

Nutrition Competencies and Grade Level Expectations *Pre-Kindergarten through Grade 12*

**Nutrition Services Division and
School Health Connections/Healthy Start Office
California Department of Education**

2008 DRAFT

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Please Note: California's State Superintendent of Public Instruction, Jack O'Connell, convened an advisory panel in 2006 that drafted standards for health education, which includes nutrition education. Superintendent O'Connell submitted the draft California Health Education Content Standards to the State Board of Education in January 2007, and expects to submit revisions to the SBE in early 2008. After the Board adopts the standards for health education (required by March 2008), these draft nutrition competencies may be revised in order to align them with the adopted health education standards.

Introduction

Nutrition competencies outline key nutrition knowledge, skill, and behavior concepts and provide the sequence of these essential concepts to be addressed at each grade level as part of a comprehensive nutrition/health education program. These nutrition-specific competencies and grade-level expectations define what students need to know and be able to do as they matriculate from pre-kindergarten through grade 12, in order to make healthy choices that build a foundation for wellbeing and success in school and in life.

Curriculum leaders and teachers use competencies and related benchmarks or expectations to determine the scope and sequence for nutrition-related health education curricula and to design and/or select instructional materials. These draft nutrition competencies are intended to supplement the California State Board of Education-adopted *Health Framework for California Public Schools (Health Framework)*.

Definitions

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

- **Academic content standards** describe the *minimum* knowledge and skills students are expected to master at selected grade levels. Standards serve as the basis for curriculum frameworks, learning assessments, and instructional resources and materials, but do not prescribe methods of instruction.
- **Curriculum frameworks** guide the development of curricular materials, and are usually based on standards. In California, the *Health Framework* preceded the development of health education standards. Frameworks provide more background information about a curriculum subject, and include specific topics to emphasize at each grade level.
- **Competencies** go beyond the minimum standards to outline comprehensive, sequential, and **grade-level expectations** for student learning. Like standards, they do not prescribe methods of instruction. However, they provide specifics at every grade, including preschool, and show the sequence of learning as it is reinforced over several grade levels.

Relationship to Health Education Content Standards

Academic content standards, whether national or state-specific, are valuable tools for educators in developing, selecting and evaluating curriculum for reaching broad health and nutrition education objectives and in assessing student achievement. In response to 2005 legislation, California is in the process of developing state health education content standards, which must be adopted by the State Board of Education by March 2008. The draft Nutrition Competencies were used as a resource by the expert panel developing these standards, and will be revised, as needed, to align with the standards after they are adopted. Until California adopts its own standards, the eight National Health Education Standards are included in this document as a reference because they support the *Health Framework for California Public Schools* and the Nutrition Competencies with definitions of concepts and skills students are expected to master.

Guidelines for Use

Organization of the Document

Following this introduction are summaries of the seven Nutrition Competencies and the National Health Education Standards. The body of the document is then presented in two sections:

- Section 1. Nutrition Competencies and Grade Level Expectations**, organized into four grade level clusters (pre-K/K, 1-3, 4-6, middle-high school)
- Section 2. Health Framework Emphases and National Health Education Standards aligned to each Nutrition Competency**, organized into three grade level clusters (preschool not included), and included in Appendix A-C as reference material

Suggested Steps for Using This Tool

Whether curriculum planners and teachers are selecting nutrition education materials to include in a comprehensive approach to health education or designing a more in-depth nutrition education program, nutrition competencies are a useful tool for ensuring that instruction is developmentally appropriate and grounded in nutrition education research.

Step 1: Determine Priorities

First, teachers can review the information in Section 1 for the desired grade level to determine the appropriate nutrition concepts and skills to emphasize in their classrooms. Noting the expectations marked with a star, they can make these concepts a priority and cover others as time allows.

Step 2: Identify Curriculum

Next, teachers can identify the curricular and assessment resources to facilitate and support student learning. The California Department of Education (CDE) recommends state-adopted health textbooks (www.cde.ca.gov/ci/he/im/) and the California Healthy Kids Resource Center (www.californiahealthykids.org) as starting locations to find curriculum resources.

Step 3: Evaluate Materials

Next, teachers can evaluate the instructional materials they've selected against the nutrition competencies. When curricular materials align with the nutrition competencies, teachers can feel confident that their nutrition instructional plans also align with the *Health Framework* expectations and National Health Education Standards identified in Section 2.

Step 4: Select Assessments

Finally, teachers will need to identify ways to assess student learning in nutrition. For assessment resources, there is a bank of field-tested assessment items available to California teachers through the California Health Education Assessment Project. For information about this Project, contact Mary Marks (mmarks@cde.ca.gov) at the CDE School Health Connections office.

Reinforcement across Grade Levels

In Section 1, specific expectations or benchmarks are listed for each Nutrition Competency at each grade level, pre-kindergarten through high school. Often, the same expectation is listed under several grade levels in the same cluster. This demonstrates the importance of emphasizing many concepts and skills over several grades, rather than just once. Teachers and curriculum leaders can choose how to accomplish this over time, with the goal of assessing mastery of the competency by the time students complete the last grade in the cluster.

Cross-References to Health Framework

Section 2 outlines relevant excerpts from the Grade Level Emphases Charts (pages 151 through 182) of the 2003 *Health Framework*, which covers kindergarten through high school. Based on the expertise of selected California health teachers, these charts also indicate those concepts and skills to be emphasized at each grade level by using a ▲ (solid delta symbol). In Section 1, the ★ symbol (solid star symbol) indicates the nutrition competencies that support a specific *Health Framework* expectation at that grade level.

Connections to National Health Education Standards

The table at the end of each competency in Section 2 indicates the specific National Health Education Standards (defined on pages 6 and 7) that support the content areas of the nutrition competency. When California Health Education Standards are adopted, alignment with the state standards will replace the national standards used in this draft. These national standards support California's *Health Framework* and the Nutrition Competencies with indicators of accomplishment for assessing what students should know and be able to do.

Links to History-Social Science Content Standards

In Section 2, the alignment of Nutrition Competencies I – V to the *Health Framework* and National Health Education Standards is very clear. Aligning Nutrition Competencies VI and VII to these health documents was less clear. However, since these competencies focus on concepts and skills related to food systems and consumer skills, they present an opportunity to establish stronger linkages to other curriculum content standards. As an example, the History–Social Science standards alignment is shown in this draft. In the future, the CDE plans to expand the Nutrition Competencies document to include content standards in all major curriculum subjects.

Revision Process and Plans

In 2001, the California Department of Education (CDE) published a first draft of Nutrition Competencies pre-K through grade 12 with suggested classroom activities to meet these competencies and link to other curriculum subjects. In 2002, the CDE added benchmarks for each grade level. From 2004-06, the CDE contracted with the University of California, Davis, to validate the Nutrition Competencies and outline connections with the *Health Framework*. This 2008 draft is the result of that two-year process, which began with a comparative analysis with state and national nutrition and health documents, engaged the assistance of an expert panel of 50 professionals in the field, and surveyed 217 California teachers, kindergarten through grade 12. This process strongly validated the perceived value, overall acceptance, age-

appropriateness, and scope and sequence of the Nutrition Competencies, while identifying perceived barriers and limitations to their use, all of which shaped the 2008 revision.

Preschool Nutrition Competencies were listed under a "pre-K to K" category in the 2001 Nutrition Competencies. During the 2002-04 validation process, an insufficient number of field reviewers responded to the preschool component. Therefore, the preschool competencies were not included in the final validation analysis.

In this 2008 draft, the preschool nutrition competencies are listed separately from kindergarten nutrition competencies to highlight the importance of early learning, as a foundation to the scope and sequence of learning that occurs in elementary and secondary school education. To construct these pre-K competencies, the CDE conducted an informal literature review to compare the scope and sequence of similar nutrition/health standards from 14 states. Through this limited literature review, the CDE determined age-appropriate preschool benchmarks that were aligned to the recently validated benchmarks and overarching nutrition competencies delineated for kindergarten through grade 12. Child care and child development experts from the California Preschool Instructional Network, Sacramento County Office of Education, and Child Development Incorporated then peer-reviewed these draft preschool competencies.

Revision Plans for 2008 Nutrition Competencies

This current document remains a draft. In light of the renewed interest in preschool nutrition, the CDE convened a Child Care Strategic Assessment Advisory Group in the summer of 2007 to provide recommended strategies for improving the child care nutrition environment. The Advisory Group will forward their recommendations to both State Superintendent O'Connell and Health and Human Services Agency Secretary Belshe in March 2008.

In January 2008, the CDE published the Preschool Learning Foundations, developed by the Child Development Division through the California Preschool Instructional Networks; these can be found at <http://www.cde.ca.gov/sp/cd/re/psfoundations.asp>. The CDE will conduct a more thorough peer review validation of the preschool component of the nutrition competencies with members of the Child Care Strategic Assessment Advisory Group, utilizing the Preschool Learning Foundations.

Plans for future revisions are as follows, and are contingent upon adequate funding:

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|--------------|---|
| October 2008 | Alignment with California Health Education Content Standards (adoption required by March 2008) |
| October 2009 | Alignment with core curriculum subjects (such as science, English-language arts, mathematics and history-social sciences) at appropriate grade levels and the Preschool Learning Foundations for Health |

Nutrition Competencies for California's Children

I: Students will know and understand the relationship between the human body, nutrition and energy balance.

- (A) Know the six nutrient groups and their functions
- (B) Describe how nutritional needs vary throughout the life cycle
- (C) Know the physiology of the human body as it relates to nutrition and physical activity

II: Students will know current nutrition and physical activity recommendations and how to apply them.

- (A) Know nutrition guidelines
- (B) Assess personal dietary needs
- (C) Understand the influence of nutrition on health
- (D) Assess the relationship of physical activity and nutrition to health
- (E) Establish personal goals and make healthy food and fitness choices

III: Students will identify and explore factors influencing food choices.

- (A) Identify influences on food choices
- (B) Explore factors that contribute to achieving and maintaining a healthy body and positive body image

IV: Students will demonstrate proper food handling and storage to maximize the nutritional quality of food and personal hygiene to prevent food borne illness.

V: Students will identify valid nutrition information and advocate for positive health policies and practices.

- (A) Access valid nutrition information and nutrition services
- (B) Advocate for positive health policy and practices

VI: Students will identify and explore influences of local, national and global factors on the quantity and quality of food.

- (A) Identify foods that come from particular regions
- (B) Understand the factors (local, regional, statewide, national, and global) that influence food availability, production and consumption

VII: Students will identify and explore the variety of food-related careers.

National Health Education Standards

In Appendix A through C, each Nutrition Competency for grades K-12 concludes with a table indicating which of the National Health Education Standards support that particular competency. This alignment is based on the following definitions, which have been modified specifically for nutrition and physical activity.

Standard 1: Concepts: Students will comprehend concepts related to health promotion and disease prevention to enhance health.

Performance indicators for this standard center around identifying what good nutrition and physical activity are, recognizing how they relate to health problems and ways in which lifestyle related to nutrition and physical activity, the environment and public and school policies can promote health. Curriculum should lead students to demonstrate the ability to a) use complete, factual information; b) provide facts that are accurate; c) show relationships among ideas; and d) make factual conclusions about how nutrition and physical activity correlate with health.

Standard 2: Analyzing Influences: Students will analyze the influence of family, peers, culture, media technology and other factors on health behaviors.

Performance indicators are related to describing and analyzing how one's cultural background, messages from the media, technology and one's friends influence food preferences and consumption as well as physical activity. Curriculum should lead students to be able to a) identify a variety of influences; b) describe both internal and external influences; c) explain the complexity of the influences; and d) show how the influences affect health choices.

Standard 3: Accessing Information: Students will demonstrate the ability to access valid nutrition and physical activity related products and services to enhance health.

Performance indicators focus on identification of valid nutrition, physical activity and weight management related information, products and services including advertisements, health insurance and treatment options and food labels. Curriculum should lead students to be able to a) identify sources of information; b) explain how to find the needed help; c) explain what type of help this source offers; and d) explain why this is a good source.

Standard 4: Interpersonal Communication: Students will demonstrate the ability to use interpersonal communication skills to enhance health.

Performance indicators focus on interpersonal communication, refusal and negotiation skills, and conflict resolution related to health issues, concerns and behaviors. Curriculum should lead students to be able to a) show dialogues that express needs, ideas and opinions; b) communicate clearly and in an organized way; c) show effective ways to say "no;" and d) use appropriate and effective verbal and nonverbal strategies (e.g., "I" messages, body language, appropriate tone, attentive listening).

Standard 5: Decision Making: Students will demonstrate the ability to use decision-making skills to enhance health.

Performance indicators focus on identifying health related situations that require decisions and ability to identify the essential steps needed to make healthy decisions. Curriculum should lead students to be able to a) identify nutrition and physical activity related situations that might require a thoughtful decision; b) distinguish between healthy and unhealthy alternatives to nutrition and physical activity related issues; c) determine when individual or alternative collaborative decision making is appropriate; d) generate alternatives to nutrition and physical activity issues; and e) predict the potential short and long-term impact of each alternative on self and others.

Standard 6: Goal Setting: Students will demonstrate the ability to use goal-setting skills to enhance health.

Performance indicators focus on identifying, adopting and maintaining healthy behaviors. Curriculum should lead students to be able to a) set personal nutrition and physical activity health goals and track progress toward their achievement; b) apply strategies and skills needed to achieve personal short and long-term health goals; and c) describe how personal health and physical activity goals can vary with changing abilities, priorities and responsibilities.

Standard 7: Self-Management: Students will demonstrate the ability to practice health enhancing behaviors and reduce health risks.

Performance indicators include identifying responsible personal health practices, and demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others. Curriculum should lead students to be able to a) demonstrate proper food preparation and storage practices to prevent food-borne illness; b) demonstrate specific food safety techniques; and c) list steps in the correct order if appropriate.

Standard 8: Advocacy: Students will demonstrate the ability to advocate for personal, family, and community health.

Performance indicators relate to identifying community resources, accurately communicating health information and ideas, and working cooperatively to persuade constituencies and decision makers to support policies that foster positive nutrition and physical activity practices. Curriculum should lead students to be able to a) take a clear stand for healthy nutrition and physical activity choices; b) explain why the stand taken is necessary for good health; c) use information to support the choice; d) show awareness of the audience for the message; e) be persuasive; and f) show conviction about the message.