Kürzi

An Interactive Media Device and Curriculum Encouraging Healthy Decision Making in Youth

Partners

COSI
Center of Science and Industry

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

education projects.org

TINYCIRCUITS™

kürzi

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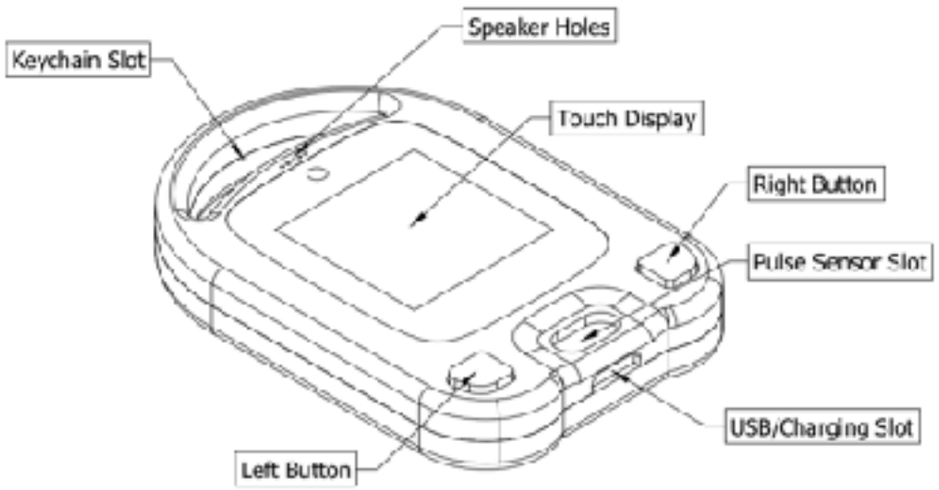
About Kürzi

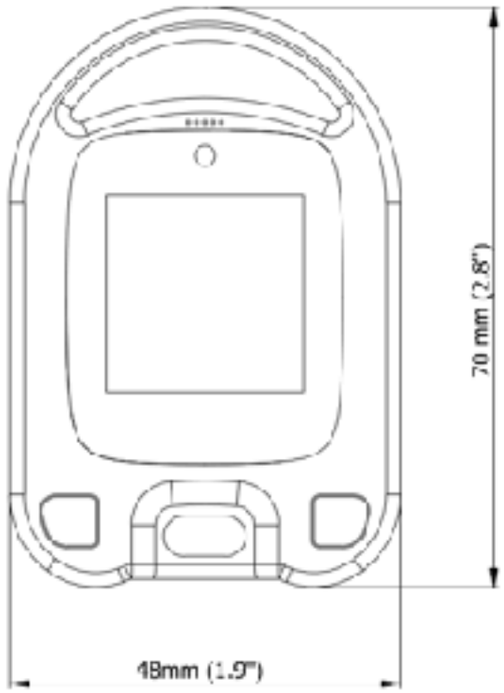
Introduction

Kürzi is a dust ball creature that appeared in a home that your students were cleaning up - a Kürzi bonds quickly with who discovers them! It's your students' job to help them make healthy decisions like eating healthy meals, exercising often, de-stressing, and going to sleep on time. **Kürzi's health is fading fast** - so the students have to act efficiently to avoid costly doctor appointments!

About

Kürzi fits in the palm of your hand. Students will be paired with a Kürzi, and Kürzi will help track your health data, including pulse/BPM, step counter, and calories. Kürzi can be a friend and help students making healthy.





About Kürzi

Turning Kürzi On

To turn Kürzi on, locate the tiny black switch at the lower left corner. For the power switch, left is OFF, right is ON. Switch the power switch to the right to turn it on. The touch screen display will light up.

Charging Kürzi

If the screen is not lighting up, you may need to charge Kürzi. You can charge Kürzi through the USB charging slot at the bottom center of the device. To reach full charge, charge Kürzi for 1.5 hours.

Restarting Kürzi

In the event that Kürzi is frozen, you may need to restart the device. You can tell that Kürzi is frozen if everything on the screen is still and nothing is being animated.

To restart Kürzi, switch the power switch OFF (left) then ON (right). You will be taken to the startup screen where you can choose New Game or Load Save.

Time in Kürzi

Kürzi tracks both real world time and has its own separate game time. One minute in the real world = One second in Kürzi time.

We chose to have two separate times because we see students using Kürzi in class for only a brief amount of time, therefore, having real world time would not translate well to Kürzi.

Kürzi time does not impact the collected student health data. Data will still be collected in real world time.

About Kürzi

How to Interact with Kürzi

Kürzi has four different user input methods, or four ways to interact with the device: **1) touchscreen, 2) left button, 3) right button, and 4) pulse sensor.**

Touchscreen

There are a few ways you can interact with the touch screen: **tap** and **drag**.

Tap once on special objects to see interactive messages or play mini games. **Double tapping** on the left or right edge of the screen is used for navigating Kürzi to other rooms. Alternatively, you can also **press and hold** the left or right edge of the screen to navigate Kürzi to other rooms. Kürzi can also be **dragged** to desired locations on the screen.

Left Button

Press the left button to access the left button menu with teacher settings. You'll see three things: **a pulse reader (oximeter**), **a step counter**, and **statistics.**

Right Button

The right button accesses Kürzi's student's health stats, coins, volume and brightness settings, Kürzi appearance customization settings, and save button. The four different health stats are recorded: **energy**, **nutrition**, **mood**, and **water**.

Pulse Sensor

The pulse sensor is located at the bottom center of the Kürzi device.There are two ways to activate the pulse sensor:

1. **Accessing the pulse oximeter in the left button menu** (left button->pulse oximeter). This will measure the student's pulse immediately. The resulting BPM will not be recorded in the teacher statistics screen.
2. **Interacting with the exercise equipment special object in the Outside room in Kürzi's environment**.

When the pulse sensor is ready, a red light will light up. Place the thumb gently and steadily on top of the sensor, covering both the sensor and red light. After a few seconds of even pressure, the next screen will appear, indicating that the pulse sensor has finished measuring the student's pulse. If the pulse sensor is not measuring the BPM, lift the thumb, and try again. If it's still not measuring after multiple tries, restart the device, access the pulse sensor, and try again.

About Kürzi

Startup Screen

When students first starts up the device, the screen will display **Clear the Dust,** prompting the student to “clear the dust” by shaking the device. Shake the device vigorously up and down for about two seconds until another screen appears. The following screen will tell the student that the room is “better” but to continue shaking the device to remove the dust from the couch. Shake the device vigorously up and down again for about two seconds.

Already Paired with a Kürzi

If you have already been using this device and are already keeping track of your health data, press **Load Save**. You will be directed to Kürzi’s environment where they can continue their gameplay.

Kürzi Appears

Once the dust is cleared, you will see Kürzi (the dustball) for the first time. Tap the screen/press the right button to learn more about Kürzi. Kürzi will then enter the doctor’s office.

Visiting the Doctor

In the doctor’s office, a doctor will guide you through Kürzi’s different game stats and how to take care of Kürzi’s stats. Follow the instructions on the screen. Tap on the screen or press the right button to go to the next instructions.

After tapping on the screen, the first thing to set up is the student’s BPM. Once the pulse sensor light lights up red, place your thumb, covering the pulse sensor and red light, gently and steadily on the device until the next screen appears (around 45 seconds). Release the thumb once the next screen appears. The dialogue will relay the BPM that was just measured and record that BPM in its stats. The following dialogue will give more details on how to replenish and maintain Kürzi’s stats.

Continue reading through the dialogue and tapping the screen/pressing the right button to go to the next dialogue to see how each stat works. Once the dialogue is finished, you will be redirected to Kürzi’s environment.

About Kürzi

The Rooms:

Kürzi has four rooms to Kürzi's house: the 1) **outside**, 2) **living room**, 3) **kitchen**, and 4) **bedroom**.

Students will focus on exercise activities when they are outside, consider their mood when you are in the living room, think about their eating decisions when in the kitchen, and finally consider their energy level when you are in the bedroom. **(Activities done within the room plays will involve Kürzi and the paired student.)**

Mini Games

Fridger:

To play the **Fridger** mini game, students will see food falling down from the top of the screen and must click on the right decision (unhealthy left, or healthy right) before the food leaves the screen. If the student chooses the incorrect answer three times, the game will end. Each time you play Fridger, the student will earn coins for every correct answer.

Once the student wins or loses the game, a screen showing their game results will pop up. After the student finishes reading his/her performance, the student will be redirected to the PC Options Menu.

Burns More:

To play the Burns More mini game, students are given two activity options on the left and right side of the screen. Students choose which activity burns more calories. If they choose the incorrect answer three times, the game will end. After showing the game results, the screen will redirect to the PC Options Menu. Playing this game will earn x coins.

Stressy Guess:

To play the **Stressy Guess** mini game, students choose which option you think relieves more stress for Kürzi. Make a guess before time runs out to earn points and coins!

After students pick their choice, the game will reveal which option was considered relaxing or stressful to Kürzi.

Pre-check & Post-check

Questionnaire

Pre-check & Post-check

Student Evaluation

As part of your participation in the Kürzi project, we need your help giving two questionnaires to students whose parents consent to the project: a pre-curriculum questionnaire and a post-curriculum questionnaire. At some point before the first lesson and before any students get a Kürzi electronic game, we need you to give a pre-curriculum questionnaire, in-class. We also need you to give the same students a post-curriculum questionnaire at some point, and ideally no more than a week, after the last lesson. The questionnaires will help the evaluation team assess any change in the students associated with the curriculum and the Kürzi game. These questionnaires are anonymous, and voluntary for the students. Even if their parents have already consented, students have the option to not take either questionnaire. To get the best accounting of outcomes, the Kürzi team would ideally like to give every consented student in your class an opportunity to take both questionnaires. We have provided step-by step instructions for facilitating the pre and post-curriculum questionnaires. Please refer to the Kürzi: Student pre and post-curriculum questionnaire instructions document for more detailed information.

Teacher Evaluation

We also would like to get feedback from you about your experience as a teacher in the Kürzi project. At some point after you finish the curriculum, you will be contacted by Dr. Gary Timko to schedule both a short questionnaire and 30-minute interview.

Section 01

Healthy Decision Making

01 Healthy Decision Making

Learning Outcomes

State the activity's goals in these four ways, with just ONE item each:

- **Project skill.** Awareness of the number of decisions students make everyday.
- **Life skill**. Making decisions.
- **Educational standards**. Functional knowledge and skills:
  - S5.4.8. Explain how family, culture, media, peers, and personal beliefs affect a health-related decision.
  - S5.7.8. Choose a healthy alternative when making a health-related decision.
  - S5.8.8. Analyze the effectiveness of a final outcome of a health-related decision.
- **Success indicator.** Students create a decision tree and list the factors that impact the decision.

Introduction

We make decisions nearly every minute of every day, such as, what to wear, what to eat, what route to take to get to school, where to sit in class, who to talk to. How might we help students make healthy decisions? By showing them a technique for increasing their skills in evaluating the decisions they make on a daily basis and applying it to their everyday decision-making.

Materials. computer; 25 copies of decision tree example and template (student log book)

Time Required. 30-minutes

Demonstration (if necessary). Review the decision tree included in the activity with students.

Classroom Activities

Activity 1:

1. Have your students generate a list of things they decide on every day. Copy and paste the words into a word cloud generator. (i.e. https://www.mentimeter.com/features/word-cloud; https://www.freewordcloudgenerator.com/) Both create word clouds for free. See sample below.

2. Review the decision tree included (in the student logbook.)
3. Have students consider decisions they have made and the factors that influenced them.
4. Have students complete a decision tree for an upcoming decision and evaluate the possible health consequences.

Activity 2:

1. How do you make decisions? What are the factors that lead to your decisions and how often do you evaluate the outcomes or consequences? Some of the consequences may increase your health while some of the consequences may not.
2. Businesses use decision tree software to help them analyze choices and make decisions. We can also use decision trees to help us make decisions.
3. Discuss the candy bar decision tree in the logbook with students. Ask students to assess the decision at the various levels on the tree. Each “maybe” leads to the next “yes”, “maybe”, or “no” options.

Activity 3:

1. Discuss the differences between the types of decisions we might make (habitual or routine, no choice, etc.)
2. Ask students to discuss with another person or their group what three things they decided based on habits.
3. Possible answers: the way they got to school, whether to brush teeth before or after breakfast, the way they walk to this classroom, etc.
4. Ask them to think about a recent decision that they actively made. What did they each consider before deciding? (individual answers)
5. Ask about consequences of their decision. Info: A lot of our decisions may not seem to have major consequences...does it really matter if you wear your shirt tucked in or not? But some decisions do have consequences: for your future, for your mental health, and/or for your physical health. Many factors may impact our decision-making, such as family, culture, media, peers, and personal beliefs.
6. Ask if they think there are health consequences related to the three things you considered?
7. Ask students to make a decision tree about one decision they have made recently or are planning to make: i.e. going out for a sports team or joining a club, taking an online course, changing your look (make-up, clothing

hair style), starting an exercise program, deciding on what to eat, etc. Ask them to list the factors that may help them make the decision and the health consequences (if any) of the decision.

Assessment:

1. Ask students to label the umbrella to illustrate that decision making covers all of these areas and that there are multiple career choices within this area that are related to these areas.

2. **Assessment**. At the end of the unit, students will revisit this umbrella and fill in information about what they have learned about decision making and how it impacts their health.

Logbook Activity:

1. Decision tree description
2. Decision tree example
3. Decision tree template
4. Label umbrella

Essential Questions. How do you make decisions about your health? What decisions impact your health? How might you evaluate the decisions you make in terms of health?

Background Information. Decision making impacts all of our lives. This lesson shows students how to use a decision tree and to look back to evaluate the consequences of making the decision. **Habitual decisions** may impact our health in positive or negative ways (think about whether you climb the stairs or use an escalator or elevator when you go to the mall; whether you park your car close to an entrance or farther away). You might describe an example to students such as how you brush your teeth...start on the lower back teeth, move to the front, brushing back and forth or up and down. You don't give much thought to how you do it, it just gets done and you rinse your mouth and start your day.

Students are not always able to choose between healthy or unhealthy alternatives—their parents may smoke and they do not get a choice; they may have to eat whatever is served for dinner; they may need to babysit their brothers or sisters while their parents are at work—so we can consider those no choice decisions. The goal of this activity is to help students become more aware of the choices they are making, and the consequences on their eating, exercise, and mood.

Decision tree example follows.

01 Healthy Decision Making

Introduce Kürzi

Students are going to focus on healthy eating, activity, and mood during the next few lessons. The Kürzi will help them to understand the effects their decision making has on it in terms of its overall health. Hopefully, Kürzi will help them make healthier decisions.

Tonight's activity is to begin to explore the Kürzi. How does it move? What does it do? They must interact with it for at least one “day” this evening. That includes moving it from room to room, playing mini games, feeding it, and trying an exercise with it.

Ask students to fill out a decision tree for something they decided for Kürzi.

Assessment Discussion. What are the healthy or not-so-healthy consequences of the “yes” and “no” answers to the right?

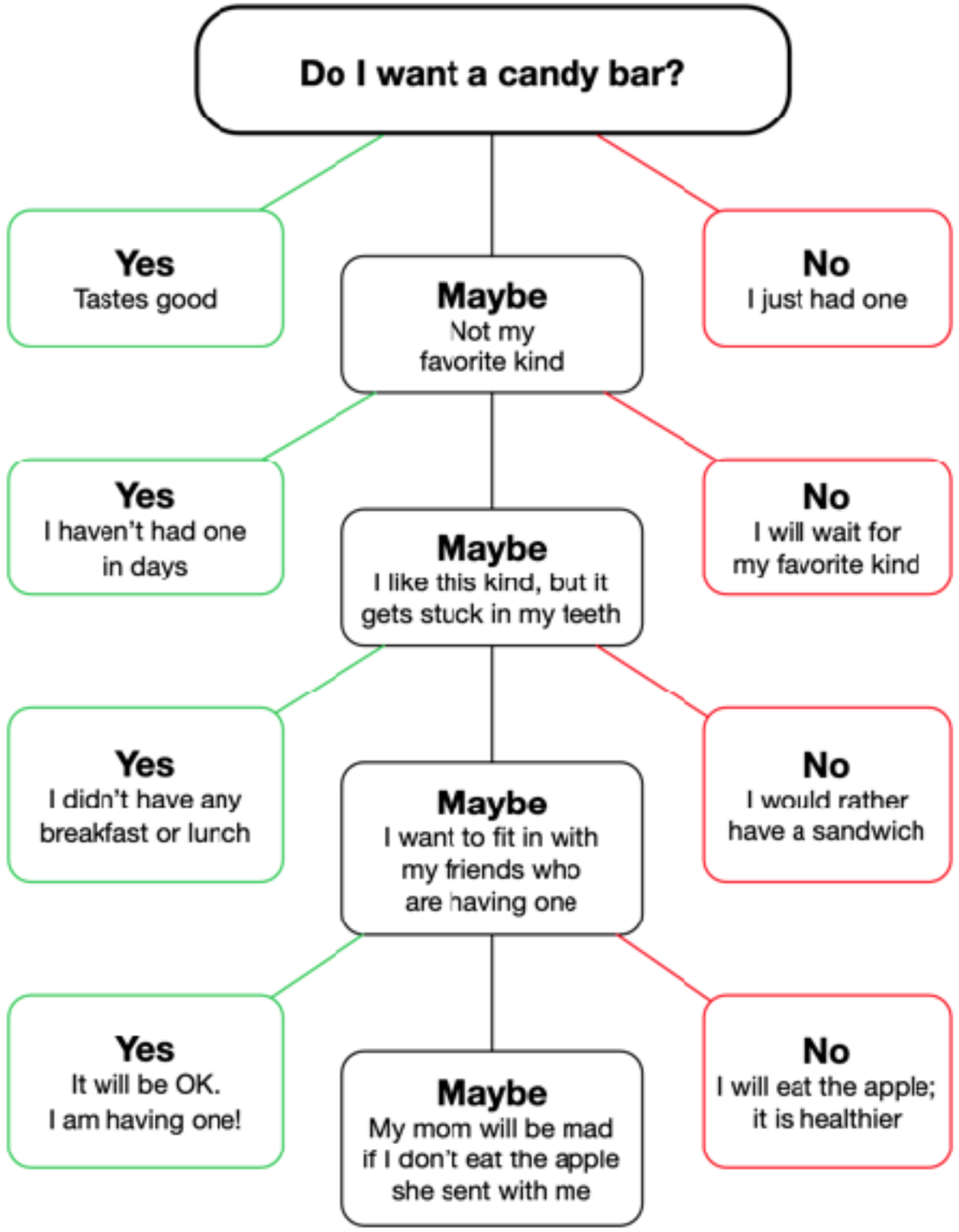


Figure 1: Decision Making Tree by EducationProjects.org. Eat right image, Healthy diet Lifestyle Eating Health, Fitness and Wellness, health, physical Fitness, food png free download. PNG_EGG_png.

Section 02

A Healthy Plate

02 A Healthy Plate

Learning Outcomes

Project skill. Evaluating food choices.

Life Skill. Making decisions.

Educational standard. Functional knowledge and skills:

- Understand the variety and amounts of food needed based on the U.S. Dietary Guidelines for Americans.
- Describe the benefits of eating healthy.
- Explain the influence of personal values, family, perceptions of norms, and social expectations on food choices.

Success indicator. Students evaluate a food log using the guidelines of My Healthy Plate.

Introduction

Students eat a variety of foods but may not evaluate their choices. This activity asks them to log their food choices (or use a log provided) to evaluate how closely they match the guidelines presented on myplate.gov.

Materials. Nutrition labels; Food logs; List of servings of common foods and servings for each; Computer for students to use to determine the proportion of their food intake from each area.

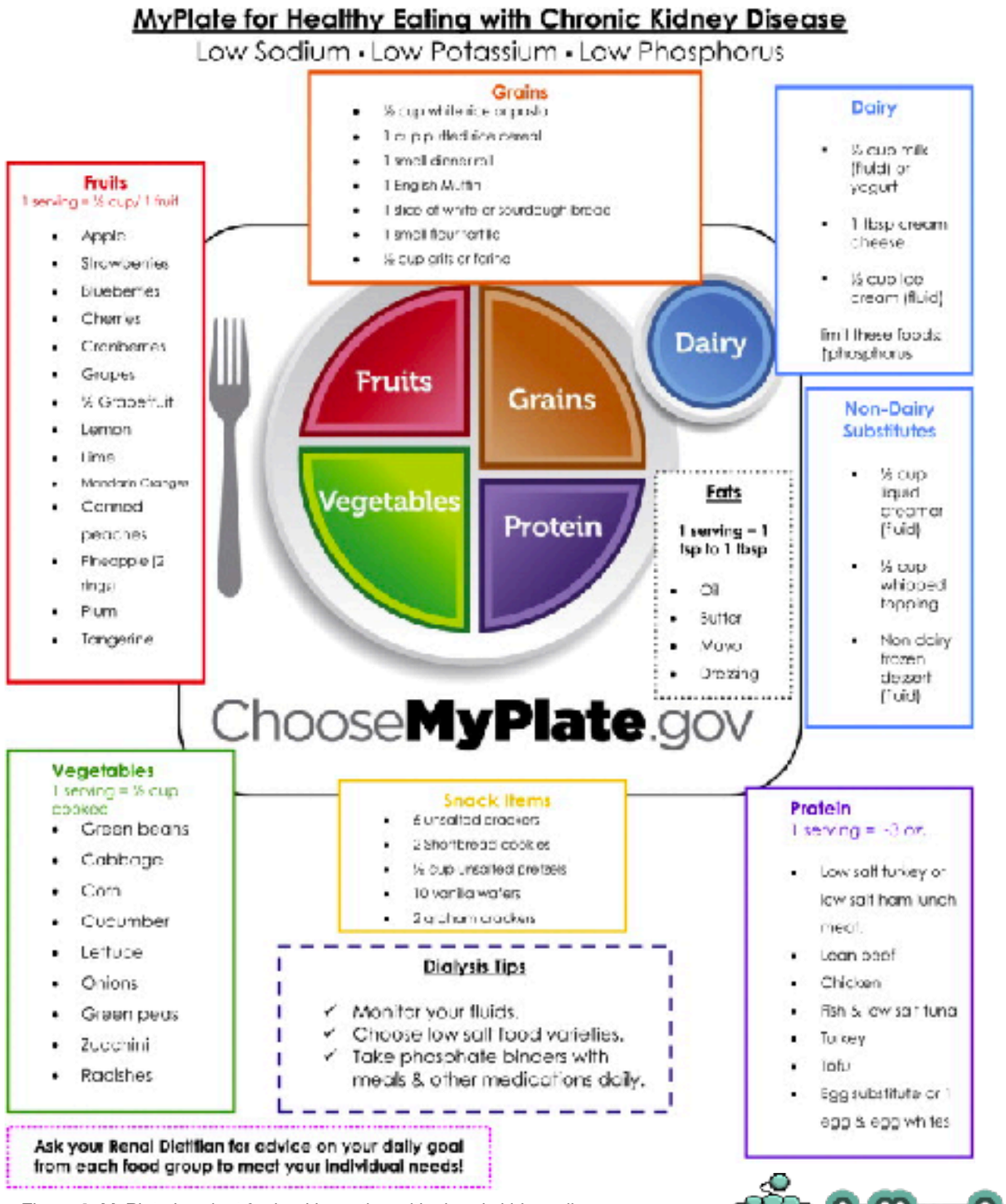


Figure 2: MyPlate handout for healthy eating with chronic kidney disease.
View Large Image | Figure Viewer | Download Hi-Res Image | Download (PPT)

02 A Healthy Plate

Time Required. Homework assigned the night before; 40-minutes for in class activity.

Classroom Activities

Pre-assigned homework: What did you eat today? Ask students to list the foods they ate. Be sure to accurately count servings. Determine from https://www.myplate.gov/ which of the five food types the food represents (fruit, vegetables, grain, protein, or dairy). Some foods may represent more than one category.

Activity 1:

Discuss how to read a nutrition label. What are the sections? Where are the ingredients listed? How can we make decisions about the health of a food by looking at the label? Use the linked label pictured to the right to lead a class discussion on learning how to read and make sense of food labels to make informed decisions on what we eat; refer to https://www.fda.gov/media/135197/download.

Activity 2:

Nutrition labels. Read and compare food labels on the following pages.

1. Compare the labels provided at the end of lesson.
2. Choose five labels and rank which are the *best* choices.

OR

2. Choose which foods are the *least* healthy choices.

Figure 7: Nutrition Facts Label Poster, JYD Creations, https://i.etsystatic.com/22100052/r/il/5bacf3/2887201891/il_794xN.2887201891_3mow.jpg

Nutrition Label Activity

INGREDIENTS: WATER, ENRICHED WHEAT AND MALTED BARLEY FLOUR (WHEAT FLOUR, MALTED BARLEY FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID), LOW-MOISTURE PART-SKIM MOZZARELLA CHEESE (CULTURED PART-SKIM MILK, SALT, ENZYMES), PEPPERONI (MADE WITH PORK, CHICKEN AND BEEF (PORK, MECHANICALLY SEPARATED CHICKEN, BEEF, SALT, CONTAINS 2% OR LESS OF SPICES, DEXTROSE, PORK STOCK, LACTIC ACID STARTER CULTURE, OLEORESIN OF PAPRIKA, FLAVORING, SODIUM NITRITE, SODIUM ASCORBATE, PAPRIKA, PROCESSED WITH NATURAL SMOKE FLAVOR, BHA, BHT, CITRIC ACID TO HELP PROTECT FLAVOR), TOMATO PASTE, 2% OR LESS OF VEGETABLE OIL (SOYBEAN OIL AND/OR CORN OIL), SUGAR, SALT, MODIFIED CORNSTARCH, CELLULOSE POWDER, YEAST, SOY LECITHIN, SPICE, DRIED GARLIC, CITRIC ACID, L-CYSTEINE.
CONTAINS: WHEAT, MILK, SOY.

Pepperoni Pizza

Nutrition Facts

3 servings per container
Serving size 1/3 pizza (136g)

	Per Serving		Per Container	
Calories	**340**		**1020**	
		% DV*		% DV*
Total Fat	15g	19%	45g	57%
Saturated Fat	7g	35%	21g	105%
Trans Fat	0g		1g	
Cholesterol	35mg	12%	105mg	36%
Sodium	700mg	30%	2100mg	90%
Total Carb.	35g	13%	105g	39%
Dietary Fiber	2g	7%	6g	21%
Total Sugars	4g		12g	
Incl. Added Sugars	1g	2%	3g	6%
Protein	15g	21%	45g	63%
Vitamin D	0.2mcg	2%	0.6mcg	4%
Calcium	250mg	20%	750mg	60%
Iron	2.7mg	15%	8.1mg	45%
Potassium	170mg	4%	510mg	10%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

BASICS Turkey & American with Treat

Nutrition Facts

Serving Size 1 package

Amount Per Serving
Calories 330 Calories from Fat 150

	% Daily Value*
Total Fat 17g	26%
Saturated Fat 8g	39%
Trans Fat 0g	
Cholesterol 30mg	10%
Sodium 650mg	27%
Total Carbohydrate 36g	12%
Dietary Fiber 1g	5%
Sugars 15g	
Protein 11g	18%

Vitamin A 4% • Vitamin C 10%
Calcium 10% • Iron 10%

*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
Cholest	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carb		300g	375g
Dietary Fiber		25g	30g

INGREDIENTS: CHOCOLATE SANDWICH CREME COOKIE (SUGAR, UNBLEACHED ENRICHED FLOUR [WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID], PALM AND SOYBEAN OIL, DEXTROSE, COCOA [PROCESSED WITH ALKALI], CONTAINS 2% OR LESS OF: HIGH FRUCTOSE CORN SYRUP, CORNSTARCH, SODIUM BICARBONATE [LEAVENER], SALT, ARTIFICIAL FLAVORS, SOY LECITHIN, CHOCOLATE). **CONTAINS: WHEAT, SOY. WHITE TURKEY - CURED - SMOKE FLAVOR ADDED** (WHITE TURKEY, WATER, POTASSIUM LACTATE, CONTAINS LESS THAN 2% OF MODIFIED CORNSTARCH, DEXTROSE, SALT, CARRAGEENAN, SODIUM PHOSPHATES, SODIUM DIACETATE, POTASSIUM CHLORIDE, SODIUM ASCORBATE, NATURAL AND ARTIFICIAL FLAVOR, SODIUM NITRITE, SMOKE FLAVOR). **AMERICAN PASTEURIZED PREPARED CHEESE PRODUCT** (MILK, WATER, MILK PROTEIN CONCENTRATE, MILKFAT, WHEY PROTEIN CONCENTRATE, SODIUM CITRATE, WHEY, SALT, LACTIC ACID, SORBIC ACID, CHEESE CULTURE, ENZYMES, OLEORESIN PAPRIKA [COLOR], ANNATTO EXTRACT [COLOR], WITH SUNFLOWER LECITHIN ADDED FOR SLICE SEPARATION). **CONTAINS: MILK. CRACKERS** (ENRICHED FLOUR [WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID], PALM OIL, SUGAR, SALT, BAKING SODA, WHEY [FROM MILK], SOY LECITHIN, NATURAL FLAVOR). **CONTAINS WHEAT, MILK, SOY.**

Nachos Cheese

Nutrition Facts

Serving size 1 package

Amount per serving
Calories 370

	% Daily Value*
Total Fat 20g	25%
Saturated Fat 4g	19%
Trans Fat 0g	
Cholesterol 10mg	4%
Sodium 810mg	35%
Total Carbohydrate 42g	15%
Dietary Fiber 3g	12%
Total Sugars 5g	
Includes <1g Added Sugars	2%
Protein 7g	
Vitamin D 0mcg 0% • Calcium 190mg 15%	
Iron 1.2mg 6% • Potassium 250mg 6%	

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: WHOLE GRAIN TORTILLA CHIPS (GROUND YELLOW CORN, VEGETABLE OIL [CONTAINS ONE OR MORE OF THE FOLLOWING: CORN, SUNFLOWER OR SOYBEAN OIL], CORN BRAN AND SALT); **NACHO CHEESE** (WHEY, MILK, CANOLA OIL, DRIED CORN SYRUP, SODIUM PHOSPHATES, CONTAINS LESS THAN 2% OF JALAPENO PEPPERS, SALT, WHEY PROTEIN CONCENTRATE, LACTIC ACID, SODIUM ALGINATE, CALCIUM PHOSPHATE, VINEGAR, POTASSIUM CHLORIDE, SORBIC ACID AS A PRESERVATIVE, CHEESE CULTURE, NATURAL FLAVOR, ENZYMES, APOCAROTENAL [COLOR]). **CONTAINS: MILK. SALSA** (WATER, TOMATO PASTE, GREEN CHILI PEPPERS, VINEGAR, DRIED ONIONS, LESS THAN 2% OF HIGH FRUCTOSE CORN SYRUP, MODIFIED FOOD STARCH, JALAPENO PEPPERS, SALT, GREEN BELL PEPPERS, GARLIC POWDER, SODIUM BENZOATE AND POTASSIUM SORBATE AS PRESERVATIVES, CITRIC ACID, SPICE).

Nutrition labels and images from: walmart.com

02 A Healthy Plate

Nutrition Facts

About 5 servings per container
Serving size 1/2 cup (120mL)

Calories per serving 70

Amount/serving	% Daily Value*	Amount/serving	% Daily Value*
Total Fat 1.5g	**2%**	**Sodium** 480mg	**21%**
Saturated Fat 0g	**0%**	**Total Carbohydrate** 13g	**5%**
Trans Fat 0g		Dietary Fiber 2g	**7%**
Polyunsaturated Fat 0g		Total Sugars 9g	
Monounsaturated Fat 0.5g		Includes 4g Added Sugars	**8%**
Cholesterol 0mg	**0%**	**Protein** 2g	
Vitamin D 0mcg	0%	Iron 0.8mg	4%
Calcium 30mg	2%	Potassium 370mg	8%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: TOMATO PUREE (WATER, TOMATO PASTE), DICED TOMATOES IN TOMATO JUICE, SUGAR, CANOLA OIL, CONTAINS LESS THAN 1% OF: SALT, DEHYDRATED ONIONS, SPICES, CITRIC ACID, DEHYDRATED GARLIC, ONION EXTRACT, GARLIC EXTRACT.

Nutrition Facts

About 5 servings per container
Serving size 1/2 cup (120mL)

Calories per serving 90

Amount/serving	% Daily Value*	Amount/serving	% Daily Value*
Total Fat 3g	**4%**	**Sodium** 480mg	**21%**
Saturated Fat 1g	**5%**	**Total Carbohydrate** 13g	**5%**
Trans Fat 0g		Dietary Fiber 2g	**7%**
Polyunsaturated Fat 0.5g		Total Sugars 10g	
Monounsaturated Fat 1.5g		Includes 4g Added Sugars	**8%**
Cholesterol 5mg	**2%**	**Protein** 2g	
Vitamin D 0mcg	0%	Iron 0.8mg	4%
Calcium 30mg	2%	Potassium 370mg	8%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: TOMATO PUREE (WATER, TOMATO PASTE), DICED TOMATOES IN TOMATO JUICE, SUGAR, BEEF, CANOLA OIL, CONTAINS LESS THAN 1% OF: SALT, SPICES, CITRIC ACID, DEHYDRATED ONIONS, DEHYDRATED GARLIC, BEEF FAT, FLAVORING, DEHYDRATED BEEF STOCK, ONION EXTRACT, GARLIC EXTRACT, BEEF EXTRACT, YEAST EXTRACT.

Nutrition Facts

Serving Size about 2oz (56g)
Servings Per Container: 8

Amount Per Serving	
Calories	200
	% Daily Value*
Total Fat 1g	**1%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 42g	**15%**
Dietary Fiber 3g	**11%**
Soluble Fiber 2g	
Insoluble Fiber 1g	
Total Sugars 1g	
Protein 7g	

Vitamin D	0mcg	0%	Thiamin	0.5mg	40%
Calcium	12mg	0%	Riboflavin	0.2mg	15%
Iron	2mg	10%	Niacin	5mg	30%
Potassium	118mg	2%	Folate	199mcg DFE (112mcg folic acid)	50%

*Percent Daily Values are based on a 2,000 calorie diet.

Spaghetti

NON GMO Project VERIFIED

Ingredients:
Semolina (wheat), durum wheat flour.

Vitamins/Minerals:
Vitamin B3 (Niacin), Iron, (Ferrous Sulfate), Vitamin B1 (Thiamin Mononitrate), Vitamin B2 (Riboflavin), Folic Acid.

Contains wheat ingredients.

Not a significant source of added sugars.

This product is manufactured on equipment that processes products containing eggs.

Nutrition Facts

8 servings per container
Serving size 2 oz (56g)

Amount Per Serving
Calories 180

	% Daily Value*
Total Fat 1.5g	**2%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 39g	**14%**
Dietary Fiber 7g	**25%**
Soluble Fiber 2g	
Insoluble Fiber 5g	
Total Sugars 1g	
Protein 8g	
Vitamin D 0mcg	0%
Calcium 17mg	2%
Iron 2mg	10%
Potassium 274mg	6%
Thiamin 0.5mg	40%
Riboflavin 0.3mg	25%
Niacin 7mg	45%
Folate 71mcg DFE	20%
Phosphorus 224mg	20%
Magnesium 54mg	15%
Zinc 2mg	20%
Manganese 1.5mg	70%

Not a significant source of added sugars.

* The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: WHOLE GRAIN DURUM WHEAT FLOUR. CONTAINS WHEAT INGREDIENTS.

Nutrition Facts

about 8 servings per loaf
Serving size 1/8 loaf (2oz.) 57g

Amount per serving
Calories 170

	% Daily Value*
Total Fat 7g	**9%**
Saturated Fat 2.5g	**13%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 290mg	**13%**
Total Carbohydrate 22g	**8%**
Dietary Fiber 0g	**0%**
Total Sugars 1g	
Includes 1g Added Sugars	**2%**
Protein 4g	
Vitamin D 0mcg	0%
Calcium 9mg	0%
Iron 2mg	10%
Potassium 58mg	2%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: Enriched flour (wheat flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), water, soybean oil, palm oil, salt, dextrose, garlic powder, yeast (ascorbic acid, cellulose gum), dough improver (enriched wheat flour [wheat flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid], enzymes [contains wheat], ascorbic acid), butter (cream, salt), onion powder, buttermilk, inactive yeast, soy lecithin, parsley flakes, natural flavor, annatto color.

CONTAINS MILK, SOY, WHEAT

Nutrition labels and images from: walmart.com

02 A Healthy Plate

Taylor Farms Chef Salad 7.75oz.

Nutrition Facts
Serving Size 1 Pkg. (220g)
Servings Per Container 1
Calories 290
Fat Cal. 190
*Percent Daily Values (DV) are based on a 2,000 calorie diet.

Amount / Serving	%DV*	Amount / Serving	%DV*
Total Fat 21g	32%	**Total Carb.** 8g	3%
Sat Fat 5g	25%	Fiber 2g	8%
Trans Fat 0g		Sugars 5g	
Cholest. 50mg	17%	**Protein** 16g	
Sodium 570mg	24%		

Vitamin A 15% • Vitamin C 6% • Calcium 25% • Iron 4%

INGREDIENTS: ICEBERG LETTUCE, RANCH DRESSING (canola oil, nonfat buttermilk [whey, water, skim milk powder, corn starch, tapioca starch, carrageenan, locust bean gum, culture], sugar, water, egg yolk, apple cider vinegar, onion juice, distilled vinegar, salt, onion, sweet onion [sweet onion, vinegar, salt], green onion, xanthan gum, dried onion, spice, mustard flour, guar gum), TURKEY BREAST (turkey breast, water, contains 2% or less of sugar, salt, sodium phosphate [preservative], sodium diacetate [preservative], sodium nitrite [preservative], potassium lactate [preservative], sodium erythorbate [preservative]), SWISS CHEESE (pasteurized milk, cheese culture, salt and enzymes, [potato starch and powdered cellulose to prevent caking], natamycin [a natural mold inhibitor]), HAM WITH NATURAL JUICES (ham cured with water, contains 2% or less of sugar, salt, potassium lactate, sodium diacetate, sodium erythorbate, sodium nitrite, sodium phosphate).

CONTAINS EGG, MILK.

Distributed by
Salinas, CA
www.tay

Taylor Farms Apple Salad with Chicken 5.5oz.

Nutrition Facts
Serving Size 1 Salad (156g)
Servings Per Container 1
Calories 270
Fat Cal. 150
*Percent Daily Values (DV) are based on a 2,000 calorie diet.

Amount / Serving	%DV*	Amount / Serving	%DV*
Total Fat 16g	25%	**Total Carb.** 21g	7%
Sat Fat 3.5g	18%	Fiber 3g	12%
Trans Fat 0g		Sugars 17g	
Cholest. 20mg	7%	**Protein** 8g	
Sodium 550mg	23%		

Vitamin A 80% • Vitamin C 120% • Calcium 10% • Iron 10%

INGREDIENTS: SWEET ONION VINAIGRETTE (canola oil, high fructose corn syrup, water, dijon mustard [water, mustard seed, distilled vinegar, salt, white wine, citric acid, turmeric (color), tartaric acid], spices, [, onion, red wine vinegar, white wine vinegar, sweet onion [sweet onion, vinegar, salt], salt, lemon juice concentrate, dried onion, spices, xanthan gum, natural smoke flavor), GREEN LEAF LETTUCE, APPLES (apples and calcium ascorbate (vitamin C, calcium salt)), CHICKEN BREAST MEAT (chicken breast with rib meat, water, cultured sugar and vinegar, potato starch, sea salt, natural flavorings), SPRING MIX (may contain some or all of the following: baby whole leaf varieties green leaf, mizuna, green romaine, tango, green oak, green chard, baby spinach, arugula, frisee, tatsoi, mache, red chard, red leaf, lolla rosa, red romaine, red mustard, radicchio, red oak, beet tops), BLUE CHEESE CRUMBLES (blue cheese [milk, cheese cultures, salt, enzymes], powdered cellulose to prevent caking, natamycin to protect flavor), WALNUTS GLAZED (walnuts, honey powder [sucrose, wheat starch, honey], honey coating [sugar, honey, salt, corn starch, carrots (for color), gum arabic, xanthan gum, propylene glycol, natural and artificial flavors (with artificial color), molasses powder (refinery syrup, molasses), raisin juice concentrate, citric acid, vegetable oil (may contain one or more of the following: canola, sunflower and/or soybean), maltodextrin, xanthan gum, sugar, salt), SWEETENED DRIED CRANBERRIES (cranberries, sugar, sunflower oil), CARROT.

CONTAINS MILK, TREE NUTS (WALNUTS), WHEAT.

Dist
877

Pepsi

Nutrition Facts
About 6 servings per container
Serving size 12 fl oz (360 mL)

Amount per serving
Calories 150

	% DV*
Total Fat 0g	0%
Sodium 30mg	1%
Total Carbohydrate 41g	15%
Total Sugars 41g	
Includes 41g Added Sugars	83%
Protein 0g	

Not a significant source of other nutrients.
* % DV = % Daily Value

CARBONATED WATER, HIGH FRUCTOSE CORN SYRUP, CARAMEL COLOR, SUGAR, PHOSPHORIC ACID, CAFFEINE, CITRIC ACID, NATURAL FLAVOR. BOTTLED UNDER THE AUTHORITY OF PEPSICO, INC., PURCHASE, NY 10577.

CAFFEINE CONTENT: 38mg/12 fl oz.
We're here to help.
Pepsi.com or 800.433.2652

Apple Juice

Nutrition Facts
8 servings per container
Serving size 8 fl oz (240mL)

Amount per serving
Calories 110

	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 35mg	2%
Total Carbohydrate 26g	10%
Dietary Fiber 0g	0%
Total Sugars 26g	
Includes 0g Added Sugars	0%
Protein 0g	

Vit. D 0mcg 0% • Calcium 0mg 0%
Iron 0mg 0% • Potassium 290mg 6%
Vit. C 90mg 100%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: APPLE JUICE FROM CONCENTRATE (WATER, APPLE JUICE CONCENTRATE), ASCORBIC ACID (VITAMIN C).

Nutrition Facts
Serving Size 1 Banana 118 g

Amount Per Serving	
Calories 105	Calories from Fat 3
	% Daily Value*
Total Fat 0g	1%
Saturated Fat 0g	1%
Trans Fat 0g	
Cholesterol 0g	0%
Sodium 2mg	0%
Total Carbohydrate 27g	9%
Dietary Fiber 3g	12%
Sugars 14g	
Protein 1g	
Vitamin A	2%
Vitamin C	17%
Calcium	1%
Iron	2%

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

Nutrition Facts
Serving Size 1 large apple (242g / 8 oz.)

Amount Per Serving	
Calories 130	Calories from Fat 0
	% Daily Value**
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Potassium 260mg	7%
Total Carbohydrate 34g	11%
Dietary Fiber 5g	20%
Sugars 25g	
Protein 1g	

Vitamin A 2% • Vitamin C 8%
Calcium 2% • Iron 2%

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

kürzi

Nutrition labels and images from: walmart.com

02 A Healthy Plate

Nutrition Facts/ Datos de Nutrición

8 servings per container/8 raciones por envase
Serving size/Tamaño por ración
2 Pastries/2 Pastelillos (96g)

Amount per serving/Cantidad por ración
Calories/Calorías 370

	% DV*/% VD*
Total Fat/Grasa Total 9g	**12%**
Saturated Fat/Grasa Saturada 3g	**15%**
Trans Fat/Grasa Trans 0g	
Polyunsaturated Fat/Grasa Poliinsaturada 3.5g	
Monounsaturated Fat/Grasa Monoinsaturada 2g	
Cholesterol/Colesterol 0mg	**0%**
Sodium/Sodio 320mg	**14%**
Total Carbohydrate/Carbohidrato Total 70g	**25%**
Dietary Fiber/Fibra Dietética 1g	**4%**
Total Sugars/Azúcares Totales 30g	
Incl. 30g Added Sugars / Incl. 30g azúcares añadidos	**60%**
Protein/Proteínas 3g	

Vitamin D/Vitamina D 0mcg 0% •	Calcium/Calcio 10mg 0%
Iron/Hierro 1.5mg 8% •	Potassium/Potasio 50mg 0%
Thiamin/Tiamina 4% •	Riboflavin/Riboflavina 10%
Niacin/Niacina 10% •	Folate/Folato 40mcg DFE 10% (25mcg folic acid/ácido fólico)

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice. / El % Valor Diario (VD) le indica cuánto un nutriente en una porción de alimentos contribuye a una dieta diaria. 2,000 calorías al día se utiliza para asesoramiento de nutrición general.

Ingredients: Enriched flour (wheat flour, niacin, reduced iron, vitamin B_1 [thiamin mononitrate], vitamin B_2 [riboflavin], folic acid), **corn syrup, high fructose corn syrup, dextrose, soybean and palm oil** (with TBHQ for freshness), **sugar, bleached wheat flour.**
Contains 2% or less of wheat starch, salt, dried strawberries, dried pears, dried apples, leavening (baking soda, sodium acid pyrophosphate, monocalcium phosphate), citric acid, gelatin, modified wheat starch, yellow corn flour, caramel color, xanthan gum, cornstarch, turmeric extract color, soy lecithin, red 40, yellow 6, blue 1, color added.
CONTAINS WHEAT AND SOY INGREDIENTS.

Whole Milk

Nutrition Facts

About 8 servings per container
Serving size 1 cup (240mL)

Amount per serving
Calories 160

	% Daily Value*
Total Fat 8g	**10%**
Saturated Fat 5g	**25%**
Trans Fat 0g	
Polyunsaturated Fat 0g	
Monounsaturated Fat 2.5g	
Cholesterol 35mg	**12%**
Sodium 135mg	**6%**
Total Carbohydrate 13g	**5%**
Dietary Fiber 0g	**0%**
Total Sugars 12g	
Includes 0g Added Sugars	**0%**
Protein 8g	**16%**

Vitamin D 2.5mcg 15% •	Calcium 300mg 25%
Iron 0mg 0% •	Potassium 410mg 8%
Vitamin A 90mcg 10% •	Riboflavin 0.4mg 30%
Vitamin B12 1.2mcg 50% •	Phosphorus 240mg 20%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS:
Grade A Organic Milk, DHA ALGAL OIL*, Vitamin D3.
*Ingredient NOT FOUND in regular WHOLE milk.
CONTAINS MILK.

Yogurt

Nutrition Facts

Servings: 1, **Serv. size: 1 container (170g),**
Amount per serving:
Calories 130, Total Fat 1.5g (2% DV), Sat. Fat 1g (5% DV), Trans Fat 0g, **Cholest.** 5mg (2% DV), **Sodium** 80mg (3% DV), **Total Carb.** 26g (9% DV), Fiber 0g (0% DV), Total Sugars 22g (Incl. 16g Added Sugars, 32% DV), **Protein** 5g, Vit. D (8% DV), Calcium (15% DV), Iron (0% DV), Potas. (6% DV), Vit. A (20% DV).
% DV = % Daily Value

INGREDIENTS: CULTURED GRADE A LOW FAT MILK, SUGAR, STRAWBERRIES, WATER, FRUCTOSE, MODIFIED FOOD STARCH, CONTAINS LESS THAN 1% OF MODIFIED CORNSTARCH, NATURAL AND ARTIFICIAL FLAVORS, VEGETABLE JUICE (FOR COLOR), GELATIN, CARRAGEENAN, SODIUM CITRATE, MALIC ACID, VITAMIN A PALMITATE, VITAMIN D_3. CONTAINS ACTIVE YOGURT CULTURES INCLUDING *L. ACIDOPHILUS*.
CONTAINS MILK.

Pretzels

Nutrition Facts

about 15 servings per container
Serving size 22 pretzels (30g)

Amount per serving
Calories 120

	% Daily Value*
Total Fat 1g	**1%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Polyunsaturated Fat 0g	
Monounsaturated Fat 0g	
Cholesterol 0mg	**0%**
Sodium 320mg	**14%**
Total Carbohydrate 24g	**9%**
Dietary Fiber <1g	**3%**
Total Sugars <1g	
Includes 0g Added Sugars	**0%**
Protein 3g	

Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 2mg	10%
Potassium 0mg	0%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

INGREDIENTS: ENRICHED WHEAT FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID), SALT. CONTAINS LESS THAN 2% OF: CORN SYRUP, HIGH OLEIC CANOLA OIL AND/OR SOYBEAN OIL, BARLEY MALT EXTRACT, LEAVENING (YEAST, SODIUM BICARBONATE AND/OR AMMONIUM BICARBONATE).
CONTAINS WHEAT.

Nutrition Facts

13 servings per container
Serving size About 15 chips (28g)

Amount per serving
Calories 160

	% Daily Value*
Total Fat 10g	**13%**
Saturated Fat 1.5g	**7%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 170mg	**7%**
Total Carbohydrate 15g	**6%**
Dietary Fiber 1g	**5%**
Total Sugars less than 1g	
Protein 2g	

Vitamin D 0mcg	0%
Calcium 10mg	0%
Iron 0.6mg	2%
Potassium 350mg	6%
Vitamin C	6%

Not a significant source of added sugars.

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Ingredients: Potatoes, Vegetable Oil (Sunflower, Corn and/or Canola Oil), and Salt.

Nutrition labels and images from: walmart.com

02 A Healthy Plate

Food Logbook Activity (one day)

Food eaten	Servings - Category

Activity 3:

Pre-assigned homework: What did you eat today? Ask students to list the foods they ate. Be sure to accurately count servings. Determine from https://www.myplate.gov/ which of the five food types the food represents (fruit, vegetables, grain, protein, or dairy). Some foods may represent more than one category.

Discuss how to read a nutrition label. What are the sections? Where are the ingredients listed? How can we make decisions about the health of a food by looking at the label?

Use the food log worksheet. Write down the food you have eaten for the day. Make sure to include the serving size and food group or category the food comes from; refer to the example below.

Food eaten	Servings - Category
Turkey Sausage & Egg Pancake Sandwich	2 - protein 1 - grain
Italian Sub	1 - protein 2 - grain
Collard Greens	1 - vegetable
Apple	1 - fruit
Protein bar	1 - grain 1 - protein
Pasta and vegetables	1 - grain 1 - vegetable
Ice cream	1 - dairy - sugar

02 A Healthy Plate

Activity 4:

Evaluate a food log. Students may use their own food logs or ones provided. *(Student food log and pre-made logs are at end of lesson.)*

1. Divide the students into 5-6 groups.
2. Give each student a food log or ask them to get out their own log from the previous day's homework.
3. Work in small groups to evaluate the foods on the food logs/their own logs.
4. Evaluate each food in the log as healthy or unhealthy.
    a. If the food is unhealthy, circle it.
    b. Count up the number of servings in the areas of grain, protein, dairy, fruits and vegetables.
    c. Count up the number of servings that are marginal (sugar, salt or fat is prevalent; i.e. fried foods, salty snacks, a food item that lists sugar as one of the first three ingredients).
5. Brainstorm healthier alternatives with your group.
    a. If you need help, go to https://www.myplate.gov/ to see healthy eating choices in each of five food groups.
6. Determine which categories the foods you eat daily fit into.
7. Does the food log for your group show whether that person has reached the governmental recommendation for healthy eating for the day?

Assessment and More Activity Challenges:

1. Have students compare prices of healthy foods to convenience foods (consider the marginal foods in the food logs) by "shopping" online at Kroger, Walmart, and Whole Foods and filling their carts.

2. Use these resources as game elements to encourage students to Eat More Color. Eat more color image: https://i.pinimg.com/originals/16/12/84/161284dd9d782ca40f3eb6c8bf538cf1.jpg American Heart Association: https://www.heart.org/en/healthy-living/healthy-eating/add-color/fruits-and-vegetables-serving-sizes

Figure 4: Diet Rainbow Weight loss Health Green, rainbow, food, weight Loss png, PNGEGG .png

Pre-made Food Logbooks

Logbook Sample 1:

Food eaten	Servings - Category
Turkey Sausage & Egg Pancake Sandwich	2 - protein 1 - grain
Italian Sub	1 - protein 2 - grain
Collard Greens	1 - vegetable
Apple	1 - fruit
Protein bar	1 - grain 1 - protein
Pasta and vegetables	1 - grain 1 - vegetable
Ice cream	1 - dairy - sugar

Logbook Sample 2:

Food eaten	Servings - Category
Bagel w/Cream Cheese	2 - grain 1 - dairy (marginal)
Cheesy Chicken Crunch Wrap	1 - protein 1 - dairy 1 - grain
Fried tater tots	1 - vegetable (marginal)
Granola bar	1 - grain
Fried chicken	1 - protein
Potato chips	1 - vegetable (marginal)
Soda	0 - sugar

Logbook Sample 3:

Food eaten	Servings - Category
Egg & Cheese Croissant	1 - protein 1 - dairy 2 - grain
Hamburger on Bun	1 - protein 2 - grain
French Fries	1 - vegetable (marginal)
Milk	1 - dairy
Meatloaf	1 - protein
Green beans	1 - vegetable
Cake	0 - sugar

Logbook Sample 4:

Food eaten	Servings - Category
Cinnamon Toast Crunch w/milk	1 - grain - sugar 1 - dairy
Cheese Pizza	1 - grain 1 - dairy 1/2 - vegetable (tomato sauce)
Baked Beans	1 - protein
Grilled chicken	1 - protein
Grilled vegetables	1 - vegetable
French bread (2 slices)	2 - grain

Pre-made Food Logbooks

Logbook Sample 5:

Food eaten	Servings - Category
Strawberry Pop Tart®	2 - grain 0 - fruit
Chicken Tenders (fried) Cornbread	1 - protein 1 - grain
Banana (large)	2 fruit
Fish sticks (fried)	1 - protein
Mashed potatoes	1 - vegetable
Salad	1 - vegetable
Slice of peach pie	1 - fruit

Logbook Sample 6:

Food eaten	Servings - Category
Strawberry Pop Tart®	2 - grain 0 - fruit; sugar
Chicken Tenders	1 - protein
Cornbread	1 - grain
Banana (large)	2 fruit
Fish sticks (fried)	1 - protein
Mashed potatoes Salad	1 - vegetable 1 - vegetable
Slice of peach pie	1 - fruit

Logbook Sample 7:

Food	Servings - Category
Assorted Cereals	1 - grain - sugar
Graham Cracker	1 - grain
Cheese Stick	1 - dairy
Hard Boiled Egg	1 - protein
Muffin	1 - grain
Yogurt	1 - dairy
Honey Roasted Sunflower Seeds	1 - protein
Granola	1 - grain
Nachos	1 - grain 1 - dairy (marginal) - salt
Cheese-y Breadsticks w/ Spaghetti Sauce	1 - dairy 2 - grain 1 - vegetable
Brussels Sprouts	1 - vegetable
Black beans	1 - vegetable or 1 - protein
Tomato Soup	1 - vegetable
Chef Salad	1 - vegetable 1 - protein

02 A Healthy Plate

Background Information. Middle school is an important time for children and establishing their eating habits. Some students are experimenting with food choices (vegan, vegetarian, meat eaters) and they may not realize that they need to have a wide range of foods to get the needed energy and nutrients for them to reach their full potential, both physically and mentally.

When choosing foods, nutrition labels can give a good look at what is healthy. The amounts of sugar, salt, and fat may be major contributors to weight issues and health-related problems in the future. If sugar or salt are one of the top three ingredients, perhaps a different choice should be made. If the content is over 30% of the daily value for adults, it might be a better decision to avoid that food on a regular basis. (see nutrition label example on last page).

Many of students' nutrition choices are limited by their parents'/guardians' decisions and budgets. Helping students to understand the extent to which they can make healthy choices and guiding those decisions by helping them to evaluate the health of foods will make a difference even when they don't believe that they have many choices.

Worried about fresh vs frozen? See https://goaskalice.columbia.edu/answered-questions/nutritional-differences-between-canned-frozen-and-fresh-veggies for the facts.

Worried about GMOs? See https://gmoanswers.com/ for scientific answers to common questions.

Information about the new Nutrition Facts Label (15 PSAs): https://www.youtube.com/playlist?list=PLey4Qe-UxcxaZlZKEArX33qrQvrHfixv4

Activity 5:

Kürzi. Play the **Fridger** mini game. You will see a food falling down from the top of the screen and must click on the right decision (unhealthy left, or healthy right) before the food leaves the screen. If you chooses the incorrect answer three times, the game will end. Each time you play Fridger, you will earn coins for every correct answer.

Answer these questions after you play:

1. Feed Kürzi with the food choices in the game. Make note of what you fed Kürzi. How similar are the foods Kürzi ate to your food choices?
2. Play the Fridger game on Kürzi.
3. How might you make healthier choices on food? (see reflection questions)

Section 03

Tracking Physical Activity

03 Tracking Physical Activity

Learning Outcomes

State the activity's goals in these four ways, with just ONE item each:

- **Project skill.** Learning to track physical activity.
- **Life skill.** Tracking and maintaining physical fitness through activity
- **Educational standard.** Functional knowledge and skills:
  - 3.A.1. Describe various forms of technology to monitor fitness (e.g., heart monitor, pedometer, phone, and iPod apps).
  - 3.A.2. Apply target heart rate and rates of perceived exertion (using RPE scale) to improve or maintain cardiorespiratory endurance.
  - 3.A.4. Develop a series of activities to improve flexibility and to warm up/cool down for each activity.
  - 3.A.6. Apply nutritional concepts and strategies to balance healthy foods, snacks, and beverages with fitness levels.
- **Success indicator.** Students apply the Borg Rating of Perceived Exertion (RPE) to a set of physical activities.

Introduction

Students are probably aware of various physical fitness monitoring apps and devices. This process is designed to increase students' own awareness of their physical activity and compare it to monitored activities.

Materials. RPE description (from: https://www.cdc.gov/physicalactivity/basics/measuring/exertion.htm#); videos or physical activity choices to use for practice

Kurzi. Student worksheet: Tracking Physical Activities + Kurzi

Time Required. 40-45—minutes

Classroom Activities

Activity 1:

1. Use Kürzi to find RHR (add instructions here for using Kürzi)
2. Lead students in some stretching/warm-up activities in class. They can follow along with this short video Brain Break: Stretching (https://www.youtube.com/watch?v=0L3W0pcHU50) or a video of your choice
3. Discuss the RPE scale with students and have them practice...they could use the Brain Break: Mountain Hike (https://www.youtube.com/watch?v=GghrfH_YTYE) or Brain Break: Run in Place, What's the Pace? (https://www.youtube.com/watch?v=i9pp5kD2gts) or a video of your choice
4. Use your Kürzi to determine your HR; see how accurate your prediction of RPE was.

03 Tracking Physical Activity

Bicycling 2 miles in 15 minutes	Sock skating for 15 minutes
Washing and waxing a car for 45–60 minutes	Walk your/neighbor's dog for 20 minutes
Washing floors for 45–60 minutes	Mowing your neighbor's lawn
Doing yard work	Helping your neighbor clean the garage
Pulling weeds	Changing bed sheets
Putting away dishes	Stair walking for 15 minutes
Clean up race in your bedroom	Playing volleyball for 15 minutes
Pushing a stroller 15 minutes Raking leaves for 30 minutes	Playing touch football for 15 minutes Walking 1.75 miles in 35 minutes (20 min/mile)
Walking 2 miles in 30 minutes (15 min/mile)	Basketball (shooting baskets) for 30 minutes
Shoveling snow for 15 minutes	Basketball (playing game) for 15–20 minutes
Game of 'red light, green light' with a friend	Do a workout video, yoga, stretching, aerobics
Making a chalk maze in your driveway	Jumping rope for 15 minutes
Dancing fast (social) for 15 minutes	Running 1.5 miles in 15 minutes (10 min/mile)
Making a dance video	Your activity idea for 15 minutes:
Swimming laps for 15 minutes	Your activity idea for 15 minutes:

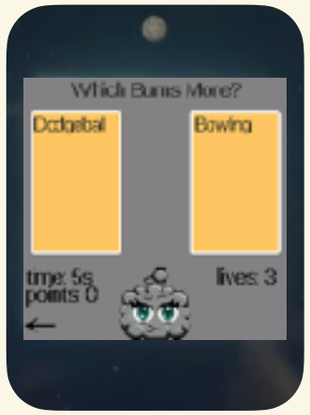
Activity 2:

1. Divide students into 6-12 groups of twos or threes.
2. Assign students to create a physical fitness routine. Use the activity list provided to create a "workout routine" that you can do at home.
3. Check your RHR before doing the activity set you planned from the list. As you are doing the exercise/ physical activity, try to estimate your RPE. Check the pulse meter on Kürzi to see how close your estimate is. *(Pulse instruction in about Kürzi section.)*
4. After the activity is completed, check your heart rate to see how high it got.
5. Then every two minutes check your heart rate to see how long it takes to return to your original RHR. (The goal of this lesson is to see how long it takes your pulse to return to your RHR.)

03 Tracking Physical Activity

Activity 3:

Kürzi. Play **Burns More** mini game. Students are given two activity options on the left and right side of the screen. Students choose which activity burns more calories. If they choose the incorrect answer three times, the game will end. After showing the game results, the screen will redirect to the PC Options Menu.



Assessment and More Challenges. Students may want to challenge each other by trading routines to try out.

Essential Questions. How do you monitor your fitness? Is fitness important? Why? How do decisions you make about fitness or physical activity affect your diet and your mental health?

Safety Tips. When introducing physical activity in the classroom, be sure that there is adequate space for what is expected and encourage students to use caution when exerting themselves during the activity.

Vocabulary. *RPE = Rating of Perceived Exertion:* is a rating method that can be used to estimate your exertion using a scale of 6-20 to determine your heart rate.

Beats per minute - bpm: the number your heart beats per minute (also known as pulse).

Background Information. The Rating of Perceived Exertion is "based on the physical sensations a person experiences during physical activity, including increased heart rate, increased respiration or breathing rate, increased sweating, and muscle fatigue." This rating is an excellent chance for students to estimate their rate of exertion and is highly correlated to the actual heart rate of respondents. This measure can be combined with resting heart rate, another measure of fitness, and how long it takes for someone's heart rate to return to resting heart rate (RHR)* after exercise. The sooner the pulse returns to RHR, the better the fitness level. Not all people have the same RHR, so do not ask students to compare these numbers. RHR is affected by several factors: level of fitness, the amount of time since your last meal, genetic background, temperature, dehydration, stress, and more.

*Normal heart rates for youth ages 6 to 12 are 70 to 120 BPM, and for ages 12 and up they are 60 to 100 BPM. Well-trained athletes may have even lower heart rates.

Have students write out their list of activities they choose and try it out at home for homework with their Kürzi. Have them estimate their RPE while they are doing the exercise, then check their pulse on Kürzi.

Section 04

Mood and Mental Health

04 Mood and Mental Health

Learning Outcomes

State the activity's goals in these four ways, with just ONE item each:

- **Project skill.** Learning to describe the difference between mood and overall mental health.
- **Life Skill.** Determining how to adjust attitude and mood through positive behaviors and how to mitigate stress. Determining when stress becomes detrimental to mental health.
- **Educational standards.** Functional knowledge and skills:
  - 4.7.8. Demonstrate the use of effective verbal and nonverbal communication skills to enhance health. Demonstrate how to effectively ask for assistance to improve personal health. (Related to protecting personal info; peer resistance; asking for help)
  - 7.3.8 Demonstrate healthy practices and behaviors to improve the health of oneself and others. (responsible for personal health behaviors)
    - Explain appropriate ways to express needs, wants, emotions, and feelings.
    - Demonstrate how to prevent and manage stress in healthy ways.
    - Explain the interrelationship of physical, mental, emotional, and social health.
    - Examine personal stressors at home, in school, and with friends and describe how to effectively manage the stress.
- **OH SEL Standards.**
  - A1. Demonstrate an awareness of personal feelings
    - Identify, recognize and name personal complex emotions
    - Describe how personal interests, qualities and strengths may help with decision making to accomplish personal goals
  - A3. Demonstrate awareness of and willingness to seek help for self or others
    - Develop and implement a plan of action, based on support or constructive feedback, that addresses challenges and builds on strengths
  - B1: Regulate emotions and behaviors by using thinking strategies that are consistent with brain development
    - Describe the relationship between thoughts, emotions and behavior and apply strategies to regulate response
  - B2: Set, monitor, adapt and evaluate goals to achieve success in school and life
    - Set a short-term school or life goal with action steps to achieve success
- **Success indicator.** Shows the ability to regulate mode, reduce stress, and communicate about social and emotional needs appropriately.

Introduction

This series of lessons is designed to make the connection between healthy decision-making and nutrition, physical activity, and mood (attitude).

04 Mood and Mental Health

Mental health in adolescents is particularly difficult due to the varying situations students find themselves in and their development into adulthood as they go through puberty. This lesson attempts to illustrate that mood or attitude may be affected by situational factors, but also by brain development, and that stressors may exacerbate the things that are going on as they navigate the brain changes they are experiencing. Eating a well-balanced diet, exercising and getting enough sleep will also help adolescents navigate this sometimes upsetting time.

Materials. Review this video for background: https://www.youtube.com/watch?v=PzyXGUCngoU&t=57s (from beginning to 3:40). Utilize Study.com: https://study.com/academy/lesson/g-stanley-hall-storm-stress-in-adolescence.html (if you have an account) Consider showing students this video: https://www.youtube.com/watch?v=jYuH3BqbSIE&t=6s Or this one: https://www.youtube.com/watch?v=ROwIojQmtjs. Stressor cards (final page of lesson)

Time Required. 40-minutes; 10-minutes to review stressor cards to determine which ones you might use.

Classroom Activities

Students individually write down things that put them in a “bad mood.” (This could be assigned as homework before class.) After a brief discussion of the difference between mood and mental health/illness, they rank order stressors and determine the ways to help deal with those stressors.

Activity 1:

Logbook Activity. Students individually write down things that put them in a “bad mood.” (This could be assigned as homework for the previous night.) Have them share with their group. Discuss the difference between being in a bad mood vs having poor mental health. Can negative feelings help to seek a solution to a problem? How might you positively express your emotions while in school?

Activity 2:

Students will use the Situation cards to rank stressful situations according to their perspectives. Students then share their rankings with others. (Optional: rankings could be collected and the most stressful situations shared with the class.) **Discussion**: What makes some situations more stressful to others than to yourself? What qualities do you have that help you deal with stress differently than others in your group? Ask students to identify at least one person they can go to to get help in dealing with stress and to help them identify their personal qualities that impact how they react to stressful situations.

Activity 3:

Students will use the stress reduction list to choose their top three strategies for reducing stress. **Discussion**: What makes some stress reduction strategies work better for others than for yourself? What qualities do you have that help you deal with stress differently than others in your group?

04 Mood and Mental Health

Assessment and More Activity Challenges:

1. Students can identify people in their lives they could turn to in order to get help.
2. While students are discussing their stressors and strategies for reduction, this music could be played to illustrate the effect of music on heart rate: (use the Kürzi to measure heart rate after each) https://www.youtube.com/watch?v=9gsM2H03xkI or this one: https://www.youtube.com/watch?v=GBD2B9bDD5I. Which clip helped to lower heart rate more?

Essential Questions. What is mental health? How do we become healthy mentally? What is the difference between a bad mood and mental issues? How might a "bad mood" motivate one to make a change in a situation? What situations do you find to be most stressful? What can you do to reduce stress? Who might you talk to about dealing with stress, bad moods, emotions?

Vocabulary. *Mental health:* includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

Mental illness: is common in the United States. Nearly one in five U.S. adults live with a mental illness (51.5 million in 2019). Mental illnesses include many different conditions that vary in degree of severity, ranging from mild to moderate to severe.

Background Information. Mental health and mental health impairment are far more common than we'd like to admit. Mental illness can begin at any age, from childhood through adolescence, puberty and into adulthood. Half of all lifetime cases of mental illness begin by age 14 and 75% by age 24. Suicide is the #1 cause of death for adolescents and young adults.

Read this article for facts about adolescents and mental health: America's mental health crisis (and how animals can help), https://www.certapet.com/emotional-support-animals-and-mental-health/.

Stress in adolescence might be triggered by situations around these topics: academic/school-related stress; social stress; family discord; world events; traumatic events; and significant life changes.

Stress is one of the most common experiences in everyone's lives.

"Stress is a feeling of being tense, overwhelmed, worn out, or exhausted. A small amount of stress can be motivating, but too much stress makes even small tasks seem daunting. Sometimes stress is the accumulation of many small hassles, while other times it is the result of major life changes or long-term problems."

https://www.therapistaid.com/therapy-worksheet/stress-exploration/stress/adolescents

04 Mood and Mental Health

Stress can have effects on your heart rate and on your long term health. Managing stress is an important skill to master!

Managing stressors is sometimes difficult. *“Stress is emotional pressure. Stress causes chemical changes in the body that can raise blood pressure, heart rate, and blood sugar levels. It may also lead to feelings of frustration, anxiety, anger, or depression.”*

Here are some people with careers who may be able to help you deal with stressors: teacher; school counselor; social worker; mental health counselor/therapist; psychologist; school nurse; religious leader (pastor, minister, reverend, priest, clergy, rabbi, elder, etc.)

Activity 4:

Kürzi. Students will use Kürzi to play the **Stressy Guess** mini game and determine which stress reduction strategies are best for reducing stress.

After students pick their choice, the game will reveal which option was considered relaxing or stressful to Kürzi.

After playing have students answer the following question:

1. How do the decisions you make within the game play of Kürzi affect the mood bar?

Additional tips.

Here are some additional tips that may help you lower your stress level: Laughter - watch a funny video or movie; Chew gum; Get a house plant - caring for plants has been shown to help people feel more comfortable, soothed, and natural; Relaxing/meditation techniques/routines - yoga, stretching; Smells that stimulate your olfactory system (i.e. essential oils); Listening to music; singing along; Go for a walk; Play with a pet; Write in a journal; Spend time with friends; Leisure activities; Play a game; Read a book; Take a break from the activity you are in; Spend time in nature; Eat a healthy meal/snack; Exercise; or Talk about problems with a trusted friend/adult.

Resources.

https://www.therapistaid.com/therapy-worksheet/stress-exploration/stress/adolescents

https://www.stress.org/6-common-triggers-of-teen-stress

https://www.excelatlife.com/depression.htm

https://divethru.com/benefits-of-house-plants/

Healthy living images, Healthy diet Lifestyle Eating Health, Fitness and Wellness, health, physical Fitness, food png free download; PNG_EGG_png. https://www.pngegg.com/en/search?q=eat+healthy

04 Mood and Mental Health

Situation Cards

A global pandemic has caused your school to change its entire approach to education. You cannot see your friends each day except on a computer screen.	Your best friend has started dating someone. Now everytime you start to talk with him/her/them, the conversation goes to one of the things they have done together when you weren't with them.	You walk into your least favorite class and the teacher says to put away your books because you are having a test you didn't know about. You have not completed the homework for any day of class this week.
At home, your parents/ guardians argue every night about the events in the news. Neither one of them seems interested in your struggles or wins.	A beloved pet of yours has to be euthanized. You are at school when parents/ guardians make the decision so you cannot go with them to the vet.	Your mom gets a new job and your family has to move to a new city and school.

Situation Cards

You arrive at school and you cannot find your phone.	You have too many tests in a week.	There is a school dance coming up; your friends are getting invited on dates, but you aren't getting asked. You would really like to go to the dance, but not on a date.
You have a big presentation to give in front of the class.	You are on a sports team and play an important position (goalie, point guard, quarterback, linebacker, defense, outfielder). Your team loses a game, and you made a mistake.	Your individual stressful situation:

Blank Situation Cards

Unit Assessment

Set a Health Goal

Set a Health Goal

Unit Assessment

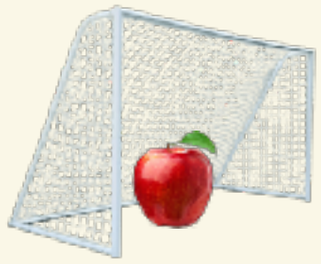
Following the four lessons and interaction with Kürzi, students will demonstrate what they have learned by completing the following activities.

1. Have students revisit their umbrella activity that they completed at the beginning of this unit in Section 1: Healthy Decision Making. *(For example, Eat: Apples, Exercise: walk the dog, Attitude/Mood: play cards (with friends), Career: School nurse.)*

2. Have students write what they learned about each area of the umbrella.
3. Have students consider *eat*, *exercise*, *attitude/mood*, or *careers* to target a personal healthy goal to work towards.
4. Instruct students to draw an infographic or flow chart that connects the types of decisions they make about each of the wedge, *eat*, *exercise*, *attitude/mood*, or *careers.* For example, eating breakfast -> improves thinking -> exercise improves my mood, etc.

SMART Health Goal

Have you students set a personal health goal for themselves. It does not have to be a big goal, but one that is achievable within a short period of time.



Explain to students what a SMART Goal is. For example, perhaps a student wants to raise his/her/their grade in math. What is the current grade? How much do they want to raise it? Be specific. That goal will be measurable, since it is starting where they are now, to where they want to be and involves percentages. If the goal is to get a 90%, but they don't have a good grasp of what they are studying now, they may need to go back to review earlier material to get caught up and make it achievable. If they struggle in math, getting 90% may not be realistic. The goal should have a time frame (90% by the end of the grading period), in other words, timely.