



## **TRACKS Lesson Plan**

### **Drinks and Calcium**

*Rethink Your Drink*

*Special Needs Students – Any Grade*

#### **I. Nutrition Education Goal & Objective:**

Goal 1: Students will comprehend concepts consistent with USDA guidance related to eating and physical activity for good health.

Objective: As a result of Pennsylvania's SNAP-Ed plan, student will know, understand, analyze and apply concepts, as developmentally appropriate, that are consistent with USDA guidance about the benefits of:

1. Drinking plenty of water.
2. Limiting foods high in fat, sodium and added sugar.

#### **II. Pennsylvania Educational Standards:**

- A. 1.6 Speaking and Listening
- B. 10.1 Concepts of Health
- C. 10.2 Healthful Living
- D. 11.3 Food Science and Nutrition

#### **III. Outcomes:**

- A. Students will recognize characteristics of beverages that should be chosen more often
- B. Students will identify beverages that are lower in added sugar to keep their bodies healthy

#### **IV. Materials:**

- A. Visuals: MyPlate Poster, Healthy Beverages Posters
- B. Activities: Listed in Developmental Section under Procedure
- C. Handout: *Think Your Drink*
- D. Food Tasting
- E. Supplies: as needed to prepare and serve food tasting
- F. Gloves, hand wipes/gel
- G. Reinforcement that conveys the appropriate nutrition message
- H. Caregiver Newsletter: Healthy Beverages
- I. Extension lessons (noted at end)

#### **V. Procedure**

- A. Introductory
    1. Welcome
      - a. Welcome students to this nutrition lesson, review last lesson (if applicable)
      - b. Introduce yourself and the topic of the day – “Choosing healthy drinks”
    2. Icebreaker - Go around the room and have each student name a favorite or healthy drink. If they name their favorites, keep a list on the board and have the students identify those that they think are most healthy.
- OR

Using the happy/sad face voting sticks, call out a drink and have students vote if they like the drink (happy face) or don't like the drink (sad face).

3. Identifying Healthy Drinks with MyPlate:
  - a. MyPlate and the Dietary Guidelines help us know what healthy foods we should have everyday. Let's use it to find out what drinks are the healthiest.
  - b. Have students look at the MyPlate poster and locate food groups that contain drinks (fruits, vegetables, and dairy groups).
  - c. Remind students that vegetables can also be made into juice so we can get drinks from the vegetable group also.
  - d. Also, we don't see water on MyPlate, but water is a very important healthy drink. Most of our bodies are made up of water, so we need to make sure we get it every day. Water doesn't have any sugar, calories, or fat and it keeps us feeling great.
  - e. Ask students if they see a food group for soda, iced tea, fruit punch, etc. Since they can't find these drinks, they must not be part of a healthy daily diet. Instead, they are "sometimes drinks" that we should only have once in awhile.
4. Why do we need healthy drinks?
  - a. 100% fruit and vegetable juices give us vitamins and minerals.
  - b. Milk gives us calcium and protein. Why are these things important? (Calcium gives us strong bones and teeth while protein makes our muscles grow strong.)
  - c. We should drink water instead of drinks like soda, iced tea, fruit drinks, and sport drinks because they have a lot of added sugar. Brainstorm ideas why too much sugar is not good for us (causes cavities and tooth loss, could cause weight gain).
5. 100% juice vs. fruit drinks
  - a. Explain to students that they are about to become "**nutrition experts**" in choosing healthy drinks.
  - b. We can tell the difference between a healthy drink and a not as healthy drink by using the food label as a guide.
  - c. Discuss the difference between 100% fruit juice and other fruit drinks. Are they the same?
  - d. No, they are not. 100% juice is ALL juice (no added sugar) while fruit drinks have a little bit of juice with added water and sugar. Use the label to tell the difference.
    - i. Look for the words "100% Juice" on the front. Words like "punch," "drink" and "cooler" are hints that the beverage does not have much fruit in it. Instead, it is mostly water and added sugar.
    - ii. Also look at the back of the label for the percent juice. This number will be written just above the Nutrition Facts panel. We want it to be 100% or very close to 100%.
  - e. Sometimes we can be tricked by the labels since they have pictures of fruit and say things that sound healthy.
  - f. Challenge students to look at their drinks to find out if they are really getting 100% fruit juice or if the label has been tricky.
6. Different kinds of milk
  - a. Take suggestions of all the different kinds of milk we have to choose from (whole, 2%, 1%, skim, chocolate, strawberry, banana)

- b. Explain the difference between whole, 2%, 1% and skim. The only thing that is different is the amount of fat and the amount of calories. All milk has the same amount of protein and calcium.
  - c. Milk has “solid fat” in it (unless the fat has been taken out and it is “skim” or “fat-free” milk). Mention the problems with too much solid fat and too many calories (not good for our hearts, could cause us to gain too much weight).
  - d. Remind students that it is best to choose fat-free or low-fat (1%) milk.
- 7. Label reading
  - a. Use the *Think Your Drink* handout to discuss the differences in nutrient content of drinks.
  - b. Ask questions to discover which are the healthier drinks:
    - Which ones have calcium?
    - Which ones have protein?
    - Which ones have vitamins?
    - What healthy nutrients are in the soda?
  - c. Conclusions:
    - Milk gives us lots of important nutrients and is a very healthy drink. Just remember to look for fat-free or low-fat.
    - Juice can also be healthy if it is 100% juice.
    - Soda and fruit drinks should be “sometimes drinks” since they don’t offer any nutrients and give us extra calories and added sugar.
    - Water is an “anytime drink” because, even though it doesn’t have any nutrients, it also doesn’t have any sugar, fat or calories and our bodies need water to be healthy.

#### B. Developmental

*Activities are marked high functional (HF), low functional (LF), or both (B) for a quick guide; however, it may vary depending on class. At least one of the following activities should be completed during the lesson. More than one is appropriate if time allows. Refer to the explanations of each activity at the end of the lesson plan.*

Activity 1 (HF): *How Much Sugar?*

Activity 2 (B): *What’s the Best Choice?*

#### C. Taste Testing

1. Students should wash hands or use antibacterial wipes/gel if no sink is available.
2. If students are helping prepare the snack, distribute gloves.
3. Prepare and distribute food tasting.
4. Clean up area properly.

### VI. Conclusion:

- A. Thank the participants for their time and answer any questions they may have.
- B. Distribute caregiver newsletters.
- C. Distribute reinforcements and explain the reasoning for the reinforcement.
- D. Remind teacher of extension lessons that correspond with this lesson in their binder.

### VII. Extension Lessons: *(Located in Special Needs Binder)*

*Activities are marked high functional (HF), low functional (LF), or both (B) for a quick guide; however, appropriateness may vary depending on class. Some or all of these activities should be given to the classroom teacher for use after the lesson. They will reinforce the concepts learned during this drink lesson. They can also be used during the lesson if the educator desires.*



This material was funded by USDA's Supplemental Nutrition Assistance Program (SNAP) through the PA Department of Human Services (DHS). This institution is an equal opportunity provider.

# Activity 1 Lesson Plan

## How Much Sugar?



### Materials Needed:

- Various individual sized drink containers (soda, fruit drink, iced tea, milk, etc)
- Sugar
- Teaspoons
- Clear cups
- Calculation guide handout
- Calculators
- Pencils

### Procedure:

1. Explain that the students are going to be sugar detectives, trying to find out how much sugar is in some of our favorite drinks.
2. If necessary, review reasons why excess sugar is not healthy.
3. Decide if students will work individually or as teams. Distribute example beverage bottles to students.
4. Show students how to find how much sugar is in the bottle. Use the calculation handout as a guide:
  - a. Find "Sugar" on the label and look for the number of grams.
  - b. This is the amount in one serving. We want to know how much is in the whole container. Look at the top of the label to see how many servings are in the whole container.
  - c. Multiply the number of servings by the amount of sugar in one serving.
  - d. Write on the board: 4 grams of sugar = 1 teaspoon of sugar.
  - e. Divide the number of grams of sugar found in step c by 4 to get number of teaspoons of sugar.
5. Have students measure out the teaspoons of sugar they have calculated into a cup.
6. Compare and discuss results with the class.
  - a. Was anyone surprised by any of the drinks?
  - b. Discuss possible lower sugar beverage substitutes.

**\*\*Alternative plan:**

Do this activity as a demonstration for the entire class and have one student volunteer do the sugar measuring and counting.



## How much sugar is in my drink?

Drink name \_\_\_\_\_

Step 1:

# of servings		grams of sugar in one serving		Total amount of sugar
	X		=	

Step 2:

Total amount of sugar		# of grams of sugar in 1 teaspoon		Total # of teaspoons of sugar
	÷		=	



This material was funded by USDA's Supplemental Nutrition Assistance Program (SNAP) through the PA Department of Human Services (DHS). This institution is an equal opportunity provider.

## How much sugar is in my drink?

Drink name \_\_\_\_\_

Step 1:

# of servings		grams of sugar in one serving		Total amount of sugar
	X		=	

Step 2:

Total amount of sugar		# of grams of sugar in 1 teaspoon		Total # of teaspoons of sugar
	÷		=	



This material was funded by USDA's Supplemental Nutrition Assistance Program (SNAP) through the PA Department of Human Services (DHS). This institution is an equal opportunity provider.

## Activity 2 – What’s the Best Choice?

### Materials Needed:

- Pencils
- Handout



### Procedure:

1. Hand out worksheet to each student. Explain to the students that they will circle the beverage in each round that is the healthiest, everyday choice
2. Go through each round (1-5) slowly, allowing each student to select/circle the choice that is the most ideal everyday beverage. After each round, discuss their selections and the beverages that were not circled. Allow the students to describe the beverages and their nutrient profiles.



This material was funded by USDA’s Supplemental Nutrition Assistance Program (SNAP) through the PA Department of Human Services (DHS). This institution is an equal opportunity provider.

# What's the Best Choice?

Play along at your seat. Circle the "Everyday Drink" for each round.

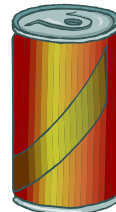
## Round #1



Lemonade



Water

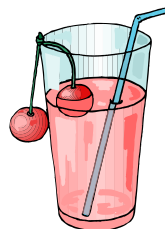


Cola

## Round #2



Root Beer



Fruit Drink



Low-fat Milk

## Round #3



100% Orange Juice



Ginger Ale



Juice Drink

## Round #4



Sports Drink



100% Apple Juice



Iced Tea

## Round #5



Chocolate Milk



Fruit Punch



Grape Soda



This material was funded by USDA's Supplemental Nutrition Assistance Program (SNAP) through the PA Department of Human Services (DHS). This institution is an equal opportunity provider.



THINK  
YOUR

# DRINK!

When it comes  
to NUTRITION,  
not all drinks are  
created equal!



## MILK LOWFAT 1%

Calories 100	% Daily Value
Total Fat	4%
Total Carbohydrates	4%
Protein	16%
Vitamin A	10%
Vitamin C	2%
Vitamin D	25%
Calcium	30%

Serving Size: 8 ounces



## CHOCOLATE MILK LOWFAT 1%

Calories 160	% Daily Value
Total Fat	4%
Total Carbohydrates (Includes 4 tsp added sugar)	10%
Protein	16%
Vitamin A	10%
Vitamin C	2%
Vitamin D	25%
Calcium	30%

Serving Size: 8 ounces



## 100% ORANGE JUICE

Calories 110	% Daily Value
Total Fat	0%
Total Carbohydrates	8%
Protein	0%
Vitamin A	2%
Vitamin C	150%
Vitamin D	0%
Calcium	2%

Serving Size: 8 ounces



## FRUIT PUNCH

Calories 130	% Daily Value
Total Fat	0%
Total Carbohydrates (Includes 6% tsp added sugar)	11%
Protein	0%
Vitamin A	0%
Vitamin C	0%
Vitamin D	0%
Calcium	0%

Serving Size: 6 1/2 ounces



## COLA

Calories 150	% Daily Value
Total Fat	0%
Total Carbohydrates (Includes 9 tsp added sugar)	14%
Protein	0%
Vitamin A	0%
Vitamin C	0%
Vitamin D	0%
Calcium	0%

Serving Size: 12 ounces



## DIET COLA

Calories 0	% Daily Value
Total Fat	0%
Total Carbohydrates	0%
Protein	0%
Vitamin A	0%
Vitamin C	0%
Vitamin D	0%
Calcium	0%

Serving Size: 12 ounces



## BOTTLED WATER

Calories 0	% Daily Value
Total Fat	0%
Total Carbohydrates	0%
Protein	0%
Vitamin A	0%
Vitamin C	0%
Vitamin D	0%
Calcium	0%

Serving Size: 8 ounces



## SPORTS DRINK

Calories 50	% Daily Value
Total Fat	0%
Total Carbohydrates	5%
Protein	0%
Vitamin A	0%
Vitamin C	0%
Vitamin D	0%
Calcium	0%

Serving Size: 8 ounces

