Health Science Food Truck Challenge

Teacher Information

Note: Student instructions are in Word to allow you to modify the instructions before sharing as needed.

Student Challenge: Create a virtual food truck that will serve people with specific health issues who require a therapeutic diet.

Intended Learning Outcomes: (aligned to the National Healthcare Skill Standards)

1.2.1 Describe etiology, pathology, diagnosis, treatment, and prevention of common diseases and disorders. (Therapeutic diets)

1.3.1 Demonstrate competency using basic math skills and mathematical conversions as they relate to healthcare. (Mathematic operations needed to produce the values on the nutrition facts label.)

2.1.1 Model verbal and nonverbal therapeutic communication. (oral presentation)

9.1.1 Promote behaviors of health and wellness. (nutrition)

Project Elements:

1. **Step 1: Therapeutic diet**
    a. In this project, students will learn about and apply a specific therapeutic diet. You can assign or let them choose. A sample list of options are provided.
        - If you want your students to use a specific resource, you may want to align the diet choices to that resource.
        - GUEST SPEAKER OPTION: This would be a good time, live or virtually, to bring in a hospital nutritionist to talk about therapeutic diets.

    b. *Options include but are not limited to:*
        - Low sodium diet
        - Low calorie (weight loss) diet
        - High fiber diet
        - Bland diet
        - Food allergen (no dairy, eggs, nuts)
        - Diabetic diet
        - Gluten free diet
        - Renal diet
        - Low fat/low cholesterol
        - Lactose free diet

2. **Step 2: Theme**
    a. Choosing a theme creates an element of fun for the project. You may need to give some examples to help your students understand how to apply the theme in the development of their food truck. Themes can be a movie, TV show, musical group, travel destination, college, pastime, hobby, etc. If you like, you can narrow the theme category to just one.

    b. For example: A student who likes the NY Yankees designed all three foods with pinstripes and named them:
        - Meat Balls and Strikes
        - Home Run Fries
        - Batter UPsidedown Cake

c. All aspects of the project must fit the theme – from the truck design and food offerings to the names of the dishes.

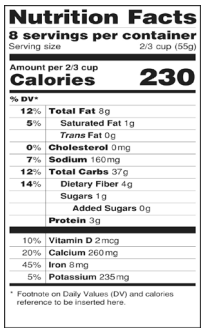
3. Step 3: Menu Plan

a. Students will design and (virtually) prepare three dishes – a signature dish, a side dish, and a dessert.

b. All three dishes must relate to the theme and follow the guidelines for the assigned therapeutic diet.

c. OPTIONAL: You may want to have students create a diet sheet – a one-page description of the specific diet that explains the reason for the diet and the foods allowed and not allowed. If you include an element of judging, this sheet would be a helpful resource for the judges.

4. Step 4: Nutrition Labels



a. Students will create a nutrition facts label for each of the items on their food truck following the FDA guidelines.

b. This is an applied math element – and for some students, the most challenging element. They must determine the exact amount of each ingredient in each dish and determine the nutritional value for each element.

5. Step 5: Truck Design

a. The truck should illustrate the theme and include the names of products, the specific type of diet supported by the dishes, and a short description of the population (health condition) the truck is designed to serve.

b. Food truck templates can be found online by searching food truck template. Give students the option of designing the truck by hand or using their computer. Allow students to create a poster-size truck design if they wish.

c. OPTIONAL: Find a place to display winning food truck designs, in your classroom or somewhere else in your school.

6. Step 6: Oral Presentation

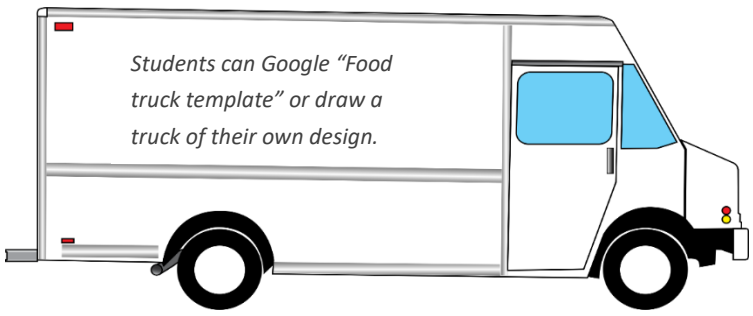
a. Students should be prepared to explain their dishes, how they support the therapeutic diet, and at least one disease or disorder indicated for that type of diet.

b. OPTIONAL: Bring in judges. By making this a judged activity, you can involve colleagues or administrators. For example – a judging panel could include your principal, the school nurse, and a culinary arts teacher. Two reasons – 1) It is always a good idea for others, like your administration, to know about the great learning opportunities you offer in your classroom, and 2) It's fun for colleagues to judge creative projects.

NUTRITION LABELS SUMMARY

Theme						
Diet						
Dishes (Names)	Signature:		Side:		Dessert:	
Ingredients (per serving)	Nutrient/g/mg	%DV	Nutrient/g/mg	%DV	Nutrient/g/mg	%DV
	Total fat ____		Total fat ____		Total fat ____	
	Saturated fat ___		Saturated fat ___		Saturated fat ___	
	Trans fat ___		*Trans* fat ___		*Trans* fat ___	
	Cholesterol ___		Cholesterol ___		Cholesterol ___	
	Sodium ____		Sodium ____		Sodium ____	
	Total Carbs ___		Total Carbs ___		Total Carbs ___	
	Dietary fiber ___		Dietary fiber ___		Dietary fiber ___	
	Sugars ___		Sugars ___		Sugars ___	
	Added sugars __		Added sugars __		Added sugars __	
	Protein ___		Protein ___		Protein ___	
	Vitamin D ___		Vitamin D ___		Vitamin D ___	
	Calcium ___		Calcium ___		Calcium ___	
	Iron ___		Iron ___		Iron ___	
	Potassium ___		Potassium ___		Potassium ___	
	Calories		Calories		Calories	

On a separate worksheet, list all the ingredients for each dish and the amount per serving. Then figure out the total nutritional values for each individual serving. Any values that are one or less can be omitted.



Students can Google "Food truck template" or draw a truck of their own design.

Helpful tips: *Make this a weeklong project with a different step due each day.*

Sharing of projects (online or in person) allows peer learning. (Your students will teach each other.)

Grading Criteria

	Criteria	Questions	Points 10 = Excellent 7 = Very Good 4 = Fair 1 = Poor
Concept	• Theme well developed • Creativity • Cohesiveness	Is the theme unique and well developed?	
Menu	• Fits the theme • Creative • Followed instructions • Ingredient list is logical	How well do the dishes fit the theme?	
Diet Sheet (Optional)	• Describes the important elements of a specific therapeutic diet	Does the diet sheet include the principles and examples of the specific diet?	
Truck Design	• Creativity • Neat • Eye-catching • Design Quality	Is the design well executed? Did it get your attention?	
Oral Presentation	• Style • Substance	Did the presentation help you understand the connection between the dishes offered and the prescribed diet?	
Deadlines	• Follows directions • Turns in project by the assigned deadline		
		TOTAL POINTS	