Nutrition Competencies for California's Children

Pre-Kindergarten through Grade 12

California Department of Education
Nutrition Services Division
Education and Training Unit
Sacramento, CA

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Introduction

Why use nutrition content to help students master skills in math, language arts, science, health, history and social sciences? Perhaps the most compelling reason is that eating well can make a positive difference in a student's ability to achieve in school, and effective nutrition education can help improve students' eating habits. Other reasons for integrating nutrition education with core curriculum include:

- Undernutrition during any period of childhood can negatively impact children's behavior, school performance, and overall cognitive development. Effective nutrition education provides students and their families with information on gaining access to adequate food sources. Thus, in tandem with school meal programs, nutrition education can help maximize the learning potential of students.
- The health status of American children is declining as obesity rises to epidemic proportions. School-based nutrition education can play a key role in reversing this trend by helping students and their families learn to choose foods wisely and stay physically active.
- We all have to eat, and eating can be an enjoyable experience. Many students, at earlier ages than ever, are responsible for obtaining and/or preparing their own meals and snacks. Using nutrition as a medium to teach a variety of subjects capitalizes on this inherent interest in and need for food while promoting skills students can apply now and in the future.
- Learning activities involving food often engage more of the senses and thus capture the attention of a greater variety of students than do simpler activities using just textbooks or pencil and paper. Besides, nutrition learning activities can be fun for students and teachers alike.

The ten *Nutrition Competencies for California's Children Pre-Kindergarten through Grade 12*, outlined on page 13, were designed to guide school districts and agencies in promoting effective, sequential, and comprehensive nutrition education. They were developed jointly by the California Department of Education's Nutrition Services Division, Education and Training Unit, in response to a statewide nutrition education needs assessment conducted in 1998. Teachers, curriculum specialists, child nutrition program and food service professionals, and nutrition education specialists throughout the state contributed to the development of these competencies.

Following the competencies, the remainder of this document contains Nutrition Links: learning activities and assessments tools to give you an idea of how the nutrition competencies can be met while students master core subjects such as math and language arts. The Nutrition Links are grouped by competencies and by grade groupings to provide you with various ways to use this material. We hope this document inspires you to teach students about eating well, so that they can achieve their physical and academic potential.

Nutrition Competencies

The matrix on the next page outlines the nutrition competencies expected of students enrolled in pre-kindergarten through grade twelve. They cover ten areas critical to effective, comprehensive nutrition education, and reflect current knowledge of nutrition science and how eating habits affect health.

The competencies were developed to apply the nutrition concepts and unifying ideas of health literacy within the *Health Framework for California Public Schools*, specifically:

- Acceptance of personal responsibility for lifelong health
- Respect for and promotion of the health of others
- An understanding of the process of growth and development
- Informed use of heath-related information, products and services

Note that the first four competencies incorporate the use of the *Food Guide Pyramid, 2000 Dietary Guidelines for Americans*, Nutrition Facts labels, and *Physical Activity Pyramid* (see Appendix). These guidelines and tools form the foundation for current nutrition knowledge and practice and for the learning activities at all grade levels.

The level at which students are expected to achieve each of the ten competencies is indicated for each grade group on the matrix using four Instructional Content Levels:

I = Introduce (Introductory activities)
D = Develop (Develop concepts previously introduced)
M = Mastery (Full comprehension)
A = Application (Ability to apply the knowledge as a life skill)

As you can see, most competency areas are introduced at the pre-kindergarten and kindergarten level, and all are introduced by the early elementary grades. Through learning activities that develop concepts further and encourage mastery, students in middle and high schools are expected to be able to apply what they have learned as a life skill. To varying degrees, application may be achieved at nearly all grade levels, since a goal of nutrition education is to empower students to make informed food choices that promote health.

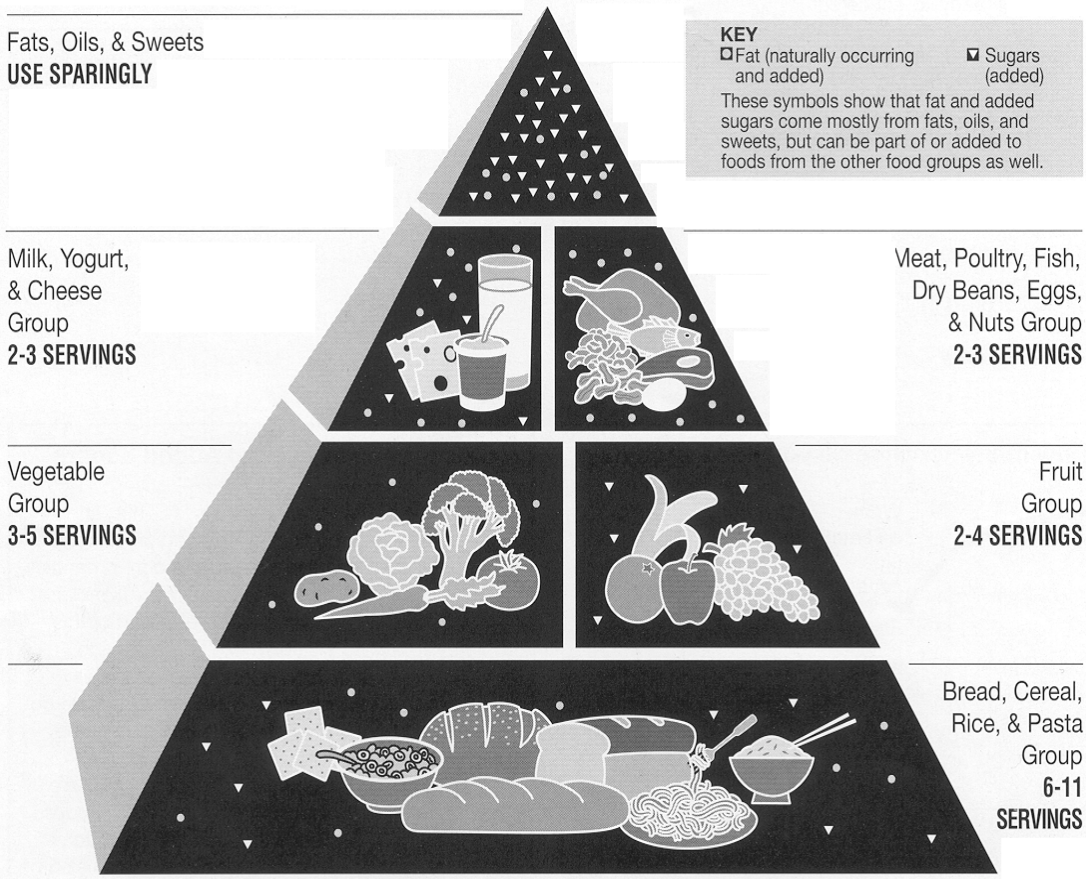
NUTRITION COMPETENCIES FOR CALIFORNIA STUDENTS
Pre-Kindergarten through Grade 12

NUTRITION COMPETENCIES	Instructional Content Level by Grade Group[1]				
	Pre-K & K	**Grades 1-3**	**Grades 4-5**	**Grades 6-8**	**Grades 9-12**
1. Know and apply the Food Guide Pyramid, *2000 Dietary Guidelines for Americans*, recommended daily number of servings, serving sizes, and nutrient types and functions.	I	I-D	D-M	D-M-A	D-M-A
2. Understand and practice making healthy food choices including planning and preparing snacks and meals, assessing personal needs, and applying strategies to reach personal nutrition goals.	I	D	D-M-A	D-M-A	D-M-A
3. Evaluate the short and long term health benefits and risks of food choices and eating behaviors using the Food Guide Pyramid, *Dietary Guidelines for Americans,* and Nutrition Facts labels.	I	I-D	D-M	M-A	A
4. Demonstrate food handling and personal hygiene to prevent foodborne illness. Handling includes growing, processing, preserving, transporting, storing, preparing, and serving.	I	D-M	D-M	M-A	M-A
5. Identify and explore factors influencing food intake including family, friends, culture, marketing, emotions, sensory stimuli, and food availability.	I	I	D-M	D-M-A	M-A
6. Describe the influence of local, national, and global factors on the quantity and quality of food, including agricultural science, ecology, technology, food safety (see #4), politics, government regulations, and economics.		I	D-M	D-M-A	M-A
7. Explain how nutritional needs vary throughout the life cycle.	I	I-D	D-M	D-M-A	D-M-A
8. Explore factors that contribute to achieving and maintaining a healthy body and positive body image such as physical activity, food choices, genetics, and self-esteem.	I	I-D	D-M	D-M-A	D-M-A
9. Identify and know how to access scientifically valid nutrition information and nutrition services.		I-D	D-M	D-M-A	D-M-A
10. Explore the variety of food-related careers.	I	I-D	D-M	D-M-A	D-M-A

[1] **Instructional Content Levels:**
I = Introduce (Introductory activities)
D = Develop (Develop concepts previously introduced)
M = Mastery (Full comprehension)
A = Application (Ability to apply the knowledge as a life skill)

Food Guide Pyramid

A Guide to Daily Food Choices



SOURCE: U.S. Department of Agriculture/U.S. Department of Health and Human Services

Use the Food Guide Pyramid to help you eat better every day. . .the Dietary Guidelines way. Start with plenty of Breads, Cereals, Rice, and Pasta; Vegetables; and Fruits. Add two to three servings from the Milk group and two to three servings from the Meat group.

Each of these food groups provides some, but not all, of the nutrients you need. No one food group is more important than another — for good health you need them all. Go easy on fats, oils, and sweets, the foods in the small tip of the Pyramid.

To order a copy of "The Food Guide Pyramid" booklet, send a $1.00 check or money order made out to the Superintendent of Documents to: Consumer Information Center, Department 159-Y, Pueblo, Colorado 81009.

U.S. Department of Agriculture, Human Nutrition Information Service, August 1992, Leaflet No. 572

How to Use The Daily Food Guide

What counts as one serving?

Breads, Cereals, Rice, and Pasta
1 slice of bread
1/2 cup of cooked rice or pasta
1/2 cup of cooked cereal
1 ounce of ready-to-eat cereal

Vegetables
1/2 cup of chopped raw or cooked vegetables
1 cup of leafy raw vegetables

Fruits
1 piece of fruit or melon wedge
3/4 cup of juice
1/2 cup of canned fruit
1/4 cup of dried fruit

Milk, Yogurt, and Cheese
1 cup of milk or yogurt
1-1/2 to 2 ounces of cheese

Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts
2-1/2 to 3 ounces of cooked lean meat, poultry, or fish
Count 1/2 cup of cooked beans, or 1 egg, or 2 tablespoons of peanut butter as 1 ounce of lean meat (about 1/3 serving)

Fats, Oils, and Sweets
LIMIT CALORIES FROM THESE especially if you need to lose weight

The amount you eat may be more than one serving. For example, a dinner portion of spaghetti would count as two or three servings of pasta.

How many servings do you need each day?

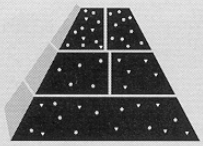
	Women & some older adults	Children, teen girls, active women, most men	Teen boys & active men
Calorie level*	about 1,600	about 2,200	about 2,800
Bread group	6	9	11
Vegetable group	3	4	5
Fruit group	2	3	4
Milk group	**2-3	**2-3	**2-3
Meat group	2, for a total of 5 ounces	2, for a total of 6 ounces	3 for a total of 7 ounces

*These are the calorie levels if you choose lowfat, lean foods from the 5 major food groups and use foods from the fats, oils, and sweets group sparingly.

**Women who are pregnant or breastfeeding, teenagers, and young adults to age 24 need 3 servings.

A Closer Look at Fat and Added Sugars

The small tip of the Pyramid shows fats, oils, and sweets. These are foods such as salad dressings, cream, butter, margarine, sugars, soft drinks, candies, and sweet desserts. Alcoholic beverages are also part of this group. These foods provide calories but few vitamins and minerals. Most people should go easy on foods from this group.



Some fat or sugar symbols are shown in the other food groups. That's to remind you that some foods in these groups can also be high in fat and added sugars, such as cheese or ice cream from the milk group, or french fries from the vegetable group. When choosing foods for a healthful diet, consider the fat and added sugars in your choices from all the food groups, not just fats, oils, and sweets from the Pyramid tip.

DIETARY GUIDELINES FOR AMERICANS

AIM FOR FITNESS...

- ▲ Aim for a healthy weight.
- ▲ Be physically active each day.

BUILD A HEALTHY BASE...

- ■ Let the Pyramid guide your food choices.
- ■ Choose a variety of grains daily, especially whole grains.
- ■ Choose a variety of fruits and vegetables daily.
- ■ Keep food safe to eat.

CHOOSE SENSIBLY...

- ● Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.
- ● Choose beverages and foods to moderate your intake of sugars.
- ● Choose and prepare foods with less salt.
- ● If you drink alcoholic beverages, do so in moderation.

...for good health

Nutrition Links

Teachers, curriculum and nutrition education specialists, child nutrition professionals and others will need a myriad of resources to translate the ten nutrition competencies into classroom learning activities. The Nutrition Links on the following pages are intended to provide a starting point. While not a comprehensive collection of learning activities, these links do provide some examples of how nutrition lessons can help students master skills related to the content standards in core subjects. Use these links as a springboard for developing nutrition activities that connect with other academic subjects.

It is important to keep in mind that these links are only suggestions, and that the quality or effectiveness of nutrition education is at least as important as the quantity or frequency of nutrition-related activities in the classroom. According to literature reviews by Lytle (1) and Contento (2), the six basic elements in successful eating behavior change programs for children include:

1. Programs are behaviorally-based and theory-driven.

2. Family involvement is incorporated for elementary school children.

3. Programs for secondary school students include self-assessment of eating patterns.

4. Programs include intervening on the school environment.

5. Behavioral change programs include intervening in the large community.

6. More instruction or intervention time results in greater program impact.

Curriculum standards for math, language arts, and health are the three subjects for which links have been identified in this document, using the following symbols and abbreviations:

✐ LA = California English-**L**anguage **A**rts Content Standards
± Math = **Math**ematics Content Standards
♥ CS = **C**hallenge **S**tandards for Student Success/Health Education

In most cases the LA and Math Links represent standards that appear with high frequency on the SAT-9 and California Content Standards components of the STAR testing system. Keep in mind, that nutrition lessons can enhance learning in all other curricular areas: science, physical education, home economics, history, social science, and visual and performing arts. No doubt you will recognize many of these subjects throughout these Nutrition Links.

Each learning activity is labeled with one of the four Instructional Content Levels outlined earlier, so that you can gauge the depth of the activity and level of competency expected:

I = Introduce (Introductory activities)
D = Develop (Develop concepts previously introduced)
M = Mastery (Full comprehension)
A = Application (Ability to apply the knowledge as a life skill)

The decision-making process—certainly a part of skill application—is inherent in food selection. Daily decisions about food do have a cumulative effect on an individual's health and well-being. Nutrition knowledge is an important foundation for these decisions, but effective nutrition education goes beyond knowledge. The best nutrition-related learning activities provide accurate and current information, facilitate an awareness of students' own nutrition-related values, and provide opportunities for them to share their nutrition-related opinions and attitudes with others as part of the decision-making process.

Several learning activities described briefly here suggest involving the staff affiliated with child nutrition programs. Often overlooked as educational resources, child nutrition program directors and supervisors are highly-trained professionals (many are registered dietitians), who are willing and able to provide nutrition education resources. Nutrition program staff at all levels can help augment classroom activities and assist teachers with connecting nutrition or food-related activities with many subject areas. And the cafeteria can serve as a learning laboratory for classroom lessons.

As you and other schools and agencies committed to connecting nutrition with core curriculum standards field-test these and other learning activities, you'll notice that some will be harder than others to implement. A variety of factors will determine how easily you can implement a learning activity that supports a nutrition competency, including: facilities (cooking, gardens), schedule (50-min class periods versus block schedule), district or agency size, and proximity to field trip destinations.

Choose those activities you feel you can carry out successfully with the resources within your reach now. And, with renewed confidence in your ability to teach nutrition, you might just find yourself in a position to tap into other resources, from personnel and funding to school gardens and cooking facilities.

(1) Lytle, L. & Achterberg "Changing the Diet of America's Children: What Works and Why?" *Journal of Nutrition Education* (Sept./Oct 1995) Vol 27, #5, pg. 250.
(2) Contento, C. et al "Nutrition Education for School-Aged Children." *Journal of Nutrition Education,* Special Issue. (Nov/Dec 1995) Vol.27, #6,pg.298

Nutrition Links

By

Competencies

Nutrition Links by Competencies

Competency #1: Know and apply the Food Guide Pyramid, *2000 Dietary Guidelines for Americans*, recommended daily number of servings, serving sizes, and nutrient types and functions.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
PreK-K	I	Have students name foods from photos or real food samples. Display the photos or foods in two unlabeled groups, based on whether they are from a plant or animal source. Guide students to identify that foods in one group are from plants and in the other from animals.	Individually or in pairs, students name each food or photo, sort them into plant and animal categories, and total how many pictures are in each group.	± Math-K Numb Sense Stds 1.1-1.2, Sort & Classify Std 1.1
PreK-K	I	Invite a dentist or dental hygienist to talk to the class. Ask him/her to discuss the importance of calcium-rich foods for bone and dental health.	Students select empty containers of calcium-rich foods from a bag and explain to an adult that these foods are good for dental and bone health.	♥ CS-K Std 1.2 ✐LA-K Writ & Oral Std 1.1, List & Speak Std 1.2, Speak App Std 2.1
PreK-K	I	Review the alphabet by reading Action Alphabet by Shelley Rottner and having students do physical activities. List the various motions on a classroom chart.	Students demonstrate a variety of movements associated with a particular alphabet letter.	✐ LA-Gr. K
PreK-K	I	Introduce the *Food Guide Pyramid* and discuss how the size of the section or food group on the *Food Guide Pyramid* corresponds to the number of recommended servings.	Students match the appropriate number and type of food models or photos to each *Food Guide Pyramid* food group.	± Math-K
PreK-K	I	Hold a tasting party of different breads or cereal/grain products.	Students list, draw or select from real foods the different breads or grain products they like and dictate why.	✐ LA-K _____
PreK-K	I	Read books featuring fruits and vegetables (Rain Makes Applesauce; Eating the Alphabet). Rotate students through tasting centers for various fruits and vegetables.	Students draw pictures of favorite fruit or vegetable, dictate food's name and reason for liking it.	✐ LA-K Writ & Oral Std 1.2; Read Comp Std 2.3
Pre K/K	I	Explain that, to maintain healthy teeth and bodies, sugar and high-sugar snacks are "sometimes foods." Count 10 sugar cubes and put them in an empty soda can to show how much sugar there is in soda. Display and taste-test low-sugar snack alternatives.	Students bring low-sugar snacks to school.	± Math-Gr.K Alg Std 1.1, Stat Stds 1.1, 1.2

* LEVEL indicates *Instructional Content Level*: I = Introduce, D = Develop, M = Mastery, A = Application

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
1-3	I	Introduce the *Food Guide Pyramid* using a poster or felt and Velcro board. Describe how foods at the base should be eaten often. Ask students to write the names of foods from the grains, fruits, and vegetable groups that they like on word strips. Correct spelling as needed and hand them back to the students.	Students use their word strips to label drawings of their favorite foods, then place the pictures and labels correctly on the *Food Guide Pyramid*.	♥ CS-Gr.1 Std 1; Gr.2 Std 1; Gr.3 Std 1 ✐ LA-Gr.1 Word Anal Std 1.1, Writ Strat Std 1.3, Vocab Std 1.17; Gr.2 Writ Strat Std 1.2
1-3	I	Give the students word searches and word scrambles about farm animals and crops (available on www.usda.gov/news/usdakids). Project the answer key on the website or an overhead transparency so that students can self-correct their work.	Students complete two separate assignments, each using three of the words from the farm animals page and from the crops page in complete sentences.	♥ CS-Gr.1 Std 5 ✐ LA-Gr.1 Writ Strat Stds 1.1-1.3, Writ & Oral Stds 2.1-2.2; Gr.2 Writ Strat Stds 1.1-1.2, 1, 4; Gr.3 Writ Strat Stds 1.1-1.2
1-3	D	Explain that Vitamin A is important for healthy skin, eyes and resistance to infection. Discuss how Vitamin A comes from both plant and animal sources, showing graphs on back of food photo cards. Make a spinach salad with cheese strips in it (or eat a school lunch featuring one) to demonstrate the two sources.	Students draw a picture of a child eating a spinach-cheese salad (or comparable vitamin A-rich food) and color the parts of the child's body that benefit from Vitamin A in a separate color.	♥ CS-Gr.1 Stds 1, 5; Gr.2 Std 1, 5; Gr.3 Stds 1, 3, 5
1-3	D	Before lunch, guide students in sorting foods on the school lunch menu for the day into the *Food Guide Pyramid* groups.	After lunch, students tally the number of *Food Guide Pyramid* groups represented by the foods they actually ate for lunch (school lunch or lunch from home) and compare with *Food Guide Pyramid* recommendations.	♥ CS-Gr. 1-3 Std 1 ± Math-Gr.2 Stat, Data Anal Std 1.1
1-3	I	Students plan weekly family or friends "theme walks" and help select themes related to classroom work. Examples: find things that rhyme or estimate the number of birds they will see.	Student record results of their walks in their journals.	✐ LA-Gr.1 Writ Strat Stds 1.1-1.3, Writ App Stds 2.1-2.2; Gr.2 Writ Strat Stds 1.1-1.2, 1.4, Writ App Std 2.1; Gr.3 Writ Strat Stds 1.1-1.4, Writ App Std 2.2 ♥ CS-Gr.1 Std 4; Gr.2 Std 5; Gr.3 Std 1

* LEVEL indicates *Instructional Content Level*: I = Introduce, D = Develop, M = Mastery, A = Application

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
1-3	D	Play "Toss a Food:" toss a ball around the class. As the ball is tossed, call out a food. The student who catches the ball names the corresponding *Food Guide Pyramid* food group. The other students indicate agreement with thumbs up or disagreement with thumbs down.	Students accurately categorize photos of foods on a *Food Guide Pyramid* poster.	♥ CS-Gr.1 Std 1; Gr.2 Std 5; Gr.3 Stds 1, 5
1-3	D	Show students whole grain plants (or photos of them) and invite students to taste food products made from them.	On paper plates, students draw meals and snacks that include their favorite whole grain foods.	♥ CS-Gr.1-3 Std 1
1-3	D	Help students plant, tend and harvest corn. Read Corn is Maize or a similar book describing food products that come from corn.	Students make a class book about the importance of corn and illustrating the variety of corn products.	✐ LA-Gr.2 Writ Strat Stds 1.1-1.4
1-3	I	Help students start a carrot garden in pots or a school garden plot. Explain to students that carrots are a healthy food choice. Show where carrots are on the *Food Guide Pyramid*. Demonstrate how to clean carrots before eating or cooking them.	Students write and draw about the sequence of their experience with carrots from seed to tasting, including color and texture. Post drawings in the cafeteria.	♥ CS-Gr.1 Std 6; Gr.3 Std 3 ✐ LA-Gr.2 Writ Strat Stds 1.1, 1.4; Gr.2 Writ Strat Stds 1.1, 1.4
1-3	I	Have students taste processed foods (e.g., peanuts or crackers) available in both regular and reduced-sodium varieties.	Students dictate a class story about a peanut or cracker that won't allow itself to be salted during processing.	♥ CS-Gr.1 Std 1 ✐ LA-Gr.1 Writ & Oral Std 1.0, Speak App Std 2.0
4-5	D	Have students sort pictures of fruits and vegetables into 3 groups: (1) those with 40% or more daily value (DV) vitamin C, (2) those with 40% or more DV vitamin A, (3) those with 25% or more DV fiber, and (4) others. Obtain %DV information from food photo/comparison cards.	In the garden, students identify and name vegetables high in fiber and vitamins A and C. (If there is no school garden, use information about home gardens or produce grown in the county or region, or build an imaginary garden.)	± Math-Gr.5 Numb Sense Std 1.2
4-5	D	Discuss the importance of fiber to the digestive system. Have students sort a variety of cereal boxes (including those offered in the School Breakfast Program, if available) from most to least fiber based on information per serving on the Nutrition Facts labels.	Students write short essays about why dietary fiber is important, including a defense of why, based on its fiber content, they would continue to eat their favorite cereal or supplement it with a different cereal.	♥ CS-Gr.4 Stds 2, 4, 5, 8; Gr.5 Stds 1, 4, 5, 8 ✐ LA-Gr.4 Writ Strat Stds 1.1-1.2, 1.4, 1.10; Gr.5 Writ Strat Stds 1.1, 1.6

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
4-5	D	Instruct students about the role of protein as part of the human physiology component of the 5th grade Science curriculum. Eat a school lunch featuring Lean Beef Chili as an example of a dish that contains proteins from both animal and plant sources.	Students locate the sources of what they ate on the *Food Guide Pyramid* and determine what % of their daily protein requirement was met when they ate a serving of chili.	♥ CS-Gr. 4 and 5 Stds 1, 4, 5, 8
4-5	D	Ask students to estimate how many servings of dry cereal they eat at a sitting, using breakfast as an example. Record the estimates. Have students use measuring cups and product labels to measure one serving. Ask students to make a new estimate of their actual consumption.	Students create a three-column (A, B, and C) graphic organizer. Column A lists each student's first estimate. Column B lists their estimates after measuring. Column C gives the factor for multiplying or dividing to find the difference between Column A and Column B.	± Math-Gr.4 Numb Sense Std 3.2, Math Reas Stds 1.2, 2.2, 2.6; Gr.5 Math Reas Stds 1.0, 2.1, 2.3-2.4, 2.6 ♥ CS-Gr.4 Std 8; Gr.5 Stds 1, 8
4-5	D	Compare the nutrient density of foods at the top of the *Food Guide Pyramid* (fats, oils and sweets) to foods in the four other groups, using food comparison cards. For these foods, often the %DV of calories is higher than the %DV of any other nutrient.	Students work in groups to produce a poster, song, or skit to promote choosing most foods from groups below the tip of the *Food Guide Pyramid*. They present their products to the class.	✐ LA-Gr.4 List & Speak Stds 1.5-1.9; Speak App Std 2.4; Gr.5 List & Speak Stds 1.4-1.6, Speak App Stds 2.1-1.2 ± Math-Gr.__ Numb Sense Std 1.2 ♥ CS-Gr.4 Std 1
4-5	M	Divide students into small groups. Have students study ingredient lists on various bread bags and cereal boxes to look for products with whole grains listed first.	Using food samples and printed nutrition information, student groups explain to the class which are the best sources of whole grains.	♥ CS-Gr.5 Std 1 ✐ LA-Gr.__ List & Speak Stds 1.7-1.8
6-8	M	Give each student a different ingredient list cut from a food package without the name of the product. Have them guess the mystery food and a key nutrient provided by it. Then have students find the rest of the package, check the identity of the food, and see from the Nutrition Facts label if they properly identified a key nutrient.	Students work in key nutrient groups and use their food labels to plan for 100% DV of their key nutrient from the foods.	♥ CS-Gr.6 Stds 1, 9; 6-8 Std 9 ✐ LA-Gr.7 Read Comp Stds 2.2, 2.5; Gr.8 Read Comp Stds 2.1, 2.6 ± Math-Gr.6 Math Reas Stds 1.2, 2.0-3.0; Gr.7 Math Reas Std 1.3

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	D	Review food sources of calcium and calcium's role in bone development during adolescence and bone health in adulthood. Discuss the recommended number of servings and serving sizes of calcium-rich foods to obtain the recommended amount for teens. Distribute labels or empty containers of calcium-rich foods.	Using labels or empty containers, students create a daily menu with 130% DV for calcium from food sources without supplementation.	♥ CS-9-12 Stds 1, 2, 4 ✐ LA-Gr. 9-10 Read Comp. Std 2.1; Gr. 11-12 Read Comp. Std 2.1
9-12	M	Ask the students who participate in sports or regular physical activity to report on what they eat before a game, meet or workout. Most will name carbohydrate foods. Point out that these foods provide energy for everyone, and that 6-11 servings are recommended on the *Food Guide Pyramid*.	Students plan a meal high in carbohydrates to eat before exercise or a sports activity, and make it at school or home or eat it in the school lunch program.	♥ CS-9-12 Stds 1, 4, 9
9-12	A	Divide the class into cooperative learning groups for breakfast, lunch, dinner and snacks. Assign each group to plan meals or snacks to comprise a one-week menu that includes key nutrients for teen health. Using the *Food Guide Pyramid* or a nutrient analysis program, have the class evaluate its composite menu against weekly nutrition goals. Then have each group adjust another group's meals or snacks to fit the goals and report changes made to class.	Over a four-day period, Monday-Thursday, each group prepares and serves its contribution. On Friday students analyze the adjusted weekly menu. Individually, students write a defense of it how their class menu meets the nutrient needs of adolescents.	♥ CS-9-12 Stds 1, 4 ✐ LA Gr. 9-10 Writ Strat Stds 1.1-1.2, 1.8-1.9; Gr. 11-12 Writ Strat Stds 1.1-1.5, 1.9

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Competency #2: Understand and practice making healthy food choices including planning and preparing snacks and meals, assessing personal needs, and applying strategies to reach personal nutrition goals.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
PreK-K	I	Read Bread and Jam for Frances. Have students discuss foods they like to eat in addition to bread and jam. Place photos and names of these foods on a *Food Guide Pyramid* poster or pocket chart while students name them.	Students draw pictures or create collages of magazine pictures of different foods they like, then pick a title from the pocket chart. Compile in a bread-shaped booklet entitled We Like to Eat.	✐ LA-K Word Anal Stds 1.1, 1.18, Writ Strat Stds 1.1, 1.3-1.4 ♥ CS-K Std 1
PreK-K	I	Read books featuring foods or recipes (e.g., Stone Soup, Chicken Soup with Rice, Green Eggs and Ham) and discuss why eating a variety of foods is important for growing healthy bodies.	Students prepare and eat a snack corresponding to the book read (e.g., bread and jam, stone soup, carrot salad).	✐ LA-K _____
1-3	I	Guide students to select pictures or photos of foods that make healthy snacks from a *Food Guide Pyramid* poster or felt board.	Students draw pictures of snacks and pick titles for them from a word wall, then prepare (at school or at home) the snacks they drew and eat them at school.	✐ LA-Gr.1 Writ App Std 2.1, List & Speak Stds 1.1-1.2 ♥ CS Gr. 1-2 Std1
1-3	I	Show students food photos of a variety of fruits with names written underneath photo.	Students make and eat fruit kebabs, then write descriptive sentences using the names of the fruits.	✐ LA-Gr.1 Writ Strat Stds 1.1-1.3
1-3	I	Read It Looks Like Spilt Milk or The Milk Makers. Have students taste whole, low-fat, and nonfat milk without identifying the type.	Students take a class vote on favorite milk type and tally the results, then describe the milks using sensory words: smell, look, mouth-feel, and taste.	✐ LA-Gr.1-2 Writ App Stds 2.1, 2.2, Speak App Std 2.4; Gr.3 Writ App Std 2.2, Speak App Std 2.3 ± Math-Gr.___
4-5	D	Students plan a burrito recipe made of products grown or raised in California.	Student groups make and serve burritos, and demonstrate where the ingredients would fit on the *Food Guide Pyramid*.	♥ CS-Gr.1 Std1
4-5	D	Invite a child nutrition program staff member to be a guest speaker. Ask her/him to demonstrate school lunch or breakfast menu requirements, using food models and/or photos.	Students plan a menu for the school cafeteria that meets National School Lunch or Breakfast Program requirements.	✐ LA-Gr.4 List & Speak Std 1.1; Gr.5 List & Speak Stds 1.1-1.2 ♥ CS-Gr.4 Stds 1, 5, 9; Gr.5 Stds 1, 5, 8
4-5	D	Instruct students in taking resting pulse and pulse after running ¼ mile.	Students make a two-colored bar graph charting both pulse rates over one month and analyze the data.	± Math- Gr.4 Stat Std 1.3; Gr.5 Std 1.2 ♥ CS-Gr.4-5 Std 1

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
4-5	D	Have students plan a lunch for a family of four based on the *Food Guide Pyramid*. Guide them in using grocery ads or an on-line store to determine the cost of the lunch per person.	Students write a proposal for how the menu they planned could be offered in the school cafeteria and submit the proposal to child nutrition program staff.	✐ LA-Gr._____ ± Math-Gr.4 Numb Sense Std 3.0; Math Reas Std 1.0; Gr.5 Numb Sense Std 2.0, Math Reas Std 1.0 ♥ CS-Gr.4 Std 1
4-5	D	Guide students in discussing how and why some students buy candy or soda instead of healthier snacks. Point out how these empty calories can displace nutrients.	Students make daily journal entries about how they feel physically and perform in school, sports, or other activity after a balanced meal or healthy snack.	♥ CS-Gr.4-5 Std 1 ✐ LA-Gr.5 Writ Strat Stds 1.2-1.3
4-5	D	Instruct students in reading Nutrition Facts labels to compare sodium content in a variety of processed foods.	Students write an essay on how they could reduce sodium content when choosing processed foods.	± Math-Gr.4 Math Reas Stds 1.0, 2.0 ✐ LA-Gr.5 Writ App Std 2.4
6-8	D	Review foods high in vitamins A and C and iron. Have students collect healthful, appealing recipes from cookbooks.	Students tally the number of times vitamin A, vitamin C and iron-rich ingredients appear in 10 recipes and graph the results.	± Math-Gr.7 Alg Std 1.5 ♥ CS-6-8 Std 1
6-8	D	Have each small group of students select a typical fast food meal, total the grams of fat it contains, and measure that amount of lard or shortening onto a plate (5 grams=1 tsp.) for display. Have each group present their findings to the class and ask classmates to brainstorm ways to reduce the fat content of the meal.	Each student writes a short essay outlining a specific goal to improve his/her fast food choices and how he/she plans to implement the goal.	✐ LA-Gr.6 Writ Strat Std 1.1 ♥ CS-9-12 Std 1
6-8	M	Explain that every person has his or her own growth pattern, which is often determined by genetics and family heritage. Have students measure their height at the beginning, middle, and end of school year. If students have access to information about their biological families, have them note height, body weight, and body shape of their relatives, and ask about their own past growth patterns. Explain that this information can help predict their growth pattern and adult size.	Each student plots his or her height throughout the year and, if known, height from 1 and 2 years ago on a standard adolescent height grid. Based on family patterns, if known, each student predicts his or her adult height.	± Math-Gr.7 Math Reas Std 1.0; Gr 6-8 Prob, Data & Stat Stds 1-3.0 ♥ CS-Gr. 6 and 6-8 Std 6

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
6-8	D	Guide students to record their minutes of physical activity for a week and make a bar graph of individual results. Have each student set an individual goal of at least one hour of physical activity per day.	A month later, students record their physical activity for three days and compute the percentage change from previous month in daily average physical activity.	± Math-Gr.6 Numb Sense Stds 1-1.3, Math Reas Stds 1.0-3.0; Gr.7 Numb Sense Std 1.3, Math Reas Stds 1.0-3.0; Gr.8 Math Reas Stds 1.0-3.0
6-8	M	Divide students into cooperative learning groups and assign each group a food group from the *Food Guide Pyramid*. Have each student group study the key nutrients provided by foods in their food group.	Student groups present the results of their nutrient study to their classmates. As a class, they create (draw, build, or act out) their own model of the *Food Guide Pyramid*.	✐ LA-6-8_____ ♥ CS-6-8 Std 9
6-8	A	Ask students to research and bring to class various health promotion documents that advocate for a diet high in fiber. Remind them that grains, breads and cereals are a major source of dietary fiber.	Students evaluate the documents they collected for similarities and differences, then taste high-fiber grain food products.	✐ LA-Gr.7 Read Comp Std 2.2
6-8	A	Have students research and experiment with various preparation techniques for maximum nutrient retention when cooking vegetables.	Students prepare several cooked vegetables to demonstrate the best techniques for nutrient retention.	± Math-Gr.7 Alg Std 1.4
6-8	D	Explain the difference in food energy (calories per gram) provided by fat versus carbohydrate and protein. Have students calculate the grams and calories of fat in a day of meals and snacks.	Based on a 2000-calorie daily intake, students calculate the recommended limit of grams of fat and calories from fat.	± Math-Gr.6 Numb Sense Std 1.4; Gr.7 Numb Sense Std 1.3
6-8	M	Guide students in calculating the percent of energy nutrients (sugar, starch, protein and fat) in various breakfasts. Instruct on the effect on morning energy levels of high-sugar food compared to a balanced meal. Discuss strategies to replace some high-sugar foods with more nutrient-dense foods.	Students prepare and eat breakfast foods or snacks that are lower in sugar and more balanced. OR Students complete a 24-hour food record before and after the learning activity and compare sugar content of foods eaten.	♥ CS-6-8 Std 1 ± Math-Gr.7 Numb Sense Std 1.3

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	M	Have students cook or write a one-day meal plan for their families based on recommended number of servings from the *Food Guide Pyramid*.	Students create a survey to poll their family members about what they like about the meal plan and how it can be improved.	✐ LA-Gr. 9-10 Speak App. Std 2.3 ♥ CS-9-12 Std 1
9-12	M	Guide students in forming a persuasive argument that will convince a peer to eat fresh fruits and vegetables daily. Group students in pairs and have each student present his/her argument to a partner.	Students give constructive feedback and discuss what about their partner's argument was convincing.	✐ LA-Gr. 9-10 List & Speak Stds 1.1-1.9 ♥ CS-9-12 Std 1
9-12	A	Review the nutrition needs of teens. Instruct students to write a nutritious eating plan for a week that they feel they could implement, including meals from the school cafeteria, fast food outlets, and home. Ask them to follow the plan for one week.	One week later, students write a reflection on how well they were able to follow their plans.	✐ LA-Gr.9-10 and 11/12 Writ Strat Stds 1.1-1.9
9-12	A	Ask a child nutrition program manager or designee to brief students on requirements in planning school menus. Guide students in discussing ways that the school cafeteria could feature health-promoting foods.	Working with the cafeteria manager or equivalent, students share ideas and agree on an implementation plan for them to help promote healthy foods featured in the cafeteria.	✐ LA-Gr. 11-12 List & Speak Stds 1.1-1.10 ♥ CS-9-12 Std 1
9-12	A	Divide students into teams. Have each team brainstorm ways to be more physically active, then commit to doing a certain daily physical activity for a set period of time (week or two).	Teacher interviews student team leaders about the activity chosen and progress made toward achieving the commitment.	♥ CS-9-12 Std 1 ✐ LA Gr.9-10 Speak App Std 2.3
9-12	A	Have students research grains grown around the world, including how they are used in regional/cultural cooking and the economic importance of these grain crops in countries where they are grown.	Students publish a list of their favorite whole grain foods from around the world and share it with the child nutrition program staff for consideration in menu planning.	✐ LA-Gr.9-10 and 11-12 Writ & Oral Stds 1.1-1.4
9-12	A	Assign students to study how to obtain a nutritionally complete vegetarian diet.	Students create nutritionally complete vegetarian menus for a week.	✐ LA-Gr.11-12 Writ Strat Std 1.8

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	M	Have students bring in snack food labels. In groups, ask them to compare the percent of calories from total fat and saturated fat, plus cholesterol content, in the snacks, then identify lower-fat snack choices.	Students write and present chants or raps to promote snacks low in saturated fat and cholesterol and moderate in total fat.	♥ CS-9-12 Stds 1, 5, 9 ± Math-Gr.8 Prob & Stat Std 8.0 ✐ LA-Gr.9-12 List & Speak Stds1.8-1.9, Speak App Std 2.6

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Competency #3: Evaluate the short and long term health benefits and risks of food choices and eating behaviors using the Food Guide Pyramid, *Dietary Guidelines for Americans*, and Nutrition Facts labels.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
PreK-K	I	Explain that fruits and vegetables are foods to eat every day. Have students place plastic models or photos of three vegetables and two fruits into bins stacked into a pyramid shape. Repeat the activity weekly.	One month later, students place the same number of vegetable and fruit models or photos into the bins without guidance.	± Math-K Alg Std 1.1, Stat Stds 1.1, 1.2
1-3	I	Each day for one week, have students list breakfast and lunch foods that they like from the school cafeteria menu and match them to the *Food Guide Pyramid* food groups.	At the end of the week, students write simple sentences about each of the five food groups and how school meals can help them eat according to *Food Guide Pyramid* recommendations.	♥ CS-Gr.1 Std 5; Gr.2 Stds 4, 5, 6, 7; Gr.3 Std 1 ✐ LA-Gr.1 Writ & Oral Stds 1.1, 1.7-1.8; Gr.2 Writ Strat Std 1.2; Gr.3 Writ & Oral Stds 1.1, 1.8
1-3	I	Have students pick out whole-wheat kernels from bread. Cut them open, the have students view them under a magnifier.	Students describe orally what the outside and inside parts of the grain look and feel like.	✐ LA-Gr.2 List & Speak Std 1.1-1.5
1-3	I	Explain to students that for health we need to eat foods every day that are low in fat and high in fiber, like fruits, vegetables and grains. To identify foods higher in fat, have students rub a piece of food on a brown bag. If the bag gets a spot that doesn't dry, the food is high in fat. Test a potato chip, apple slice, hot dog, pretzel, donut, carrot, French fry, etc.	Students sort foods into higher and lower fat categories, using this test method, and explain which are better for health when eaten daily.	± Math-Gr.1 Numb Sense Stds 1.1-1.4; Gr.2 Numb Sense Stds 1, 3.2, 3, Math Reas Std 2.1; Gr.3 Numb Sense Std 2.1, Math Reas Stds 3.1, 3.3 ✐ LA-Gr.1 Writ & Oral Std 1.1, List & Speak Stds 1.4-1.5; Gr.2 Writ & Oral Std 1.1, List & Speak Stds 1.5-1.6; Gr.3 Writ & Oral Stds 1.1-1.4, List & Speak Stds 1.1, 1.7 ♥ CS-Gr.1 and 2 Stds 1, 8; Gr.3 Std 1

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
1-3	D	Display high-sugar foods and review how these “sometimes foods” can have a negative impact on dental health. Display fruits, vegetables, and other low-sugar snack alternatives (real foods, packages or photos). Have students measure and indicate (in teaspoons or sugar cubes) the sugar content of a variety of foods and compare (e.g., milk versus soda, candy versus fruit).	One week later, students identify foods higher and lower in sugar (from real foods, packages or photos) and their impact on teeth.	♥ CS-Gr.1-3 Std 1 ✐ LA-Gr.1-3 List & Speak Stds 1.1-1.2
4-5	D	Have students prepare the soil, plant, tend and harvest vegetables in a class garden. Discuss exercise and growing nutritious foods as two of many benefits of gardening.	Students write about the health benefits of gardening.	✐ LA-Gr.4 Writ Strat Stds 1.1-1.3, 1.10, Writ & Oral Std 1.0; Gr.5 Writ Strat Stds 1.2, 1.6, Writ & Oral Std 1.0 ♥ CS-Gr.4 Std 4
4-5	D	Guide students in discovering nutrient information about whole grain foods using data on the back of food photo cards.	Students write a paragraph about the nutrients in and benefits of eating whole grain foods based on food card information and prior knowledge.	✐ LA-Gr.4 Writ Strat Std 1.2b
4-5	D	Instruct students on the role of carbohydrates as a source of energy. Students test various vegetables with iodine solution to detect the presence of carbohydrates.	Students chart results of the iodine tests and rank vegetables by carbohydrate content.	✐ LA-Gr.4 Writ & Oral Std 1.1; Gr.5 List & Speak Stds 1.1-1.3
4-5	M	Guide students in tasting samples of fruits and vegetables and researching a key nutrient each contains and the role of that nutrient in humans.	Students make oral presentations in other upper elementary classes to explain the benefits of fruits and vegetables and their nutrients and present samples for tasting.	✐ LA-Gr.5 List & Speak Stds 1.4-1.6; Gr.4 Speak App Std 2.1
4-5	D	Instruct students to identify information about total fat and saturated fat on Nutrition Facts labels.	Looking at serving sizes and %DV for saturated fat, students use Nutrition Facts labels on ice cream and frozen yogurt to determine the frozen dessert with the lowest %DV of saturated fat.	± Math-Gr.5 Numb Sense Std 1.2

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	A	Divide students into small groups. Have each group evaluate one weight management plan for sound nutritional practices and lifelong effects on health. Optional: feature guest speakers from local weight management programs.	Student groups present their findings by writing and performing a skit about dieting or body building. They present their skits to the class, at a health fair, or to middle school students (live or via videotape).	✐ LA-Gr.9-10 Writ Strat Stds 1.5, 1.8, List & Speak Stds 1.6-1.8; Gr. 11-12 Writ Strat Stds 1.6-1.8, 2.6, List & Speak Stds 1.6, 1.8, Speak App Std 2.4 ♥ CS-9-12 Stds 1, 4, 9
9-12	M	Match students with an elementary class to assist younger students with garden activities that require teenage muscle and skill.	Students write essays or poems about gardening or working with younger students.	✐ LA-Gr.9-10 Writ Strat Stds 1.1-1.3, 1.9, Writ App Std 2.3; Grs.11-12 Writ Strat Stds 1.1-1.5, 1.9, Writ App Std 2.3 ♥ CS-9-12 Std 5
9-12	A	Guide students to work in groups to develop games to teach the *Food Guide Pyramid* to young children.	Students teach the games to younger children and report the results to the class.	✐ LA-Gr.9-10 List & Speak Std 1.9, Gr. 11-12 List & Speak Std 1.8
9-12	A	Students calculate the percentage of the *Food Guide Pyramid* devoted to each food group. (Visit www.usda.gov/news/usdakids)	Students develop a teen's weekly eating plan that reflects the percentages calculated.	♥ CS-9-12 Std 1 ± Math-9-12 Alg 1 Std 24.0
9-12	A	Have students research desired HDL and LDL blood cholesterol levels and consequences of abnormal levels.	Students interview doctors, nutritionists, or heart association health professionals about ways to achieve and maintain desired cholesterol levels, and report back to class.	♥ CS-9-12 Std 1 ✐ LA-Gr.___ Speak App Stds 2.2a-b
9-12	A	Have students examine foods currently available on campus (in vending machines, student sales, and breakfast and lunch programs) with regard to sugar content. Have them brainstorm healthier alternatives that students would buy.	Students approach student leadership group(s) and school administrators and present alternatives to selling high-sugar foods to raise school funds and promote student health.	♥ CS-9-12 Std 1 ✐ LA-Grs.11-12 Writ Strat Std 1.3, List & Speak Std 1.6

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	M	Guide students in studying the diet and genetics of populations with high rates of hypertension. Discuss ways to adapt recipes and eating habits to reduce the risk of hypertension.	Students modify traditional recipes to reduce the risk of hypertension (e.g., reduce sodium and increase fiber content).	± Math-Gr.____ Prob & Stat Stds 7.0, 8.0, Adv Prob & Stat Std 14.0
9-12	A	Have students research health studies on-line to discover the long-term effects of high-sodium diets, then develop presentations of data found in small groups.	Student groups present data found, using computer-generated visual aids, then listen to and evaluate other groups' reports.	♥ CS-9-12 Std 1 ✐ LA-Gr.11-12 List & Speak Std 1.8

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Competency #4: Demonstrate food handling and personal hygiene to prevent foodborne illness. Handling includes growing, processing, preserving, transporting, storing, preparing, and serving.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
Pre K/K	I	Ask each student to smell and observes a cup of milk or orange juice on Monday. Explain that milk or juice is usually kept in the refrigerator, but the class will be keeping it at room temperature for an experiment. Ask each student to smell and observe the milk or juice every day that week. On Friday, have the students compare the stale milk or juice with fresh milk or juice.	In small groups, students discuss what happened to the milk or juice and why it would be better to keep it in the refrigerator.	✐ LA-K List & Speak Std 1.2, Speaking App Std 2.1
Pre K/K	I	Demonstrate the steps in proper handwashing, placing a written label on a pocket chart for each step.	Student demonstrate proper handwashing in pairs: one student washes, while the other holds up the written label for the appropriate step.	✐ LA-K Word Anal Stds 2-1.3 ♥ CS-K Std 1
PreK-K	I	Have students bring from home empty food containers. In housekeeping area of classroom, guide students in storing different foods in appropriate areas (cupboard, refrigerator, freezer).	Students store food models or empty containers from a grocery bag in the proper food storage places.	± Math-K Alg Std 1.0 ✐ LA-K Word Anal Std 1.17
1-3	D	Demonstrate how to clean hands before handling food. Consider using handwashing facilities in school kitchen.	Students clean hands properly before handling food.	♥ CS-Gr.1-2 Std 1 ✐ LA- Gr.1 List & Speak Stds 1.1-1.3; Gr.2 List & Speak Std 1.3
1-3	I	Have students pick spinach grown in their school garden. Ask, “Is it ready to eat or cook, or what must we do to it first?” Demonstrate how to wash spinach.	Students explain to an adult how spinach must be cleaned before they can eat or cook it, then demonstrate before preparing a spinach salad or cooked spinach to taste.	✐ LA-Gr.1 Writ & Oral Std 1.1, List & Speak Stds 1.4-1.5; Gr.2 List & Speak Stds 1.5-1.6 ♥ CS-Gr.1 Std 5
4-5	D	Have students rub vegetable oil and ½ teaspoon of cinnamon on their hands before washing them and observe the “germs” that are left on their hands after they are finished washing. Repeat with different lengths of handwashing time.	Students estimate the percent of their hands that are free of bacteria after each length of time spent washing hands. Then they make bar graphs of their results.	± Math-Gr.4 Stat Data Anal Stds 1.1, 1.3; Gr.5 Std 1.2 ♥ CS-Gr.4 Stds 1, 2; Gr.5 Std 5
4-5	D	Using case studies, guide students in learning foodborne illness and how to prevent food spoilage of leftovers, on picnics, and while preparing food.	Students describe the ill effects of eating spoiled food and ways to prevent.	♥ CS-Gr.4-5 Std1 ✐ LA-Gr.4 Read Comp Stds 2.4, 2.6; Gr.5 Read Comp Stds 2.3-2.4

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
6-8	M	Guide students in researching foodborne illness and safe food storage and preparation methods to use at home.	Students create a computer-generated food safety guide and evaluate the guide for accuracy, conformity to written language rules and appeal to intended audience(s).	✐ LA-Gr.8 Writ Strat Stds 1.4-1.5 ♥ CS-6-8 Std 2
6-8	M	Provide students with information regarding the "temperature danger zone" for food storage. Assign students to write word problems with one unknown, either time or temperature.	Students solve each others' word problems, then discuss correct answers as a class.	± Math-Gr.__ Alg Stds 1-15.0 ♥ CS-6-8 Std 1
6-8	M	Have students pack two lunch bags with items like pasta salad and cheese sandwich and put a cold pack in one. Have them test each food's temperature at 1 hour intervals to see if any are in the "temperature danger zone," then make graphs of the temperatures over time.	Students make an oral presentation with visual aids based on their findings.	✐ LA-Gr.7 List & Speak Stds 1.4-1.6; Gr.8 List & Speak Stds 1.3-1.5 ± Math-Gr 6 Math Reas Stds 1.1, 2.1, 2.4, 2.7, 3.1; Gr 7 Alg & Func Std 4.2, Data & Stat Std 1.1, Math Reas Stds 1.0, 2.3, 2.5, 2.6, 2.8, 3.1
9-12	A	Students study exponential growth of bacteria and how aseptic techniques reduce bacterial growth.	Students solve and graph equations for time versus bacterial growth.	± Math-Gr.9-10 Alg 1 Std 2.0
9-12	A	Review student knowledge about food safety and sanitation practices from prior grades. Assign students to prepare a meal or snack in front of the class, demonstrating safe food handling and personal hygiene.	Ask the child nutrition program Director or designee to evaluate and comment on student demonstrations in terms of food safety. OR Students evaluate each others' demonstrations using a food safety checklist.	✐ LA-Gr.9-10 List & Speak Stds 1.3, 1.7, Speak App Stds 2.2, 2.6b; Gr.11-12 List & Speak Std 1.8

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Competency #5: Identify and explore factors influencing food intake including: family, friends, culture, marketing, emotions, sensory stimuli and food availability.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
Pre K/K	I	Have students describe favorite foods served at home, identify who makes this food for them, and who else in the family likes it. Compile a list and submit these as suggestions for center/school menus.	Students explain to their classmates what they like about this food and who else in their family likes it, then draw a picture of their family eating this favorite food.	♥ CS-K Std 1 ✐ LA-K Word Anal Stds 1.17-1.18
Pre K/K	I	Discuss what a holiday is and foods that are eaten at home on holidays.	Students cut out pictures of favorite holiday foods, glue them on a paper plate and write or dictate one-word labels.	♥ CS-K Std 1 ✐ LA-K Writ Strat Stds 1.2, 1.4
1-3	I	Help students tend and harvest root vegetables in their school garden (or purchase them or obtain them from the child nutrition program staff). Discuss the "looks and smells" of the vegetables. Read Making Vegetable Soup (Ehlert) and help students make soup with the vegetables they have observed.	Students pull sensory words off a pocket chart to describe how the vegetables look and smell before and after cooking and create sentences using the words selected.	✐ LA-Gr.1 Word Anal Stds 1.1, 1.16, Writ Strat Std 1.2, Read Comp Std 2.6; Gr.2 Word Anal Stds 1.10, 1.3; Gr.3 Word Anal Std 1.2
1-3	I	Guide students in tasting a variety of fruit and vegetable pieces, then in discussing the smells, colors, sounds (when eaten), texture, and taste.	Students write sensory words on word strips and place them on a word wall under sound, sight, smell, feel, and taste categories.	✐ LA-Gr.1 Word Anal Std 1.17; Gr.3 Writ App Std 2.2, Writ & Oral Std 1.1, Speak App Std 2.3
4-5	D	Help students explore food-related advertising. Show videotapes to demonstrate advertising techniques. Brainstorm and discuss the kinds of food ads shown on TV most often.	Students use the same advertising techniques they have discussed to write and illustrate an ad for a fresh fruit or vegetable.	♥ CS-Gr.4 Std 8 ✐ LA-Gr.4 Writ Strat Stds 1.1, 1.10, Writ App Std 2.0, Writ & Oral Std 1.6; Gr.5 Read Comp Std 2.1
4-5	D	Have students study print and TV ads promoting foods for their ease of preparation.	Students create an ad that markets fresh foods as being easy to prepare.	♥ CS-Gr. 4 Stds 1, 4, 5, 8; Gr.5 Std 8 ✐ LA-Gr.4 Writ Strat Std 1.1, Writ & Oral Stds 1.5-1.6; Gr.5 Read Comp Std 2.1
6-8	D	Guide students in discussing what motivates them to eat when they are not hungry or to not eat when they are hungry. Have them brainstorm positive motivators for eating only when hungry.	Students write in journals about what positively motivates them to maintain a healthier eating pattern.	♥ CS-6-8 Stds 1, 6, 7 ✐ LA-Gr.6 Writ Strat Std 1.1

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
6-8	D	Have students brainstorm foods served at home that "make their mouths water," then identify emotions associated with these foods.	Students interview family members to find out what emotions they associate with the same foods, and report back to class.	♥ CS-6-8 Stds 1, 6, 7 ✐ LA-Gr.6 and 8 Speak App Std 2.1
6-8	M	Help students establish a definition of culture or ethnicity. Have them brainstorm cultures existing in their school and local community. Assign students to interview someone from a specific culture and obtain a recipe for a traditional dish.	Students share recipes with the class and choose one or more to prepare (in class or at home) for a celebration of cultures.	♥ CS-6-8 Std 1 ✐ LA-Gr.7 List & Speak Stds 1.1, 1.4
6-8	M	Arrange for students to visit an ethnic market (e.g., Asian, Latino) to identify vegetables used in the corresponding cuisine. Help them grow several of these vegetables in a school garden (or purchase them locally) and identify culturally-specific ways to prepare them.	Students use the vegetables that they have grown or purchased to cook traditional ethnic dishes.	♥ CS-6-8 Stds 1, 6, 7
9-12	M	Guide students in researching community services that provide food to families in need.	Students publish a brochure for families (including a map) describing community agencies where food is provided or served.	♥ CS-9-12 Std 9 ✐ LA-Grs.9-10 Writ Strat Std 1.8
9-12	M	Arrange for students to shop at an on-line grocery store and price identical items on a list of a nutritionally adequate, three-day emergency food supply for a family of six.	Students graph the results of their research (including price of food items and transportation costs) and compare advantages and disadvantages.	♥ CS-9-12 Stds 6, 7 ± Math-Gr.___ Prob & Stat Std 8.0
9-12	A	Guide students in making a personal eating plan for one week. Then have them identify emotional or peer influences that could cause them to deviate from the plan.	Students role-play strategies to help them overcome influences that could negatively affect the implementation of their eating plan.	♥ CS-9-12 Stds 6, 7 ✐ LA-Gr.9-10 List & Speak Std 1.6; Gr.11-12 List & Speak Std 1.7
9-12	A	Have students discuss what they typically eat when they are in a positive mood and compare this with what they eat when they feel lonely, stressed, or depressed.	Students prepare a buffet (using real food, photos, labels, or ads) of "feeling good" foods (at school or brought from home) or depict these foods on a paper mural and/or write about why these foods make them feel this way.	♥ CS-9-12 Stds 6, 7 ✐ LA-Grs.____ Stds _____

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Competency #6: Describe the influence of local, national and global factors on the quantity and quality of food, including agricultural science, ecology, technology, food safety (see Competency #4), politics, government regulations, and economics.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
PreK-K	I	Display, discuss, and let students handle hand tools and products used in planting, tending and harvesting food. Take the class on a field trip to a farm. Show students farm machinery used for similar purposes as the hand tools.	Students match garden tools with pictures of farm machines that are used for similar purposes and/or use hand tools for their intended purpose in the school garden.	✐ LA-K Word Anal Stds 1.17-1.18
1-3	I	Help students grow three beds of radishes under different growing conditions (water, fertilizer, amount of sunlight). Have students monitor the growth and health of the plants periodically, then observe and taste final products.	Students write about the best ways to grow radishes and graph results (i.e., differences in growth, color, taste).	✐ LA-Gr.1 Writ App Std 2.2, Writ & Oral Std 1.1; Gr.2 Writ Strat Std 1.1; Writ & Oral Stds 1.2, 1.7; Gr.3 Writ Strat Stds 1.1, 1.4 ± Math-Gr.1-3 Math Reas Stds 1.0, 2.0
1-3	I	Introduce students to ideal weather conditions for growing apple trees. Show them on a world map where apples are grown. Read the story of Snow White. Discuss the importance of the apple to the story.	Students pass an apple around a circle as they add a new sentence to a folktale involving apples that the teacher begins for them. After the storytelling, students write the story as they remember it.	♥ CS-Gr.2 Std 4; Gr.3 Std 4 ✐ LA-Gr.2 Writ Strat Stds 1.1, 1.4, List & Speak Stds 1.1, 1.3; Gr.3 Lit Res & Anal Std 3.3
1-3	I	Discuss how people have had healthy food habits for thousands of years by growing and eating foods that come from plants. Use beans as an example. Show, soak, and cook dried beans, and have students taste a bean dish.	Students work in cooperative learning groups with an adult, who guides them in retelling the story of their study of beans.	♥ CS-Gr.1 Std 6; Gr.3 Stds 3, 4 ✐ LA-Gr.1 Writ & Oral Std 1.1, List & Speak Stds 1.4, 1.5, 2.4; Gr.2 List & Speak Stds 17-1.9; Gr.3 List & Speak Stds 1.2, 1.5-1.9 Speak App Std 2.0
4-5	D	Use 4th grade social studies texts and/or CD-ROM sources to instruct students about the role of Cesar Chavez and the grape boycott of the 1960's in gaining migrant farm worker rights.	Students report on how the economics of California agriculture were affected by Cesar Chavez and his followers.	♥ CS-Gr.4 Std 5 ✐ LA-Gr.4 Read Comp Stds 2.2, 2.4, 2.6, Writ Strat Stds 1.1-1.2, 1.5-1.9

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
4-5	D	Use 5th grade social studies texts and *Pie Chart Pam* (www.usda.gov/news/usdakids) to instruct students about the percent of U.S. farm land planted with different grains.	Students create a pie chart that reflects the percentages of different grains grown on United States' farmland.	♥ CS-Gr.5 Std 5 ± Math-Gr.5 Math Reas Stds 2.3, 2.6, Stat Data Std 1.2, Numb Sense Std 1.2 ✐ LA-Gr.__ Read Comp Stds 2.2, 2.4
6-8	D	Divide the class into groups to research several government regulatory agencies that affect farms and ranches.	Student groups make oral reports to the class about their assigned agency's source of authority and functions.	♥ CS-Gr.6 Stds 5, 9; 6-8-Std 9 ✐ LA-Gr.7 Read Comp Std 2.2; Gr.8 Writ & Oral Std 1.1
6-8	D	Using on-line resources, guide students in studying the effects of natural catastrophe and relief efforts on long-term food supplies.	Students make a model of a hypothetical catastrophe case that considers relief efforts and long-term food supplies.	✐ LA-Gr.7 Read Comp Std 2.2, Writ Strat Stds 1.4, 1.7; Gr.8 Writ Strat Stds 1.1, 1.4-1.6
9-12	M	Use multiple sources including world history texts to instruct students about technological breakthroughs that have resulted in greater crop yields since the Agricultural Revolution.	Students create a timeline based on their study, then carry it into the future by predicting innovations in the next century.	✐ LA-Grs.9-10 Read Comp Stds 2.1, 2.5, 2.7, Writ Strat Stds 1.1-1.2, 1.9; Gr.11-12 Read Comp Stds 2.2-2.3, Writ Strat Std 1.1
9-12	M	Arrange for students to visit agri-business, Farm Bureau, websites, and organizations of family farmers to discover different perspectives on how land should be farmed in the United States.	Students write a persuasive essay that advocates for a specific point of view on how U.S. land should be farmed.	✐ LA-Gr.9-10 Read Comp Stds 2.1, 2.5, 2.7, Writ Strat Stds 1.1-1.2, 1.9; Gr.11-12 Read Comp Stds 2.2-2.3, Writ Strat Std 1.1
9-12	A	Have students conduct interviews in person or on-line with California farmers or ranchers and slow growth activists to get their perspectives on how converting agricultural land to housing impacts food quantity, choices and costs.	Students write a hypothetical growth plan for a California city that advocates for one of the perspectives that they learned about in their interviews.	♥ CS-9-12 Std 9 ± Math-Gr.____ Prob & Stat Std 8.0 ✐ LA-Gr.11-12 _____ Stds 1.6-1.7, 1.9

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	A	Assist small groups of students in gathering data on several congresspersons from various agricultural states about bills they propose to help agriculture in their states.	As a class, students evaluate the data collected, then proposes a bill to benefit agriculture and tries to pass it through a mock House of Representatives.	♥ CS-9-12 Std 9 ✐ LA-Grs.11-12 Writ Strat Stds 1.6-1.7, 1.9

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Competency #7: Explain how nutritional needs vary throughout the life cycle.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
PreK-K	I	Help students explore how their current eating habits vary from what they ate when they where babies. Display and taste baby-food and fresh or raw versions of fruits and vegetables.	Students dictate a list of foods that they ate when they were babies that they either don't eat anymore or eat in a different form. Students vote on the form of food they prefer now.	♥ CS-K Std 7 ✐ LA-K Writ & Oral Std 1.2, List & Speak Std 1.2, Speak App Std 2.3
Pre K/K	I	Guide students in discovering the variety in their own eating patterns by naming foods they eat often. Have students bring in samples of such foods for tasting. Place food names on a word wall.	Students choose one food to illustrate and label for a class book titled <u>We Eat Many Different Foods</u>.	✐ LA-K Writ Strat Stds 1.3-1.4
1-3	I	Guide students in a discussion of how they feel after playing hard (e.g., tired, hungry). Have the class make and eat a nutritious snack to help them refuel after playing.	Students list and describe nutritious snacks that replace the energy used during vigorous play.	♥ CS-Gr.1 Std 5; Gr.2 Stds 1, 2; Gr.3 Std 1 ✐ LA-Gr.2 List & Speak Stds 1.6-1.7; Gr.3 List & Speak Std 1.5
4-5	D	Have students list activities that are more active and less active. Discuss what supplies energy for activities. Help students prepare and eat a healthy snack to provide energy for activity.	Students make a banner for the school featuring pictures showing fun ways to be active and foods that fuel activity.	♥ CS-Gr.4 Stds 4, 5, 6; Gr.5 Stds 1, 4
4-5	D	Review the five taste sensations and discuss with students how their tastes have changed since they were younger. Discuss students' willingness to taste different foods as a way to increase food variety and interest. Have students prepare and taste a healthy snack featuring foods they haven't tasted before.	Students create a class cookbook of after school snacks made with foods new to the students.	✐ LA-Gr.4 Writ Strat Stds 1.1, 1.10, Writ & Oral Stds 1.1, 1.2, 1.7; Gr.5 Writ Strat Std 1.6, Writ & Oral 1.4, 1.5
6-8	D	Divide the class into teams to research female nutrition needs in infancy, childhood, adolescence, child bearing years, post menopause, and older adulthood.	Students make oral reports in cooperative learning groups about their findings.	♥ CS-6-8 Stds 1, 6 ✐ LA-Gr.6 Speak App Std 2.2; Gr.7 Writ & Oral Std 1.0, List & Speak Stds 1.4-1.6, Speak App Stds 2, 3; Gr.8 Writ & Oral Std 1.0

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
6-8	M	Students investigate the relationship between calcium intake in adolescence and osteoporosis in older adults.	Students write and perform a skit on how to prevent osteoporosis.	♥ CS-6-8 Stds 1, 4, 5, 9 ✐ LA-Gr.6 Writ App Std 2.1, List & Speak Stds 1.4, 1.6, 1.7, Speak App Stds 2.1, 2.2; Gr.7 Writ App Std 2.1, Listen & Speak Stds 1.4, 1.6
9-12	D	Arrange for students to interview a male high school student and a middle-aged man, both of healthy weight and similar height, about what they eat (showing them portion size containers) and their activity level each day.	Students graph estimated caloric intake for both males and make inferences about their caloric needs to maintain a healthy weight.	♥ CS-9-12 Stds 1, 2, 5, 6, 7 ± Math-Gr.____ Prob & Stat 8.0
9-12	D	Arrange for students to visit a Meals on Wheels or on-site senior nutrition program that prepares and serves meals for the elderly and interview the menu planner to learn of specific nutritional needs for this population.	Students write a model daily meal plan for a male or female elder.	♥ CS-9-12 Stds 1, 5, 6
9-12	M	Invite an OB/GYN doctor or registered dietitian from a prenatal program to speak to the class regarding recommended nutrition for pregnant women or lactating mothers.	Students make a healthy eating plan for a non-pregnant female teenager, and then make a graphic organizer that compares it with the nutritional needs discussed by the speaker.	♥ CS-9-12 Stds 1, 2, 6
9-12	M	Guide students in researching statistics on the average age of onset of cardiovascular disease now compared to 25 years ago.	Students graph results and lead the class in a brainstorming session about possible explanations for the differences between the two time periods.	♥ CS-9-12 Stds 1, 6 ✐ LA–Grs.9-10 Writ App Std 2.3
9-12	A	Assign students to interview a nutrition program director at a licensed childcare center about nutrition needs for the center's clients.	Students write a daily meal plan for a childcare center that meets the needs of preschoolers. Optional: Students volunteer to assist with food preparation and service for one day at a childcare center.	♥ CS-9-12 Stds 1, 5, 6

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Competency #8: Explore factors that contribute to achieving and maintaining a healthy body and positive body image such as physical activity, food choices, genetics, and self-esteem.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
Pre K/K	I	Discuss with students how physical activity benefits our bodies, and how we can have fun when we do it. Brainstorm active ways to have fun at school and at home.	Students engage in active play rather than sedentary activities for a majority of the time during outdoor play periods.	♥ CS-K Stds 1, 3
Pre K/K	I	Introduce aerobic movement with musical accompaniment as an activity that is good for our bodies. Guide the class in making up a rhyme to sing while moving to music.	Students demonstrate physical activities that are good for their bodies.	♥ CS-K Stds 1, 3
4-5	D	Discuss with students that as their bodies grow and change they will notice many different body types. Encourage them to seek to maintain a healthy body, right for them, rather than one like pictures of models in the media.	Students write an essay about what they like about their bodies or one favorite feature.	♥ CS-Gr.4 Stds 1, 6, 7; Gr.5 Stds 6, 7 ✐ LA-Gr.4 Writ Strat Stds 1.1-1.4, 1.10; Gr.5 Writ Strat Stds 1.1, 1.2, 1.6
6-8	D	Ask students to measure their height and weight at home, and bring in the data. Or, provide sample heights and weights of varied adolescents (thin, average, and heavy). Instruct students in how to calculate Body Mass Index (BMI) and how it is used to monitor growth.	Students compute their own or a sample BMI and compare it to growth curves for the appropriate age and gender.	♥ CS-6-8 Stds 1, 6, 7 ± Math-Gr.6 Math Reas Stds 2.5, 2.7; Gr.7 Alg & Func Stds 2.2, 3.4, Math Reas Stds 1.0, 2.0
9-12	D	Demonstrate how to calculate an exercising heart rate that will promote cardiovascular fitness in teens.	Students hypothesize what their exercising heart rates will be, and calculate their actual rates during physical exercise.	♥ CS-9-12 Stds 1, 2, 7 ± Math-Gr.__ Alg 1 Std 24.0
9-12	D	Present formulas to the class for calculating calories burned during different types of exercise for specific periods of time.	Students solve word problems involving calories burned during exercise.	♥ CS-9-12 Stds 1, 2 ± Math-Gr.__ Alg 1 Std 5.0
9-12	M	Ask cooperative learning groups to decide on a list of ten attributes that they would like their best friend to have. Students post their group lists to create a class best friend "wish list". Tally attributes that appear more than once. (Body Image attributes will probably be low on the list.)	Based on the list, students write a persuasive essay advocating for the importance of the attributes that appear multiple times on the list.	♥ CS-9-12 Std 4 ✐ LA-Gr.9-10 Writ Strat Stds 1.1-1.2, 1.9, Writ App Std 2.4; Gr.11-12 Writ Strat Stds 1.1-1.5, 1.9 Writ & Oral Std 1.0

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	M	Lead students in brainstorming actions to take for bone health. Based on extent of students' prior knowledge, instruct the class about the importance of regular exercise and four servings per day of calcium-rich foods for people their age.	Students outline strategies that they think would be successful in convincing a friend (or that a friend could use to convince them) to increase exercise and consumption of high-calcium foods.	♥ CS-9-12 Stds 1, 4, 5 ✐ LA-Gr.9-10 Writ App Std 2.4, Writ & Oral Std 1.0; Gr.11-12 Writ App Std 2.3a, Writ & Oral Std 1.0
9-12	A	Assign students to study the growing problem of eating disorders in the United States. Divide the class into three groups to study eating disorders in adolescence, adulthood and old age.	Students create a case study of a mythical subject giving her or his current height, weight and disease profile, and a plan to improve her or his health status.	♥ CS-9-12 Stds 1, 4, 5, 6, 7 ✐ LA-Gr.9-10 Writ Strat Stds 1.1-1.2, 1.9; Gr.11-12 Writ Strat Stds 1.3, 1.6, 1.9
9-12	A	Review the concept of metabolism and basal metabolic rate (BMR). Assign students to calculate their own caloric needs for a 24-hour period, noting hours of sleep and hours of activity (light, moderate or vigorous).	Students create word problems involving linear equations to arrive at their caloric needs for the 24-hour period.	♥ CS-9-12 Stds 1, 7 ± Math-Gr.__ Alg 1 Std 5.0

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Competency #9: Identify and know how to access scientifically valid nutrition information and nutrition services.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
1-3	I	Invite the child nutrition program Director or designee to make a presentation on how their weekly menus fit within the *Food Guide Pyramid*, and to generally describe the nutrition criteria used in selecting foods and planning school meals.	Given large-format weekly menus, students cut out names of foods and place them on a *Food Guide Pyramid* pocket chart.	♥ CS-Gr.1 Stds 1, 8; Gr.2 Stds 1, 8; Gr.3 Stds 1, 8
4-5	M	Instruct students on reading Nutrition Facts labels and product ingredient lists.	On a field trip to a grocery store, students pack a grocery bag of nutritious foods by using information on nutrition labels and ingredient lists.	♥ CS-Gr.4 Std 8; Gr.5 Std 8 ✐ LA-Gr.4 Read Comp Std 2.2
4-5	D	Students visit web sites or consult periodicals for information about meat inspection.	Students write brief summaries of the information they found from each source, and post findings on a classroom chart for other students to study and decide which was the best source of information.	♥ CS-Gr.4 Std 8, Gr.5 Stds 5, 8 ✐ LA-Gr.4 Writ Strat Stds 1.5-1.7; Gr.5 Read Comp Std 2.4, Writ Strat Stds 1.2-1.3, Writ App Std 2.4
6-8	D	Review the *Dietary Guidelines for Americans* with students. Point out that these guidelines apply to healthy people, and that some people, such as those with chronic diseases require special diets. Assign each student group a different chronic disease or condition requiring a special diet. Ask them to consult at least three resources (e.g., on-line, mail, written text, or in person) for information on special diets.	Students report back on the kinds of special diets they learned about, and what sources of information were most helpful.	♥ CS-Gr.6 Stds 1, 2, 5, 9; 6-8 Stds 1, 2, 5, 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Read Comp Stds 2.1-2.2, 2.6, Writ Strat Std 1.4, Writ App Std 2.3c; Gr.8 Read Comp Std 2.1
6-8	D	Ask a representative of the Certified Farmers' Market Association to speak to the class about definitions and benefits of organically grown foods.	Students find an additional source of information about organically grown foods that represents a different point of view than the speaker, then compare and contrast viewpoints.	♥ CS-Gr.6 Stds 1, 2, 5, 9; 6-8 Stds 1, 2, 5, 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Read Comp Stds 2.1-2.2, 2.6, Writ Strat Std 1.4, Writ App Std 2.3c; Gr.8 Read Comp Std 2.1

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
6-8	M	Take students to a grocery store to estimate the approximate percentage of produce that come from countries outside the United States. Assign them to find out about health regulations that govern fruit and vegetable production and export in various countries.	Students identify various websites that are good sources of information about imported produce, and discuss from which countries they would eat fruits and vegetables and why.	♥ CS-Gr.6 Stds 5, 9; 6-8 Stds 1, 5, 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Read Comp Stds 2.1-2.2, 2.6, Writ Strat Std 1.4, Writ App Std 2.3c; Gr.8 Read Comp Std 2.1
9-12	M	Show samples of nutrition information: one accurate, one from a questionable source, and one containing misinformation. Guide students in brainstorming criteria for valid nutrition information.	Students find another source of nutrition information and write an essay supporting or refuting the nutrition information is contains, based on the validity criteria established.	♥ CS-9-12 Stds 5, 9 ✐ LA-Gr.9-10 Read Comp Stds 2.1, 2.4, Writ Strat Std 1.3
9-12	M	Give students a hypothetical case study of a high school athlete with poor eating habits that affect his or her performance. Brainstorm ideas of where the athlete could find information about appropriate diet changes.	Students provide a list of four nutrition information sources that this hypothetical athlete would find helpful.	♥ CS-9-12 Stds 1, 2, 5, 6, 9 ✐ LA-Gr.9-10 Read Comp Stds 2.1, 2.4, Writ Strat Std 1.3
9-12	A	Using personal eating plans that students developed in prior lessons, lead students in discussing and researching possible sources for nutrient analysis of their eating plans.	Students provide a nutrient analysis for foods consumed in one day from their personal eating plans.	♥ CS-9-12 Stds 1, 2, 5, 6, 9 ± Math-Gr.__ Prob & Stat Std 8.0 ✐ LA-Gr.11-12 Read Comp Stds 2.1-2.6
9-12	A	Have each student interview two other high school students about their food intake for one day. Help the class pool the data gathered and develop an analysis of eating habits of the students in their school.	Students find reliable nutrition information sources to help high school students maintain an ideal weight and get appropriate levels of nutrients. They prepare a pamphlet listing these sources for school-wide distribution.	♥ CS-9-12 Stds 1, 2, 5, 6, 9 ✐ LA-Gr.11-12 Read Comp Stds 2.1-2.6, Writ Strat Stds 1.6-1.8

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Competency #10: Explore the variety of food-related careers.

GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
PreK-K	I	Arrange for a visit to a local dairy farm or from the mobile dairy farm from Dairy Council of California to inform students about what a dairy farmer does.	Students complete a class picture book with captions about a day in the life of a dairy farmer. Students explain the content of the book to an adult helper.	✐ LA-K Writ Strat Std 1.1, List & Speak Std 1.2
PreK-K	I	Take the class on a field trip to a school or restaurant kitchen. Ask the hosting staff to point out the jobs that different people do in the school nutrition program or restaurant.	Students role-play being school or restaurant "chefs" to make a snack, then role-play "wait or service staff" and serve it to "customers."	✐ LA-K List & Speak Std 1.2, Speak App Std 2.1
1-3	I	Take students to visit a California Certified Farmers' Market (CFM) to learn what farmers produce.	Students demonstrate how important a farmer is by drawing pictures of produce they saw at the CFM and sorting the food pictures on a *Food Guide Pyramid* poster.	♥ CS-Gr.1 Std 1 ✐ LA-Gr.1 List & Speak Stds 1.0, 2.3
1-3	I	Go on a field trip to a grocery store. Ask the produce manager to take the students through the process of how the grocery store brings fresh fruits and vegetables to the customer.	Students write the story of a fruit or vegetable from truck to table (may use key nouns and verbs from a pocket chart and add words to make complete sentences).	✐ LA-Gr.2 Writ Strat. Stds 1.2, 2.2, Writ App Stds 2.1-2.2
4-5	D	Introduce a unit on the important role of agricultural growers in California history. Help students explore how technology, water policy, and land use have changed growers' roles from the 1830s to the present.	Students create and perform a skit, set in several different time periods, about a mythical, time traveling, agricultural grower.	✐ LA-Gr.4 List & Speak Stds 1.5-1.9, Speak App Stds 2.2-2.4
4-5	D	Introduce a unit about the role of the farmer in the United States today. How is the farmer's role different now than it was in colonial times?	Students write a report that evaluates (from their own point of view) whether being a farmer is a viable career choice.	✐ LA-Gr.5 Writ App Std 2.3
6-8	D	Introduce a unit about scientists and their role in the food industry. Guide students in researching such topics as pesticides, genetically altered foods, irradiated foods, and food safety.	Students write about the role of the food scientist in their chosen topic area and provide a list of websites where interested students can seek out further information.	♥ CS-Gr.6 Std 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Writ Strat Stds 1.4, 1.6; Gr.8 Writ Strat Std 1.4
6-8	D	Invite the child nutrition program Director or designee to the class to discuss the varied aspects of his or her job, including ordering, dealing with food processors, menu planning, and nutrient analysis.	Students write an essay comparing their preconceptions about the child nutrition program Director's job versus the realities according to the guest speaker who holds the job.	✐ LA-Gr.6 Writ Strat Std 1.2, Writ App Std 2.2; Gr.7 Writ Strat Stds 1.1-1.3, 1.7; Gr.8 Writ Strat Stds 1.1-1.3, 1.6

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GRADES	LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
9-12	M	Present a list of food-related careers from a local college or university career center. Help students research the careers in terms of education requirements, workplace options, salary range, etc.	Students create a persuasive essay that supports or refutes a particular career as a viable option for the reporting student's plans for the future.	✐ LA-Gr.9-10 Writ Std 1.0; Gr.11-12 Writ Std 1.0
9-12	M	Take the class on a field trip to a food processing plant or hospital food service department. Ask a representative of management and a representative of labor to discuss what careers are available, and what training is necessary.	Students create a graphic organizer, listing on the left side the steps in the process of making the product or the hospital department's services, and on the right side, the job descriptions of those responsible for each step.	✐ LA-Gr.9-10 Writ App Std 2.6
9-12	A	Arrange for students to visit or serve as an intern with a franchisee of one or more restaurants. Have them research the process of becoming a franchisee and the requirements involving food purchasing and quality control.	Students describe what they learned at the workplace and evaluate the pros and cons of being a franchisee.	✐ LA-Gr.9-10 Writ App Stds 2.3-2.4; Gr.11-12 Writ Strat Stds 1.1, 1.9
9-12	A	Arrange for one half of the students to spend several days working in a restaurant training program, while the other students shadow child nutrition program or commercial restaurant workers in various positions. If there is no restaurant training program at your school, seek one out at a nearby high school, community college, or culinary academy.	Students compare their experiences in discussion with the other half of the class and come to a conclusion about the effectiveness of learning the restaurant business in a school atmosphere or on the job.	✐ LA-Gr.9-10 List & Speak Stds 1.1, 1,8, 1.12; Gr.11-12 List & Speak Stds 1.6, 1.8, 1.12

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Nutrition Links

By

Grade Groupings

Nutrition Links
Pre-Kindergarten and Kindergarten

Competency #1: Know and apply the Food Guide Pyramid, *2000 Dietary Guidelines for Americans*, recommended daily number of servings, serving sizes, and nutrient types and functions.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Have students name foods from photos or real food samples. Display the photos or foods in two unlabeled groups, based on whether they are from a plant or animal source. Guide students to identify that foods in one group are from plants and in the other from animals.	Individually or in pairs, students name each food or photo, sort them into plant and animal categories, and total how many pictures are in each group.	± Math-K Numb Sense Stds 1.1-1.2, Sort & Classify Std 1.1
I	Invite a dentist or dental hygienist to talk to the class. Ask him/her to discuss the importance of calcium-rich foods for bone and dental health.	Students select empty containers of calcium-rich foods from a bag and explain to an adult that these foods are good for dental and bone health.	♥ CS-K Std 1.2 ✐ LA-K Writ & Oral Std 1.1, List & Speak Std 1.2, Speak App Std 2.1
I	Review the alphabet by reading Action Alphabet by Shelley Rottner and having students do physical activities. List the various motions on a classroom chart.	Students demonstrate a variety of movements associated with a particular alphabet letter.	✐ LA-Gr. K
I	Introduce the *Food Guide Pyramid* and discuss how the size of the section or food group on the *Food Guide Pyramid* corresponds to the number of recommended servings.	Students match the appropriate number and type of food models or photos to each *Food Guide Pyramid* food group.	± Math-K
I	Hold a tasting party of different breads or cereal/grain products.	Students list, draw or select from real foods the different breads or grain products they like and dictate why.	✐ LA-K _____
I	Read books featuring fruits and vegetables (Rain Makes Applesauce; Eating the Alphabet). Rotate students through tasting centers for various fruits and vegetables.	Students draw pictures of favorite fruit or vegetable, dictate food's name and reason for liking it.	✐ LA-K Writ & Oral Std 1.2; Read Comp Std 2.3
I	Explain that, to maintain healthy teeth and bodies, sugar and high-sugar snacks are "sometimes foods." Count 10 sugar cubes and put them in an empty soda can to show how much sugar there is in soda. Display and taste-test low-sugar snack alternatives.	Students bring low-sugar snacks to school.	± Math-Gr.K Alg Std 1.1, Stat Stds 1.1, 1.2

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Competency #2: Understand and practice making healthy food choices including planning and preparing snacks and meals, assessing personal needs, and applying strategies to reach personal nutrition goals.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Read Bread and Jam for Frances. Have students discuss foods they like to eat in addition to bread and jam. Place photos and names of these foods on a *Food Guide Pyramid* poster or pocket chart while students name them.	Students draw pictures or create collages of magazine pictures of different foods they like, then pick a title from the pocket chart. Compile in a bread-shaped booklet entitled We Like to Eat.	✐ LA-K Word Anal Stds 1.1, 1.18, Writ Strat Stds 1.1, 1.3-1.4 ♥ CS-K Std 1
I	Read books featuring foods or recipes (e.g., Stone Soup, Chicken Soup with Rice, Green Eggs and Ham) and discuss why eating a variety of foods is important for growing healthy bodies.	Students prepare and eat a snack corresponding to the book read (e.g., bread and jam, stone soup, carrot salad).	✐ LA-K _____

Competency #3: Evaluate the short and long term health benefits and risks of food choices and eating behaviors using the Food Guide Pyramid, *2000 Dietary Guidelines for Americans*, and Nutrition Facts labels.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Explain that fruits and vegetables are foods to eat every day. Have students place plastic models or photos of three vegetables and two fruits into bins stacked into a pyramid shape. Repeat the activity weekly.	One month later, students place the same number of vegetable and fruit models or photos into the bins without guidance.	± Math-K Alg Std 1.1, Stat Stds 1.1, 1.2

Competency #4: Demonstrate food handling and personal hygiene to prevent foodborne illness. Handling includes growing, processing, preserving, transporting, storing, preparing, and serving.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Ask each student to smell and observe a cup of milk or orange juice on Monday. Explain that milk or juice is usually kept in the refrigerator, but the class will be keeping it at room temperature for an experiment. Ask each student to smell and observe the milk or juice every day that week. On Friday, have the students compare the stale milk or juice with fresh milk or juice.	In small groups, students discuss what happened to the milk or juice and why it would be better to keep it in the refrigerator.	✐ LA-K List & Speak Std 1.2, Speaking App Std 2.1
I	Demonstrate the steps in proper handwashing, placing a written label on a pocket chart for each step.	Student demonstrate proper handwashing in pairs: one student washes, while the other holds up the written label for the appropriate step.	✐ LA-K Word Anal Stds 2-1.3 ♥ CS-K Std 1
I	Have students bring from home empty food containers. In housekeeping area of classroom, guide students in storing different foods in appropriate areas (cupboard, refrigerator, freezer).	Students store food models or empty containers from a grocery bag in the proper food storage places.	± Math-K Alg Std 1.0 ✐ LA-K Word Anal Std 1.17

Competency #5: Identify and explore factors influencing food intake including: family, friends, culture, marketing, emotions, sensory stimuli and food availability.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Have students describe favorite foods served at home, identify who makes this food for them, and who else in the family likes it. Compile a list and submit these as suggestions for center/school menus.	Students explain to their classmates what they like about this food and who else in their family likes it, then draw a picture of their family eating this favorite food.	♥ CS-K Std 1 ✐ LA-K Word Anal Stds 1.17-1.18
I	Discuss what a holiday is and foods that are eaten at home on holidays.	Students cut out pictures of favorite holiday foods, glue them on a paper plate and write or dictate one-word labels.	♥ CS-K Std 1 ✐ LA-K Writ Strat Stds 1.2, 1.4

Competency #6: Describe the influence of local, national and global factors on the quantity and quality of food, including agricultural science, ecology, technology, food safety (see Competency #4), politics, government regulations, and economics.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Display, discuss, and let students handle hand tools and products used in planting, tending and harvesting food. Take the class on a field trip to a farm. Show students farm machinery used for similar purposes as the hand tools.	Students match garden tools with pictures of farm machines that are used for similar purposes and/or use hand tools for their intended purpose in the school garden.	✐ LA-K Word Anal Stds 1.17-1.18

Competency #7: Explain how nutritional needs vary throughout the life cycle.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Help students explore how their current eating habits vary from what they ate when they where babies. Display and taste baby-food and fresh or raw versions of fruits and vegetables.	Students dictate a list of foods that they ate when they were babies that they either don't eat anymore or eat in a different form. Students vote on the form of food they prefer now.	♥ CS-K Std 7 ✐ LA-K Writ & Oral Std 1.2, List & Speak Std 1.2, Speak App Std 2.3
I	Guide students in discovering the variety in their own eating patterns by naming foods they eat often. Have students bring in samples of such foods for tasting. Place food names on a word wall.	Students choose one food to illustrate and label for a class book titled We Eat Many Different Foods.	✐ LA-K Writ Strat Stds 1.3-1.4

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Competency #8: Explore factors that contribute to achieving and maintaining a healthy body and positive body image such as physical activity, food choices, genetics, and self-esteem.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Discuss with students how physical activity benefits our bodies, and how we can have fun when we do it. Brainstorm active ways to have fun at school and at home.	Students engage in active play rather than sedentary activities for a majority of the time during outdoor play periods.	♥ CS-K Stds 1, 3
I	Introduce aerobic movement with musical accompaniment as an activity that is good for our bodies. Guide the class in making up a rhyme to sing while moving to music.	Students demonstrate physical activities that are good for their bodies.	♥ CS-K Stds 1, 3

Competency #10: Explore the variety of food-related careers.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Arrange for a visit to a local dairy farm or from the mobile dairy farm from Dairy Council of California to inform students about what a dairy farmer does.	Students complete a class picture book with captions about a day in the life of a dairy farmer. Students explain the content of the book to an adult helper.	✐ LA-K Writ Strat Std 1.1, List & Speak Std 1.2
I	Take the class on a field trip to a school or restaurant kitchen. Ask the hosting staff to point out the jobs that different people do in the school nutrition program or restaurant.	Students role-play being school or restaurant “chefs” to make a snack, then role-play “wait or service staff” and serve it to “customers.”	✐ LA-K List & Speak Std 1.2, Speak App Std 2.1

Nutrition Links
Early Elementary—Grades 1-3

Competency #1: Know and apply the Food Guide Pyramid, 2000 Dietary Guidelines for Americans, recommended daily number of servings, serving sizes, and nutrient types and functions.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Introduce the *Food Guide Pyramid* using a poster or felt and Velcro board. Describe how foods at the base should be eaten often. Ask students to write the names of foods from the grains, fruits, and vegetable groups that they like on word strips. Correct spelling as needed and hand them back to the students.	Students use their word strips to label drawings of their favorite foods, then place the pictures and labels correctly on the *Food Guide Pyramid*.	♥ CS-Gr.1 Std 1; Gr.2 Std 1; Gr.3 Std 1 ✐ LA-Gr.1 Word Anal Std 1.1, Writ Strat Std 1.3, Vocab Std 1.17; Gr.2 Writ Strat Std 1.2
I	Give the students word searches and word scrambles about farm animals and crops (available on www.usda.gov/news/usdakids). Project the answer key on the website or an overhead transparency so that students can self-correct their work.	Students complete two separate assignments, each using three of the words from the farm animals page and from the crops page in complete sentences.	♥ CS-Gr.1 Std 5 ✐ LA-Gr.1 Writ Strat Stds 1.1-1.3, Writ & Oral Stds 2.1-2.2; Gr.2 Writ Strat Stds 1.1-1.2, 1, 4; Gr.3 Writ Strat Stds 1.1-1.2
D	Explain that Vitamin A is important for healthy skin, eyes and resistance to infection. Discuss how Vitamin A comes from both plant and animal sources, showing graphs on back of food photo cards. Make a spinach salad with cheese strips in it (or eat a school lunch featuring one) to demonstrate the two sources.	Students draw a picture of a child eating a spinach-cheese salad (or comparable vitamin A-rich food) and color the parts of the child's body that benefit from Vitamin A in a separate color.	♥ CS-Gr.1 Stds 1, 5; Gr.2 Std 1, 5; Gr.3 Stds 1, 3, 5
D	Before lunch, guide students in sorting foods on the school lunch menu for the day into the *Food Guide Pyramid* groups.	After lunch, students tally the number of *Food Guide Pyramid* groups represented by the foods they actually ate for lunch (school lunch or lunch from home) and compare with *Food Guide Pyramid* recommendations.	♥ CS-Gr. 1-3 Std 1 ± Math-Gr.2 Stat, Data Anal Std 1.1
I	Students plan weekly family or friends "theme walks" and help select themes related to classroom work. Examples: find things that rhyme or estimate the number of birds they will see.	Student record results of their walks in their journals.	✐ LA-Gr.1 Writ Strat Stds 1.1-1.3, Writ App Stds 2.1-2.2; Gr.2 Writ Strat Stds 1.1-1.2, 1.4, Writ App Std 2.1; Gr.3 Writ Strat Stds 1.1-1.4, Writ App Std 2.2 ♥ fCS-Gr.1 Std 4; Gr.2 Std 5; Gr.3 Std 1

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Competency #1 (continued): Know and apply the Food Guide Pyramid, 2000 Dietary Guidelines for Americans, recommended daily number of servings, serving sizes, and nutrient types and functions.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Play "Toss a Food:" toss a ball around the class. As the ball is tossed, call out a food. The student who catches the ball names the corresponding *Food Guide Pyramid* food group. The other students indicate agreement with thumbs up or disagreement with thumbs down.	Students accurately categorize photos of foods on a *Food Guide Pyramid* poster.	♥ CS-Gr.1 Std 1; Gr.2 Std 5; Gr.3 Stds 1, 5
D	Show students whole grain plants (or photos of them) and invite students to taste food products made from them.	On paper plates, students draw meals and snacks that include their favorite whole grain foods.	♥ CS-Gr.1-3 Std 1
D	Help students plant, tend and harvest corn. Read Corn is Maize or a similar book describing food products that come from corn.	Students make a class book about the importance of corn and illustrating the varieyt of corn products.	✐ LA-Gr.2 Writ Strat Stds 1.1-1.4
I	Help students start a carrot garden in pots or a school garden plot. Explain to students that carrots are a healthy food choice. Show where carrots are on the *Food Guide Pyramid*. Demonstrate how to clean carrots before eating or cooking them.	Students write and draw about the sequence of their experience with carrots from seed to tasting, including color and texture. Post drawings in the cafeteria.	♥ CS-Gr.1 Std 6; Gr.3 Std 3 ✐ LA-Gr.2 Writ Strat Stds 1.1, 1.4; Gr.2 Writ Strat Stds 1.1, 1.4
I	Have students taste processed foods (e.g., peanuts or crackers) available in both regular and reduced-sodium varieties.	Students dictate a class story about a peanut or cracker that won't allow itself to be salted during processing.	♥ CS-Gr.1 Std 1 ✐ LA-Gr.1 Writ & Oral Std 1.0, Speak App Std 2.0

Competency #2: Understand and practice making healthy food choices including planning and preparing snacks and meals, assessing personal needs, and applying strategies to reach personal nutrition goals.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Guide students to select pictures or photos of foods that make healthy snacks from a *Food Guide Pyramid* poster or felt board.	Students draw pictures of snacks and pick titles for them from a word wall, then prepare (at school or at home) the snacks they drew and eat them at school.	✐ LA-Gr.1 Writ App Std 2.1, List & Speak Stds 1.1-1.2 ♥ CS Gr. 1-2 Std1
I	Show students food photos of a variety of fruits with names written underneath photo.	Students make and eat fruit kebabs, then write descriptive sentences using the names of the fruits.	✐ LA-Gr.1 Writ Strat Stds 1.1-1.3
I	Read It Looks Like Spilt Milk or The Milk Makers. Have students taste whole, low-fat, and nonfat milk without identifying the type.	Students take a class vote on favorite milk type and tally the results, then describe the milks using sensory words: smell, look, mouth-feel, and taste.	✐ LA-Gr.1-2 Writ App Stds 2.1, 2.2, Speak App Std 2.4; Gr.3 Writ App Std 2.2, Speak App Std 2.3 ± Math-Gr.___

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Competency #3: Evaluate the short and long term health benefits and risks of food choices and eating behaviors using the Food Guide Pyramid, *2000 Dietary Guidelines for Americans*, and Nutrition Facts labels.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Each day for one week, have students list breakfast and lunch foods that they like from the school cafeteria menu and match them to the *Food Guide Pyramid* food groups.	At the end of the week, students write simple sentences about each of the five of the food groups and how school meals can help them eat according to *Food Guide Pyramid* recommendations.	♥ CS-Gr.1 Std 5; Gr.2 Stds 4, 5, 6, 7; Gr.3 Std 1 ✐ LA-Gr.1 Writ & Oral Stds 1.1, 1.7-1.8; Gr.2 Writ Strat Std 1.2; Gr.3 Writ & Oral Stds 1.1, 1.8
I	Have students pick out whole-wheat kernels from bread. Cut them open, the have students view them under a magnifier.	Students describe orally what the outside and inside parts of the grain look and feel like.	✐ LA-Gr.2 List & Speak Std 1.1-1.5
I	Explain to students that for health we need to eat foods every day that are low in fat and high in fiber, like fruits, vegetables and grains. To identify foods higher in fat, have students rub a piece of food on a brown bag. If the bag gets a spot that doesn't dry, the food is high in fat. Test a potato chip, apple slice, hot dog, pretzel, donut, carrot, French fry, etc.	Students sort foods into higher and lower fat categories, using this test method, and explain which are better for health when eaten daily.	± Math-Gr.1 Numb Sense Stds 1.1-1.4; Gr.2 Numb Sense Stds 1, 3.2, 3, Math Reas Std 2.1; Gr.3 Numb Sense Std 2.1, Math Reas Stds 3.1, 3.3 ✐ LA-Gr.1 Writ & Oral Std 1.1, List & Speak Stds 1.4-1.5; Gr.2 Writ & Oral Std 1.1, List & Speak Stds 1.5-1.6; Gr.3 Writ & Oral Stds 1.1-1.4, List & Speak Stds 1.1, 1.7 ♥ CS-Gr.1 and 2 Stds 1, 8; Gr.3 Std 1
D	Display high-sugar foods and review how these "sometimes foods" can have a negative impact on dental health. Display fruits, vegetables, and other low-sugar snack alternatives (real foods, packages or photos). Have stduents measure and indicate (in teaspoons or sugar cubes) the sugar content of a variety of foods and compare (e.g., milk versus soda, candy versus fruit).	One week later, students identify foods higher and lower in sugar (from real foods, packages or photos) and their impact on teeth.	♥ CS-Gr.1-3 Std 1 ✐ LA-Gr.1-3 List & Speak Stds 1.1-1.2 ± Math-Gr.__ Std ___

Competency #4: Demonstrate food handling and personal hygiene to prevent foodborne illness.

Handling includes growing, processing, preserving, transporting, storing, preparing, and serving.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Demonstrate how to clean hands before handling food. Consider using handwashing facilities in school kitchen.	Students clean hands properly before handling food.	♥ CS-Gr.1-2 Std 1 ✐ LA- Gr.1 List & Speak Stds 1.1-1.3; Gr.2 List & Speak Std 1.3
I	Have students pick spinach grown in their school garden. Ask, "Is it ready to eat or cook, or what must we do to it first?" Demonstrate how to wash spinach.	Students explain to an adult how spinach must be cleaned before they can eat or cook it, then demonstrate before preparing a spinach salad or cooked spinach to taste.	✐ LA-Gr.1 Writ & Oral Std 1.1, List & Speak Stds 1.4-1.5; Gr.2 List & Speak Stds 1.5-1.6 ♥ CS-Gr.1 Std 5

Competency #5: Identify and explore factors influencing food intake including: family, friends, culture, marketing, emotions, sensory stimuli and food availability.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Help students tend and harvest root vegetables in their school garden (or purchase them or obtain them from the child nutrition program staff). Discuss the "looks and smells" of the vegetables. Read Making Vegetable Soup (Ehlert) and help students make soup with the vegetables they have observed.	Students pull sensory words off a pocket chart to describe how the vegetables look and smell before and after cooking and create sentences using the words selected.	✐ LA-Gr.1 Word Anal Stds 1.1, 1.16, Writ Strat Std 1.2, Read Comp Std 2.6; Gr.2 Word Anal Stds 1.10, 1.3; Gr.3 Word Anal Std 1.2
I	Guide students in tasting a variety of fruit and vegetable pieces, then in discussing the smells, colors, sounds (when eaten), texture, and taste.	Students write sensory words on word strips and place them on a word wall under sound, sight, smell, feel, and taste categories.	✐ LA-Gr.1 Word Anal Std 1.17; Gr.3 Writ App Std 2.2, Writ & Oral Std 1.1, Speak App Std 2.3

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Competency #6: Describe the influence of local, national and global factors on the quantity and quality of food, including agricultural science, ecology, technology, food safety (see Competency #4), politics, government regulations, and economics.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Help students grow three beds of radishes under different growing conditions (water, fertilizer, amount of sunlight). Have students monitor the growth and health of the plants periodically, then observe and taste final products.	Students write about the best ways to grow radishes and graph results (i.e., differences in growth, color, taste).	✐ LA-Gr.1 Writ App Std 2.2, Writ & Oral Std 1.1; Gr.2 Writ Strat Std 1.1; Writ & Oral Stds 1.2, 1.7; Gr.3 Writ Strat Stds 1.1, 1.4 ± Math-Gr.1-3 Math Reas Stds 1.0, 2.0
I	Introduce students to ideal weather conditions for growing apple trees. Show them on a world map where apples are grown. Read the story of Snow White. Discuss the importance of the apple to the story.	Students pass an apple around a circle as they add a new sentence to a folktale involving apples that the teacher begins for them. After the storytelling, students write the story as they remember it.	♥ CS-Gr.2 Std 4; Gr.3 Std 4 ✐ LA-Gr.2 Writ Strat Stds 1.1, 1.4, List & Speak Stds 1.1, 1.3; Gr.3 Lit Res & Anal Std 3.3
I	Discuss how people have had healthy food habits for thousands of years by growing and eating foods that come from plants. Use beans as an example. Show, soak, and cook dried beans, and have students taste a bean dish.	Students work in cooperative learning groups with an adult, who guides them in retelling the story of their study of beans.	♥ CS-Gr.1 Std 6; Gr.3 Stds 3, 4 ✐ LA-Gr.1 Writ & Oral Std 1.1, List & Speak Stds 1.4, 1.5, 2.4; Gr.2 List & Speak Stds 17-1.9; Gr.3 List & Speak Stds 1.2, 1.5-1.9 Speak App Std 2.0

Competency #7: Explain how nutritional needs vary throughout the life cycle.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Guide students in a discussion of how they feel after playing hard (e.g., tired, hungry). Have the class make and eat a nutritious snack to help them refuel after playing.	Students list and describe nutritious snacks that replace the energy used during vigorous play.	♥ CS-Gr.1 Std 5; Gr.2 Stds 1, 2; Gr.3 Std 1 ✐ LA-Gr.2 List & Speak Stds 1.6-1.7; Gr.3 List & Speak Std 1.5

Competency #9: Identify and know how to access scientifically valid nutrition information and nutrition services.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Invite the child nutrition program Director or designee to make a presentation on how their weekly menus fit within the *Food Guide Pyramid*, and to generally describe the nutrition criteria used in selecting foods and planning school meals.	Given large-format weekly menus, students cut out names of foods and place them on a *Food Guide Pyramid* pocket chart.	♥ CS-Gr.1 Stds 1, 8; Gr.2 Stds 1, 8; Gr.3 Stds 1, 8

Competency #10: Explore the variety of food-related careers.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
I	Take students to visit a California Certified Farmers' Market (CFM) to learn what farmers produce.	Students demonstrate how important a farmer is by drawing pictures of produce they saw at the CFM and sorting the food pictures on a *Food Guide Pyramid* poster.	♥ CS-Gr.1 Std 1 ✐ LA-Gr.1 List & Speak Stds 1.0, 2.3
I	Go on a field trip to a grocery store. Ask the produce manager to take the students through the process of how the grocery store brings fresh fruits and vegetables to the customer.	Students write the story of a fruit or vegetable from truck to table (may use key nouns and verbs from a pocket chart and add words to make complete sentences).	✐ LA-Gr.2 Writ Strat. Stds 1.2, 2.2, Writ App Stds 2.1-2.2

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Nutrition Links
Upper Elementary—Grades 4-5

Competency #1: Know and apply the Food Guide Pyramid, 2000 Dietary Guidelines for Americans, recommended daily number of servings, serving sizes, and nutrient types and functions.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Have students sort pictures of fruits and vegetables into 3 groups: (1) those with 40% or more daily value (DV) vitamin C, (2) those with 40% or more DV vitamin A, (3) those with 25% or more DV fiber, and (4) others. Obtain %DV information from food photo/comparison cards.	In the garden, students identify and name vegetables high in fiber and vitamins A and C. (If there is no school garden, use information about home gardens or produce grown in the county or region, or build an imaginary garden.)	± Math-Gr.5 Numb Sense Std 1.2
D	Discuss the importance of fiber to the digestive system. Have students sort a variety of cereal boxes (including those offered in the School Breakfast Program, if available) from most to least fiber based on information per serving on the Nutrition Facts labels.	Students write short essays about why dietary fiber is important, including a defense of why, based on its fiber content, they would continue to eat their favorite cereal or supplement it with a different cereal.	♥ CS-Gr.4 Stds 2, 4, 5, 8; Gr.5 Stds 1, 4, 5, 8 ✐ LA-Gr.4 Writ Strat Stds 1.1-1.2, 1.4, 1.10; Gr.5 Writ Strat Stds 1.1, 1.6
D	Instruct students about the role of protein as part of the human physiology component of the 5th grade Science curriculum. Eat a school lunch featuring Lean Beef Chili as an example of a dish that contains proteins from both animal and plant sources.	Students locate the sources of what they ate on the *Food Guide Pyramid* and determine what % of their daily protein requirement was met when they ate a serving of chili.	♥ CS-Gr. 4 and 5 Stds 1, 4, 5, 8
D	Ask students to estimate how many servings of dry cereal they eat at a sitting, using breakfast as an example. Record the estimates. Have students use measuring cups and product labels to measure one serving. Ask students to make a new estimate of their actual consumption.	Students create a three-column (A, B, and C) graphic organizer. Column A lists each student's first estimate. Column B lists their estimates after measuring. Column C gives the factor for multiplying or dividing to find the difference between Column A and Column B.	± Math-Gr.4 Numb Sense Std 3.2, Math Reas Stds 1.2, 2.2, 2.6; Gr.5 Math Reas Stds 1.0, 2.1, 2.3-2.4, 2.6 ♥ CS-Gr.4 Std 8; Gr.5 Stds 1, 8
D	Compare the nutrient density of foods at the top of the *Food Guide Pyramid* (fats, oils and sweets) to foods in the four other groups, using food comparison cards. For these foods, often the %DV of calories is higher than the %DV of any other nutrient.	Students work in groups to produce a poster, song, or skit to promote choosing most foods from groups below the tip of the *Food Guide Pyramid*. They present their products to the class.	✐ LA-Gr.4 List & Speak Stds 1.5-1.9; Speak App Std 2.4; Gr.5 List & Speak Stds 1.4-1.6, Speak App Stds 2.1-1.2 ± Math-Gr.__ Numb Sense Std 1.2 ♥ CS-Gr.4 Std 1
M	Divide students into small groups. Have students study ingredient lists on various bread bags and cereal boxes to look for products with whole grains listed first.	Using food samples and printed nutrition information, student groups explain to the class which are the best sources of whole grains.	♥ CS-Gr.5 Std 1 ✐ LA-Gr.__ List & Speak Stds 1.7-1.8

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Competency #2: Understand and practice making healthy food choices including planning and preparing snacks and meals, assessing personal needs, and applying strategies to reach personal nutrition goals.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Students plan a burrito recipe made of products grown or raised in California.	Student groups make and serve burritos, and demonstrate where the ingredients would fit on the *Food Guide Pyramid*.	♥ CS-Gr.1 Std1
D	Invite child nutrition program staff to be guest speaker. Ask her/him to demonstrate school lunch or breakfast menu requirements, using food models and/or photos.	Students plan a menu for the school cafeteria that meets National School Lunch or Breakfast Program requirements.	✐ LA-Gr.4 List & Speak Std 1.1; Gr.5 List & Speak Stds 1.1-1.2 ♥ CS-Gr.4 Stds 1, 5, 9; Gr.5 Stds 1, 5, 8
D	Instruct students in taking resting pulse and pulse after running ¼ mile.	Students make a two-colored bar graph charting both pulse rates over one month and analyze the data.	± Math- Gr.4 Stat Std 1.3; Gr.5 Std 1.2 ♥ CS-Gr.4-5 Std 1
D	Have students plan a lunch for a family of four based on the *Food Guide Pyramid*. Guide them in using grocery ads or an on-line store to determine the cost of the lunch per person.	Students write a proposal for how the menu they planned could be offered in the school cafeteria and submit the proposal to child nutrition program staff.	✐ LA-Gr._____ ± Math-Gr.4 Numb Sense Std 3.0; Math Reas Std 1.0; Gr.5 Numb Sense Std 2.0, Math Reas Std 1.0 ♥ CS-Gr.4 Std 1
D	Guide students in discussing how and why some students buy candy or soda instead of healthier snacks. Point out how these empty calories can displace nutrients.	Students make daily journal entries about how they feel physically and perform in school, sports, or other activity after a balanced meal or healthy snack.	♥ CS-Gr.4-5 Std 1 ✐ LA-Gr.5 Writ Strat Stds 1.2-1.3
D	Instruct students in reading Nutrition Facts labels to compare sodium content in a variety of processed foods.	Students write an essay on how they could reduce sodium content when choosing processed foods.	± Math-Gr.4 Math Reas Stds 1.0, 2.0 ✐ LA-Gr.5 Writ App Std 2.4

Competency #3: Evaluate the short and long term health benefits and risks of food choices and eating behaviors using the Food Guide Pyramid, *2000 Dietary Guidelines for Americans*, and Nutrition Facts labels.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Have students prepare the soil, plant, tend and harvest vegetables in a class garden. Discuss exercise and growing nutritious foods as two of many benefits of gardening.	Students write about the health benefits of gardening.	✐ LA-Gr.4 Writ Strat Stds 1.1-1.3, 1.10, Writ & Oral Std 1.0; Gr.5 Writ Strat Stds 1.2, 1.6, Writ & Oral Std 1.0 ♥ CS-Gr.4 Std 4
M	Divide students into small groups. Have students study ingredient lists on various bread bags and cereal boxes to look for products with whole grains listed first.	Using food samples and printed nutrition information, student groups explain to the class which are the best sources of whole grains.	♥ CS-Gr.5 Std 1 ✐ LA-Gr.__ List & Speak Stds 1.7-1.8
D	Instruct students on the role of carbohydrates as a source of energy. Students test various vegetables with iodine solution to detect the presence of carbohydrates.	Students chart results of the the iodine tests and rank vegetables by carbohydrate content.	✐ LA-Gr.4 Writ & Oral Std 1.1; Gr.5 List & Speak Stds 1.1-1.3
D	Instruct students on the role of carbohydrates as a source of energy. Students test various vegetables with iodine solution to detect the presence of carbohydrates.	Students chart results of the the iodine tests and rank vegetables by carbohydrate content.	✐ LA-Gr.4 Writ & Oral Std 1.1; Gr.5 List & Speak Stds 1.1-1.3
M	Guide students in tasting samples of fruits and vegetables and researching a key nutrient each contains and the role of that nutrient in humans.	Students make oral presentations in other upper elementary classes to explain the benefits of fruits and vegetables and their nutrients and present samples for tasting.	✐ LA-Gr.5 List & Speak Stds 1.4-1.6; Gr.4 Speak App Std 2.1
D	Instruct students to identify information about total fat and saturated fat on Nutrition Facts labels.	Looking at serving sizes and %DV for saturated fat, students use Nutrition Facts labels on ice cream and frozen yogurt to determine the frozen dessert with the lowest %DV of saturated fat.	± Math-Gr.5 Numb Sense Std 1.2

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Competency #4: Demonstrate food handling and personal hygiene to prevent foodborne illness. Handling includes growing, processing, preserving, transporting, storing, preparing, and serving.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Have students rub vegetable oil and ½ teaspoon of cinnamon on their hands before washing them and observe the "germs" that are left on their hands after they are finished washing. Repeat with different lengths of handwashing time.	Students estimate the percent of their hands that are free of bacteria after each length of time spent washing hands. Then they make bar graphs of their results.	± Math-Gr.4 Stat Data Anal Stds 1.1, 1.3; Gr.5 Std 1.2 ♥ CS-Gr.4 Stds 1, 2; Gr.5 Std 5
D	Using case studies, guide students in learning foodborne illness and how to prevent food spoilage of leftovers, on picnics, and while preparing food.	Students describe the ill effects of eating spoiled food and ways to prevent.	♥ CS-Gr.4-5 Std1 ✐ LA-Gr.4 Read Comp Stds 2.4, 2.6; Gr.5 Read Comp Stds 2.3-2.4

Competency #5: Identify and explore factors influencing food intake including: family, friends, culture, marketing, emotions, sensory stimuli and food availability.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Help students explore food-related advertising. Show videotapes to demonstrate advertising techniques. Brainstorm and discuss the kinds of food ads shown on TV most often.	Students use the same advertising techniques they have discussed to write and illustrate an ad for a fresh fruit or vegetable.	♥ CS-Gr.4 Std 8 ✐ LA-Gr.4 Writ Strat Stds 1.1, 1.10, Writ App Std 2.0, Writ & Oral Std 1.6; Gr.5 Read Comp Std 2.1
D	Have students study print and TV ads promoting foods for their ease of preparation.	Students create an ad that markets fresh foods as being easy to prepare.	♥ CS-Gr. 4 Stds 1, 4, 5, 8; Gr.5 Stnd. 8 ✐ LA-Gr.4 Writ Strat Std 1.1, Writ & Oral Stds 1.5-1.6; Gr.5 Read Comp Std 2.1

Competency #6: Describe the influence of local, national and global factors on the quantity and quality of food, including agricultural science, ecology, technology, food safety (see Competency #4), politics, government regulations, and economics.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Use 4th grade social studies texts and/or CD-ROM sources to instruct students about the role of Cesar Chavez and the grape boycott of the 1960's in gaining migrant farm worker rights.	Students report on how the economics of California agriculture were affected by Cesar Chavez and his followers.	♥ CS-Gr.4 Std 5 ✐ LA-Gr.4 Read Comp Stds 2.2, 2.4, 2.6, Writ Strat Stds 1.1-1.2, 1.5-1.9
D	Use 5th grade social studies texts and *Pie Chart Pam* (www.usda.gov/news/usdakids) to instruct students about the percent of U.S. farm land planted with different grains.	Students create a pie chart that reflects the percentages of different grains grown on United States' farmland.	♥ CS-Gr.5 Std 5 ± Math-Gr.5 Math Reas Stds 2.3, 2.6, Stat Data Std 1.2, Numb Sense Std 1.2 ✐ LA-Gr.__ Read Comp Stds 2.2, 2.4

Competency #7: Explain how nutritional needs vary throughout the life cycle.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Have students list activities that are more active and less active. Discuss what supplies energy for activities. Help students prepare and eat a healthy snack to provide energy for activity.	Students make a banner for the school featuring pictures showing fun ways to be active and foods that fuel activity.	♥ CS-Gr.4 Stds 4, 5, 6; Gr.5 Stds 1, 4
D	Review the five taste sensations and discuss with students how their tastes have changed since they were younger. Discuss students' willingness to taste different foods as a way to increase food variety and interest. Have students prepare and taste a healthy snack featuring foods they haven't tasted before.	Students create a class cookbook of after school snacks made with foods new to the students.	✐ LA-Gr.4 Writ Strat Stds 1.1, 1.10, Writ & Oral Stds 1.1, 1.2, 1.7; Gr.5 Writ Strat Std 1.6, Writ & Oral 1.4, 1.5

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Competency #8: Explore factors that contribute to achieving and maintaining a healthy body and positive body image such as physical activity, food choices, genetics, and self-esteem.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Discuss with students that as their bodies grow and change they will notice many different body types. Encourage them to seek to maintain a healthy body, right for them, rather than one like pictures of models in the media.	Students write an essay about what they like about their bodies or one favorite feature.	♥ CS-Gr.4 Stds 1, 6, 7; Gr.5 Stds 6, 7 ✐ LA-Gr.4 Writ Strat Stds 1.1-1.4, 1.10; Gr.5 Writ Strat Stds 1.1, 1.2, 1.6

Competency #9: Identify and know how to access scientifically valid nutrition information and nutrition services.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Instruct students on reading Nutrition Facts labels and product ingredient lists.	On a field trip to a grocery store, students pack a grocery bag of nutritious foods by using information on nutrition labels and ingredient lists.	♥ CS-Gr.4 Std 8; Gr.5 Std 8 ✐ LA-Gr.4 Read Comp Std 2.2
D	Students visit web sites or consult periodicals for information about meat inspection.	Students write brief summaries of the information they found from each source, and post findings on a classroom chart for other students to study and decide which was the best source of information.	♥ CS-Gr.4 Std 8, Gr.5 Stds 5, 8 ✐ LA-Gr.4 Writ Strat Stds 1.5-1.7; Gr.5 Read Comp Std 2.4, Writ Strat Stds 1.2-1.3, Writ App Std 2.4

Competency #10: Explore the variety of food-related careers.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Introduce a unit on the important role of agricultural growers in California history. Help students explore how technology, water policy, and land use have changed growers' roles from the 1830s to the present.	Students create and perform a skit, set in several different time periods, about a mythical, time traveling, agricultural grower.	✐ LA-Gr.4 List & Speak Stds 1.5-1.9, Speak App Stds 2.2-2.4
D	Introduce a unit about the role of the farmer in the United States today. How is the farmer's role different now than it was in colonial times?	Students write a report that evaluates (from their own point of view) whether being a farmer is a viable career choice.	✐ LA-Gr.5 Writ App Std 2.3

Nutrition Links
Middle School—Grades 6-8

Competency #1: Know and apply the Food Guide Pyramid, 2000 Dietary Guidelines for Americans, recommended daily number of servings, serving sizes, and nutrient types and functions.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Give each student a different ingredient list cut from a food package without the name of the product. Have them guess the mystery food and a key nutrient provided by it. Then have students find the rest of the package, check the identity of the food, and see from the Nutrition Facts label if they properly identified a key nutrient.	Students work in key nutrient groups and use their food labels to plan for 100% DV of their key nutrient from the foods.	♥ CS-Gr.6 Stds 1, 9; 6-8 Std 9 ✐ LA-Gr.7 Read Comp Stds 2.2, 2.5; Gr.8 Read Comp Stds 2.1, 2.6 ± Math-Gr.6 Math Reas Stds 1.2, 2.0-3.0; Gr.7 Math Reas Std 1.3

Competency #2: Understand and practice making healthy food choices including planning and preparing snacks and meals, assessing personal needs, and applying strategies to reach personal nutrition goals.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Review foods high in vitamins A and C and iron. Have students collect healthful, appealing recipes from cookbooks.	Students tally the number of times vitamin A, vitamin C and iron-rich ingredients appear in 10 recipes and graph the results.	± Math-Gr.7 Alg Std 1.5 ♥ CS-6-8 Std 1
D	Have each small group of students select a typical fast food meal, total the grams of fat it contains, and measure that amount of lard or shortening onto a plate (5 grams=1 tsp.) for display. Have each group present their findings to the class and ask classmates to brainstorm ways to reduce the fat content of the meal.	Each student writes a short essay outlining a specific goal to improve his/her fast food choices and how he/she plans to implement the goal.	✐ LA-Gr.6 Writ Strat Std 1.1 ♥ CS-9-12 Std 1
M	Explain that every person has his or her own growth pattern, which is often determined by genetics and family heritage. Have students measure their height at the beginning, middle, and end of school year. If students have access to information about their biological families, have them note height, body weight, and body shape of their relatives, and ask about their own past growth patterns. Explain that this information can help predict their growth pattern and adult size	Each student plots his or her height throughout the year and, if known, height from 1 and 2 years ago on a standard adolescent height grid. Based on family patterns, if known, each student predicts his or her adult height.	± Math-Gr.7 Math Reas Std 1.0; Gr 6-8 Prob, Data & Stat Stds 1-3.0 ♥ CS-Gr. 6 and 6-8 Std 6

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LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Guide students to record their minutes of physical activity for a week and make a bar graph of individual results. Have each student set an individual goal of at least one hour of physical activity per day.	A month later, students record their physical activity for three days and compute the percentage change from previous month in daily average physical activity.	± Math-Gr.6 Numb Sense Stds 1-1.3, Math Reas Stds 1.0-3.0; Gr.7 Numb Sense Std 1.3, Math Reas Stds 1.0-3.0; Gr.8 Math Reas Stds 1.0-3.0
M	Divide students into cooperative learning groups and assign each group a food group from the *Food Guide Pyramid*. Have each student group study the key nutrients provided by foods in their food group.	Student groups present the results of their nutrient study to their classmates. As a class, they create (draw, build, or act out) their own model of the *Food Guide Pyramid*.	✐ LA-6-8_____ ♥ CS-6-8 Std 9
A	Ask students to research and bring to class various health promotion documents that advocate for a diet high in fiber. Remind them that grains, breads and cereals are a major source of dietary fiber.	Students evaluate the documents they collected for similarities and differences, then taste high-fiber grain food products.	✐ LA-Gr.7 Read Comp Std 2.2
A	Have students research and experiment with various preparation techniques for maximum nutrient retention when cooking vegetables.	Students prepare several cooked vegetables to demonstrate the best techniques for nutrient retention.	± Math-Gr.7 Alg Std 1.4
D	Explain the difference in food energy (calories per gram) provided by fat versus carbohydrate and protein. Have students calculate the grams and calories of fat in a day of meals and snacks.	Based on a 2000-calorie daily intake, students calculate the recommended limit of grams of fat and calories from fat.	± Math-Gr.6 Numb Sense Std 1.4; Gr.7 Numb Sense Std 1.3
M	Guide students in calculating the percent of energy nutrients (sugar, starch, protein and fat) in various breakfasts. Instruct on the effect on morning energy levels of high-sugar food compared to a balanced meal. Discuss strategies to replace some high-sugar foods with more nutrient-dense foods.	Students prepare and eat breakfast foods or snacks that are lower in sugar and more balanced. OR Students complete a 24-hour food record before and after the learning activity and compare sugar content of foods eaten.	♥ CS-6-8 Std 1 ± Math-Gr.7 Numb Sense Std 1.3

Competency #4: Demonstrate food handling and personal hygiene to prevent foodborne illness. Handling includes growing, processing, preserving, transporting, storing, preparing, and serving.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Guide students in researching foodborne illness and safe food storage and preparation methods to use at home.	Students create a computer-generated food safety guide and evaluate the guide for accuracy, conformity to written language rules and appeal to intended audience(s).	✐ LA-Gr.8 Writ Strat Stds 1.4-1.5 ♥ CS-6-8 Std 2
M	Provide students with information regarding the "temperature danger zone" for food storage. Assign students to write word problems with one unknown, either time or temperature.	Students solve each others' word problems, then discuss correct answers as a class.	± Math-Gr.__ Alg Stds 1-15.0 ♥ CS-6-8 Std 1
M	Have students pack two lunch bags with items like pasta salad and cheese sandwich and put a cold pack in one. Have them test each food's temperature at 1 hour intervals to see if any are in the "temperature danger zone," then make graphs of the temperatures over time.	Students make an oral presentation with visual aids based on their findings.	✐ LA-Gr.7 List & Speak Stds 1.4-1.6; Gr.8 List & Speak Stds 1.3-1.5 ± Math-Gr 6 Math Reas Stds 1.1, 2.1, 2.4, 2.7, 3.1; Gr 7 Alg & Func Std 4.2, Data & Stat Std 1.1, Math Reas Stds 1.0, 2.3, 2.5, 2.6, 2.8, 3.1

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Competency #5: Identify and explore factors influencing food intake including: family, friends, culture, marketing, emotions, sensory stimuli and food availability.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Guide students in discussing what motivates them to eat when they are not hungry or to not eat when they are hungry. Have them brainstorm positive motivators for eating only when hungry.	Students write in journals about what positively motivates them to maintain a healthier eating pattern.	♥ CS-6-8 Stds 1, 6, 7 ✐ LA-Gr.6 Writ Strat Std 1.1
D	Have students brainstorm foods served at home that "make their mouths water," then identify emotions associated with these foods.	Students interview family members to find out what emotions they associate with the same foods, and report back to class.	♥ CS-6-8 Stds 1, 6, 7 ✐ LA-Gr.6 and 8 Speak App Std 2.1
M	Help students establish a definition of culture or ethnicity. Have them brainstorm cultures existing in their school and local community. Assign students to interview someone from a specific culture and obtain a recipe for a traditional dish.	Students share recipes with the class and choose one or more to prepare (in class or at home) for a celebration of cultures.	♥ CS-6-8 Std 1 ✐ LA-Gr.7 List & Speak Stds 1.1, 1.4
M	Arrange for students to visit an ethnic market (e.g., Asian, Latino) to identify vegetables used in the corresponding cuisine. Help them grow several of these vegetables in a school garden (or purchase them locally) and identify culturally-specific ways to prepare them.	Students use the vegetables that they have grown or purchased to cook traditional ethnic dishes.	♥ CS-6-8 Stds 1, 6, 7

Competency #6: Describe the influence of local, national and global factors on the quantity and quality of food, including agricultural science, ecology, technology, food safety (see Competency #4), politics, government regulations, and economics.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Divide the class into groups to research several government regulatory agencies that affect farms and ranches.	Student groups make oral reports to the class about their assigned agency's source of authority and functions.	♥ CS-Gr.6 Stds 5, 9; 6-8-Std 9 ✐ LA-Gr.7 Read Comp Std 2.2; Gr.8 Writ & Oral Std 1.1
D	Using on-line resources, guide students in studying the effects of natural catastrophe and relief efforts on long-term food supplies.	Students make a model of a hypothetical catastrophe case that considers relief efforts and long-term food supplies.	✐ LA-Gr.7 Read Comp Std 2.2, Writ Strat Stds 1.4, 1.7; Gr.8 Writ Strat Stds 1.1, 1.4-1.6

Competency #7: Explain how nutritional needs vary throughout the life cycle.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Divide the class into teams to research female nutrition needs in infancy, childhood, adolescence, child bearing years, post menopause, and older adulthood.	Students make oral reports in cooperative learning groups about their findings.	♥ CS-6-8 Stds 1, 6 ✐ LA-Gr.6 Speak App Std 2.2; Gr.7 Writ & Oral Std 1.0, List & Speak Stds 1.4-1.6, Speak App Stds 2, 3; Gr.8 Writ & Oral Std 1.0
M	Students investigate the relationship between calcium intake in adolescence and osteoporosis in older adults.	Students write and perform a skit on how to prevent osteoporosis.	♥ CS-6-8 Stds 1, 4, 5, 9 ✐ LA-Gr.6 Writ App Std 2.1, List & Speak Stds 1.4, 1.6, 1.7, Speak App Stds 2.1, 2.2; Gr.7 Writ App Std 2.1, Listen & Speak Stds 1.4, 1.6

Competency #8: Explore factors that contribute to achieving and maintaining a healthy body and positive body image such as physical activity, food choices, genetics, and self-esteem.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Ask students to measure their height and weight at home, and bring in the data. Or, provide sample heights and weights of varied adolescents (thin, average, and heavy). Instruct students in how to calculate Body Mass Index (BMI) and how it is used to monitor growth.	Students compute their own or a sample BMI and compare it to growth curves for the appropriate age and gender.	♥ CS-6-8 Stds 1, 6, 7 ± Math-Gr.6 Math Reas Stds 2.5, 2.7; Gr.7 Alg & Funct Stds 2.2, 3.4, Math Reas Stds 1.0, 2.0

* LEVEL indicates Instructional Content Level: I = Introduce, D = Develop, M = Mastery, A = Application

Competency #9: Identify and know how to access scientifically valid nutrition information and nutrition services.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Review the *Dietary Guidelines for Americans* with stduents. Point out that these guidelines apply to healthy people, and that some people, such as those with chronic diseases require special diets. Assign each stduent group a different chronic disease or condition requiring a special diet. Ask them to consult at least three resources (e.g., on-line, mail, written text, or in person) for information on special diets.	Students report back on the kinds of special diets they learned about, and what sources of information were most helpful.	♥ CS-Gr.6 Stds 1, 2, 5, 9; 6-8 Stds 1, 2, 5, 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Read Comp Stds 2.1-2.2, 2.6, Writ Strat Std 1.4, Writ App Std 2.3c; Gr.8 Read Comp Std 2.1
D	Ask a representative of the Certified Farmers' Market Association to speak to the class about definitions and benefits of organically grown foods.	Students find an additional source of information about organically grown foods that represents a different point of view than the speaker, then compare and contrast viewpoints.	♥ CS-Gr.6 Stds 1, 2, 5, 9; 6-8 Stds 1, 2, 5, 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Read Comp Stds 2.1-2.2, 2.6, Writ Strat Std 1.4, Writ App Std 2.3c; Gr.8 Read Comp Std 2.1
M	Take students to a grocery store to estimate the approximate percentage of produce that come from countries outside the United States. Assign them to find out about health regulations that govern fruit and vegetable production and export in various countries.	Students identify various websites that are good sources of information about imported produce, and discuss from which countries they would eat fruits and vegetables and why.	♥ CS-Gr.6 Stds 5, 9; 6-8 Stds 1, 5, 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Read Comp Stds 2.1-2.2, 2.6, Writ Strat Std 1.4, Writ App Std 2.3c; Gr.8 Read Comp Std 2.1

Competency #10: Explore the variety of food-related careers.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Introduce a unit about scientists and their role in the food industry. Guide students in researching such topics as pesticides, genetically altered foods, irradiated foods, and food safety.	Students write about the role of the food scientist in their chosen topic area and provide a list of websites where interested students can seek out further information.	♥ CS-Gr.6 Std 9 ✐ LA-Gr.6 Writ Strat Std 1.4; Gr.7 Writ Strat Stds 1.4, 1.6; Gr.8 Writ Strat Std 1.4
D	Invite the child nutrition program Director or designee to the class to discuss the varied aspects of his or her job, including ordering, dealing with food processors, menu planning, and nutrient analysis.	Students write an essay comparing their preconceptions about the child nutrition program Director's job versus the realities according to the guest speaker who holds the job.	✐ LA-Gr.6 Writ Strat Std 1.2, Writ App Std 2.2; Gr.7 Writ Strat Stds 1.1-1.3, 1.7; Gr.8 Writ Strat Stds 1.1-1.3, 1.6

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Nutrition Links
High School—Grades 9-12

Nutrition Links
High School—Grades 9-12

Competency #1: Know and apply a food grouping method, recommended daily number of servings, serving sizes, and nutrient types and functions.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Review food sources of calcium and calcium's role in bone development during adolescence and bone health in adulthood. Discuss the recommended number of servings and serving sizes of calcium-rich foods to obtain the recommended amount for teens. Distribute labels or empty containers of calcium-rich foods.	Using labels or empty containers, students create a daily menu with 130% DV for calcium from food sources without supplementation.	♥ CS-9-12 Stds 1, 2, 4 ✐ LA-Gr. 9-10 Read Comp. Std 2.1; Gr. 11-12 Read Comp. Std 2.1
M	Ask the students who participate in sports or regular physical activity to report on what they eat before a game, meet or workout. Most will name carbohydrate foods. Point out that these foods provide energy for everyone, and that 6-11 servings are recommended on the *Food Guide Pyramid*.	Students plan a meal high in carbohydrates to eat before exercise or a sports activity, and make it at school or home or eat it in the school lunch program.	♥ CS-9-12 Stds 1, 4, 9
A	Divide the class into cooperative learning groups for breakfast, lunch, dinner and snacks. Assign each group to plan a meals or snacks to comprise a one-week menu that includes key nutrients for teen health. Using the *Food Guide Pyramid* or a nutrient analysis program, have the class evaluate its composite menu against weekly nutrition goals. Then have each group adjust another group's meals or snacks to fit the goals and report changes made to class.	Over a four-day period, Monday-Thursday, each group prepares and serves its contribution. On Friday students analyze the adjusted weekly menu. Individually, students write a defense of it how their class menu meets the nutrient needs of adolescents.	♥ CS-9-12 Stds 1, 4 ✐ LA Gr. 9-10 Writ Strat Stds 1.1-1.2, 1.8-1.9; Gr. 11-12 Writ Strat Stds 1.1-1.5, 1.9

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Competency #2: Understand and practice making healthy food choices including planning and preparing snacks and meals, assessing personal needs, and applying strategies to reach personal nutrition goals.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Have students cook or write a one-day meal plan for their families based on recommended number of servings from the *Food Guide Pyramid*.	Students create a survey to poll their family members about what they like about the meal plan and how it can be improved.	✐ LA-Gr. 9-10 Speak App. Std 2.3 ♥ CS-9-12 Std 1
M	Guide students in forming a persuasive argument that will convince a peer to eat fresh fruits and vegetables daily. Group students in pairs and have each student present his/her argument to a partner.	Students give constructive feedback and discuss what about their partner's argument was convincing.	✐ LA-Gr. 9-10 List & Speak Stds 1.1-1.9 ♥ CS-9-12 Std 1
A	Review the nutrition needs of teens. Instruct students to write a nutritious eating plan for a week that they feel they could implement, including meals from the school cafeteria, fast food outlets, and home. Ask them to follow the plan for one week.	One week later, students write a reflection on how well they were able to follow their plans.	✐ LA-Gr.9-10 and 11/12 Writ Strat Stds 1.1-1.9
A	Ask a child nutrition program manager or designee to brief students on requirements in planning school menus. Guide students in discussing ways that the school cafeteria could feature health-promoting foods.	Working with the cafeteria manager or equivalent, students share ideas and agree on an implementation plan for them to help promote healthy foods featured in the cafeteria.	✐ LA-Gr. 11-12 List & Speak Stds 1.1-1.10 ♥ CS-9-12 Std 1
A	Divide students into teams. Have each team brainstorm ways to be more physically active, then commit to doing a certain daily physical activity for a set period of time (week or two).	Teacher interviews student team leaders about the activity chosen and progress made toward achieving the commitment.	♥ CS-9-12 Std 1 ✐ LA Gr.9-10 Speak App Std 2.3
A	Have students research grains grown around the world, including how they are used in regional/cultural cooking and the economic importance of these grain crops in countries where they are grown.	Students publish a list of their favorite whole grain foods from around the world and share it with the child nutrition program staff for consideration in menu planning.	✐ LA-Gr.9-10 and 11-12 Writ & Oral Stds 1.1-1.4
A	Assign students to study how to obtain a nutritionally complete vegetarian diet.	Students create nutritionally complete vegetarian menus for a week.	✐ LA-Gr.11-12 Writ Strat Std 1.8

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Have students bring in snack food labels. In groups, ask them to compare the percent of calories from total fat and saturated fat, plus cholesterol content, in the snacks, then identify lower-fat snack choices.	Students write and present chants or raps to promote snacks low in saturated fat and cholesterol and moderate in total fat.	♥ CS-9-12 Stds 1, 5, 9 ± Math-Gr.8 Prob & Stat Std 8.0 ✐ LA-Gr.9-12 List & Speak Stds1.8-1.9, Speak App Std 2.6

Competency #3: Evaluate the short and long term health benefits and risks of food choices and eating behaviors using the Food Guide Pyramid, *2000 Dietary Guidelines for Americans*, and Nutrition Facts labels.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
A	Divide students into small groups. Have each group evaluate one weight management plan for sound nutritional practices and lifelong effects on health. Optional: feature guest speakers from local weight management programs.	Student groups present their findings by writing and performing a skit about dieting or body building. They present their skits to the class, at a health fair, or to middle school students (live or via videotape).	✐ LA-Gr.9-10 Writ Strat Stds 1.5, 1.8, List & Speak Stds 1.6-1.8; Gr. 11-12 Writ Strat Stds 1.6-1.8, 2.6, List & Speak Stds 1.6, 1.8, Speak App Std 2.4 ♥ CS-9-12 Stds 1, 4, 9
M	Match students with an elementary class to assist younger students with garden activities that require teenage muscle and skill.	Students write essays or poems about gardening or working with younger students.	✐ LA-Gr.9-10 Writ Strat Stds 1.1-1.3, 1.9, Writ App Std 2.3; Grs.11-12 Writ Strat Stds 1.1-1.5, 1.9, Writ App Std 2.3 ♥ CS-9-12 Std 5
A	Guide students to work in groups to develop games to teach the *Food Guide Pyramid* to young children.	Students teach the games to younger children and report the results to the class.	✐ LA-Gr.9-10 List & Speak Std 1.9, Gr. 11-12 List & Speak Std 1.8
A	Students calculate the percentage of the *Food Guide Pyramid* devoted to each food group. (Visit www.usda.gov/news/usdakids)	Students develop a teen's weekly eating plan that reflects the percentages calculated.	♥ CS-9-12 Std 1 ± Math-9-12 Alg 1 Std 24.0

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LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
A	Have students research desired HDL and LDL blood cholesterol levels and consequences of abnormal levels.	Students interview doctors, nutritionists, or heart association health professionals about ways to achieve and maintain desired cholesterol levels, and report back to class.	♥ CS-9-12 Std 1 ✐ LA-Gr.___ Speak App Stds 2.2a-b
A	Have students examine foods currently available on campus (in vending machines, student sales, and breakfast and lunch programs) with regard to sugar content. Have them brainstorm healthier alternatives that students would buy.	Students approach student leadership group(s) and school administrators and present alternatives to selling high-sugar foods to raise school funds and promote student health.	♥ CS-9-12 Std 1 ✐ LA-Grs.11-12 Writ Strat Std 1.3, List & Speak Std 1.6
M	Guide students in studying the diet and genetics of populations with high rates of hypertension. Discuss ways to adapt recipes and eating habits to reduce the risk of hypertension.	Students modify traditional recipes to reduce the risk of hypertension (e.g., reduce sodium and increase fiber content).	± Math-Gr.____ Prob & Stat Stds 7.0, 8.0, Adv Prob & Stat Std 14.0
A	Have students research health studies on-line to discover the long-term effects of high-sodium diets, then develop presentations of data found in small groups.	Student groups present data found, using computer-generated visual aids, then listen to and evaluate other groups' reports.	♥ CS-9-12 Std 1 ✐ LA-Gr.11-12 List & Speak Std 1.8

Competency #4: Demonstrate food handling and personal hygiene to prevent foodborne illness. Handling includes growing, processing, preserving, transporting, storing, preparing, and serving.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
A	Students study exponential growth of bacteria and how aseptic techniques reduce bacterial growth.	Students solve and graph equations for time versus bacterial growth.	± Math-Gr.9-10 Alg 1 Std 2.0
A	Review student knowledge about food safety and sanitation practices from prior grades. Assign students to prepare a meal or snack in front of the class, demonstrating safe food handling and personal hygiene.	Ask the child nutrition program Director or designee to evaluate and comment on student demonstrations in terms of food safety. OR Students evaluate each others' demonstrations using a food safety checklist.	✐ LA-Gr.9-10 List & Speak Stds 1.3, 1.7, Speak App Stds 2.2, 2.6b; Gr.11-12 List & Speak Std 1.8

Competency #5: Identify and explore factors influencing food intake including: family, friends, culture, marketing, emotions, sensory stimuli and food availability.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Guide students in researching community services that provide food to families in need.	Students publish a brochure for families (including a map) describing community agencies where food is provided or served.	♥ CS-9-12 Std 9 ✐ LA-Grs.9-10 Writ Strat Std 1.8
M	Arrange for students to shop at an on-line grocery stores and price identical items on a list of a nutritionally adequate, three-day emergency food supply for a family of six.	Students graph the results of their research (including price of food items and transportation costs) and compare advantages and disadvantages.	♥ CS-9-12 Stds 6, 7 ± Math-Gr.___ Prob & Stat Std 8.0
A	Guide students in making a personal eating plan for one week. Then have them identify emotional or peer influences that could cause them to deviate from the plan.	Students role-play strategies to help them overcome influences that could negatively affect the implementation of their eating plan.	♥ CS-9-12 Stds 6, 7 ✐ LA-Gr.9-10 List & Speak Std 1.6; Gr.11-12 List & Speak Std 1.7
A	Have students discuss what they typically eat when they are in a positive mood and compare this with what they eat when they feel lonely, stressed, or depressed.	Students prepare a buffet (using real food, photos, labels, or ads) of "feeling good" foods (at school or brought from home) or depict these foods on a paper mural and/or write about why these foods make them feel this way.	♥ CS-9-12 Stds 6, 7

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Competency #6: Describe the influence of local, national and global factors on the quantity and quality of food, including agricultural science, ecology, technology, food safety (see Competency #4), politics, government regulations, and economics.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Use multiple sources including world history texts to instruct students about technological breakthroughs that have resulted in greater crop yields since the Agricultural Revolution.	Students create a timeline based on their study, then carry it into the future by predicting innovations in the next century.	✐ LA-Grs.9-10 Read Comp Stds 2.1, 2.5, 2.7, Writ Strat Stds 1.1-1.2, 1.9; Gr.11-12 Read Comp Stds 2.2-2.3, Writ Strat Std 1.1
M	Arrange for students to visit agri-business, Farm Bureau, websites, and organizations of family farmers to discover different perspectives on how land should be farmed in the United States.	Students write a persuasive essay that advocates for a specific point of view on how U.S. land should be farmed.	✐ LA-Gr.9-10 Read Comp Stds 2.1, 2.5, 2.7, Writ Strat Stds 1.1-1.2, 1.9; Gr.11-12 Read Comp Stds 2.2-2.3, Writ Strat Std 1.1
A	Have students conduct interviews in person or on-line with California farmers or ranchers and slow growth activists to get their perspectives on how converting agricultural land to housing impacts food quantity, choices and costs.	Students write a hypothetical growth plan for a California city that advocates for one of the perspectives that they learned about in their interviews.	♥ CS-9-12 Std 9 ± Math-Gr.____ Prob & Stat Std 8.0 ✐ LA-Gr.11-12 Stds 1.6-1.7, 1.9
A	Assist small groups of students in gathering data on several congresspersons from various agricultural states about bills they propose to help agriculture in their states.	As a class, students evaluate the data collected, then proposes a bill to benefit agriculture and tries to pass it through a mock House of Representatives.	♥ CS-9-12 Std 9 ✐ LA-Grs.11-12 Writ Strat Stds 1.6-1.7, 1.9

Competency #7: Explain how nutritional needs vary throughout the life cycle.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Arrange for students to interview a male high school student and a middle-aged man, both of healthy weight and similar height, about what they eat (showing them portion size containers) and their activity level each day.	Students graph estimated caloric intake for both males and make inferences about their caloric needs to maintain a healthy weight.	♥ CS-9-12 Stds 1, 2, 5, 6, 7 ± Math-Gr.____ Prob & Stat 8.0
D	Arrange for students to visit a Meals on Wheels or on-site senior nutrition program that prepares and serves meals for the elderly and interview the menu planner to learn of specific nutritional needs for this population.	Students write a model daily meal plan for a male or female elder.	♥ CS-9-12 Stds 1, 5, 6
M	Invite an OB/GYN doctor or registered dietitian from a prenatal program to speak to the class regarding recommended nutrition for pregnant women or lactating mothers.	Students make a healthy eating plan for a non-pregnant female teenager, and then make a graphic organizer that compares it with the nutritional needs discussed by the speaker.	♥ CS-9-12 Stds 1, 2, 6
M	Guide students in researching statistics on the average age of onset of cardiovascular disease now compared to 25 years ago.	Students graph results and lead the class in a brainstorming session about possible explanations for the differences between the two time periods.	♥ CS-9-12 Stnds. 1,6 ✐ LA–Grs.9-10 Writ App Std 2.3
A	Assign students to interview a nutrition program director at a licensed childcare center about nutrition needs for the center's clients.	Students write a daily meal plan for a childcare center that meets the needs of preschoolers. Optional: Students volunteer to assist with food preparation and service for one day at a childcare center.	♥ CS-9-12 Stds 1, 5, 6

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Competency #8: Explore factors that contribute to achieving and maintaining a healthy body and positive body image such as physical activity, food choices, genetics, and self-esteem.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
D	Demonstrate how to calculate an exercising heart rate that will promote cardio-vascular fitness in teens.	Students hypothesize what their exercising heart rates will be, and calculate their actual rates during physical exercise.	♥ CS-9-12 Stds 1, 2, 7 ± Math-Gr.__ Alg 1 Std 24.0
D	Present formulas to the class for calculating calories burned during different types of exercise for specific periods of time.	Students solve word problems involving calories burned during exercise.	♥ CS-9-12 Stds 1, 2 ± Math-Gr.__ Alg 1 Std 5.0
M	Ask cooperative learning groups to decide on a list of ten attributes that they would like their best friend to have. Students post their group lists to create a class best friend "wish list". Tally attributes that appear more than once. (Body Image attributes will probably be low on the list.)	Based on the list, students write a persuasive essay advocating for the importance of the attributes that appear multiple times on the list.	♥ CS-9-12 Std 4 ✐ LA-Gr.9-10 Writ Strat Stds 1.1-1.2, 1.9, Writ App Std 2.4; Gr.11-12 Writ Strat Stds 1.1-1.5, 1.9 Writ & Oral Std 1.0
M	Lead stduetns in brainstorming actions to take for bone health. Based on extent of students' prior knowledge, instruct the class about the importance of regular exercise and four servings per day of calcium-rich foods for people their age.	Students outline strategies that they think would be successful in convincing a friend (or that a friend could use to convince them) to increase exercise and consumption of high-calcium foods.	♥ CS-9-12 Stds 1, 4, 5 ✐ LA-Gr.9-10 Writ App Std 2.4, Writ & Oral Std 1.0; Gr.11-12 Writ App Std 2.3a, Writ & Oral Std 1.0
A	Assign students to study the growing problem of eating disorders in the United States. Divide the class into three groups to study eating disorders in adolescence, adulthood and old age.	Students create a case study of a mythical subject giving her or his current height, weight and disease profile, and a plan to improve her or his health status.	♥ CS-9-12 Stds 1, 4, 5, 6, 7 ✐ LA-Gr.9-10 Writ Strat Stds 1.1-1.2, 1.9; Gr.11-12 Writ Strat Stds 1.3, 1.6, 1.9
A	Review the concept of metabolism and basal metabolic rate (BMR). Assign students to calculate their own caloric needs for a 24-hour period, noting hours of sleep and hours of activity (light, moderate or vigorous).	Students create word problems involving linear equations to arrive at their caloric needs for the 24-hour period.	♥ CS-9-12 Stds 1, 7 ± Math-Gr.__ Alg 1 Std 5.0

Competency #9: Identify and know how to access scientifically valid nutrition information and nutrition services.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Show samples of nutrition information: one accurate, one from a questionable source, and one containing misinformation. Guide students in brainstorming criteria for valid nutrition information.	Students find another source of nutrition information and write an essay supporting or refuting the nutrition information is contains, based on the validity criteria established.	♥ CS-9-12 Stds 5, 9 ✐ LA-Gr.9-10 Read Comp Stds 2.1, 2.4, Writ Strat Std 1.3
M	Give students a hypothetical case study of a high school athlete with poor eating habits that affect his or her performance. Brainstorm ideas of where the athlete could find information about appropriate diet changes.	Students provide a list of four nutrition information sources that this hypothetical athlete would find helpful.	♥ CS-9-12 Stds 1, 2, 5, 6, 9 ✐ LA-Gr.9-10 Read Comp Stds 2.1, 2.4, Writ Strat Std 1.3
A	Using personal eating plans that students developed in prior lessons, lead students in discussing and researching possible sources for nutrient analysis of their eating plans.	Students provide a nutrient analysis for foods consumed in one day from their personal eating plans.	♥ CS-9-12 Stds 1, 2, 5, 6, 9 ± Math-Gr.__ Prob & Stat Std 8.0 ✐ LA-Gr.11-12 Read Comp Stds 2.1-2.6
A	Have each student interview two other high school students about their food intake for one day. Help the class pool the data gathered and develop an analysis of eating habits of the students in their school.	Students find reliable nutrition information sources to help high school students maintain an ideal weight and get appropriate levels of nutrients. They prepare a pamphlet listing these sources for school-wide distribution.	♥ CS-9-12 Stds 1, 2, 5, 6, 9 ✐ LA-Gr.11-12 Read Comp Stds 2.1-2.6, Writ Strat Stds 1.6-1.8

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Competency #10: Explore the variety of food-related careers.

LEVEL*	LEARNING ACTIVITY	ASSESSMENT TOOL	CURRICULUM LINKS
M	Present a list of food-related careers from a local college or university career center. Help students research the careers in terms of education requirements, workplace options, salary range, etc.	Students create a persuasive essay that supports or refutes a particular career as a viable option for the reporting student's plans for the future.	✐ LA-Gr.9-10 Writ Std 1.0; Gr.11-12 Writ Std 1.0
M	Take the class on a field trip to a food processing plant or hospital food service department. Ask a representative of management and a representative of labor to discuss what careers are available, and what training is necessary.	Students create a graphic organizer, listing on the left side the steps in the process of making the product or the hospital department's services, and on the right side, the job descriptions of those responsible for each step.	✐ LA-Gr.9-10 Writ App Std 2.6
A	Arrange for students to visit or serve as an intern with a franchisee of one or more restaurants. Have them research the process of becoming a franchisee and the requirements involving food purchasing and quality control.	Students describe what they learned at the workplace and evaluate the pros and cons of being a franchisee.	✐ LA-Gr.9-10 Writ App Stds 2.3-2.4; Gr.11-12 Writ Strat Stds 1.1, 1.9
A	Arrange for one half of the students to spend several days working in a restaurant training program, while the other students shadow child nutrition program or commercial restaurant workers in various positions. If there is no restaurant training program at your school, seek one out at a nearby high school, community college, or culinary academy.	Students compare their experiences in discussion with the other half of the class and come to a conclusion about the effectiveness of learning the restaurant business in a school atmosphere or on the job.	✐ LA-Gr.9-10 List & Speak Stds 1.1, 1,8, 1.12; Gr.11-12 List & Speak Stds 1.6, 1.8, 1.12

APPENDICES

Resources

Resources specified in the Nutrition Links learning activities are listed below in alphabetical order. For a more complete listing of nutrition education resources, contact the California Healthy Kids Resource Center (www.californiahealthykids.org) or refer to *Strategies for Success II*: *Enhancing Academic Performance and Health Through Nutrition Education.*

American Dietetic Association (800) 877-1600 (www.eatright.org)

California Department of Education (916) 322-4792 or (800) 952-5609 (www.cde.gov/nsd/nets)
- Fruit and Vegetable Photo Cards

Dairy Council of California (888) 868-3133 (www.dairycouncilofca.org)
- Mobile dairy classroom
- Nutrition programs for selected grades

NASCO Nutrition Resources (209) 545-1600 (www.eNASCO.com)
- Food replicas
- Other nutrition teaching aids

National Dairy Council (800) 426-8271 (www.nationaldairycouncil.org)
- Food photo/comparison cards

Tufts University's Nutrition Navigator (www.navigator.tufts.edu)

United Nations (www.un.org)
- Information on natural disasters and relief efforts

United States Department of Agriculture
(www.usda.gov/news/usdakids):
- Word searches and word scrambles featuring farm animals and crops
- Percentage contributed by each food group in the *Food Guide Pyramid*
- *Pie Chart Pam*

(www.usda.gov/cnpp):
- *Dietary Guidelines for Americans 2000*
- *Food Guide Pyramid*: Poster and other materials

U.S. Food and Drug Administration (www.fda.gov)
- Links to other agencies such as those regulating farms and ranches
- Information about meat inspection

University of California Cooperative Extension
(Consult your telephone directory for the number of your county extension office)
- List of certified farmers' markets

The New Food Label at a Glance

The new food label will carry an up-to-date, easier-to-use nutrition information guide, to be required on almost all packaged foods (compared to about 60 percent of products up till now). The guide will serve as a key to help in planning a healthy diet.*

Serving sizes are now more consistent across product lines, stated in both household and metric measures, and reflect the amounts people actually eat.

Nutrition Facts

Serving Size 1/2 cup (114g)
Servings Per Container 4

Amount Per Serving

Calories 90	Calories from Fat 30
	% Daily Value*
Total Fat 3g	**5%**
Saturated Fat 0g	**0%**
Cholesterol 0mg	**0%**
Sodium 300mg	**13%**
Total Carbohydrate 13g	**4%**
Dietary Fiber 3g	**12%**
Sugars 3g	
Protein 3g	

Vitamin A	80%	•	Vitamin C	60%
Calcium	4%	•	Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

New title signals that the label contains the newly required information.

Calories from fat are now shown on the label to help consumers meet dietary guidelines that recommend people get no more than 30 percent of their calories from fat.

% Daily Value shows how a food fits into the overall daily diet.

The **list of nutrients** covers those most important to the health of today's consumers, most of whom need to worry about getting too much of certain items (fat, for example), rather than too few vitamins or minerals, as in the past.

Daily Values are also something new. Some are maximums, as with fat (65 grams or less); others are minimums, as with carbohydrate (300 grams or more). The daily values for a 2,000- and 2,500-calorie diet must be listed on the label of larger packages. Individuals should adjust the values to fit their own calorie intake.

The label of larger packages must now tell the number of calories per gram of fat, carbohydrate, and protein.

* This label is only a sample. Exact specifications are in the final rules.
Source: Food and Drug Administration 1993

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Children's Activity Pyramid

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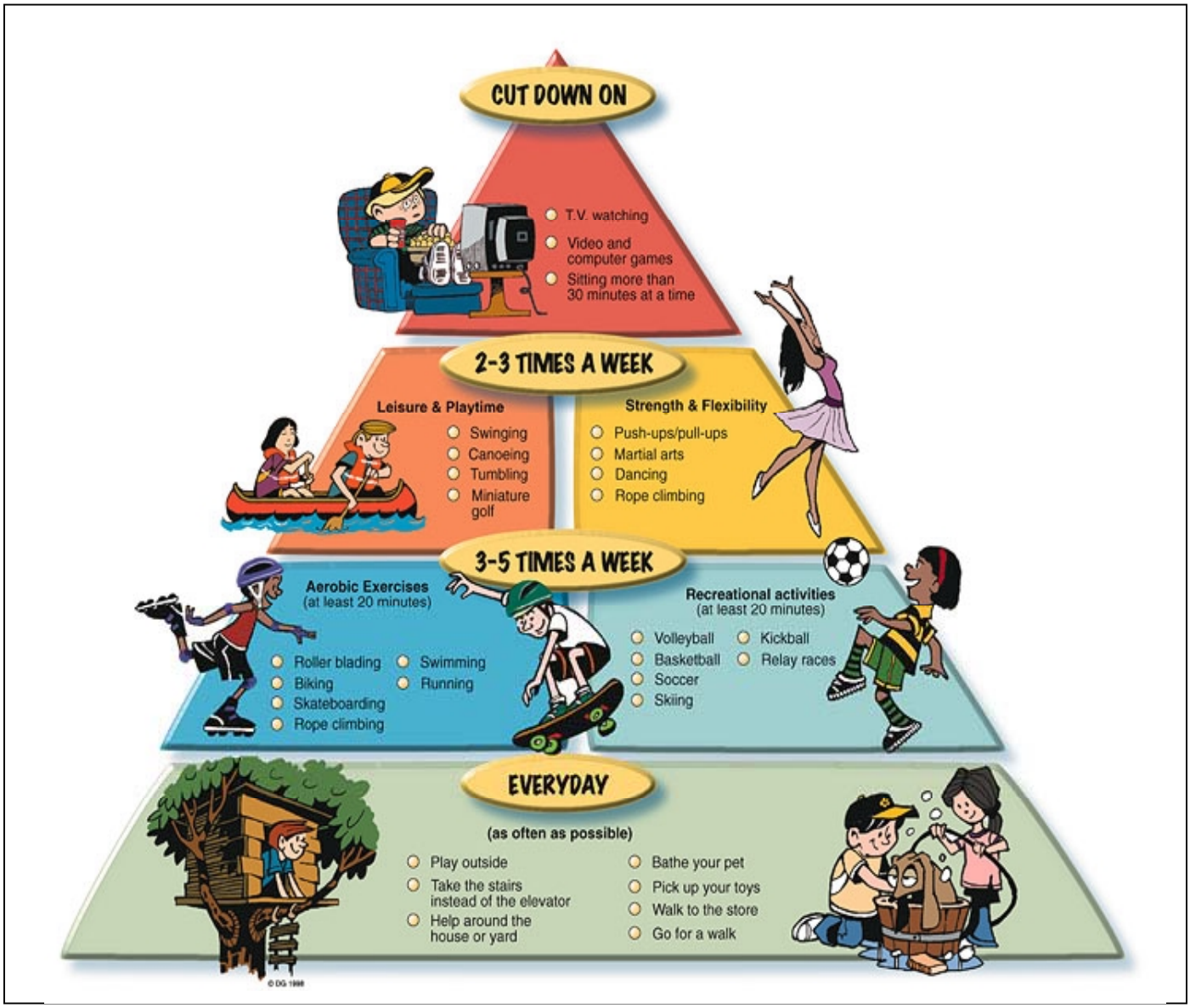

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