

REDUCING RISKS FOR NCDs AROUND THE WORLD

AGE RANGE

10–13

OVERVIEW

Students will learn about the impact of physical activity, nutritious food choices on overall health and reducing the risk of developing certain noncommunicable diseases (NCDs) before discovering the recommended amount of physical activity and food recommendations for their age, gender, etc. Students will then investigate how people in different countries stay healthy and active. What are the snack foods and main forms of physical activity in countries across the globe? Students will use this data to draw conclusions and describe patterns.



TIMING

45–60 minutes

OBJECTIVES

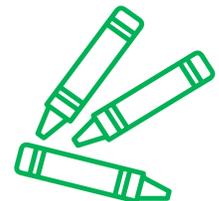
Students will

- Identify national recommendations for physical activity and nutrition
- Investigate common physical activity and snack foods in other countries
- Draw conclusions about physical activity, nutrition, and NCDs

MATERIALS NEEDED

- Pencil, one per student
- **National Recommendations** student handout, one per student*
- **Staying Healthy Across the Globe WebQuest** student handout, one per group*

**Note:* There are facilitation options below if the students are in a virtual situation. Handouts can be provided electronically to be printed at home or as an editable Microsoft Word template to be submitted via email, learning management system, or as a live/shared document.



EDUCATOR PREPARATION

- Before each session, make sure students have access to the required handouts. If students are learning virtually, they can print them out at home or utilize shared online documents. You can also make them available through your chosen virtual learning platform or learning management system.
- If an activity calls for working with a partner or group, students learning virtually can share their answers out loud or write their definitions down to reference later, add to a live/shared document, or comment in a chat box. Alternatively, you can prepare breakout rooms in your learning management system prior to your session.
 - Platforms like [Zoom](#) allow you to pre-assign participants to breakout rooms. [Google Meet](#) will randomly distribute participants.
- Prior to the session, assign each group a different country for the **Staying Healthy Across the Globe WebQuest**. Some suggestions include United States, Great Britain, Mexico, India, Columbia, Ireland, China, Japan, Russia, etc. (It is not recommended to include your own country, as students will already have investigated and discussed it during the Learn section.) Sample search engine terms have been provided. If you choose to provide students with specific websites they may use, prepare that list prior to the session.



PROCEDURE

Engage

1. For approximately **4–5 minutes**, engage students in the upcoming lesson by asking one or more discussion questions similar to those below.
 - What are some things we can do to stay healthy?
 - What is your favorite way to exercise?
 - Do you know how much exercise you are *supposed* to get?
 - What is your favorite snack?

VIRTUAL FACILITATION OPTIONS

- If students are on video and/or able to use microphones, allow them to share their answers out loud.
- If students are not using video or microphones, encourage them to write their answers down to reference later or use the chat feature.

Learn

2. Explain to students that a noncommunicable disease or NCD is any disease that is not contagious and cannot be spread to others, unlike the flu. Some examples of NCDs are type 2 diabetes and heart disease.
3. Clarify that an NCD is often the result of a lifestyle choice, such as lack of physical activity or not making the most nutritional food choices possible.
4. Instruct the students to investigate the **National Recommendations** handout.

5. Invite 3–4 volunteers to share their thoughts or immediate reactions. If students are reluctant to volunteer, ask how many students were already familiar with these recommendations. Ask for a raise of hands whether they think it is easy or difficult to maintain these recommendations in their daily life.
6. Explain that in the next challenge activity, students will be investigating “snack foods” in various countries. A snack food is a food that is highly available, eaten in large quantities, and ends up being a large portion of the standard diet for a person in that country. For example, in the United States, wheat is a staple ingredient and bread can be found as part of almost every meal.

VIRTUAL FACILITATION OPTIONS

- If students are in a virtual situation, consider using the poll feature.

Challenge

7. Divide students into groups of 3–4. Distribute one **Staying Healthy Across the Globe WebQuest** handout to each group. Give students time to determine who will be the typist, the recorder, and the reporter.

8. Instruct each group to use search engines and research different websites for their assigned countries. If students need assistance, provide them with suggestions for search engine terms. They should decide as a group which information they want to share, and the recorder should write it in the appropriate box(es) on their **WebQuest** handouts. Sample search terms might include:

- Nutritional recommendations in *[specific country]*.
- What is a snack food in *[specific country]*?
- Physical activity recommendations in *[specific country]*.
- What kind of exercise is popular in *[specific country]*?

9. After approximately 15 minutes, instruct groups to begin comparing and contrasting their research with the information presented on the **National Recommendations** handout in the Venn Diagram on page 2 of their **WebQuest** handout. Students will be comparing their own country’s recommendations with those of the specific country that was assigned to them during the WebQuest.
10. Lastly, have groups look up how many people die annually from NCDs in their assigned country and record it on their handouts.

VIRTUAL FACILITATION OPTIONS

- If students are in a virtual situation, consider using the breakout group feature, a shared/live document, or they can complete it individually.



Apply

11. Review with students the basics of the national nutrition and physical activity requirements and how many people die each year from NCDs in their country. Give them 2–3 minutes to discuss within their group their Venn Diagrams and how that information compares to their assigned country.
12. Facilitate them in drawing conclusions about how national recommendations relate to NCD deaths, what role snack foods and common physical activity play in the occurrence of NCDs, etc. Do they help people make nutritional food choices, or are contributing to unhealthier choices? Encourage them to think about the kinds of foods that are recommended to be healthy and if they are reflected in the country’s snack foods. What else do they think impacts which foods become “staple?” Do they think that the economics of a country has anything to do with their snack foods or the amount of NCDs? Instruct each group’s recorder write down his/her group’s thoughts on their handout.

Discuss

13. Invite each group to share their research and conclusions with the class. After one group has shared, they can “popcorn” to another group to share their information. To “popcorn” means the student will call out the next group’s reporter so they can “pop” up and begin sharing. Continue this activity until all groups have shared their WebQuest information.

Reflect

14. Take time to facilitate students’ reflections on their experiences during the session. Consider asking one or more discussion questions similar to those below:

- How much physical activity is it recommended you get every day?
- What role does food play in keeping us healthy?
- How does your country compare to other countries with regards to nutrition, exercise, and incidence of NCDs?
- Are there any patterns you notice between countries?



VIRTUAL FACILITATION OPTIONS

- If students are in a virtual situation, consider using the chat feature or a shared/live document.

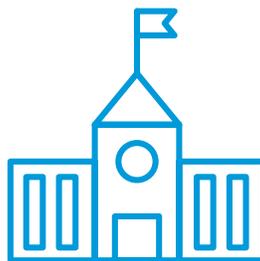
EXTENSION IDEAS FOR EDUCATORS

- Provide students with the opportunity to design a week-long meal plan based on the nutritional recommendations and snack foods of their assigned country.
- Ask each group to create a 2–3-minute fitness routine based on the common forms of physical activity in its assigned country and lead the class in participating.

NATIONAL CONTENT STANDARDS

UNITED STATES

- [National Health Standards](#)
 - Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.
 - Standard 3: Students will demonstrate the ability to access valid information, products, and services to enhance health.
 - Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health.
- [Common Core State Standards in Math](#)
 - [SP.A.1](#): Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.
- [Common Core State Standards for English Language Arts](#)
 - Writing
 - CCSS.ELA-LITERACY.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
 - Speaking and Listening
 - CCSS.ELA-LITERACY.CCRA.SL.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
 - CCSS.ELA-LITERACY.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.



NATIONAL RECOMMENDATIONS

Activity Recommendation—60 Minutes a Day



Nutritional Recommendation—My Plate



NCDs cause more than two-thirds (71%, around 41 million) of all annual deaths in the United States.¹

¹ WHO, "Noncommunicable diseases," fact sheet, June 2018.

STAYING HEALTHY ACROSS THE GLOBE WEBQUEST, PAGE 1 OF 2

COUNTRY: _____

Can you find the country's recommendations on daily nutrition? If so, log the website here and try to summarize below:

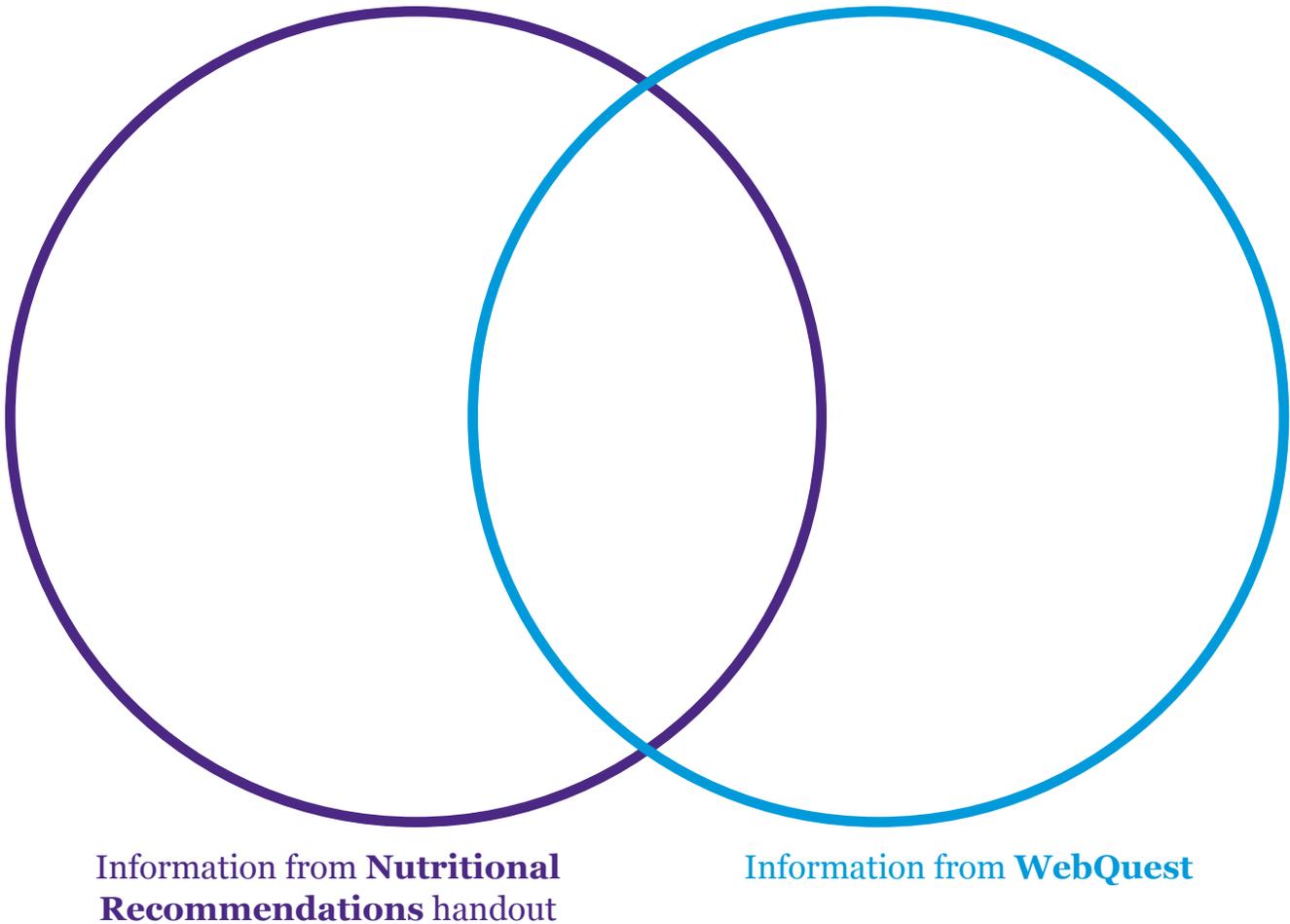
List at least five snack foods from this country:

Can you find the country's recommendations on daily physical activity? If so, log the website here and try to summarize below:

List the main forms of physical activity in this country:

STAYING HEALTHY ACROSS THE GLOBE WEBQUEST, PAGE 2 OF 2

Review your **National Recommendations** handout. Compare and contrast the information you just researched with your own country. Label one side of the diagram with your own country and the other side of the diagram with the country you were assigned to research.



How many people die of NCDs in this country each year?

Based on your research and what you have learned about your own country and what conclusions can you draw?