Grades 9–12: (1b), f; 2–8

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

Cafeteria connection: No

After school: Yes

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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Exercise Your Options

Publisher: Dairy Council of California

Web site: <http://www.dairycouncilofca.org/Educators/ClassroomPrograms/ProgramsEYO.aspx> (accessed July 25, 2011)

Target audience: Middle-school students

Nutrition competencies:

Grade 6: 1a–c, f; 2, (3), 4–6, (7), 8

Grades 7–8: 1a–c, e–g; 2, (3), 4–6, (7), 8

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

Cafeteria connection: No

After school: Yes

Middle-school students assess their nutrition and physical activity in this curriculum, which is guided by the principles of the *Health Framework for California Public Schools* (California Department of Education 2003) and the *Physical Education Model Content Standards for California Public Schools* (California Department of Education 2005). Ideas for extension activities, questions, and projects for students are included. The DVD 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 CD/DVD with eight video segments that introduce the key issues in each lesson.

Activity highlight: Students research nutrients, portion size, and benefits of food groups by using the student activity booklet and CD/DVD.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Farm to Table & Beyond

Publisher: Teachers College, Columbia University

Web site: <http://blogs.tc.columbia.edu/cfe/education/nutrition-curriculum/farm-to-table-beyond/>
(accessed August 25, 2011)

Target audience: Grades 5–6

Nutrition competencies: 1g–h; 2, 7, 8

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

Cafeteria connection: No

After school: Yes

This sequential curriculum uses science to explore nutrition and the food environment. Students are led through an investigation of the food system and its relation 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, student activity

sheets and readings, a matrix that maps the curriculum to the National Science Education Standards and Benchmarks for Science Literacy.

Activity highlight: “Field to Store” (lesson 5) 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Finding Solutions to Hunger

Publisher: World Hunger Year

Web site: <http://www.kidscanmakeadifference.org/>
(accessed July 25, 2011)

Target audience: Middle and high school students

Nutrition competencies:

Grade 6: Not reviewed

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

Language: English

Number of lesson plans: 25

Amount of time per lesson: N/A

Estimated total time for lessons: N/A

Format: Hard copy

Cost: Available for purchase

Cafeteria connection: No

After school: Yes

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. Links are available to a Web site.

Activity highlight: In one lesson, students assume the roles of villagers, world-bank ministers, government officials, environmentalists, loggers, and “trees and creatures of the forest” and debate whether a proposed development project would really benefit the people and their land.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Food Safety from Farm to Fork

Publisher: California Foundation for Agriculture in the Classroom

Web site: <http://www.cfaitc.org/foodsafety/pdf/foodsafety.pdf> (accessed July 25, 2011)

Target audience: Grades 5–7

Nutrition competencies:

Grades 5–6: 1g, (7)

Grade 7: 1g, (7)

Language: English

Number of lesson plans: 5

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 6.6 hours

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

Cost: Free

Cafeteria connection: No

After school: Yes

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 foodborne 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Fruits and Vegetables for Health

Publisher: California Foundation for Agriculture in the Classroom

Web site: <http://www.cfaitc.org/lessonplans/?details=409.pdf> (accessed July 25, 2011)

Target audience: Grades 4–6

Nutrition competencies:

Grades 3–4: 1a, b, f–h; 2, 3, 5–7

Grade 5–6: 1a, b, f–h; 2, 3, 5–7

Language: English

Number of lesson plans: 9

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 7.5 hours

Format: Downloadable PDF, hard copy

Cost: Free PDF; hard copy available for purchase

Cafeteria connection: Yes

After school: Yes

This comprehensive curriculum teaches students about the production, distribution, and nutritional value of fresh produce from California. Geography, language arts, mathematics, science, health, and nutrition concepts are incorporated. It is aligned with the *Health Education Content Standards for California Public Schools* (California Department of Education 2008). The older version of the food pyramid is used but could be updated easily.

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.

Activity highlight: Students compose a creative story about life as a fruit or vegetable.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

The Growing Classroom

Publisher: National Gardening Association

Web site: <http://www.lifelab.org/2007/01/2007-the-growing-classroom-new-edition> (accessed July 25, 2011)

Target audience: Grades 2–6

Nutrition competencies:

Grade 2: 1a–c, f; 2–5, 7–8

Grades 3–4: 1a–c, f, h; 2–3, 7–8

Grades 5–6: 1a–c, f, h; 2–3, 7–8

Language: Instructional guide in English, with additional Spanish handouts

Number of lesson plans: 6

Amount of time per lesson: N/A

Estimated total time for lessons: N/A

Format: Hard copy

Cost: Available for purchase

Cafeteria connection: No

After school: Yes

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 and 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Harvest of the Month

Publisher: California Department of Public Health

Web site: <http://www.harvestofthemoth.com/>
(accessed July 25, 2011)

Target audience: Kindergarten–grade 12

Nutrition competencies:

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

Language: Instructional guide in English, with additional Spanish handouts

Number of lesson plans: 36

Amount of time per lesson: N/A

Estimated total time for lessons: Flexible

Format: Downloadable PDFs

Format: Free

Cafeteria connection: Yes

After school: Yes

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 newslet-

ters, 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Health & Fitness Series

Publisher: Harcourt

Web site: http://www.harcourtschool.com/menus/health_fitness/ (accessed July 25, 2011)

Target audience: Kindergarten–grade 6

Nutrition competencies:

Kindergarten: Not reviewed

Grade 2: 1a–c, e–h; 2–8

Grade 3: 1a–e, g; 2–5, 7, 8

Grade 4: 1a–b, e, g; 3, 5, 6

Grade 5: 1a–c, e–h; 2–3, 6–8

Grade 6: 1a–c, e–h; 5–8

Language: English

Number of lesson plans: 4–13, depending on grade level

Amount of time per lesson: 45–60 minutes, depending on grade level

Estimated total time for lessons: 4–9 hours, depending on grade level

Format: Hard copy; supplemental online resources

Cost: Available for purchase; supplemental online resources free

Cafeteria connection: No

After school: Yes

Harcourt’s *Health and Fitness* sequential curriculum, offered in a series of six, is a state-adopted health textbook series. It covers a wide range of health aspects, including nutrition. Supplemental online resources are also available. Topics are introduced through text, pictures, charts, classroom discussions, and presentation materials. Lessons present a variety of nutrition topics, including food safety, food choices, food advertising, and food labels.

What’s inside: Transparencies, assessment guide, activity book, and teaching resources are available for purchase; supplemental online resources are free.

Activity highlight: The supplemental nutrition activity gives students a look at “super veggies”—those that have increased nutrient value (e.g., purple carrots).

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Health & Wellness

Publisher: Macmillan/McGraw-Hill

Web site: <http://www.mhschool.com/health/2005/student/index.html> (accessed July 25, 2011)

Target audience: Kindergarten, grades 2–5, 7–8

Nutrition competencies:

Kindergarten: 1a–c, e–g; 2–8

Grade 1: 1a–c, e–g; 2–8

Grade 2: 1a–g; 2–5, 7

Grade 3: 1a–g; 2–8

Grade 4: 1a–c, e–g; 2–5, 7, 8

Grade 5: Not reviewed

Grade 7: 1a–h; 2–7

Grade 8: 1a–h; 2–8

Language: English and Spanish

Number of lesson plans: 4–10, depending on grade level

Estimated total time for lessons: 15–45 hours, depending on grade level

Amount of time per lesson: 2–4.5 hours, depending on grade level

Format: Hard copy; supplemental online resources

Cost: Available for purchase; supplemental online resources free

Cafeteria connection: No

After school: Yes

This sequential curriculum is offered in a series of state-adopted textbooks divided into five units that teach students about aspects of living a healthy life. One unit focuses on growth and nutrition. The curriculum includes a variety of summative, formative, and cumulative assessment strategies to help monitor student progress. Review at the end of each chapter includes objectives, life skills, critical thinking, and reading and vocabulary and encourages goal setting, decision-making skills, and health contracts. There are 10 “mini-lessons” per unit. Free online supplemental materials—including fun, interactive games—are available.

What’s inside: Lesson overview with resources, activities, vocabulary, and national standards. A chapter planner is included for pacing. Major emphasis is on general health and nutrition. Topics include the body, hygiene and fitness, and amount of food consumed. Discussion format accompanies activities.

Activity highlight: Lesson 4, “Rules for Healthful Living,” includes a pre-discussion on general rules, followed by comparison to “Rules for Healthful Living” and health standards.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Healthy Choices, Healthy Me!

Publisher: Dairy Council of California

Web site: <http://www.dairycouncilofca.org/Educators/ClassroomPrograms/ProgramsHCHM.aspx> (accessed July 25, 2011)

Target audience: Grades 1–2

Nutrition competencies:

Grade 1: 1a, (1b), c–h; 2, 5, 7, 8

Grade 2: 1a–h; 2, 5, 7, 8

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; also available for purchase from out of state

Cafeteria connection: Yes

After school: Yes

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; MyPyramid 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Healthy Foods from Healthy Soils

Publisher: Tilbury House Publishers

Web site: <http://www.tilburyhouse.com/childrens/healthy-foods-from-healthy-soils.htm> (accessed July 25, 2011)

Target audience: Kindergarten–grade 6

Nutrition competencies: Not reviewed

Language: English

Number of lesson plans: 45

Amount of time per lesson: 45–60 minutes

Estimated total time for lessons:

Format: Hard copy

Cost: Available from CASRC on free loan

Cafeteria connection: Yes

After school: Yes

The food cycle is the focus of this resource. Lessons are organized into four themes: origins of food, choosing food, putting “garbage” to work, and simple gardening. Activities keep students engaged as they make models, taste new foods, keep journals, and chart the results of their investigations. School gardens (such as an Appetizer Garden or the legendary Three Sisters) or a series of worm-composting activities for the classroom help students discover the role nutrients play in healthy plant production.

What’s inside: Science skills are identified in each lesson, and health skills such as accessing

information, practicing health-enhancing behaviors, goal setting, and analyzing influences on food choices are addressed. Student worksheets, parent letters, literature links, and additional resources accompany each lesson in the set.

Activity highlight: “It All Adds Up” is a lesson in which students chart their lunchroom’s food waste, how much there is, and where it ends up. Students present their findings to decision makers and make suggestions on how to reduce waste.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Healthy Weight for Teens

Publisher: Channing Bete Company

Web site: <http://store.channing-bete.com/onlinestore/storeitem.html?iid=165285>
(accessed July 25, 2011)

Target audience: Grades 9–12

Nutrition competencies:
(1b), c, (f); (2–3), 4, (5), 6, (7)

Language: English

Number of lesson plans: 1–3

Amount of time per lesson: 45–60 minutes

Estimated total time for lessons: 1 hour

Format: Hard copy and CD

Cost: Available for purchase

Cafeteria connection: No

After school: Not reviewed

This presentation kit and obesity-prevention tool targets teenagers. The PowerPoint presentation promotes healthy eating and physical activity. In addition, it explains the risk of health problems caused by obesity and helps teens set goals to develop their own health plan.

What's inside: Leaders guide, 50 copies of *Healthy Eating—Looking Great, Feeling Great*, and materials for alerting audiences to the date

and location of the presentation. Also contains a CD with adaptable PowerPoint, discussion questions, and optional activities for personal assessment.

Activity highlight: Part One (“Are You at Risk?”) contains an activity to determine body mass index and to assess personal weight status. Discussion questions include thinking about common reactions to overweight people.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

How to Teach Nutrition to Kids—Instructional Set

Publisher: NCES

Web site: <http://www.nutritionforkids.com/aboutbook.htm> (accessed August 25, 2011)

Target audience: Grades 1–6

Nutrition competencies: Not reviewed

Language: English

Number of lesson plans: 200+

Amount of time per lesson: Varies

Estimated total time for lessons: Varies

Format: Hard copy

Cost: Available from CASRC on free loan

Cafeteria connection: Yes

After school: Yes

This instructional resource set includes a teacher’s guide and two activity books that are packed with over 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 MyPyramid, 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Jump Start Teens

Publisher: California Project LEAN

Web site: <http://californiaprojectlean.org/doc.asp?id=193> (accessed July 25, 2011)

Target audience: Grades 9–12

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

Language: Instructional guide in English, with additional Spanish handouts

Number of lesson plans: 8

Amount of time per lesson: 50 minutes

Estimated total time for lessons: 6.6 hours

Format: Downloadable PDF

Cost: Free

Cafeteria connection: Yes (extension activities)

After school: Yes

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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Kids Cook Farm-Fresh Food

Publisher: California Department of Education

Web site: <http://www.cde.ca.gov/ls/nu/he/kidscook.asp> (accessed July 25, 2011)

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

Nutrition competencies:

Kindergarten: (1a), e, g–h; (5), 8

Grades 1–2: 1g–h; (2), 7

Grades 3–4: 1g–h; (2), 7

Grades 5–6: 1g–h

Grades 7–8: 1g–h; 7

Grades 9–12: (1g–h); (2), (5), (7)

Language: English

Number of lesson plans: 57

Amount of time per lesson: 1 hour

Estimated total time for lessons: 57 hours

Format: Downloadable PDF

Cost: Free

Cafeteria connection: No

After school: Yes

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 allow teachers flexibility in using it with their 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Linking Science and Nutrition

Publisher: California Department of Public Health, Network for a Healthy California

Web site: <http://www.cdph.ca.gov/programs/CNPS/Pages/default.aspx> (accessed July 25, 2011)

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

Nutrition competencies:

Kindergarten: 1b, (f); (2), 7

Grade 2: 1f; 2, 3, 5

Grade 4: 1a, (1e), 1g; 3, 5, 6

Grade 5: (1b), e–f; 3, 5, 7

Grade 7: 1a, c, f, g; (2), (3), (5), 7

Grade 8: 1a, c, e–g; (3), 7

Language: English

Number of lesson plans: 12

Amount of time per lesson: 60–65 minutes

Estimated total time for lessons: 12–13 hours

Format: Hard copy; downloadable PDF teacher resource guide

Cost: Available for purchase

Cafeteria connection: Yes (extension activities)

After school: Not evaluated

This sequential comprehensive curriculum comprises a set of 12 lessons designed to address both the California science content standards and the California health education content standards for nutrition and physical activity. Most grades have two or three lessons. Each lesson fosters student acquisition of science and health concepts and skills. Students question, collect, and examine data; derive conclusions; and reflect on and evaluate results, using familiar food supplies and nutrition information. They are also asked to apply science-based information to real-life choices. Lesson extension and assessment activities encourage students to positively influence the school nutrition environment. The curriculum does not include physical activity. In places where the curriculum only partially meets the nutrition

competencies, adding a physical activity component would strengthen the lesson.

What's inside: 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. The curriculum identifies content standards, steps for preparation, materials, and ideas for extension. Student worksheets and student assessment sheets are included.

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

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

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

Publisher: National Institute of Child Health and Human Development

Web site: http://www.nichd.nih.gov/msy/program_materials.htm#subnav1 (accessed July 25, 2011)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1b, f; 2, 3, 6–8

Grades 7–8: 1a, b, e, f; 2, 3, 6–8

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: Hard copy, downloadable PDF teacher resource guide

Cost: Free

Cafeteria connection: No

After school: Yes

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.”

What’s inside: A teacher resource guide, pre- and post-curriculum activities, media-questions poster, and a video/DVD. 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

MyPyramid for Kids

Publisher: USDA, Food and Nutrition Services

Web site: <http://www.fns.usda.gov/tn/Resources/mypyramidclassroom.html> (accessed July 25, 2011)

Target audience: Grades 1–6

Nutrition competencies:

Level 1: 1b, c; 2, (3), 5–7

Level 2: (1b), (c), (f), g; 2, 4, 6, 8

Level 3: 1b, (d); 2–4, 7, 8

Language: English

Number of lesson plans: 3 for each level (9 total)

Amount of time per lesson: 45 minutes

Estimated total time for lessons: 2–3 hours for each level (6–7 hours total)

Format: Downloadable PDF; print

Cost: Free

Cafeteria connection: Yes

After school: Yes

The *MyPyramid for Kids* classroom lessons feature a set of nine sequential lesson plans, with three lessons at each level: Level 1, Level 2 and Level 3. The lessons are based on the USDA Dietary Guidelines for Americans and MyPyramid for Kids. Lessons are grade-appropriate, have clearly stated objectives, and are interactive, well-organized, and easy to follow. Some lessons link to language arts, math, or science. Supplemental materials are available on a CD. Black-and-white reproducible masters are provided.

What's inside: Teacher resource guide with visuals, lunchroom links, and take-home activities.

Posters, reproducible handouts, and a CD-ROM with additional materials, including songs, are available upon request.

Activity highlight: “Food Math” includes a discussion of portion sizes. Students are divided into pairs and use worksheets to choose foods for a healthy menu. The lesson incorporates math to assess food groupings and portion sizes, asks students to write a food “rap,” and connects to the cafeteria by inviting school food-service personnel to discuss how they create a balanced menu.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Nourish: Food + Community

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

Web site: <http://www.nourishlife.org/> (accessed July 7, 2011)

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

Nutrition competencies:

Grades 5–6: (1g), h; 2, 4, 8

Grades 7–8: (1g), h; 2, 4, (6), 8

Grades 9–12: 1h; 2–5, 8

Language: English, with Spanish handouts

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

Cafeteria connection: Yes

After school: Yes

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: Curriculum guide and DVD. The curriculum guide contains a DVD 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 it means to say that a food is “in season” 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Nutrition Essentials

Publisher: U.S. Department of Agriculture, Team Nutrition

Web site: <http://www.fns.usda.gov/tn/resources/nutritionessentials.pdf> (accessed July 25, 2011)

Target audience: Grades 6–8

Nutrition competencies:

Grade 6: 1b, c, (f); 3, 5, (7)

Grades 7–8: 1a–d, f; (3), (5), 6, (7)

Grade 9: (1a–c, f); (3), (5–7)

Language: English

Number of lesson plans: 6

Amount of time per lesson: 40–60 minutes

Estimated total time for lessons: 5–6 hours

Format: Downloadable PDF; print with CD

Cost: Free

Cafeteria connection: No

After school: Yes

This curriculum helps students learn how to make healthful dietary and physical activity choices. The curriculum is designed for students who are familiar with the various food groups and who have had exposure to terms such as *vitamins* and *minerals*. It includes six lessons and tools for teachers based on the USDA Dietary Guidelines for Americans.

What's inside: Lesson plans and various tools for the teacher: lesson plans with objectives, Power-

Point presentations, posters, reproducible worksheets, standards, and interactive games.

Activity highlight: Lesson 1, “Get the MyPyramid Amounts of Foods for You,” reviews the key concepts from MyPyramid through discussion and the use of a poster.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Nutrition EZ

Publisher: JAB Publishing

Web site: <http://www.nutritionez.org/> (accessed August 25, 2011)

Target audience: Kindergarten–grade 5

Nutrition competencies: Not reviewed

Language: English

Number of lesson plans: 100+

Amount of time per lesson: Varies

Estimated total time for lessons:

Format: Hard copy

Cost: Available from CASRC on free loan

Cafeteria connection: No

After school: Yes

This resource contains nutrition background and more than 100 activities and student worksheets to support nutrition education and standard-based language arts, math, and science instruction.

What's inside: A book with eight chapters; introduces the MyPyramid Food Guidance System

and covers the five food groups and discretionary calories. Each chapter supplies topic-specific background information, daily recommendations, and student worksheets related to content standards in mathematics, English–language arts, health, and science for multiple grade ranges.

Activity highlight: N/A

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Nutrition Pathfinders

Publisher: Dairy Council of California

Web site: [http://www.dairycouncilofca.org/
Educators/ClassroomPrograms/ProgramsNP.aspx](http://www.dairycouncilofca.org/Educators/ClassroomPrograms/ProgramsNP.aspx)
(accessed July 25, 2011)

Target audience: Grades 4–5

Nutrition competencies:

Grades 3–4: 1a–c, e–g; 2, 4–8

Grades 5–6: 1 a, (1b), 1c, 1f, 1g; 2–8

Language: English and Spanish

Number of lesson plans: 5

Amount of time per lesson: 40 minutes

Estimated total time for lessons: 3.8 hours

Format: Hard copy

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

Cafeteria connection: Yes

After school: Yes

This curriculum features a computer-camp simulation activity involving MyPyramid and appropriate amounts of daily exercise. Students learn about nutrition and health and gain decision-making, problem-solving, and critical-thinking skills.

What’s inside: A teacher resource guide, student workbooks, Camp Eatawella CD-ROM, downloadable cafeteria connections activity, and a Web site

with resources for teachers, parents, and students. Supplemental materials include a calcium quiz, how to make your own pizza, and a dairy-farm game.

Activity highlight: In activity 3, “Breakfast Bonanza,” students explore healthy breakfast foods and complete a worksheet activity and food record.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Nutrition to Grow On

Publisher: California Department of Education

Web site: <http://www.cde.ca.gov/ls/nu/he/nrttogrow.asp> (accessed July 25, 2011)

Target audience: Grades 4–6

Nutrition competencies:

Grade 4: 1a–c, f; 2–8

Grades 5–6: 1a–c, f–h; 2–8

Language: English

Number of lesson plans: 9

Amount of time per lesson: 1–1.5 hours

Estimated total time for lessons: 9 hours

Format: Downloadable PDF; hard copy

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

Cafeteria connection: No

After school: Yes

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, MyPyramid for Kids, food math, and nutrition labels, and they include additional activities and optional snacks. 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 such as 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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Planet Health

Publisher: Harvard School of Public Health/Human Kinetics

Web site: <http://www.humankinetics.com/products/all-products/planet-health-2nd-edition?isbn=9780736069182> (accessed July 25, 2011)

Target audience: Middle-school students

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

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: Available for purchase

Cafeteria connection: No

After school: Not reviewed

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.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ The Power of Choice

Publisher: USDA

Web site: http://www.fns.usda.gov/tn/RESOURCES/power_of_choice.html (accessed July 25, 2011)

Target audience: Grades 6–12

Nutrition competencies:

Grade 6: 1b, c, f, g; 2–8

Grades 7–8: 1a, c, f, g; 2–8

Grades 9–12: 1c, f, g; 2, 4–7

Language: English

Number of lesson plans: 10

Amount of time per lesson: 1 hour

Estimated total time for lessons: 10 hours

Format: Downloadable PDF; printed materials and CD

Cost: PDF free; printed materials available upon request to middle and high schools

Cafeteria connection: No

After school: Yes

This curriculum helps adolescents understand how food and activity choices impact health. Discussion topics address teen concerns about health and body image. The curriculum was developed for use in after-school programs and includes a variety of quick, simple, and fun activities for students. Most of the activities require little planning.

What's inside: Teacher resource guide, including information on how to reach young adults; background information for each lesson; and

activities. The curriculum includes a recipe booklet that can be duplicated and given to students as a learning extension. Each lesson also includes snack recipes based on the USDA's Afterschool Snacks meal pattern.

Activity highlight: In Activity 10, students learn the term *food neophobia* and discover ways to overcome the fear of trying new foods, participate in a blindfold food tasting, and organize into small groups to learn about the nutrition facts for each new food they try.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Project R.E.A.D. Together

Publisher: Iowa State University, Cooperative Extension

Web site: http://www.extension.iastate.edu/homefamily/parenting/project_read.htm (accessed July 25, 2011)

Target audience: Kindergarten

Nutrition competencies: 1e, g–h; 3, 5–8

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

Number of lesson plans: 3

Amount of time per lesson: N/A

Estimated total time for lessons: N/A

Format: hard copy

Cost: Available for purchase

Cafeteria connection: No

After school: Not reviewed

This educational program promotes literacy and healthy eating by using a series of hands-on activities to complement nutrition-themed children’s books (*The Beastly Feast, Growing Vegetable Soup, and Feast for 10*). The program involves the use of take-home book bags and is designed primarily for parents, but it can be adapted for classroom applications.

What’s inside: Program overview, ideas for implementation, book-bag printing specification sheet, sample script to introduce the project to families, book-bag checkout sheet, tips for reading with children, linking literacy and nutrition

for families with limited incomes, and materials for three nutrition book bags in English and two in Spanish. Each book bag contains ideas for several activities that families can choose. Books must be purchased separately from publishers or local bookstores.

Activity highlight: The Growing Vegetable Soup parent activities include an introduction letter and evaluation form, discussion guide, vegetable-soup recipe, dramatic-play activity, gardening activity, finger-play activity, “reading books bingo,” and a bookmark.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Reading Across MyPyramid

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

Web site: <http://repro-ecommerce.ucdavis.edu/anr-manuals/reading-across-my-pyramid.html> (accessed July 25, 2011)

Target audience: Kindergarten–grade 3

Nutrition competencies:

Kindergarten: 1a–g; 2, 5–8

Grades 1–2: 1b–d; 2, (3), 5–7

Grade 3: 1a–c, f, g; 4, 6, 8

Language: Instructional guide in English, with Spanish handouts

Number of lesson plans: 11

Amount of time per lesson: N/A

Estimated total time for lessons: NA

Format: Hard copy

Cost: Available for purchase

Cafeteria connection: Yes

After school: Yes

This nutrition education program focuses on literacy. Children’s storybooks, food- and physical activity-related themes, and hands-on activities provide the backdrop for learning about MyPyramid. Connections to English, history, math, and science are included.

What’s inside: Teacher resource guide, lesson objectives, background for the instructor, and guidelines for discussion. Lessons include book reading, quizzes, supplemental activities, recipes

for snacks, and review. Sample letters to parents are provided. Different books are recommended for kindergarten/first grade and for grades two and three.

Activity highlight: The “Marvelous Milk” lesson includes a reading activity, an activity with pictures of foods in the milk group, an activity about the importance of milk in the diet, a yogurt parfait recipe, and a lesson review with quiz.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ ReCharge! Energizing After-School

Publisher: Action for Healthy Kids

Web site: <http://www.actionforhealthykids.org/recharge> (accessed July 25, 2011)

Target audience: Grades 2–6

Nutrition competencies:

Grade 2: 1b, c, e, f; 3, 4, 6–8

Grades 3–4: 1b, (c), f; (2), 3, (4), 6–7

Grades 5–6: 1b, c, e, (1f–g); 3, 6, 7

Language: English

Number of lesson plans: 15 core; 11 extension

Amount of time per lesson: 30–40 minutes

Estimated total time for lessons: approximately 8–10 hours

Format: Downloadable PDF, printed materials, and CD

Cost: \$40 shipping and handling fee per kit; portions available free of charge online

Cafeteria connection: No

After school: Yes

This curriculum is designed for students to learn about and practice good nutrition and physical activity habits. It focuses on four concepts: energy in, energy out, teamwork, and goal setting. It promotes national standards for health education, physical activity, and family involvement, as well as MyPyramid and the USDA Dietary Guidelines for Americans. Youths learn about the food groups, recommended intake amounts for each group, balanced meals, the importance of proper warm-up, and how to set realistic nutrition and activity goals.

What's inside: The full kit includes an instructor's notebook, 15 core hands-on lesson plans, equipment to implement the lessons, a poster,

a healthy-snack guide, football-player cards, and newsletters for families. Many additional resources are available online, including a 60-minute training Webinar.

Activity highlight: In Lesson 6, “Energy In – Energy Out,” teams use magazine pictures to create a collage of nutritious “Energy In” foods and physical activities that use “Energy Out.” Before teams work on their collages, the program leader guides a review of healthy foods and physical activities by engaging the group in an active game similar to “Simon Says.” Teams share their collages and explain their choices of foods and activities.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Shaping Up My Choices

Publisher: Dairy Council of California

Web site: <http://www.dairycouncilofca.org/educators/classroomprograms/ProgramsSMC.aspx> (accessed August 25, 2011)

Target audience: Grade 3

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

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; also available for purchase from out of state

Cafeteria connection: Yes

After school: Yes

This skills-based curriculum engages students by providing them with opportunities to use their personal experiences. The program helps students apply problem-solving, reasoning, and critical-thinking techniques as they learn about nutrition and physical activity.

What's inside: Teacher guide; student workbooks; poster; transparencies; and a CD-ROM with vocabulary cards, color masters of transparencies, and food pictures. The curriculum also

includes a pre- and post-test, cafeteria connections in the extension activities, and home connections.

Activity highlight: Lesson 3, “Nutrient Power,” introduces students to the main nutrients provided by foods in each of the five food groups. With the help of engaging activities and a song, students learn about nutrients and how a main nutrient helps their bodies to be stronger and healthier.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

The Snack Shop

Publisher: The Learning Zone Express

Web site: <http://www.learningzonexpress.com/p-23-the-snack-shop-lesson-plans-video.aspx>
(accessed August 25, 2011)

Target audience: Grades 9–12

Nutrition competencies: Not reviewed

Language: English

Number of lesson plans: 6

Amount of time per lesson:

Estimated total time for lessons: 6 weeks

Format: Hard copy with introductory DVD

Cost: Available from CASRC on free loan

Cafeteria connection: No

After school: Yes

This instructional resource is organized as a six-week course in which students work collaboratively in small groups to produce and market a healthy snack. Teens conduct marketing surveys; learn about basic nutrition and food labels; and compare fat, sugar, and salt content of popular snacks. They combine this learning with food safety and technology information to develop a company, create a snack, design a label, provide nutrition information, and advertise their

creation. The team also identifies a board of directors and develops distribution and marketing plans for their business portfolio. In the final evaluation, team members assess their contribution to product development and sample the snacks developed by other teams.

What's inside: Reproducible student worksheets, teacher mini-lectures, and a five-minute introductory DVD are included.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

★ Teen Health 1, 2, and 3

Publisher: Glencoe/McGraw-Hill

Web site: <http://www.mheonline.com/program/view/2/21/1340/007TH> (accessed July 25, 2011)

Target audience: Grades 6, 7, and 8

Nutrition competencies:

Course 1 (grade 6): 1a–h; 2–5, 7

Course 2 (grade 7): 1a–g, (1h); 2–8

Course 3 (grade 8): 1a–d, f; 2–8

Language: English, with Spanish translations of student text, summaries, quizzes, activities, and parent letters.

Number of lesson plans: 16 chapters with 3–6 lessons each, depending on grade level and which units are included

Estimated total time for lessons: 2.25–4.5 hours, depending on grade level

Format: Hard copy and online resources

Cost: Available for purchase; online resources free of charge

Cafeteria connection: No

After school: Not reviewed

These curricula are provided in a health-based, state-adopted textbook divided into three course levels: grades six (level 1), seven (level 2), and eight (level 3). It combines course curriculum with multimedia tools to teach middle-school students how to achieve and maintain good health. Lessons address a variety of nutrition and physical activity topics: reading food labels, body image, nutrients for health, and how to follow a balanced diet. There are teacher wraparounds and assessment options. Lessons are interactive. The book focuses on national health standards; academic integration is addressed in teacher sections. Each section has four to five units.

What's inside: A teacher resource guide, student textbook, fitness and nutrition information, and a handbook on reading skills. Online resources include audio chapter summaries, online quizzes,

and Web activities for students. Contains additional online material for teachers, including links to grant opportunities, lesson plans, and articles on professional development.

Activity highlight: Teen Health Course 1 (“Hands-on Health”), Lesson Four (“Managing Your Weight”), uses the vocabulary of health care professionals. The lesson helps to explain healthy weight, identify problem behaviors, and demonstrate decision making to help a friend. It covers safe ways to lose weight, critical thinking about body image, and respect for others’ bodies and feelings. Students work in pairs to help a friend who has an eating disorder. Practice is provided with real-life situations for decision-making steps. In one activity, students calculate teaspoons of sugar based on grams in products and then pour the amounts into baby-food jars.

Key: The star symbol (★) indicates recommended curricula. A nutrition competency inside a parenthesis () means the curriculum partially met the competency.

Appendix B

Resources for Enhancing Nutrition Education

A nutrition education program can be enriched by expanding connections with (1) the cafeteria, (2) Farm to School programs and instructional gardens, (3) food-tasting activities, and (4) cooking experiences. Programs can also be enhanced by integrating them with core subjects and by teaching them in after-school programs.

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 ensure 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.
- Invite the school nutrition director or manager to visit your class and talk about the foods served in the cafeteria.
- Share artwork for use on cafeteria bulletin boards or menus, or at food stations.
- Conduct poster contests related to specific nutrition concepts taught in the program.
- Institute a family night where you and school nutrition personnel can showcase how knowledge in the classroom is being applied at mealtimes.
- Have students share what they have learned.
- Invite parents and guardians to share their favorite recipes or to speak about foods from their cultural background.
- Ask school nutrition program staff to supply foods for nutrition education lessons.
- Start a school garden. Students love to plant, care for, and harvest fruits and vegetables, and they enjoy eating produce that they have grown. This activity fosters an appreciation for the process of growing produce. Ask that the foods grown be served in the cafeteria.
- Invite a local farmer to conduct a classroom presentation.

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 might have been eaten by California Native Americans or by people living in the early California missions.

Ideas for Linking the Cafeteria 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.
- 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 fiber.
- 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 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 in line.
- Offer students samples of new fruits and vegetables, 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 Web Sites

The **School Nutrition Association** offers “Keys to Excellence for Nutrition Education” that can help food-service directors coordinate with classrooms. The keys are posted at <http://www.cde.state.co.us/cdenutritran/download/pdf/WPSNAKeys.pdf> (accessed July 25, 2011).

Bridges to Wellness cafeteria-to-classroom lessons for grades 5–12: <http://www.schoolnutrition.org/Content.aspx?id=8448> (accessed July 25, 2011)

Build On a Healthy Base resources, Washington State University: <http://nutrition.wsu.edu/BOHB.html> (accessed July 25, 2011)

CANFIT snack guide for after-school programs: <http://www.canfit.org/pdf/CANFitHealthySnackGuide.pdf> (accessed July 25, 2011)

Eat Well & Keep Moving cafeteria connections—which include menu cards to review with students: <http://www.eatwellandkeepmoving.org/pdf/Manual%204.pdf> (accessed August 5, 2011)

Farm to School, Seven Generations Ahead: http://www.sevengenerationsahead.org/index.php/programs/farm_to_school/ (accessed July 25, 2011)

Food clip art: http://www.clipartguide.com/clipart_food.shtml (accessed August 25, 2011)

Illinois Nutrition Education and Training Program (ILNET): <http://www.kidseatwell.org/links.html> (accessed July 25, 2011)

The Learning Café: The cafeteria-related activities and ideas in this booklet were developed for cafeteria managers to conduct alone, or with teachers, to enhance concepts taught in class. The activities and ideas were compiled to spark creativity in cafeteria managers and to encourage involvement in effective cafeteria learning experiences. http://www.doe.state.la.us/offices/nutritionsupport/nutrition_education.html (accessed August 5, 2011)

Making the Connection Bulletin Board Toolkit and promotional materials, North Carolina Nutrition Services: <http://www.nutritionnc.com/ResourcesForSchools/index.htm> (accessed July 25, 2011)

National Dairy Council resources: <http://www.schoolnutrition.org/Content.aspx?id=8448> (accessed July 25, 2011)

2. Farm to School/Garden-Based Nutrition Education Resources

Farm to School and garden-based 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 helpful resources:

Organization	Web Site
California Farm to School Task Force	http://www.cafarmtoschool.org (accessed July 25, 2011)
California School Garden Network	http://www.csgn.org/ (accessed July 25, 2011)
Center for Ecoliteracy	http://www.ecoliteracy.org/programs/rsl.html
Farm to School Extension and Research Program, Cornell University	http://farmtoschool.cce.cornell.edu/ (accessed July 25, 2011)
Farm to School Urban and Environmental Policy Institute at Occidental College	http://departments.oxy.edu/uepi/ (accessed July 25, 2011)
Kids Gardening (National Gardening Association)	http://www.kidsgardening.com/ (accessed July 25, 2011)
LocalHarvest	http://www.localharvest.org/ (accessed July 25, 2011)
National Gardening Association (NGA)	http://assoc.garden.org/ (accessed July 25, 2011)
USDA Healthy Meals Resource System (HMRS)	http://healthymeals.nal.usda.gov (accessed July 25, 2011)
USDA Know Your Farmer, Know Your Food	http://www.usda.gov/wps/portal/usda/knowyourfarmer?navid=knowyourfarmer (accessed July 25, 2011)

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 to organize for teachers. 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: <http://www.harvestofthemonth.com/> (accessed August 25, 2011).

4. Cooking in the Classroom

Nutrition education takes on a whole new life when combined with cooking projects. In teaching children about nutrition, the most direct route may be through the stomach. Children are more willing to try new, healthful foods when nutrition principles are taught in the classroom. 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 percent said they sometimes prepare their own snacks, and 80 percent reported that they sometimes cook or make their own breakfast. Children who don't 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 non-cooks, skilled only at using microwave ovens 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 very effective when it focuses on practical concepts such as sanitation, safe food handling, and basic food preparation. Cooking projects can increase children's confidence, expose them to new and/or 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:

- CDE Classroom Cooking: <http://www.cde.ca.gov/ls/nu/he/classcook.asp> (accessed August 25, 2011)
- Kids Cook Farm-Fresh Food: <http://www.cde.ca.gov/ls/nu/he/documents/kidscookcomplete.pdf> (accessed August 25, 2011)
- California Healthy Kids Resource Center: <http://www.californiahealthykids.org>

The California Healthy Kids Resource Center provides a *Cooking in the Classroom* training program. It introduces teachers to planning, recipe selection, and food-safety tips for successful classroom cooking. The training program contains the following items:

Cooking in the Classroom PowerPoint slide show: <http://www.californiahealthykids.org/Pages/articles/cooking.ppt> (accessed April 28, 2011)

Cooking in the Classroom participant handouts:

Handout 1 (Word document): http://www.californiahealthykids.org/Pages/articles/Handout_bingo.doc (accessed April 28, 2011)

Handout 3* (PDF): <http://www.californiahealthykids.org/Pages/articles/Handout3.pdf> (accessed April 28, 2011)

Handout 4 (PDF): <http://www.californiahealthykids.org/Pages/articles/Handout4.pdf> (accessed April 28, 2011)

*Note: As of August 25, 2011, the California Healthy Kids Resource Center Web site did not include a Handout 2.

Handout 5 (Word document): <http://www.californiahealthykids.org/Pages/articles/Handout5.doc> (accessed August 25, 2011)

Handout 6 (PDF): <http://www.californiahealthykids.org/Pages/articles/Handout6.pdf> (accessed April 28, 2011)

Handout 7 (PDF): <http://www.californiahealthykids.org/Pages/articles/Handout7.pdf> (accessed April 28, 2011)

Handout 8 (PDF): <http://www.californiahealthykids.org/Pages/articles/Handout8.pdf> (accessed April 28, 2011)

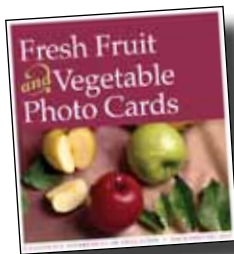
Handout 9 (Word document): <http://www.californiahealthykids.org/Pages/articles/Handout9.doc> (accessed April 28, 2011)

Handout 10 (PDF): <http://www.californiahealthykids.org/Pages/articles/Handout10.pdf> (accessed April 28, 2011)

Handout 11 (Word document): <http://www.californiahealthykids.org/Pages/articles/Handout11.doc> (accessed April 28, 2011)

Handout 12 (Word document): <http://www.californiahealthykids.org/Pages/articles/Handout12.doc> (accessed April 28, 2011)

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, 8½ x 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

for using the cards with students of all ages. Cost (as of April 28, 2011): \$50 plus shipping and handling. To order, contact the CDE Press Sales Office at 1-800-995-4099 or visit the CDE Press Web site at <http://www.cde.ca.gov/re/pn/rc/ap/pubdisplay.aspx?ID=001650> (accessed August 25, 2011).

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.

A Child's Garden of Standards: Linking School Gardens to California Education Standards (California Department of Education)

This CDE publication shows the relationship of garden-based education activities selected from several published educational materials to academic content standards for grades two through six in science, history–social science, mathematics, and English–language arts. The document is posted at the following Web site: <http://www.cde.ca.gov/ls/nu/he/documents/childsgarden.pdf> (accessed August 25, 2011).

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 August 25, 2011)

Interdisciplinary Nutrition Education Curriculum (Pennsylvania Department of Education)

Pennsylvania's interdisciplinary nutrition education curriculum includes lesson plans for grades K–12 and is organized into four grade groups: K–3, 4–6, 7–9, and 10–12. The lesson plans are aligned with the Pennsylvania academic standards, include activities that encourage physical activity, contain Web links to additional resources, and provide ideas for implementing the local wellness policy and involving parents, food-service personnel, and the community.

http://www.portal.state.pa.us/portal/server.pt/community/lesson_plans/7486 (accessed August 25, 2011)

Nutrition Across the Curriculum: Lesson Plans for Grades PreK–12 (Louisiana Department of Education)

The Centers for Disease Control and Prevention (CDC) advocates the need for school-based nutrition education. While the CDC recommends that health be taught as a separate unit in a sequential format, an additional study unit is not always feasible. Fortunately, many nutrition concepts are easily linked to benchmarks in core subjects.

The state of Louisiana has developed an instructional resource for educators at all grade levels. Lessons are designed to help students develop positive attitudes toward good nutritional practices, establish lifelong healthful-eating patterns, take action for good health, and provide accurate and current nutrition information. The document is designed to provide comprehensive, action-oriented delivery of nutrition information that targets standards and benchmarks in the content areas of health, science, mathematics, English–language arts, physical education, and social studies.

http://www.doe.state.la.us/offices/nutritionsupport/nutrition_education.html (accessed July 26, 2011)

6. Resources for After-School Programs

Incorporating nutrition education into after-school programs can be a very effective way to build on nutrition-related teaching offered during the school day. The California After School Resource Center (<http://www.californiaafterschool.org>) has identified several resources for use in after-school programs, and many of the materials can be borrowed through the center's Web site.

7. Resources for Adapting MyPyramid to MyPlate

Many existing nutrition education materials can still be used with simple adaptations, such as including the *MyPlate* icon, changing the food group names, and reinforcing messages from the Tip Sheets:

- Update nutrition education materials, including Dairy Council or USDA materials, with the attached *MyPlate* coloring pages. Suggestions for *MyPyramid for Kids Classroom Materials* are as follows:
 - > *Grades 1-2: Lesson 1—MyPyramid for Kids Black-and-White Handout.* Students learn about the food groups. Include the *MyPlate* coloring page instead of the *MyPyramid* handout. The same objectives can be achieved by replacing the poster and pictures with *MyPlate* materials.
 - > *Grades 1-2: Lesson 2—Eat Smart with MyPyramid for Kids.* Students practice sorting foods into the five food groups. Use a *MyPlate* poster or illustration for sorting and refer to the food groups with *MyPlate* terms.
 - > *Grades 1-2: Lesson 3—My Fruit and Vegetable Diary.* Students sort fruits and vegetables and keep a diary. Emphasize messages from the *Add More Vegetables to Your Day* and *Focus on Fruits* tip sheets. For example, encourage students to brighten their diary by including red, orange, and dark green vegetables or more fresh fruit for added fiber.
- Introduce *MyPlate*.
 - > Use an overhead projector or draw a large plate proportioned as *MyPlate*, including the same color scheme. Introduce students to *MyPlate* and have them place food cards or food pictures from magazines in the correct food-group categories. Start students moving with a relay race.
 - > Use tape to create an outline of *MyPlate* on the ground. Include a basket of food pictures next to a plate. Have students race to the plate, choose a picture, and place it in the correct area of the plate. Students race back and tag the next team member to run and choose a food. Student teams check their results and get points for each food in the correct section of the plate.
- *Children's PowerPlay! Campaign and Harvest of the Month* (www.harvestofthemonth.com) materials. These materials focus on fruits and vegetables and healthy eating messages and need little adaptation.
- Review the *Be a Healthy Role Model for Children* Tip Sheet. These 10 suggestions will help to create an environment that depicts and reinforces healthy eating.

Appendix C

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

MyPlate is a new tool released by the United States Department of Agriculture (USDA) to accompany the 2010 *Dietary Guidelines for Americans*. *MyPlate* replaces *MyPyramid*; the five food groups in a plate setting are a visual reminder to make healthful food choices. The ChooseMyPlate.gov Web site (<http://www.choosemyplate.gov>) features practical information and tips to help everyone build healthier diets. It features selected messages and materials to help focus on key behaviors. ChooseMyPlate.gov includes much of the consumer and professional information formerly found on MyPyramid.gov. The materials for children and schools will be updated regularly. Until then, *MyPyramid* resources will remain available to health professionals and nutrition educators in the “Tips and Resources” section of the *MyPlate* Web site.

The Dietary Guidelines for Americans 2010 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 seek to reduce the risk of chronic disease. For more information, visit <http://www.cnpp.usda.gov/dietaryguidelines.htm> (accessed August 25, 2011).

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://nirc.cas.psu.edu/pdf/RDADRI.pdf> (accessed August 5, 2011).

The Nutrition Facts Label was developed by the U.S. Food and Drug Administration to provide consumers with information about the ingredients of food items. For more information, visit <http://www.fda.gov/Food/LabelingNutrition/ConsumerInformation/ucm078889.htm> (accessed August 25, 2011).

2. Nutrient Groups

Nutrients are substances that come from foods and are required by the body for energy, building, maintenance and 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 are also used to 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/everyone/basics/index.html> (accessed July 25, 2011).

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 September/October 2007 edition of *Nutrition Perspectives*, a journal published by the University of California, Davis, Center for Health and Nutrition Research. <http://nutrition.ucdavis.edu/perspectives/pastIssues/2007/5NP%20SeptOct07.pdf> (accessed July 25, 2011)

4. Online Professional Development in Nutrition

The Dairy Council of California and the California Healthy Kids Resource Center provide online resources for professional development.

Dairy Council of California, Teacher Training Program

This 25-minute program provides teachers with a basic overview of nutrition information. It is designed to help teachers feel comfortable and confident enough to teach nutrition in the classroom. The training includes guidance from teachers who have used the Dairy Council's nutrition education programs; an overview of the program content; review of student outcomes; information about materials that are available—free of charge—from the Dairy Council; and best practices for implementing the Dairy Council's program. The program is organized by grade level and is available at <http://www.dairyCouncilofca.org/Educators/Teacher-Training.aspx> (accessed August 25, 2011).

The California Healthy Kids Resource Center

The California Healthy Kids Resource Center provides many resources for teachers and others who teach nutrition education. Materials can be borrowed free of charge. The training modules available through the following Web site are designed to help teachers learn more about nutrition: <http://www.californiahealthykids.org/c/@Wx95TSBGpEr02/Pages/guided3.html> (accessed July 25, 2011).

Dietary Guidelines for Americans

The one-hour training introduces the Dietary Guidelines for Americans.

- Foundations of Nutrition: http://www.californiahealthykids.org/Pages/articles/Foundations_Nutrition.ppt (PowerPoint presentation, accessed August 25, 2011)

- Foundations of Nutrition handouts:

Tips for a Successful Presentation: http://www.californiahealthykids.org/Pages/articles/FN-DG_Presentation.doc (Word document, accessed August 25, 2011)

Handout 1: http://www.californiahealthykids.org/Pages/articles/FN-DG_H1.doc (Word document, accessed August 25, 2011)

Handout 2: http://www.californiahealthykids.org/Pages/articles/FN-DG_H2.doc (Word document, accessed August 25, 2011)

Handout 3: http://www.californiahealthykids.org/Pages/articles/FN-DG_H3.doc (Word document, accessed August 25, 2011)

The Nutrition Facts Label

This 30- to 45-minute training session offers a practical overview of food labeling and information to make better nutrition decisions.

- The Foundations of Nutrition: The Nutrition Label: http://www.californiahealthykids.org/articles/Foundations_label.ppt (PowerPoint presentation, accessed August 25, 2011)

5. Other Web Resources

The California Food Guide: Fulfilling the Dietary Guidelines for Americans provides new information for health professionals on nutrition and physical activity. This resource is designed primarily as a nutrition or training manual. It can be used by health professionals such as public health nutritionists, registered dietitians, physicians, nursing staff, health educators, and other community-based health professionals.

<http://www.dhcs.ca.gov/formsandpubs/publications/Pages/CaliforniaFoodGuide.aspx> (accessed July 25, 2011)

Nutrition.gov provides consumers with online access to government information about food and nutrition.

http://www.nutrition.gov/nal_display/index.php?info_center=11&tax_level=1 (accessed August 25, 2011)

Appendix D

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 building skills.

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.

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.

Glossary

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 specifics at every 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 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.

1. Terminology from Northeastern Illinois University (<http://www.neiu.edu/~dbehrlic/hrd408/glossary.htm>).

evidence-based programs. Programs that have been found to be effective based on the results of rigorous evaluations.²

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.

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. Education that is organized across subject-matter lines to create meaningful associations among aspects of the curriculum and that focuses on broad areas of study.

learning activity. An assignment or exercise that assesses students' understanding about the content, generates class discussions, and/or gathers student perspectives and opinions regarding the cycle's topic. Activities should be designed to reinforce and apply content as part of an overall lesson plan and curriculum. Generally, a lesson can 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.

2. Siobhan M. Cooney, Mary Huser, Stephen Small, and Cailin O'Connor, "Evidence-Based Programs: An Overview." What Works. Research to Practice Series 6, University of Wisconsin–Madison Extension, October 2007. http://www.uwex.edu/ces/flp/families/whatworks_06.pdf.

3. <http://www.cde.ca.gov/ci/cr/cf/imfrpfaq1.asp#Question18>.

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.

pacing guide. A planning tool that helps teachers chart their 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.

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 programs include many of these approaches and strategies to target outcomes specific to individuals, schools, families, and communities.

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