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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Human Services |
| **Course Name** | Lifetime Nutrition and Wellness |
| **Lesson/Unit Title** | Inside the Package: Understanding the Nutrition Facts Label |
| **TEKS Student Expectations** | **130.274. (c) Knowledge and Skills**  (2) The student understands the role of nutrients in the body. The student is expected to:  (A) classify nutrients and their functions and food sources and compare the nutritive value of various foods  (4) The student demonstrates knowledge of nutritionally balanced diets. The student is expected to:  (I) examine the nutritional value of fast foods and convenience foods  (J) read and interpret food labels  (K) examine and explain nutritional serving sizes |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | **Students will:**   * Identify information on food labels * Interpret nutrition information found on food labels * Investigate foods high in nutrients * Research nutrition information for a favorite fast food item * Compare fast food items to healthier food versions |
| **Rationale** | Understanding the Nutrition Facts Label has become an important link in maintaining our healthy lifestyles. The Food and Drug Administration (FDA) regulates the information on food labels to make sure consumers have complete, useful, and accurate information about the foods they buy and eat. |
| **Duration of Lesson** | Seven 45-minute class periods |
| **Word Wall/Key Vocabulary**  *(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* | **Calcium:** A mineral needed by the body for, among other things, to maintain bone health  **Calories:** The amount of energy needed to raise the temperature of 1 kilogram of water (a little more than 4 cups) by 1 degree Celsius  **Dietary Fiber:** Plant material that cannot be digested  **Fast food:** Hamburgers, pizza, or fried chicken, that is prepared in quantity by a standardized method and can be dispensed quickly at inexpensive restaurants for eating there or elsewhere  **Nutrition Facts Label:** The part of the food label that gives the serving size, servings per container, calories per serving and information on some nutrients  **Percent Daily Values:** The percentage of the daily values found in a specific serving of a food and based on the Daily Value recommendations for key nutrients for a 2000 calorie diet  **Saturated Fat:** A type of fat that may increase your low-density lipoprotein (LDL) bad cholesterol levels. Elevated LDL levels may increase your risk of heart disease  **Serving Size:** A standardized amount of a food, such as a cup or an ounce, used in comparing similar foods  **Servings per container:** The total number of servings in a food package based on the serving size  **Sodium:** A component of salt (sodium chloride); excess sodium intake can increase your risk for high blood pressure. A potassium rich diet can counteract some of sodium’s effects on blood pressure |
| **Materials/Specialized Equipment Needed** | **Equipment:**   * Computer with Internet access for multimedia presentations * Light projector (Elmo)   **Materials:**   * Empty food packages (see Anticipatory Set) * Copies for handouts   **PowerPoint:**   * Inside the Package: Understanding the Nutrition Facts Label * Presentation Notes – Inside the Package: Understanding the Nutrition Facts Label   **Graphic Organizer:**   * Nutrition Facts to Eat Healthier * Nutrition Facts to Eat Healthier (Key)   **Handouts:**   * Eat Right: Shop Smart – Get the Facts on Food Labels * Certificate of Excellence * Rubric for Fast Food Nutrition Information GlogsterEDU Display * Rubric for Fast Food Nutrition Information Visual Display * Inside the Package |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | **Before class begins:**  Gather empty containers of various foods that have the Nutrition Facts Label and display them in front of the room. Items may include:   * Candy wrappers * Cereal boxes * Chip bags * Energy drinks * Fast food packages * Soda can/bottles   When class begins, choose any package, and ask the following questions:   1. How many servings do you think are in the package? 2. How many calories per serving? 3. Could you eat the whole package? 4. Is there any nutritional value in this food? 5. Why do we eat/drink this type of food? 6. Have you read the Nutrition Facts Label on the foods you eat?   Display the package on the light projector for your students to view. |
| **Direct Instruction \*** | Introduce lesson objectives, terms, and definitions.  Distribute graphic organizer Nutrition Facts to Eat Healthier so that students may take notes during the slide presentation and add appropriate food examples for each section.  Introduce PowerPoint Inside the Package: Understanding the Nutrition Facts Label. Follow the script at the bottom of the presentation notes.  View Food and Drug Administration video:   * The Food Label and You FDA presents an entertaining and educational tool to help consumers understand and use the Nutrition Facts Label to make informed food choices. <http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm275409.htm>   This video can be viewed all at once or shown by segments (recommended).  Distribute handout Eat Right: Shop Smart – Get the Facts on Food Labels from the Food, Nutrition and Health Tips from the Academy of Nutrition and Dietetics. Allow for discussion. Students will be able to share this information with their parents.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * checking for understanding * peer tutor |
| **Guided Practice \*** | Distribute handout Inside the Package.  Assign the students to find a nutrition facts label from any food/snack/beverage they have consumed. Students should transfer the information to the handout in the correct sections and attach the empty package for verification.  Display a sample on the light projector so that students can follow along.  Discuss questions on handout. Explain that sometimes we eat without realizing how much we have eaten. Some people tend to eat more when they are alone, stressed, in a hurry, or very hungry.  *Scavenger Hunt Ideas*  If ChooseMyPlate is studied in sections (one section at a time), then assign the Inside the Package handout for each section with the following percentages:   1. Any label 2. Fruit Group – Vitamin C 15%+ 3. Vegetable Group – Vitamin A 10%+ 4. Grains Group – Dietary Fiber 4%+ 5. Dairy Group – Calcium 20%+ 6. Protein Foods Group – Iron 2%+ 7. Sodium 10%+   Students will have to look for foods they have eaten that contain the amounts listed. The percentages are low making it easy for the students to accomplish the assignment. They may even use packages available from their school breakfast or lunch. It will be interesting to see what they eat. Challenge the students to look for higher percentages in each section for extra credit.  If time allows, students may visit FDA’s interactive website for more information on the Nutrition Facts Label.  Note to teacher: The Nutrition Facts Label was made according to FDA guidelines with the following link:   * Nutrition Labeling; Questions L1 through L153 October 2009 Guidance for Industry: A Food Labeling Guide<http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm064904.htm>   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * repeated instructions * shortened, simplified instructions |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Students will work individually and design a poster comparing and evaluating the nutritional value of two fast food items/meals from their favorite establishments or convenience stores. Examples may include hamburger, fries, soft drink (icee), chicken nuggets, and other choices.  Students will research the nutritional facts for the particular items using the Internet or available brochures from local fast food establishments and evaluate and determine the healthier choice.  Empty packages or illustrations of food items may be attached to the poster. Student findings will be presented to the class. Students may also be encouraged to provide healthier alternatives to the fast food items/meals.  If you have a computer lab available, students can create a *Glogster* (virtual poster) using [http://www.edu.glogster.com.](http://www.edu.glogster.com./) If an appropriate video is available, they should include it.  Distribute Rubric for Fast Food Nutrition Information Visual Display for a poster board display or the Rubric for Fast Food Nutrition Information GlogsterEDU Display for the virtual poster. Review the tasks so that students will understand the assignment.  Note to Teacher: Family, Career, and Community Leaders of America (FCCLA) offers an online Students Taking Action with Recognition (STAR) competition event using the virtual poster – GlogsterEDU. This lesson will allow students to practice their skills before the competition. For more details, see the Career and Technical Student Organization (CTSO) connection in this lesson.  Allow the students to vote for the best poster that meets all the criteria from the rubrics and award the Certificate of Excellence to the *Best Nutrition Facts Poster/Glogster*. This certificate can be added to a portfolio. Other certificate templates can be found on Microsoft Word and designed with your school logo and mascot if desired.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * extended time for assignments * check for understanding |
| **Lesson Closure** | Review lesson objectives, terms, and definitions.  Using the light projector if available, view some of the food packages students have turned in and discuss the serving size, calories, fat, and more.  To find reasons for mindless eating, ask students the following questions:   * Did they eat the entire product? * What were they doing when they ate the product? * Who were they with? * Were they really hungry? |
| **Summative/End of Lesson Assessment \*** | Students will present their fast food nutrition information on a poster (virtual or poster board). All presentations will be assessed with a rubric.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*   * encourage participation * assist in presentation |
| **References/Resources/**  **Teacher Preparation** | **Images:**   * Microsoft Office Clip Art: Used with permission from Microsoft.   **Textbook:**   * Kowtaluk, H. (2010). *Food for today.* Columbus, OH: Glencoe/McGraw-Hill.   **Websites:**   * About the FDA Significant Dates in U.S. Food and Drug Law History<http://www.fda.gov/aboutfda/whatwedo/history/milestones/ucm128305.htm> * Nutrition Labeling; Questions L1 through L153 October 2009 Guidance for Industry: A Food Labeling Guide<http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm064904.htm> |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** | * Word wall * Draw visual representations of terms on word wall * Add terms and definitions to personal dictionary * Utilize Four Corners Vocabulary/ Word Wall Activity |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** | Current Events Assign students to read information to keep up with the latest news on nutrition. Information can be found in newspaper articles, magazines, journals, and online print. Suggestions:  Encourage students to read the following Blogs from the Mayo Clinic, USDA, and the U.S. Food Policy.   * USDA Blog MyPlate Celebrates Its First Anniversary; Prompting People to Eat Healthy<http://blogs.usda.gov/2012/05/30/myplate-celebrates-its-first-anniversary-prompting-people-to-eat-healthy/> * U.S. Food Policy – a public interest perspective Healthy food not more expensive<http://usfoodpolicy.blogspot.com/2012/05/healthy-food-not-more-expensive.html> * Have students form their own questions about the text prior to reading or have them write down any questions that come to mind as they are reading. |
| **Quotes** | In fresh fruit and vegetables and nuts are all the vitamins and minerals and high-grade proteins the human body needs to bring it to a state of physical perfection and to MAINTAIN it in that state indefinitely.  **-Dr. Herbert Shelton, M.D. Superior Nutrition**  Most human illnesses and diseases are due to a deficiency of vital nutrients. When you supply your body with the proper nutrients, in a form that your body can use, it knows how to repair itself. **-American Living Foods**  The first wealth is health. **-Emerson**  The human body heals itself and nutrition provides the resources to accomplish the task.  **-Roger Williams Ph.D. (1971)**  I do practice what I preach when it comes to nutrition. **-Mehmet Oz**  Nutrition is also a valuable component that can help athletes both protect themselves and improve performance. **-Bill Toomey**  I believe that parents need to make nutrition education a priority in their home environment. It’s crucial for good health and longevity to instill in your children sound eating habits from an early age. **-Cat Cora** |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** | **Journal Entries:**   * Reading the Nutrition Facts Label is important because … * A fact from the Nutrition Facts Label from my favorite food is … * My favorite drink has … calories and I am going to … * It is important to read the Nutrition Facts Label because … * I think more information such as … should be included in the Nutrition Facts Label because … * Compare a fast food meal and a healthy meal with the Nutrition Facts Label. State the results. * I was surprised to learn that the Nutrition Facts Label from my favorite food was …   **Writing Strategy:**   * RAFT writing strategy   + Role – student   + Audience – school peers   + Format – PSA   + Topic – important information about the Nutrition Facts Label |
| **Communication**  **90 Second Speech Topics** | * My favorite fast food meal is … * The reason I eat fast food is … * I eat fast food … day(s) of the week because … |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) | Students can design a brochure stating the importance of reading the Nutrition Facts Label. They can request permission to place the brochure in the nurse’s office.  **Math Assessment Question**  Question 5. Barbara eats an entire bag of chips. Afterwards, she wants to know how many calories she consumed. On the label, the serving size of 12 chips has 130 calories. There are 12 servings per bag. How many calories did she consume?   * a. 144 calories * b. 976 calories * c. 1,560 calories * d. 2,014 calories   Answer: c  Linked video file: http://www.showme.com/sma/embed/?s=bVwvNk8&w=580&h=434  Question 9. If a study shows that an average fast food meal takes 2 hours off your life expectancy, and you eat fast food once a day for four weeks, how many days can you expect to lose from your life expectancy? a. 2 1/3 b. 28 c. 38 1/3 d. 56  Answer: a  Linked video file: http://www.showme.com/sma/embed/?s=Y3jMOrA |
| **Family/Community Connection** | * Invite a registered dietitian to speak to the class about reading the nutrition facts label and the dangers of too much fast food. * Encourage your family to read the nutrition facts from the foods they eat. |
| **CTSO connection(s)** | **Family, Career, and Community Leaders of America (FCCLA)**  [http://www.texasfccla.org](http://www.texasfccla.org/)  STAR Events:   * Sports Nutrition   An individual or team event, recognizes participants who use Family and Consumer Sciences skills to plan and develop an individualized nutritional plan to meet the needs of a competitive student athletic in a specific sport. * Nutrition and Wellness  An individual event, recognizes participants who track food intake and physical activity for themselves, their family, or a community group and determine goals and strategies for improving their overall health.   Online STAR Events:   * No Kid Hungry National Outreach Project  A team event, recognizes chapters that participate in the “No Kid Hungry” Share our Strength National Outreach Project. Participants will use Family and Consumer Sciences content and skills to address ending childhood hunger through service learning, education/awareness, and fundraising. * Virtual Poster An individual event, recognizes participants who demonstrate their knowledge, skills, and ability to publish a virtual, interactive digital poster using Glogster EDU (edu.glogster.com). The virtual poster (Glogster) will address an issue related to one of the three Student Body units: Eat Right, Be Fit, and Make Healthy Choices. |
| **Service Learning Projects** | Successful service learning project ideas originate from student concerns and needs. Allow students to brainstorm about service projects pertaining to the lesson. For additional information on service learning see [http://www.servicelearning.org](http://www.servicelearning.org/)   * Example: Students can make arrangements to teach the important facts from the nutrition label to an after-school program. They can display their Glogster Poster or poster boards about the nutrition information gathered from fast food establishments. |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)