

CHOW

A Simulation of Nutrition and Food Budgeting



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Welcome to CHOW!

Students learn everything they need to know about the USDA's 2010 MyPyramid guidelines.

As an "Appetizer," students complete whole-class or team activities to learn about major nutrients, food labels, and MyPyramid specifics. The main "CHOW" simulation has student teams plan meals within a limited budget, shop at a classroom store, react to fate cards (allergies, food shortages, etc.) and keep daily records. Throughout, the students must maintain exercise logs, an essential part of the new USDA guidelines. An extensive third, "A la Carte" section offers optional activities in art, ELA, science, health, social studies, and home economics for enrichment or differentiated instruction.



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Author's Note

CHOW has undergone numerous revisions since it was first published in 1981 when the United States Department of Agriculture (USDA) based its food recommendations on the four food groups. This new version is based both on the Dietary Guidelines for Americans 2005 and the proposed 2010 revisions. These guidelines offer “*science-based advice to promote health and to reduce risk for major chronic diseases through diet and physical exercise.*” However, beyond clarifying the guidelines and including information from the new health care law, no one expects significant changes from what has been proposed in this most recent report and the final version of the guidelines that will be released in 2011.

That said, this new *CHOW* is quite different from the one based on the simple pyramid. In the new USDA pyramid, exercise is a major piece of the recommendations and the guidelines. The first paragraphs of the report state that “*Poor diet and physical inactivity...are the most important factors contributing to the increase in overweight and obesity [rates] in this country.*” They also note that cardiovascular disease, type 2 diabetes, hypertension, osteoporosis, and certain cancers are all linked to poor diet and lack of exercise. In the new *CHOW*, students make a commitment to exercise daily.

Increasing physical activity is very important, but being aware of the calories we're eating is also important. The new guidelines aim to prevent an energy imbalance (when more calories are consumed than expended). We have all heard the expression “portion distortion.” That's when what we consider one serving is sometimes two or more times larger than the serving that dietitians describe. For example, many people settle down to a full plate of pasta and think that is one serving. In fact, it is probably four servings or more. The new *CHOW*, therefore, stresses serving sizes and calories. It also has activities that help students be aware of the calories they consume.

In the new *CHOW*, students will continue to work with the Nutrition Facts labels that are found on most food packaging. The labels' information is based on a 2000 calorie diet—an amount that is close to the needs of most 8–13 year olds. By planning for a 2000-calorie diet, your students will learn the skills to write their own meal plans. Teachers should introduce their students to: MyPyramid.gov, the USDA's excellent website. The website gives students a personalized pyramid plan after they put in basic information about their age, height, weight, and activity level. This pyramid tells them their total calorie need and specifically how many servings of each food they should eat every day.

Finally, the new guidelines require that people keep track of “discretionary calories,” which are calories from fats and added sugars. The system for tracking these as outlined in the guidelines is too complicated and time-

Author's Note

consuming for *CHOW*. However, *CHOW* now includes a simplified system of tracking discretionary calories that encourages students to choose lean and low-fat over high-fat and high-sugar foods.

After completing the new *CHOW*, your students will have a strong working knowledge of the USDA guidelines and know what they can do "*to eat fewer calories, be more active, and make wiser food choices.*"*

* All quotes from the *Executive Summary of the Dietary Guidelines for Americans, 2005*

Purpose

CHOW teaches nutrition in a unique way. The first part, called Appetizer, provides whole class and team activities to learn basic nutrition. Throughout, students have the opportunity to reinforce what they are learning by choosing from **A La Carte** activities in science, math, social studies, English/ language arts, home economics, and health. In the second part of *CHOW*, students use all they have learned in a true-to-life simulation. In teams of three, they will play three roles: Planner, Shopper, and Diner. They will develop menu plans reflecting a balanced diet, purchase the food at a classroom grocery, react to **Fate Cards** (allergies, financial hardships, food shortages, etc.), make group decisions, and keep daily records. From what they learn in *CHOW*, they will be prepared to make better nutritional choices for the rest of their lives.

Educational Standards

National Health Education Standards

- The student will comprehend concepts related to health promotion and disease prevention.
- The student will demonstrate the ability to access valid health information and health-promoting products and services.
- The student will demonstrate the ability to practice health-enhancing behaviors and reduce health risks.

National Science Education Standards

Life Science

- The Structure and function of living systems: Cells carry on the many functions needed to sustain life. They grow and divide, thereby producing more cells. This requires that they take in nutrients, which they use to provide energy for the work that cells do and to make the materials that a cell or an organism needs.

Science in Personal and Social Perspectives

- Personal health: Food provides energy and nutrients for growth and development. Nutrition requirements vary with body weight, age, sex, activity, and body functioning.
- Risks and benefits: Students should understand the risks associated with...personal hazards (dieting).

National Standards for School Mathematics (National Council of Teachers of Mathematics)

Number and Operations Standard

- Compute fluently and make reasonable estimates.

Measurement Standard

- Understand measurable attributes of objects and the units, systems, and processes of measurement.

Problem Solving Standard

- Solve problems that arise in mathematics and in other contexts
- Apply and adapt a variety of appropriate strategies to solve problems

Representation Standard

- Create and use representations to organize, record, and communicate mathematical ideas.
- Select apply, and translate among mathematical representations to solve problems

California Applied Learning Standards

- Students will understand how to apply communication skills and techniques. Students will demonstrate ability to communicate orally and in writing.
- Students will understand the importance of teamwork. Students will work on teams to achieve project objectives.

Knowledge, Skills, and Attitudes

Knowledge—Your students will:

- Understand that our bodies need proteins, fats, carbohydrates, vitamins, minerals and water to survive.
- Understand that some nutrients are called essential because our body cannot make them and we must eat them in our foods.
- Understand that proteins are our building blocks used to build and repair our bodies.
- Understand that carbohydrates provide our bodies with energy to live.
- Understand that fats provide stored energy when food supplies are low.
- Understand that fats also are essential to the absorption of key vitamins.
- Understand that there are essential vitamins and minerals that we must eat to remain healthy.
- Understand that there are water-soluble vitamins that must be eaten every day.
- Understand that there are fat-soluble vitamins that can be stored and may become toxic if they are overdosed.
- Understand that water is essential to all bodily functions and, without water, a person would die.
- Understand that the Food Pyramid was created by the US Department of Agriculture to provide guidelines for all Americans above the age of two.
- Understand that essential nutrients come in a variety of foods.
- Understand that daily exercise can offset some of the calories a person eats.

Skills—Your students will learn how to:

- Read and understand food labels by using them to decide appropriate purchases.
- Plan menus that complete the MyPyramid recommendations for a healthy diet.
- Use the Nutrition Food Labels to determine calorie intake, fat intake, and percent of Daily Value.
- Interpret a percentage value.
- Maintain a daily record of menus and purchases.

Purpose

- Manage a grocery budget for three days.
- Use the USDA MyPyramid webpage: MyPyramid.gov.

Attitudes—*Your students will appreciate that:*

- Good health usually depends on good choices.
- Their knowledge of nutrition and their skills managing a food budget empower them to make good choices for a healthy life.
- They can make better food choices by choosing more nutritious and filling foods over high-calorie, high-fat foods.
- No food is forbidden, but some must be chosen as a special treat rather than a daily staple.
- To maintain a healthy lifestyle, they need good nutrition and moderate exercise.

Overview

CHOW is presented in three parts—Part 1: Appetizer; Part 2: Main Course—The Simulation; and Part 3: A La Carte.

Part 1: Appetizer—Learning about Nutrition

Use the **Pretest** to determine what your students will need to learn before the simulation and whether you will need all or only part of the Appetizer part of *CHOW*. Like the appetizer of any meal, these activities are a starting point. They present a variety of activities where students work either individually or in teams of three to become experts on nutrition and to become competent consumers.

The timeline offered is only a suggestion because some of your students will bring no previous knowledge to this unit, while others may have learned nutrition at other grade levels. Also, some of your students will need little instruction to understand what 30% of the daily nutritional value means, and others will need a full lesson. Read through the daily lesson plans and decide where your students will need more time or instruction. Consider using math time and *CHOW* materials to reinforce percent and graphing.

If your class moves quickly through the material, you may add **A La Carte Activities** to a day's lesson for some or all of your students.

In Appetizer, your students will also be introduced to Exercise Stations and the Personal Exercise Log. This component is essential to the overall goal of *CHOW*—to improve student health. The new MyPyramid not only encourages good eating habits, but also promotes exercise as a daily activity. Use the exercise stations during *CHOW* and continue throughout the year. You may reward teams that keep good records and cooperate in the Exercise Stations by giving them extra points or “exercise coupons” to boost their budgets for the simulation. You may choose one or a combination of the following exercise options:

1. Use the **Exercise Stations** outline on page 114 .
2. Use out-of-class exercise records whereby students report on an honor system or with the signature of a parent that they have completed a certain amount of exercise on a given day.
3. Work with the PE teacher or coach to create written records of student exercise activity.

Part 2: Main Course—The Simulation

The simulation allows students to use what they have learned during Part 1. Students continue to work in their teams of three. Within these teams they rotate new roles—Planner, Shopper, and Diner. Students keep daily records of meals planned, food purchased, and calories consumed. **Food Fate** and **Cash Consequences Cards** and rolling the Exercise Die affect the simulation daily. The simulation runs for three days, but you may extend it to six days. In three days, each student plays the three roles once; in six days, twice. Students earn and record points each day trying to reach a four-star rating goal. If you believe that competition will help motivate your students, announce the points earned each day to show students how close they are to achieving their goal.

An important debriefing activity ends the simulation and the **Posttest** ends the unit.

Part 3: A La Carte—Extension Activities

Take time to study the **A La Carte** activities and plan how to incorporate them into your curriculum. These extension activities are in language arts, social studies, science, math, art, and home economics. They may extend over several weeks either before, during, or after the simulation. Choose to do as many or as few of these extension activities as you like.

MyPyramid.gov—This new version of *CHOW* offers a new subpart to **A La Carte**. The MyPyramid.gov website has interactive tools that students can use to make a personal plan to follow the MyPyramid guidelines.

Use the **A La Carte Rubric** to assess student work. This rubric also uses a four-level rating. If a student completes an extra activity as you expected, award them a three-rating. However, if someone goes well beyond what you asked, award a four-rating.

Two major extension activities—a Food Fair and a Food Drive—result in a school-wide “happening.” The Food Fair or Food Drive may be used as a culminating activity to *CHOW*, or as follow-up activities throughout the year.

Unit Time Chart

Week 1**Day 1:**

- Pretest
- Introduction
- Set Up Teams
- Questionnaire
- Cooperative Group Rubric
- Exercise is Not Optional
- Exercise Stations

Day 2:

- Exercise Logs
- Building Blocks: Proteins
- Graphic Organizer: Proteins
- A La Carte Activities (optional)
- A La Carte Rubric

Day 3:

- Exercise Logs
- Quiz: Proteins
- Quick Energy: Carbohydrates
- Graphic Organizer: Carbohydrates
- A La Carte Activities (optional)

Day 4:

- Exercise Logs
- Quiz: Carbohydrates
- Stored Energy: Fats
- Graphic Organizer: Fats
- Fat Detective (optional)
- A La Carte Activities (optional)

Day 5:

- Exercise Logs
- Quiz: Fats
- Vitamins, Minerals, & Water
- Graphic Organizer: Vitamins, Minerals, & Water
- Comic Hero (optional)
- Wanted Poster (optional)
- A La Carte Activities (optional)

Week 2**Day 6:**

- Exercise Logs
- Quiz: Vitamins & Minerals
- Appetizer Test 1
- A La Carte Activities (optional)

Day 7:

- Exercise Logs
- Percent Perceiver
- A La Carte Activities (optional)

Day 8:

- Exercise Logs
- Quiz: Perceiving Percent
- Nutrition Facts Labels
- A La Carte Activities (optional)

Day 9:

- Exercise Logs
- Quiz: Nutrition Facts Label
- MyPyramid
- Translating Servings into Measurements
- A La Carte Activities (optional)

Day 10:

- Exercise Logs
- Appetizer Test 2
- Intro to Simulation
- Food Preference
- Practice *CHOW* Procedure
- A La Carte Activities (optional)

Week 3**Day 11:**

- Exercise Logs
- Team Scoring
- Start First Day *CHOW*
- A La Carte Activities (optional)

Day 12:

- Exercise Logs
- Finish First Day *CHOW*
- A La Carte Activities (optional)

Day 13:

- Exercise Logs
- Second Day *CHOW*
- A La Carte Activities (optional)

Day 14:

- Exercise Logs
- Third Day *CHOW*
- A La Carte Activities (optional)

Day 15:

- Exercise Logs
- Debriefing
- Questionnaire
- Posttest
- Awards (optional)

After CHOW

- A La Carte Activities (optional)—Food Fair or Food Drive

General Directions

1. **Look Before You Leap.** Thoroughly study this Teacher’s Guide before beginning *CHOW*. Be certain to follow directions and prepare the classroom and materials. See **Before Starting This Unit** on page 15.
2. **Time Commitment.** Running the simulation alone will take four to seven days depending on whether you run a three-day or six-day simulation. If you need to complete the whole Appetizer portion and teach basic nutrition, add five to six days. Include one to two more days for **Pretest, Posttest, and Debriefing**. The Food Fair and/or Food Drive will require additional time to organize and complete. See **Unit Time Chart** on Page 9.
3. **A La Carte Activities.** Before beginning *CHOW* instruction, read through all the extension activities and decide which your class will do. Many of these activities may be set up at centers where students or teams work independently. Others, like the Food Drive or Food Fair, require much more pre-planning and coordination. Allow your students time to explore the MyPyramid.com webpage.
4. **Teams.** Determine how you will group your students into teams. The three methods—choice, chance, and dictation—all have advantages. Realize that the students are going to be working together within these groups for an hour a day for several days. If your number of students does not divide evenly by three, set up one or two teams with only two players. These teams should combine the shopper and meal planner into one role.
5. **Classroom Setup.** Plan where and how you will set up the classroom grocery. Other teachers have made “store shelves” by making shallow pockets on large sheets of oak tag pinned securely to a bulletin board. Slip the **Food Choice Cards** into the pockets. See page 18.
6. **Star Ratings.** The scoring in *CHOW* uses the same numbering as the Restaurant Food Guides. Four-star is the highest rating a restaurant can achieve in the AAA or Zagat Guides. Before beginning the unit, create point criteria for four-star, three-star, two-star and one-star ratings for your class. This way, teams compete to reach a standard rather than compete against each other.
7. **Duplication—Part 1 Appetizer.** Duplicate the following in the quantity indicated:
 - Food Choice/Nutrition Facts Cards—*duplicate the number indicated on each page for one class set. See #9 on page 18 for more information*

Teaching tip

Compute a four-star level for Appetizer and a second four-star level for the *CHOW* simulation. In that way, students who did not quite earn four-stars in the first part can work to achieve a higher level in the Main Course simulation. You might even include a star rating for the **Posttest** to recognize student achievement.



- Cooperative Group Work Rubric—*Choose which type you will use. Make at least five class sets*
- A La Carte Activities Rubric—*class set, more as needed*
- Pretest/Posttest—*two class sets*
- CHOW Vocabulary—*as needed*
- Food, Food, Food—*class set*
- Questionnaire—*two class sets*
- Exercise Is Not Optional—*class set plus one per team*
- Exercise Stations—*class set*
- Exercise Stations Log—*class set, more as needed.*
- Personal Exercise Log—*two class sets*
- Building Blocks: Proteins Essay—*class set plus one per team*
- Graphic Organizers For Proteins—*class set or one per team*
- Quick Quiz: Proteins—*class set*
- Quick Energy: Carbohydrates Essay—*class set plus one per team*
- Graphic Organizers for Carbohydrates—*class set or one per team*
- Quick Quiz Carbohydrates—*class set*
- Stored Energy: Fats Essay—*class set plus one per team*
- Graphic Organizers for Fats—*class set or one per team*
- Fat Detective—*class set (optional)*
- Quick Quiz: Fats—*class set*
- Vitamins, Minerals, and Water Essay—*class set plus one per team*
- Graphic Organizers For Vitamins, Minerals, and Water—*class set or one per team*
- Wanted Poster—*class set (optional)*
- Comic Hero—*class set (optional)*
- Major Nutrients of Your Body—*class set*
- Quick Quiz: Vitamins And Minerals—*class set*
- Appetizer: Test 1—*class set*

Teaching tip

The copy numbers suggested are those necessary for three days of the simulation. If you want to practice more or run more days of the simulation, duplicate more copies.



- Percent Perceiver Pattern—*class set*
- Quick Quiz: Perceiving Percent—*class set*
- Nutrition Facts Labels Essay—*class set plus one per team*
- Nutrition Facts Labels Homework—*class set*
- Quick Quiz: Nutrition Facts Labels—*class set*
- MyPyramid and Servings Essay—*class set plus one per team*
- Translating Servings Into Measurements—*class set*
- Appetizer Test Two—*class set*

8. **Duplication—Part 2 Simulation.** Duplicate the following in the quantity indicated in *Italics*:

- Food Fate and Cash Consequences Cards—*one set (Cut apart and glue each type onto a different color of construction paper. Laminate, if possible for durability. Place each set of cards in separate envelopes.)*
- Price List and Food Preference—*class set*
- CHOW: A Simulation Of Nutrition And Food Budgeting—*class set*
- CHOW Procedure—*one per Team Folder, transparency, or poster (optional)*
- Menu and Budget Practice—*three per Team Folder*
- Daily Meal Evaluation Practice—*three per Team Folder*
- Menu and Budget—*three per Team Folder*
- Daily Meal Evaluation—*three per Team Folder*
- Sample Team Score Sheet—*one per Team Folder*
- Team Score Sheet—*three per Team Folder*

9. **Duplication: Part 3—A La Carte.** Duplicate the following in the quantity indicated in *Italics* if you plan to use them in their related activity:

- Rube Goldberg Invention (Home Economics A La Carte #4)—*transparency or class set*
- Outline Maps—(Social Studies A La Carte #2, 3, 4) *class set or one per group*
- Digestive System (Science A La Carte all)—*class set or one per group*

10. **Nutrition Facts Food Choice Cards.** These cards present nutritional information and are essential to the simulation and many of the activities. You need to make only one set that you can use from year to year. However, if this is the first year, dedicate a day at least before Day Six (or earlier if students understand the food groups) and ask your students to prepare the **Food Choice Cards**. See Making Food Choice Cards on page 18 for directions. Use extra pictures for other A La Carte activities (e.g., the Food, Glorious Food collage) or to decorate the classroom.
11. **Exercise Stations.** Modify the exercises if space is a factor. Create other activities that cause students to use their muscles and/or raise their heart rate. If you intend to use the Exercise Stations as written for daily activities, you will need one each of the following:
 - hacky sack
 - ping-pong paddle and ball
 - soft rubber ball
 - stairs, or a firm platform for step aerobics
 - elastic cord
 - hula hoop
 - jump rope
 - watch or clock with a sweep second hand
12. **Objective and Informal Assessments.** *CHOW* includes many opportunities to assess how well your students are absorbing content.
 - a. The **Pretest** and **Posttest** provide an objective assessment of knowledge gained by students during the lessons.
 - b. **Quick Quizzes** and **Appetizer Tests 1 and 2** provide objective assessment for content during Part 1 of this unit.
 - c. The graphic organizers and similar activities also offer opportunities for assessments.
13. **Performance Assessments.** The **Team Score Sheet** provides performance assessments of student willingness to follow directions, complete accurate math computations, and read and apply the food pyramid information. Administer the **Cooperative Group Work Rubric**, especially as students work to correct the **Quick Quizzes**. Individual students, regardless of how their teams finish in the simulation, may strive to achieve a score of “four” when you apply one of these rubrics.
14. **Rubrics.** Always post and discuss rubrics before using them. During the simulation, complete the **Cooperative Group Rubrics** for all students at least *once every three days*. Choose the type of **Cooperative Group Work Rubric** that you believe will work best with your class—Holistic or Chart form. After the first evaluation, students generally attend to their tasks better and work to improve their rubric scores by the end of the simulation.



Teaching tip

Occasionally some of these magazines may have “adult” stories, advertisements, or photos. Take a moment to peruse the magazines ahead of time to find them. Either remove the stories, ads, or photos from the magazine, or tear out the photo pages of food and discard the magazine.



Teaching tip

Do not “grade” the **Quick Quizzes**—they are designed to help students understand what they know and what they need to learn. Use the **Appetizer Tests 1 and 2** for a more formal assessment.

15. What Do Rubric Scores Mean? When completing performance assessments, focus on “student work.” This work is *not* limited to only written work. It may include demonstrated skills, oral exchanges, individual and cooperative group behavior, processes, strategies, and any other evidence that proves that the students have learned the targeted content or skill and can apply what they know.

4 – Generally this rating describes **exemplary** student work that *exceeds the standard* for the activity. The descriptor includes words such as *consistently, complete, with detail, actively, and willingly*. Students who earn a “4” demonstrate leadership and knowledge during simulation.

3 – Generally this rating describes **expected** student work that *meets the standard with quality*. The descriptors lack some of the positive adjectives of a “4,” but this student has mastered the content or skill and can demonstrate his/her understanding in an application setting.

2 – Generally this rating describes **nearly there** student work that *almost meets the standard*. Sometimes inconsistent effort or a misconception of the content will result in a “2” rating. This student needs a little re-teaching, needs to try a little harder, or needs to revise his/her work in order to meet the standards described.

1 – Generally this rating describes student work that is **incomplete**, that *has not yet met the standard in content and/or skill*. This student will require more instruction and another opportunity to demonstrate a knowledge or skill, or will require alternative instruction and assessment.

16. Weighting Rubric Scores for Awarding Points. Because earning a four-rating (exemplary) is much more difficult than earning a two-rating (nearly there), you can weight the scores for purpose of awarding points. Award the following:

4-rating = 10 points

2-rating = 4 points

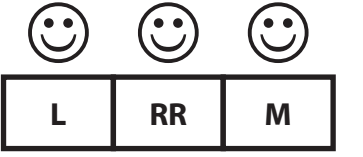
3-rating = 7 points

1-rating = 1 point

17. Awards. There are two awards certificates on pages 170 and 171 that you may award at the end of the unit. You must decide if the awards are necessary and/or helpful. A little celebration to congratulate the students can be a wonderful idea. However, try to serve healthy snacks and not those from the discretionary calories list.

Before Starting This Unit

1. Read through the entire **Teacher's Guide** to familiarize yourself with the content and materials. Peruse the (optional) **A La Carte Activities** in art, home economics, language arts, math, science, and social studies to use throughout the unit. The A La Carte Science activities represent an entire five-day science unit about digestion.
2. Organize the **teams** and prepare the **Team Folders**. Try to create teams that are mixed by gender, academic ability, and work ethic.
3. Decide how you will **arrange your classroom** to accommodate teams of three and choose the place where folders will be stored.


4. Decide where and when you will be using the **Exercise Stations** to complete the Exercise component of *CHOW*. If you decide not to use the Exercise Stations, you need to establish the criteria for meeting the exercise requirements in this unit. Work with the PE/health teacher.
5. Administer the **Pretest** to all students individually before starting this unit. Remind students that they should never guess on a pretest because you are trying to know what they know, not how lucky a guesser they are. Review student answers because having a general idea of student pre-knowledge will help you pace your unit.
6. **Make the Food Choice Cards**. Ask students to bring in **magazines** that have pictures of food—the more, the better. Use these pictures to make a class set of **Food Choice/Nutrition Facts Cards** before Day Seven in the Appetizer Phase and for the *CHOW* simulation. See page 18 of this guide. (If you decide to do this as part of a whole class activity, it will take at least one full period.)
7. **Duplicate** the handouts for at least the first two days of **Appetizer**. Those marked *one per Team Folder* should be put in the Team Folders ahead of time. Those marked *class set* will be distributed during the instructional period. Some teachers like to duplicate all of the Appetizer and store the handouts in order in a hanging file box. There are two pages of **CHOW Vocabulary**. See page 106 for **CHOW Vocabulary**. You may choose to use the lists of words as spelling words, vocabulary words, or topics for research. Duplicate the list as needed.

Before Starting the Simulation

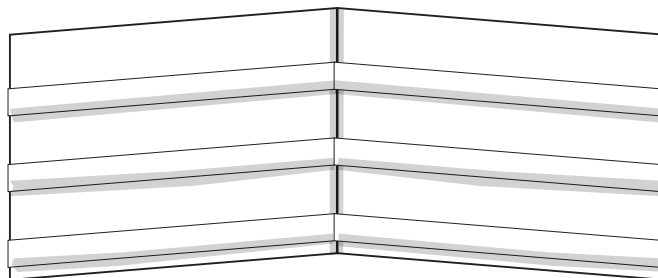
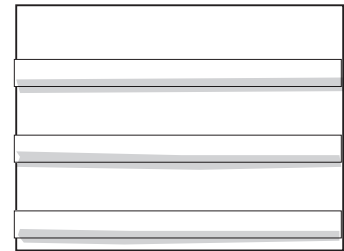
1. Duplicate the **Food Fate** and **Cash Consequence Cards** and laminate them for durability.
2. **Set up** classroom grocery making three to four shopping shelves.

Materials

- (24" x 18") oak tag or poster board (12 pieces)
- clear packing tape (1 roll), scissors

Procedure for making shelves

- a. Cut 2 pieces of poster board into strips (24" x 2")—No wider or the pockets will be too deep.
- b. Tape the *bottom* edge of 3 strips across the 24" x 18" piece of poster board. Space them equally. These will form long pockets.
- c. Tape together 2 large pieces of poster board along a short side. Reinforce the clear tape to make it a hinge joint.



3. Make the **Food Choice Cards**.
See page 18 for directions.

Making Food Choice Cards

Materials

- Catalogs, magazines that feature food—*as many as possible*
- Glue or glue sticks—*enough for students*
- Envelopes (5" x 7" or 9" x 12")—*seven for food groups, combination foods, and discretionary calories*
- Index Cards (3" x 5" or 4" x 6")—*at least 250; 120 more for optional activities*
- Scissors—*class set*

If you choose to make collages with the extra food pictures:

- Construction paper (light color, 9" x 12")
- Crayons or markers—*enough for students*

Procedure

1. Label seven large envelopes: *Bread/Cereal, Fruit, Vegetable, Milk, Meat, Combination, and Discretionary Calories* (discretionary calories refer to foods that have high-sugar or high-fat content, such as butter, mayonnaise, jam, or soda).
2. Collect seed catalogs (*Burpee, Guerney, Harris, etc*) and food magazines (*Gourmet, Eating Well, Weight Watchers*), or magazines that feature food (*Good Housekeeping, Woman's Day, Family Circle.*) As a whole class or at a center, ask the students to cut out pictures of different kinds of foods and place them into the correct envelopes.
3. Duplicate the Nutrition Facts labels in the number indicated at the top of each page. Paste each label onto an index card.
4. As a class or at a center, ask students to find pictures in the envelopes to match the foods listed on the Nutrition Facts labels. Paste the food pictures on the other side of the index cards. If a picture of a food cannot be found, ask your students to draw the food or use an actual food label from a can or box.
5. When you have made a card for every Nutrition Facts label, you will have a class set ready for the simulation. Use extra pictures for other simulation activities (e.g., **A La Carte Art #1** and **#2**) or to decorate the room.
6. **Other Foods Not On the Price List**
 - There are blank Nutrition Facts labels that your students can use for favorite foods found in your part of the country. Because all

Teaching tip

In *CHOW*, we are not tracking the Oils segment of the pyramid.



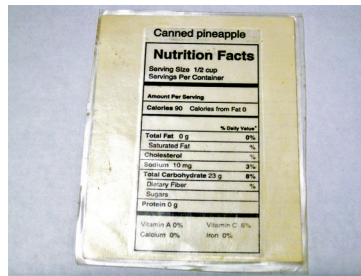
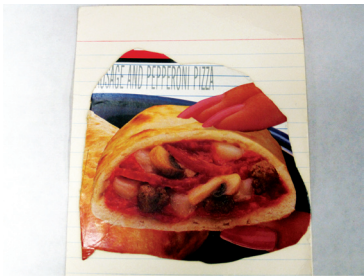
Teaching tip

You need 2–3 copies of some **Food Choice** pages.



packaged food products use nutrition labels, you may photocopy actual labels and laminate the pictures from the boxes.

- If you have vegetarians in your class, ask them to bring in labels from foods they often eat at home and make cards for them to use in the simulation.
 - If you are not certain about the Nutrition Facts of a new food, just do a Google search on the Internet. Enter "New Food + Nutrition Facts." You'll usually find it.
7. Because the cards will be used repeatedly throughout the simulation, it is important to glue the pictures securely. You may decide to laminate the cards for durability.



Daily Directions

Day 1

Materials

- Food, Food, Food—*class set*
 - Questionnaire—*class set*
 - Cooperative Group Work Rubric—*transparency, class set, or poster*
 - Exercise Is Not Optional—*class set*
 - Exercise Stations—*one per team*
 - Exercise Stations Record—*class set*
- and/or
- Personal Exercise Logs—*class set*

Procedure

1. Distribute the **Food, Food, Food Essay** and discuss what the students will be doing over the next 15 days. Remind students that in this unit, they are trying to achieve enough points to earn a four-star rating. Because they are competing to a standard, more than one team can be a “winner.”
2. Set up the teams and rearrange your room so that the trios can work together comfortably. Give students four to five minutes to come up with team names. Encourage students to choose teams names that are food or nutrition related. (For example, Veggie-Magicians, Pasta Pirates, Knights of Nutrition, etc.) Discourage “junk food” names.
3. Go over the team roles (the Leader, the Reader/Recorder, and the Manager) for this first part of *CHOW*—Appetizer. Assign each team member a role for today and tell them that they will rotate these roles every day. The rotation will be the same each day. Leader becomes the Reader/Recorder becomes the Manager becomes the Leader again: L → R/R → M → L → R/R → M.
4. Direct students to the **Cooperative Group Work Rubric**. Explain that they will be earning (and losing) points depending on how well they work together.
5. Ask all the Team Managers to come to you for three copies of the Questionnaire for their team. Have students separate their desks to fill in these questionnaires independently. When they have finished, have the Leaders collect them and bring them to you.

Teaching tip

Only the best restaurants earn the four-star rating.



Teaching tip

During the *CHOW* simulation, the three roles (Planner, Shopper, and Diner) are different and have different responsibilities.



Teaching tip

Put aside to use on the last day of the unit.

