



18 USC 707

4th H for
Health Challenge
Leader Guide

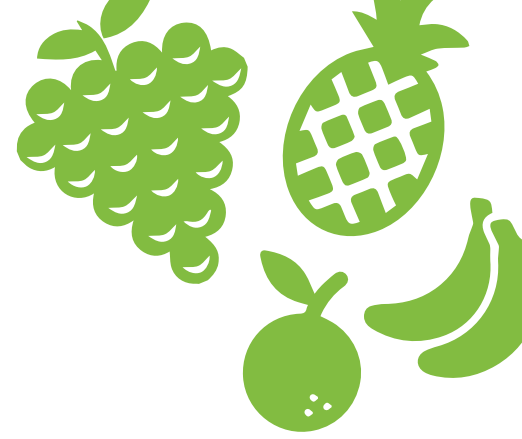


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OVERVIEW OF THE 4TH H FOR HEALTH CHALLENGE CURRICULUM

The 4th H for Health Challenge curriculum encourages physical activity and healthy eating habits. Over the course of this 6-week lesson plan, youth will learn how to Snack Smart, Drink Right, and Move More. The lessons encourage fruits and vegetables for snacks, water as the beverage of choice, and new ways to increase active time to help youth reach the 60 minutes-a-day recommendation.

Both the lack of physical activity and over-consumption of food among children are factors that have contributed to the childhood obesity epidemic. Currently, 1 in 3 children are overweight or obese, and children and teenagers who are obese have a 70-80% chance of becoming obese as adults. Now more than ever, it is important to help youth establish healthy habits. The curriculum's overarching objective is *to encourage youth to establish a pattern of healthy eating and physical activity during meeting times that they can replicate in other areas of their lives.*

Healthy behaviors are embedded in the 4-H mission. The pledge states, "I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living, for my club, my community, my country, and my world." Since the fourth "H" stands for health, 4-H club meetings provide a great opportunity to teach the science behind healthy habits and role model healthy behaviors.

The final lesson presents youth with the 4th H for Health Challenge. After learning the importance of healthy eating and physical activity over the first 5 sessions, we hope everyone will be excited to take on the Challenge. They can do the Challenge together as a club and make their meeting times a place where healthy habits are the norm. Please read the 4th H for Health Challenge Overview and Tracker sheets (pages 28 and 29) for more information.

“

I PLEDGE MY HEAD TO CLEARER THINKING, MY HEART TO GREATER LOYALTY, MY HANDS TO LARGER SERVICE, AND MY HEALTH TO BETTER LIVING, FOR MY CLUB, MY COMMUNITY, MY COUNTRY, AND MY WORLD.”

SESSION 1: SNACK SMART TASTE TEST

SESSION OBJECTIVES

- ✓ Participants will be able to explore the different tastes and textures of fruits and vegetables.
- ✓ Participants will be able to explain some of the health benefits of fruits and vegetables.

MEETING OUTLINE

Pre-meeting: Prep the samples of fruits and vegetables or have older youth help prep during the session (i.e., wash, slice, divide into containers, etc.)

Min. 0-5: Attendance and introduction

Min. 5-20: Physical Activity Meeting Starter

Min. 20-50: Taste Test

Min. 50-60: Closing discussion and wrap-up

PHYSICAL ACTIVITY MEETING STARTER

(15 minutes) An activity called “**Guess the Number**” is the first physical activity session. Next week, youth will design their own activities to lead.

INSTRUCTIONS FOR GUESS THE NUMBER

- 1 Select one person to be the Guesser. The remaining players pick a number between 0 to 1,000 (or 0-100 for younger kids). Be sure the Guesser doesn't hear the number!
- 2 The Guesser will start to guess numbers. To help him/her get to the right number, you give active clues:
 - If the guess is too high, do squats or lunges to tell the Guesser: **Go lower!**
 - If the guess is too low, jump up and down to tell the Guesser: **Go higher!**
- 3 The guessing and active clues continue until you get to the correct number. Try multiple rounds so players can take turns being the Guesser.



SESSION MATERIALS

- ✓ Snack Smart Taste Test for each participant
- ✓ Pens/pencils
- ✓ At least 2 different fruits
- ✓ At least 2 different vegetables
- ✓ Knife to cut the produce samples
- ✓ Cutting board
- ✓ Small containers to put the samples in
- ✓ Access to water (to wash produce) if possible
- ✓ Paper towels or napkins
- ✓ Physical activity equipment



**NEED ANOTHER ACTIVITY?
CHECK THESE OUT!**

www.healthykidshub.org/PA-breaks.pdf

MAIN ACTIVITY

TASTE TEST



TIME TO COMPLETE ACTIVITY
30 Minutes

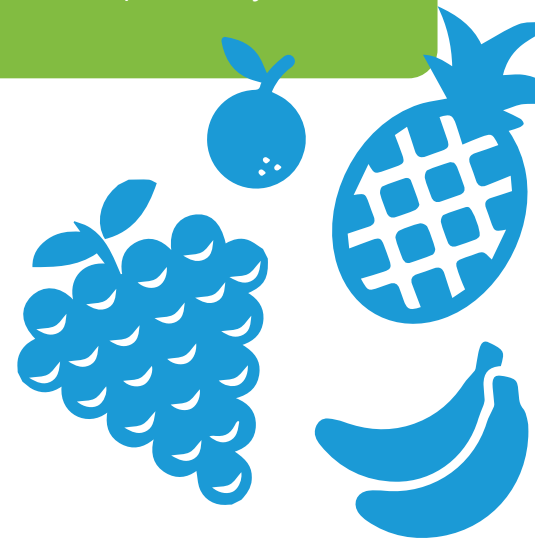


ACTIVITY BACKGROUND

This activity allows youth to learn about different fruits and vegetables and discover their favorites. Fruits and vegetables are a vital part of a healthy diet: they provide important *nutrients* such as *vitamins, minerals, and fiber, as well as water*. Foods that contain fiber and water help us feel full. Ninety-eight percent of American children do not reach the recommended daily servings of fruits and vegetables. This Taste Test exposes students to new flavors and textures of a variety of fruits and vegetables. It also provides students an opportunity to try their hand at recordkeeping and can be used as an example of why recordkeeping is important when conducting experiments.

OPENING QUESTIONS

- What fruits and vegetables do you like?
- Why are fruits and vegetables important to eat?
- What are some of the health benefits of fruits and vegetables?
- What are different ways to describe the flavor and texture of fruits and vegetables?



DIRECTIONS

- 1 Before beginning the taste test, ask the students to list off fruits and vegetables they know. Ask them what their favorites are. Identify some less common fruits and vegetables and discuss which ones they've tried.
- 2 Give a Taste Test sheet (page 7) to each participant (or complete the activity together using one sheet).
- 3 Have participants guess the name of each sample. Create more of a challenge by having them close their eyes!
- 4 Mark an 'X' in the table next to the words that best describe each sample. Explain the importance of data sheets and recordkeeping when conducting an experiment.
- 5 For older participants, ask them if they know what nutrients the different fruits and vegetables contain. Do the nutrients differ by color? Have older participants help you explain the health benefits of fruits and vegetables to the younger participants.
- 6 Vote on the sample most liked by the club.

CLOSING DISCUSSION

- **What were your favorite fruits and vegetables?**
- **What textures and flavors did you like best?**
- **What surprised you about any of the samples?**
 - ✓ Being open-minded and trying new things can allow you to develop new tastes!
- **Why is it important to eat fruits and vegetables?**
 - ✓ Fruits and vegetables provide important nutrients such as fiber, vitamins, and minerals.
 - ✓ They also contain lots of water!
 - ✓ Fruits and vegetables help us feel full because they contain fiber.
- **How can you be sure to eat more fruits and vegetables during the day?**
 - ✓ Examples: Eating grapes instead of chips, or eating a peach as an after-school snack instead of a treat from the vending machine.
- **Where are other places you can try new fruits and vegetables?**
 - ✓ At school lunch, try a new fruit or vegetable to go with your meal, such as cantaloupe or beets.
 - ✓ At the farmer's market, ask farmers for samples of different fruits and vegetables.
 - ✓ At a restaurant you can order a new dish that has fruits or vegetables.
- **In what other situations would trying new things be a good idea?**
 - ✓ When you are shopping with a parent at the grocery store. You can even ask what fruits and vegetables are in season and how to select ripe produce.
 - ✓ When you are preparing food at home.





Snack Smart Taste Test



There are hundreds of fruits and vegetables: from apples and blackberries to yams and zucchini. With this taste test, 4-H'ers can try unfamiliar fruits and vegetables and discover new favorites!

1. Wash and slice samples of fruits and vegetables.
2. Give a taste test sheet to each club member, or complete the activity together using one sheet.
3. Have club members guess the name of each sample. Create more of a challenge by having them close their eyes!
4. Mark an 'X' in the table next to the words that best describe each sample.
5. Vote on the sample most liked by the club.

	FRUITS			VEGETABLES		
	SAMPLE A	SAMPLE B	SAMPLE C	SAMPLE A	SAMPLE B	SAMPLE C
CRUNCHY						
SWEET						
SOUR						
JUICY						
BITTER						
YUMMY						
RIPE						
SLIPPERY						
CHEWY						
BLAND						
SURPRISING						
OTHER _____						

FAVORITE FRUIT

FAVORITE VEGETABLE

Research shows that the more times kids taste new foods, the better they like them. Encourage kids to keep trying new foods, they might be pleasantly surprised!

SESSION 2: MOVE MORE ACTIVITY PLAN

SESSION OBJECTIVES

- ✓ Participants will be able to design and lead a 5-15 minute physical activity session at club meetings.
- ✓ Participants will be able to understand the importance of being physically active.

MEETING OUTLINE

Pre-meeting: Gather available physical activity equipment

Min. 0-5: Attendance and introduction

Min. 5-20: Physical Activity Meeting Starter

Min. 20-55: Move More Activity Plan

Min. 55-60: Closing discussion and wrap-up

PHYSICAL ACTIVITY MEETING STARTER

- 1 (5 minutes) Play the 'As If' Game: Read sentence aloud and have the youth act out each sentence for 30 seconds. For example:
 - "Jump in place as if you are popping popcorn!"
 - "Sprint in place as if you are in the Olympics!"
 - "March in place as if you are in a marching band!"
 - Make up activities relevant to your area (e.g. fishing, picking apples, surfing, etc.)
 - Try mixing up the directions every 30 seconds.
- 2 (5 minutes) Play Mathletes: Have the youth stand up and act out math equations. For example, "Take 3 steps in place, 2 times. How many steps did you take in total?" or "Hop up and down 10 minus 3 times!"
- 3 (5 minutes) Play 'Sports Shout-Out': Have the youth stand up. Call out different sport actions for them to perform, like jumping over hurdles or dribbling a soccer ball. Have the youth act out those actions for 15 to 30 seconds each.



SESSION MATERIALS

- ✓ Activity Plan template sheets for each student or groups of students
- ✓ Pens/pencils
- ✓ Physical activity equipment that you will have accessible at each session (e.g. jump ropes, balls, cones, etc.)



NEED IDEAS FOR PHYSICAL ACTIVITY?

Check out the Healthy Kids Hub:
www.healthykidshub.org

MAIN ACTIVITY

MOVE MORE ACTIVITY PLAN



TIME TO COMPLETE ACTIVITY

35 Minutes



ACTIVITY BACKGROUND

The physical activity session the group just completed is an example of what the youth will be designing today. Being physically active is vital to keeping our bodies healthy. Not only does it strengthen our heart and muscles, research shows that kids who get more exercise perform better in school. Adding just 15 minutes of physical activity can help youth achieve the recommended 60 minutes per day. Less than half of school-aged children and only about 10% of teenagers meet the recommendation. Physical activity can be performed throughout the day; it does not need to happen all at once. The activities will expose the youth to new and creative ways to move, while helping them reach the 60-minute goal.

WHEN HELPING THE YOUTH DESIGN THESE ACTIVITIES, THERE ARE A FEW IMPORTANT THINGS TO KEEP IN MIND:

- 1 Encourage activities that are non-competitive, fun, and inclusive.
- 2 Try to have activities that involve everyone and keep all the youth moving. For example, if the activity involves a relay, have those that are waiting their turn do jumping jacks or run in place.
- 3 Avoid activities that require long explanations or a lot of set-up, since you only have 15 minutes. Be sure to make the most of it!
- 4 Having trouble getting started? Think of common games such as Red Light/Green Light or Simon Says and change the directions to make it more active.

DID YOU KNOW?

Putting math in real-world contexts may help kids better understand concepts. Some studies suggest that combining movement with learning even elicits changes in brain activity that help kids learn more effectively!

OPENING QUESTIONS

- **Why is physical activity important?**
- **How much physical activity do you get each day?**
 - **What activities do you do? Consider all the ways you stay active at home, school, and during afterschool or summer activities.**
- **What types of foods can you eat for your body to have the energy it needs to be active?**

DIRECTIONS

- 1 Create groups of students who will design a physical activity together and lead it, starting with today's session.
 - There are 4 more sessions, each with 15 minutes of activity. Divide youth into groups accordingly. Consider having the older participants design longer sessions (15 minutes) and younger participants design shorter ones (5 minutes).
- 2 Explain that any of the equipment can be used for the sessions. Challenge the older participants to design activities without the equipment.



- 3 Explain to the youth that their sessions are required to:
 - meet the designated time length
 - include everyone
 - keep everyone moving as much as possible

Make it more of a challenge for older youth by giving them more requirements to meet (make 5 of the 15 minutes harder exercises, teach the younger participants a new skill as part of the session, etc.).

- 4 (15 minutes) Give each group an Activity Plan Template sheet to complete, and work with the youth to design their activity sessions. For younger youth, skip the Template sheet and have them verbally explain their activity.
- 5 (5 minutes) Have the students practice leading the physical activity sessions in small groups.
- 6 (15 minutes) Select one group to lead their activity for the whole group. Save completed Template sheets so that remaining groups can lead the activity at future meetings.

CLOSING DISCUSSION

- **What did you learn from designing these physical activity sessions?**
- **How can you use what you learned today at home?**
 - How can you incorporate these activities into your daily routine?

ACTIVITY PLAN TEMPLATE SHEET

ACTIVITY NAME: _____

ACTIVITY TIME (5, 10, 15 MINUTES): _____

LOCATION (CLASSROOM, GYM, OUTSIDE): _____

MATERIALS/EQUIPMENT NEEDED: _____

DIRECTIONS: **1** _____

2 _____

3 _____

DIAGRAM (IF NEEDED):



DOUBLE-CHECK YOUR GAME:

1 Is everybody moving? YES NO

2 Is the game non-competitive (nobody is eliminated)? YES NO

3 Is it making you breathe harder? YES NO

SESSION 3: FUEL FOODS & SUGAR DETECTIVES

SESSION OBJECTIVES

- ✓ Participants will learn the health benefits of different kinds of foods and beverages.
- ✓ Participants will be able to determine the amount of sugar in a variety of common beverages.

MEETING OUTLINE

Pre-meeting: Cut out the Activity Cards. Gather the materials needed for the Sugar Detectives activity, including calculating how many teaspoons of sugar are in each container (*see sugar conversion below). Older youth can do this with you during the activity.

Min. 0-5: Attendance and introduction

Min 5-30: Fuel Forward Activity

Min. 30-55: Sugar Detectives

Min. 50-60: Closing discussion and wrap-up

SUGAR CONVERSION

1. Use the nutrition facts label on each drink to find the grams of sugar.

Nutrition Facts		
Serving Size: 8 fl. oz (240 mL)		
Servings Per Container: 2.5		
Amount Per Serving		
Calories	100	
		% Daily Value
Total Fat	0g	0%
Sodium	35mg	2%
Total Carbohydrate	27g	9%
Sugars	27g	
Protein	0g	

2. Check the number of servings per container. If there's more than one, multiply the grams of sugar by the number of servings to get the total amount.

3. Convert the total grams to teaspoons or packets:

4 = =

GRAMS
1 TEASPOON
1 PACKET

4. Note the total teaspoons of sugar for each drink to reference during the Activity.

Example: A 20 oz. soda contains **27** grams of sugar per serving. There are **2.5** servings per container. So, **27 x 2.5 = 67.5 grams total**. To get the number of teaspoons, divide the total by **4**. So, there are **17** teaspoons of sugar (**67.5/4=17**) in one bottle.

SESSION MATERIALS

- ✓ Fuel Forward Activity cards
- ✓ Sugar Detectives handout
- ✓ Empty drink containers, such as sports drinks, a juice pouch, soda, and iced tea with the nutrition facts label still attached
 - Include an empty bottle of water
 - For clarity, do not include 100% fruit juice or milk
- ✓ Sugar (packets or bag of sugar & measuring spoons)

MAIN ACTIVITY

FUEL FOODS & SUGAR DETECTIVES



TIME TO COMPLETE ACTIVITIES

50 Minutes



ACTIVITY BACKGROUND

This session has two activities. The Fuel Forward activity teaches youth the difference between foods that provide energy AND are nutritious (Fuel Foods), and foods that only provide energy (Treat Foods). Participants will first learn how the two groups of foods differ, and then they'll play an active game with the Fuel Forward Activity cards to reinforce the message. In the second activity, Sugar Detectives, you'll discuss sugar-sweetened beverages and the amount of sugar that we unknowingly drink when we consume these beverages. Many know that there is sugar in desserts and candy, but few know that almost half of the added sugar in our diets comes from drinks!

OPENING QUESTIONS

- Do you know what kinds of foods help our bodies grow strong and healthy?
- Do you know how much sugar is in the beverages you drink?

DIRECTIONS - ACTIVITY #1

- 1 Pass out one Fuel Forward Activity Card to each student.
- 2 Explain that you're going to talk about two types of foods: "Fuel Foods" and "Treat Foods". Explain that all foods give us energy. We need this energy so our brains can think, our lungs can breathe, our heart can beat, and our muscles can move.
- 3 **Fuel Foods** (and drinks) give us energy, but they also give us other things our bodies need to be healthy and strong. Fuel Foods give us vitamins, minerals, protein, healthy fats, fiber, and water, and these things are extremely important for our bodies. We need them every day to grow strong.
- 4 Ask if anyone thinks they have a Fuel Food card. If so, what benefits does their food provide? Youth should see the benefits on their card (e.g. vitamins & minerals, protein, etc.) Let students share their cards until you've covered all five benefits (see below). Treat Food cards will be addressed later.
 - Vitamins & Minerals boost our immune system so that our bodies can fight off colds, make sure our bodies grow and develop the way it should, and help all our organs do their jobs.
 - Protein is needed by our bodies to keep our organs working properly and to build strong muscles.
 - Fiber helps to keep our stomachs and the rest of our digestive system healthy. The digestive system is the part of the body that processes the food we eat. Fiber also helps us feel full and gives us long-lasting energy.
 - Healthy Fats protect our hearts and keep them strong so they can beat and pump our blood.

- 5 Ask if anyone can guess something that you need to drink every day to stay healthy.
- Water is vital to our health! We need water to make sure all of the vitamins, minerals, and other nutrients we get from eating Grow Foods can get to the different parts of our bodies. If we don't drink enough water, we can become dehydrated, making us tired and weak. Most Fuel Foods, especially fruits and vegetables, contain water. So, when we eat these foods we help our bodies stay hydrated!
- 6 **Treat Foods** (and drinks) also give us energy, but they don't give our bodies any of the other benefits (vitamins, minerals, protein, fiber, etc.) that we get from Fuel Foods. So, they don't give us the nutrients we need to grow in a healthy way. Since we can only eat so much food in a day, the more Treat Foods we eat, the less likely we are to eat enough Fuel Foods. This means our bodies will miss out on the things it needs to grow strong and stay healthy.
- 7 Ask if anyone has a Treat Food card. What is it?
- 8 Now prepare the group to play the Fuel Forward game. The goal of the game is to play Activity Cards that allow you to take steps and move forward. An Activity Card lets you take a step when it's a food that helps you grow healthy (Fuel Food). Teams that complete 10 steps win! Two teams get 12 cards each (or 1 page), some cards will be Fuel Foods and some will be Treat Foods. Each card lists the different benefits that the food contains. For each benefit, players will act out the corresponding action. Some cards have more than one benefit, so players get to do all the actions on the card. Read the actions aloud and have kids practice what to do for each one.

ACTIVITY CARDS: BENEFITS & ACTIONS

VITAMINS & MINERALS: Hop on one foot for 10 seconds, then take 1 step

FIBER: Do 10 jumping jacks, then take 1 step

PROTEIN: Do a squat, then take 1 step

HEALTHY FATS: Stomp your feet twice, then take 1 step

WATER: Pretend to swim for 10 seconds, then take 1 step

ENERGY: Run in place for 10 seconds, but **DON'T** take any steps

- 9 How to play the Fuel Forward game:
- Divide the youth into two teams.
 - Distribute 12 cards to each team. Have teams start at the same time by drawing a card to play from the top of the deck.
 - For younger players, keep the cards and read them aloud, alternating one for each team.
 - All players on the team do the actions on the card to move forward.
 - Teams continue to draw cards at the same time until one team has taken 10 steps forward. If neither team reaches 10 steps in the first round, shuffle and redistribute the cards.

ACTIVITY CARDS

WATER



WATER
SWIM +1 step



BEANS



ENERGY
RUN IN PLACE for 10 seconds
VITAMINS & MINERALS
HOP ON ONE FOOT +1 step
FIBER
DO 10 JUMPING JACKS +1 step
PROTEIN
DO A SQUAT +1 step

DONUTS



ENERGY
RUN IN PLACE for 10 seconds

BROCCOLI



ENERGY
RUN IN PLACE for 10 seconds
VITAMINS & MINERALS
HOP ON ONE FOOT +1 step
FIBER
DO 10 JUMPING JACKS +1 step
WATER
SWIM +1 step

CANDY



ENERGY
RUN IN PLACE for 10 seconds

STRAWBERRIES



ENERGY
RUN IN PLACE for 10 seconds
VITAMINS & MINERALS
HOP ON ONE FOOT +1 step
FIBER
DO 10 JUMPING JACKS +1 step
WATER
SWIM +1 step

FRUIT DRINK



ENERGY
RUN IN PLACE for 10 seconds

MILK



ENERGY
RUN IN PLACE for 10 seconds
VITAMINS & MINERALS
HOP ON ONE FOOT +1 step
PROTEIN
DO A SQUAT +1 step
WATER
SWIM +1 step

COOKIES



ENERGY
RUN IN PLACE for 10 seconds

CUCUMBERS



ENERGY
RUN IN PLACE for 10 seconds
VITAMINS & MINERALS
HOP ON ONE FOOT +1 step
FIBER
DO 10 JUMPING JACKS +1 step
WATER
SWIM +1 step

TUNA



ENERGY
RUN IN PLACE for 10 seconds
VITAMINS & MINERALS
HOP ON ONE FOOT +1 step
PROTEIN
DO A SQUAT +1 step
HEALTHY FATS
STOMP +1 step

SPINACH



ENERGY
RUN IN PLACE for 10 seconds
VITAMINS & MINERALS
HOP ON ONE FOOT +1 step
FIBER
DO 10 JUMPING JACKS +1 step
WATER
SWIM +1 step

ACTIVITY CARDS

CUPCAKES



ENERGY
RUN IN PLACE for 10 seconds



APPLES



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

FIBER
DO 10 JUMPING JACKS +1 step

WATER
SWIM +1 step

SPORTS DRINK



ENERGY
RUN IN PLACE for 10 seconds

WHOLE WHEAT BREAD



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

FIBER
DO 10 JUMPING JACKS +1 step

YOGURT



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

PROTEIN
DO A SQUAT +1 step

CARROTS



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

FIBER
DO 10 JUMPING JACKS +1 step

WATER
SWIM +1 step

CHOCOLATE GRANOLA BAR



ENERGY
RUN IN PLACE for 10 seconds

NUTS



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

PROTEIN
DO A SQUAT +1 step

HEALTHY FATS
STOMP +1 step

BANANAS



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

FIBER
DO 10 JUMPING JACKS +1 step

WATER
SWIM +1 step

AVOCADOS



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

FIBER
DO 10 JUMPING JACKS +1 step

HEALTHY FATS
STOMP +1 step

SODA



ENERGY
RUN IN PLACE for 10 seconds

MANDARIN ORANGES



ENERGY
RUN IN PLACE for 10 seconds

VITAMINS & MINERALS
HOP ON ONE FOOT +1 step

FIBER
DO 10 JUMPING JACKS +1 step

WATER
SWIM +1 step

DIRECTIONS - ACTIVITY #2

- 1 Line the sugary drink containers up on a table in random order, including the water bottle.
- 2 Ask the youth if they've ever tried any of the drinks on the table.
- 3 Show the students how much sugar is in a teaspoon. Ask them to guess how many teaspoons or packets of sugar are in each drink.
- 4 Have youth measure and count out how many teaspoons of sugar are in each drink container. You can have youth scoop teaspoons of sugar out of a bag into a bowl, or have them count out sugar packets and tape them together to form a string. Make sure all students participate.
- 5 Explain that the sugar contained in these drinks provides energy, but unlike the energy we get from Fuel Foods, we don't get any other benefits from these drinks. Some Fuel Foods are sweet, like different fruits, but they're sweet because they grew that way, not because someone added sugar to them. Ask the students if they think these beverages are Fuel Drinks or Treat Drinks.



CLOSING DISCUSSION

- What's the difference between a Fuel Food and a Treat Food?
- In the game, what happened when you played a Treat Food? What about a Fuel Food?
- Did anything surprise you about the drinks we looked at today?
- Does anyone think differently about the beverages that you choose to drink?
 - How so?
 - Will you choose different drinks now?
- How much sugar does water contain?

Sugar Detectives

We know desserts and candy have a lot of sugar, but what about our drinks? Almost half of the added sugar in our diets comes from drinks! Use this activity to show 4-H'ers the hidden sugar in common beverages.

- Collect a **variety of popular drinks**, such as a sports drink, juice pouch, and soda. Find the **total grams of added sugar in the entire drink**, using the Nutrition Facts label.
- Convert the **grams to teaspoons** for each drink - 4 grams is equal to about 1 tsp. Example: A 20 oz soda contains **64** grams, or **16** tsp. of sugar ($64/4=16$)
- For each drink, **measure the number of teaspoons of sugar** into a **small bowl** or **sandwich-sized plastic bag**. You can also tape together sugar packets, using one packet for each teaspoon of sugar. Label each bowl, bag or string of sugar packets with the number of tsp. it contains.

Find the Sugar

The Nutrition Facts label may only list the grams of sugar **per serving**. Find the total amount of sugar by multiplying the amount of sugar per serving by the number of servings per container.



- Ask 4-H'ers to guess how much sugar is in each drink by matching sugar containers with drinks. Then, reveal the correct pairs.

Questions for 4-H'ers

Consider the sizes of cups sold at convenience stores, restaurants, and movie theaters. How much sugar do you think these cups contain?

Think about what you drink. How much sugar are you drinking each day?

Sugar Detectives, Round 2

You can expand this activity by using different popular drinks to use in the display. Try including a sweetened iced tea, energy drink, or a drink with added vitamins to show that even these drinks contain a lot of sugar.

Older club members can create a poster to display at a community event using posterboard, empty bottles of drinks, and bags of sugar or sugar packets.

SESSION 4: WHY WATER WINS

SESSION OBJECTIVES

- ✓ Participants will be able to explain the importance of drinking water.
- ✓ Participants will be able to recognize the symptoms of dehydration.

MEETING OUTLINE

Pre-meeting: Gather materials needed to make three varieties of flavored water (e.g. water pitchers, cups, frozen berries, citrus, cucumber, mint, etc.)

Min. 0-5: Attendance and introduction

Min. 5-20: Physical Activity Meeting Starter

Min. 20-50: We Are Water

Min. 50-60: Closing discussion and wrap-up

PHYSICAL ACTIVITY MEETING STARTER

(15 minutes) Have groups of participants lead the physical activity sessions they designed in Session 2.



SESSION MATERIALS

- ✓ Empty gallon jug (clear)
- ✓ Measuring cups (1 cup)
- ✓ Water (sink access or large jug)
- ✓ Daily Hydration Chart
- ✓ Water pitchers and cups
- ✓ Blank pieces of paper
- ✓ Frozen fruit, fresh fruit (oranges, lemons, limes, berries) herbs (mint, basil), cucumber slices, non-caffeinated herbal tea bags
- ✓ Physical activity equipment

MAIN ACTIVITY

WE ARE WATER & FLAVORED WATER



TIME TO COMPLETE ACTIVITY
30 Minutes



ACTIVITY BACKGROUND

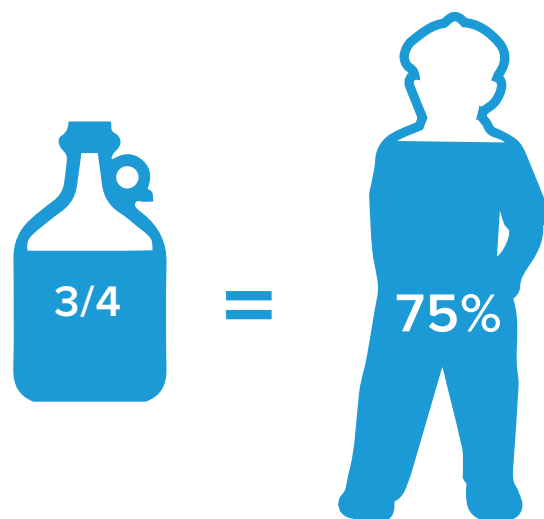
Water is essential for human life. We would not be alive without it. In fact, we would survive less than a week without drinking water. This activity will teach students why water is important to drink and how much they should try to drink each day. It will also give them some ideas for making water fun to encourage youth to choose water more often.

OPENING QUESTIONS

- Why is drinking water important?
- What happens when you don't drink enough water?
 - Think about plants: What happens to plants when they don't get watered?

DIRECTIONS

- 1 Prepare three pitchers of flavored water by adding different ingredients to each. Set aside.
- 2 Ask the youth what percentage of their body is water. You can also shout out percentages and have them say whether it is more or less.
- 3 Share with the youth that $\frac{3}{4}$ of their bodies are made up of water. Using the gallon jug, fill it up $\frac{3}{4}$ full to represent how much of a child's body is water. Work out the math together:
 - There are 16 cups in 1 gallon, so fill the jug with 12 cups to equal $\frac{3}{4}$ full ($12/16=0.75=3/4$)
- 4 Ask the youth how they take in water throughout the day.
 - Answers: drinking and eating
 Then, ask how much water they lose in a day and how.
 - Answers: 5-10% of their body weight by sweating, breathing, urine output, etc.
 Explain that you can see your breath when it's cold outside because of the water in it!
- 5 Use the measuring cups to take out 5-10% of the water from the jug to represent water lost. Do the math with the kids: $1/12$ cups = 8.3%. Remove 1 cup of water from the jug. Explain to the youth that when you compare the size of the jug to the size of their bodies, they need to replace a lot more than one cup.

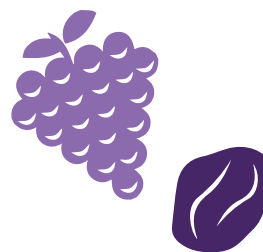


6 Discuss why it's important to drink water in order to replenish what you lose during the day. Explain that you need water to convert the food you eat into energy and for your liver to function properly. Water is critical for digesting food and regulating body temperature. It helps keep the body working so it can do things like grow hair and keep skin healthy.










7 Ask the students if they know what dehydration is. Explain that when you are dehydrated, it means you are not replenishing your body's water appropriately.

8 Ask the students how they can tell if they are dehydrated. Explain that some common symptoms of dehydration are: Dry, sticky mouth, thirst, tiredness, decreased motivation for activity, decreased urine output, dry skin, headache, constipation, dizziness or lightheadedness, confusion, and inability to sweat.

9 Remind students that it is easy to confuse thirst with hunger, so if they ate recently and still feel hungry, they might actually be dehydrated. Recommend that they try drinking water first and see if the symptoms subside.



10 Using the chart below, explain how much water the youth should drink and consume from food each day based on their age and gender. Explain that when they are physically active, or if it is hot and humid out, they need to drink extra water to avoid dehydration.

 DAILY HYDRATION CHART			
AGE GROUP	TOTAL WATER* (APPROX. CUPS)	 WATER WE DRINK (APPROX. CUPS)	 WATER WE EAT (APPROX. CUPS)
 CHILDREN 1-3	5 1/2	4	1 1/2
 CHILDREN 4-8	7	5	2
 GIRLS 9-13	9	7	2
 BOYS 9-13	10	8	2
 GIRLS 14-18	10	8	2
 BOYS 14-18	14	11	3

***Don't forget to add an additional 1 cup of water for every 30 minutes of physical activity!**

- 11** Ask a volunteer to measure out the number of cups of water they need to drink, based on the chart.

For example: A 9 year-old girl needs 9 cups of water => 7 cups from drinks and 2 cups from foods. If she gets 60 minutes of physical activity a day, she needs 2 more cups, for a total of 11 cups of water!

- 12** Explain that water from food is mostly found in fruits and vegetables (Fuel Foods). Watermelon and strawberries contain about 92% water by volume. Other fruits with high water content include grapefruit with 91%, cantaloupe with 90%, and peaches with 88%. Cucumbers and lettuce consist of 96% water. Zucchinis, radishes, and celery are comprised of 95% water. Tomatoes are 94% water and green cabbage is 93% water. So fruits and vegetables are a great way to get water during snacks and meals.

- 13** Now that the flavored water has had time to infuse, explain that they're going to sample different types of flavored water. Flavored water is a fun way to liven up tap water and can help youth drink more now that they know how much water they need to consume.

- 14** Line up the three pitchers along a table with a piece of paper in front of each to identify the flavor. Have kids sample each flavor and think about which is their favorite. Then have them choose their favorite or rank the three varieties by writing a number on the pieces of paper that identify each flavor on the table (e.g. favorite = 3, second favorite = 2, least favorite = 1). Total up the scores and share the results.

CLOSING DISCUSSION

- **Has anyone ever been dehydrated? Do you remember what it felt like?**
- **What can we do to remember to drink more water throughout the day (at home, school, etc.)?**
 - ✓ Example: Carry a water bottle with you, drink it with meals and snacks, and drink water first thing when you get up in the morning.
- **Would you make flavored water at home? What else could you add to your water?**
- **Remember: when you sweat more, like when you're playing sports, or when it's really hot outside, you need to drink even more water because you may be losing more water through sweating!**



SESSION 5: TALK TEST

SESSION OBJECTIVES

- ✓ Participants will be able to differentiate between light, moderate, and vigorous activity.

MEETING OUTLINE

Pre-meeting: Prepare materials and print out a Respiration Data Sheet for each participant

Min. 0-5: Attendance and introduction

Min. 5-20: Physical Activity Meeting Starter

Min. 20-50: Talk Test Activity

Min. 50-60: Closing discussion and wrap-up

PHYSICAL ACTIVITY MEETING STARTER

(15 minutes) Have groups of participants lead the physical activity sessions they designed in Session 2.



SESSION MATERIALS

- ✓ Talk Test Activity Sheets (page 34) for each participant (or one for the group for younger students)
- ✓ Pens/pencils
- ✓ Physical activity equipment



MAIN ACTIVITY

TALK TEST



TIME TO COMPLETE ACTIVITY

30 Minutes



ACTIVITY BACKGROUND

Physical activity can be done in many different ways, and some ways take more effort than others. We can break activity down into three levels: vigorous, moderate, and light. When we are moving really fast or working really hard, we are doing vigorous activity. It's hard to do vigorous activity for a long period of time. Moderate activity is like when we're walking very fast or riding a bike. And when we are doing gentle activity, like walking slowly, we are doing light activity. Light activity can be sustained for a much longer period of time. For the physical activity session in this curriculum, we only have 15 minutes, so we want to make the most of it, which means aiming for moderate or vigorous activity. It's important to know what level of activity we are doing so we can be sure to get the recommended 60 minutes of moderate to vigorous activity per day. All levels of physical activity are great, but the harder we work the healthier we will be!

OPENING QUESTIONS

- **What types of physical activities do you like to do?**
- **Are some easier than others?**
- **How do you know when you are working hard?**
 - **Breathing harder, heart beating faster, harder to talk, sweating, etc.**

DIRECTIONS

- 1** Explain that your heart beats faster when you are exercising more vigorously because it has to pump more blood and oxygen to your muscles. Explain that you also breathe more when you are exercising more vigorously in order to get oxygen to your muscles and carbon dioxide out from your muscles. The Talk Test helps you know what level of activity you are doing. If you are doing light activity, you can sing and talk while you're moving. If you're doing moderate activity you can talk, but not sing. And if you're doing vigorous activity, you will not be able to say more than a few words without pausing for a breath.
- 2** Start by picking a song that all children know (for example, the Hokey Pokey) for the talk and sing test. Instruct youth to practice by first talking it as a group and then singing it together. This activity can be done as a group, which is best for younger kids, or in pairs.
- 3** Pass out the Talk Test Sheet or record observations on one sheet as a group.
- 4** Have students practice the ease with which they can both talk and sing the song while walking at a slow pace. Inform students that this is a light activity since they can both talk and sing. Record the activity type on the Talk Test Activity Sheet.

- 5 Have kids engage in a moderate activity (e.g. walking briskly), and attempt to both talk and sing. Ask them whether they were able to sing or talk easily. Record the activity type on the Activity Sheet.
- 6 Have kids engage in vigorous activity (e.g. running in place), and attempt to both talk and sing. Record the activity on the Activity Sheet.
- 7 Have students test the physical activities they designed in Session 2. Then let them choose different light, moderate, and vigorous activities to test. Here are some examples:
 - Light: stretching, spinning slowly
 - Moderate: doing lunges, pretending to swim
 - Vigorous: doing jumping jacks or push-ups, dancing fast

CLOSING DISCUSSION

- Reinforce that all activity is good, but vigorous activity means your body is working harder.
- What level of activity do you think is better to do if you have a short amount of time?
- Of the activities we tested today, which do you think was the most vigorous?
 - How long do you think you could keep doing that activity without stopping?
- What level of activity were the physical activities you designed in Session 2? Were you surprised?
- What are other vigorous activities that you like to do? (e.g. soccer, playing tag, etc.)

TALK TEST ACTIVITY SHEET

The Talk Test helps you know what level of activity you are doing. Here's how you'll know what level you're doing:

Light Activities: You can talk and sing!

Moderate Activities: You can talk, but not sing easily.

Vigorous Activities: Both talking and singing are hard to do.

Talk and sing your favorite song while doing different activities to determine the activity level.

Test the activities in the table to determine if they are light, moderate, or vigorous activities and then record the result. Write in new activities and test those out too!

ACTIVITY	LIGHT	MODERATE	VIGOROUS
Walking slowly			
Walking fast			
Running in place			

All activity is good, but to stay healthy and strong aim to get 60 minutes of moderate to vigorous physical activity every day!

SESSION 6: 4TH H FOR HEALTH CHALLENGE

SESSION OBJECTIVES

- ✓ Participants will be able to demonstrate their knowledge of healthy behaviors.
- ✓ Participants will be able to explain the importance of physical activity and healthy eating.

MEETING OUTLINE

Pre-meeting: Print trivia cards and 4th H for Health Trackers. Cut trivia cards and prepare additional materials

Min. 0-5: Attendance and introduction

Min. 5-20: Physical Activity Meeting Starter

Min. 20-50: 4th H for Health Trivia

Min. 50-60: Closing discussion and wrap-up

PHYSICAL ACTIVITY MEETING STARTER

(15 minutes) Have groups of students lead the physical activity sessions they designed in Session 2.



SESSION MATERIALS

- ✓ Trivia cards
- ✓ Fun prizes (e.g. stickers, pens, temporary tattoos, etc. if available)
- ✓ Notepads or paper for each group
- ✓ Pens
- ✓ 4th H for Health Trackers

MAIN ACTIVITY

4TH H FOR HEALTH TRIVIA



TIME TO COMPLETE ACTIVITY
30 Minutes



ACTIVITY BACKGROUND

Over the last 5 sessions, the youth have learned about healthy behaviors related to eating, drinking, and physical activity. This last session is a chance to reflect on what the group has accomplished throughout the last 5 sessions and celebrate their hard work. It is also an opportunity to carry the momentum from these sessions to other areas. If the group will continue to meet after this session, consider completing the 4th H for Health Challenge (attached). If the group is wrapping up, invite the youth to bring the 4th H for Health Challenge to their other out-of-school programs. Are they involved in youth sports? How about Scouts? Connected to the local YMCA? All of these are opportunities to complete the Challenge in those programs and continue their healthy habits.

OPENING QUESTIONS

- **What topics have we been focused on over the last 6 weeks?**
- **Why are these topics important?**

QUESTIONS ABOUT THE CHALLENGE?

Check out the Healthy Kids Hub volunteer leader page:
www.healthykidshub.org/4h

DIRECTIONS

- 1 Divide the students into small groups based on the number of participants.
- 2 Give each group a notepad and pen. For younger kids, have them raise their hand to give the answer.
- 3 Explain to the participants that you will read a question out loud, and they will have 30 seconds to write down an answer as a group. Each time a group gets a correct answer, the group will get a point.
- 4 If time allows, have youth create their own questions based on what they've learned. Continue the game until time runs out.
- 5 Go over the 4th H for Health Challenge.

CLOSING DISCUSSION

- **What other out-of-school programs are you involved in? How could they be healthier?**
- **Can you bring the Challenge to these programs?**
- **What other areas in your life could you incorporate what you learned over the last 6 sessions?**
 - ✓ Family meals, at school, church groups, etc.
- **Give each student a copy of the 4th H for Health Challenge and explain how they can bring it to the other groups they are a part of.**
- **How could you ensure these healthy habits are the norm during your different activities? Could you make a policy or rule that everyone tries to follow? How would it work?**

4TH H TRIVIA QUESTIONS



Which food groups have the highest percentage of water by weight?

How can you tell the difference between light physical activity and vigorous physical activity?

What are two symptoms of dehydration?

Name three of your favorite moderate or vigorous physical activities.

Name one food or drink that contains added sugar.

List two reasons to eat fruits and vegetables every day.

How much physical activity should kids get every day to stay healthy?

Which drink in the sugar detectives activity had the most added sugar?

Fill in the blank:

When I am physically active, it makes me feel _____.

True or False:

When I'm playing outside in hot weather, it's important to drink extra water to stay hydrated.

Name two of your favorite vegetables.

What percentage of our bodies is water?

4TH H TRIVIA ANSWERS



Playing soccer,
swimming,
dancing, etc.

Dry, sticky
mouth, thirst,
tiredness,
decreased urine
output, dry skin,
headache,
constipation,
dizziness,
confusion, and
inability to
sweat, etc.

During light
activity you
can talk and
sing, during
vigorous
activity it's
hard to do
either.

Fruits
and
Vegetables.

Fill in:

60 minutes
of moderate
or vigorous
activity every
day!

Delicious,
high in fiber,
provide
vitamins &
minerals,
hydrating,
etc.

Sodas, iced
teas, fruit-
flavored
drinks, sports
drinks, candy,
cookies,
cakes, etc.

75%

Examples:
broccoli,
cucumbers,
squash, kale,
spinach, sweet
potatoes.

TRUE

Examples:
happy, strong,
proud, tired,
excited, good,
energetic

4TH H TRIVIA QUESTIONS



Name two **Fuel Foods**.

What are some things you can do to make sure you drink enough **water** every day?

What's the best level of activity (light, moderate, or vigorous) if you only have a short amount of time?

What's the difference between **Fuel Foods** and **Treat Foods**?

For every 30 minutes of physical activity you do, how much extra water do you need to drink to stay hydrated?

Name some ways you can add an extra 15 minutes of physical activity to your day.

Name two **Treat Foods**.

List some ways you can get friends and family to join you in eating well and staying active.

Write your own:

Write your own:

Write your own:

Write your own:

4TH H TRIVIA ANSWERS

Fuel Foods give you energy and other things your body needs to grow healthy & strong.
Treat Foods only give you energy.



Moderate or vigorous activity

Examples:
Always carry a water bottle, drink water with every meal and snack, make flavored water

Examples:
apple, yogurt, nuts, corn, milk, avocado, whole wheat bread, carrots.

Examples:
Take a family walk, remind others to drink water, take on the 4th H for Health Challenge with your friends

Examples:
cupcakes, soda, candy, sports drinks, donuts, cake

Examples:
Start club meetings with a 15 minute activity, walk to school, play an active game at recess

1 cup of water

Answer:

Answer:

Answer:

Answer:



4th H for Health Challenge



*"I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and **my health to better living**, for my club, my community, my country, and my world."*

Help 4-H'ers make healthy habits the norm during club meetings and set them on a path of healthy living. Complete the activities below, using the **4th H for Health Challenge** Tracker to show your club's progress.

3

Serve a **fruit or vegetable** as a snack* at **three** meetings.

6

Serve **water** as the main beverage at **six** meetings.

9

Add 15 minutes of **physical activity** at **nine** meetings.

*Consider food at meetings, events, and activities. If your club does not have food at meetings, just check the box next to "There is no food at my club meetings" on the 4th H for Health Challenge Tracker.

Reinforce these habits by trying the activities in this packet, the tips below, or by visiting www.HealthyKidsHub.org/4H for healthy snack recipes, active games, and more!



Ideas for serving water:

- Make fruit-infused water for meetings. Add fruit (e.g. oranges, berries) to a pitcher of water.
- Encourage members to always bring a reusable water bottle with them.



Tips for adding 15 minutes of physical activity:

- Kick off meetings with a short game or activity that gets everyone up and moving.
- Elect an "exercise officer" to lead physical activity breaks.



Suggestions for serving fruits and vegetables:

- Create a list of healthy meeting snacks and distribute it to club members.
- Choose a different color every month and bring a fruit or vegetable to match.

Once you've completed the Challenge, contact your local 4-H staff member to learn how to get a certificate or pins! **Questions?** Email HealthyKidsOutOfSchool@tufts.edu.

4th H for Health Challenge Tracker

Congratulations for taking on the 4th H for Health Challenge! Use this tracker to record the dates of the meetings or gatherings when your club has water, a healthy snack, or performs 15 minutes of physical activity.

Name: _____ # of Participants: _____

Healthy Meeting Activities:



Serve a fruit or vegetable snack at 3 meetings.*

1	2	3
---	---	---

**Snacks served at events or other gatherings can fulfill this requirement.*

There is no food at our meetings.



Serve water as the primary beverage at 6 meetings.

1	2	3	4	5	6
---	---	---	---	---	---



Do 15 minutes of physical activity at 9 meetings.

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---



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Quick Tips: Snack Smart

Ask volunteers to rotate bringing in a fruit or vegetable snack. Check out the Snack Smart handout for ideas and activities.

Quick Tips: Drink Right

Make sure water is in plain sight and easily accessible during meetings. Encourage youth to bring a water bottle to meetings and show them where they can refill it.

Quick Tips: Move More

Make physical activity fun! Try music or props, like balls or jump ropes. Keep games and activities non-competitive and encourage all youth to participate.

Completed the Challenge? Congratulations! Keep up the healthy habits during meeting times and encourage other 4-H clubs to take the 4th H for Health Challenge!

TALK TEST ACTIVITY SHEET

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Vigorous Activities: Both talking and singing are hard to do.

Talk and sing your favorite song while doing different activities to determine the activity level.

Test the activities in the table to determine if they are light, moderate, or vigorous activities and then record the result. Write in new activities that you or the whole group comes up with and then test those out too!

ACTIVITY	LIGHT	MODERATE	VIGOROUS
Walking slowly			
Walking fast			
Running in place			

All activity is good, but to stay healthy and strong aim to get 60 minutes of moderate to vigorous physical activity every day!

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