

WATER & NUTRITIOUS BEVERAGES

LEARNING OBJECTIVES

By the end of this module, students should be able to:

- discuss the health benefits derived from keeping the body well-hydrated.
- discuss fallacies associated with water and beverages.

MATERIALS

Lesson 1

- video: **Module 5 Water and Nutritious Beverages**
- file: **GR09_M05_Lesson 1 Powerpoint**
- manila paper (three sheets per group)
- coloring materials
- markers

Lesson 2

- Fact or Myth Newspapers (from previous session)

REMINDERS

Letters to the Parents

Each module comes with a letter to parents explaining the key points that our students are learning in class. The letter also encourages parents to model healthy nutrition habits at home. We hope that through these circulars, parents will become involved in their child's learning process. Please remember to photocopy and distribute the corresponding parent circular at the start of each module. These letters can be found in the folder marked 'Letters to Parents.'

Rubrics

Many of the activities in these modules serve as formative assessments for you to gauge each student's progress. You may use the PDF file named 'Rubrics' as a guide for grading major outputs and performance tasks.



MODULE OVERVIEW

Dear Teacher,

This Module Overview is a summary of the key learning points that we want our students to understand and master by the end of this module. These key learning points are presented in the video presentation and powerpoint that accompany this module. The supplementary activities further reinforce these key points.

KEY POINTS

1. It is important to drink enough water every day.
 - a. Drinking water helps to cool down our body. When our body feels hot, we perspire, and the perspiration cools us down.
 - b. Drinking water helps to remove waste (i.e. urine and stool) from our body.
 - c. Water can be found in our blood, so water actually helps in bringing nutrients all over our bodies.
 - d. Water helps our skin and eyes from becoming dry.
2. Children and adolescents should drink the recommended amount of water daily:
 - a. 6–9 years old: 6 glasses or more each day
 - b. 10–12 years old: 8 glasses or more each day
 - c. 13–18 years old: 9–12 glasses of water or more each day.
3. If you feel thirsty, it means that your body needs some more water. Do not wait until you feel thirsty before you drink water.
4. Aside from drinking 9–12 glasses or more of water each day, each day, drink nutritious beverages such as milk to prevent calcium deficiency:
 - a. Functions of calcium: maintains strong bones, needed in other body activities such as muscle contraction and blood clotting
 - b. Significant sources of calcium: milk, dairy products (e.g. yoghurt and cheese), dark green leafy vegetables, fish with bones eaten (e.g. sardines)
5. One way to make good nutritional decisions is to be aware of fallacies related to water and beverages. For example:
 - a. Fact or myth: Distilled water is better than mineral water.
 - i. Answer: Myth
 - ii. Explanation: Drinking distilled water on a regular, daily basis is potentially dangerous to one's health. Distillation is the process in which water is boiled, evaporated and the vapor condensed. Distilled water is an active absorber and promotes discharge of some minerals from the body. This, in turn, may lead to electrolyte imbalance resulting in irregular heartbeat, blood pressure changes and weakness. While more studies are needed to investigate this, filtered mineral water is deemed safer to drink. It can also help increase intake of some minerals such as calcium, phosphorus and magnesium, which are usually dissolved in water.

b. Fact or myth: Lactose intolerance is common in the Philippines.

i. Answer: Fact

ii. Explanation: Lactose intolerance refers to an inability to digest lactose, a substance found in milk. There is a higher incidence of lactose intolerance among Asians, compared to Americans and Europeans. A person with lactose intolerance may experience bloating, abdominal pain, and diarrhea whenever he or she drinks milk. Because of the resulting discomfort, a person suffering from lactose intolerance tends to reduce his or her consumption of dairy products, which may increase their risk for osteoporosis. To improve milk tolerance, individuals suffering from lactose intolerance should gradually re-introduce milk into their diet. They can also compensate by consuming dairy products with low lactose content, like yogurt and cheese.

c. Fact or myth: Milk is the best source of calcium.

i. Answer: Fact

ii. Explanation: Milk is the best source of calcium because each serving contains about 2/3 of the recommended daily calcium intake. In addition, milk contains other nutrients, such as protein and vitamin D, which facilitate the body's absorption of calcium.

d. Fact or myth: Milk can be fattening.

i. Answer: Myth

ii. Explanation: Milk and other dairy products are not fattening. Some studies even show that milk drinkers tend to stay within healthy weight ranges compared to non-drinkers. Weight gain is a result of excess energy intake from food coupled by a sedentary lifestyle.

Lesson 1



LET'S GET STARTED



15 mins

Announce the top three groups from the previous lesson – if you have not done so – before proceeding with the lesson. You will start this lesson by showing them the video **Module 5 Water and Nutritious Beverages**.

FACT OR MYTH



15 mins

1. Use Part 1 of the file **GR09_M05_Lesson 1 Powerpoint** for this part of the lesson. Open the PDF file, and at the top menu bar, select VIEW > Enter Full Screen. This places one page of the PDF file on the computer screen, and you can scroll up or scroll down to go through each page like a powerpoint slide.
2. The powerpoint contains some statements, and your students must judge whether the statement is a fact or a myth.
3. If they think the statement is a FACT, they should wave their right hand. If they think that the statement is a MYTH, they should wave their left hand. (You may use other actions, such as standing versus sitting or moving to opposite sides of the room, to energize your students if needed.)

4. The slides contain these statements:
 - a. It is better to drink distilled water than mineral water. (*answer: myth*)
 - b. Lactose intolerance is common among Asians. (*answer: fact*)
 - c. Milk is the best source of calcium. (*answer: fact*)
 - d. Milk is fattening. (*answer: myth*)
5. Discuss the correct answers to each statement as well as the explanations. The explanations are found at the bottom of the slide as well as in Key Points (at the beginning of this document).
6. After your discussion, proceed with Part 2 of **GR09_M05_Lesson 1 Powerpoint**. This presentation stresses the importance of drinking enough water every day. It also discusses the benefits and sources of calcium.



Have the students reflect on the following and ask a few volunteers to share their answers with the class:

1. Which of the myths discussed in class surprised you the most?
2. Is there a myth discussed in class that you are still finding hard to believe is a myth?
3. Have there been changes in your behavior since learning about these myths?



1. Tell the students that they will be making a “Fact or Myth” newspaper about the myths discussed throughout the program.
2. Using three sheets of manila paper, they must create an output that looks like a newspaper, with a front page and inner spreads, and news stories written in columns.
3. Through their newspaper, the group must educate others about these common fallacies and provide accurate explanations behind these erroneous assumptions.
4. Their news stories can include quotes from people interviewed about the myths. Encourage your students to read typical news articles to see how interviews are woven into a story.
5. Students should use the remainder of the class time to plan out the topics they will include in their newspaper, and to delegate tasks to members. Tell them that you will give them some time in the next session to work on their newspaper, but they must begin working on it on their own throughout the week.
6. Tell your students that their outputs will be included in the culminating activity and will be seen by others in the school community, so they should make sure their newspapers are filled with accurate information and that they effectively deliver their message.

Lesson 2

Give students time to work on their newspapers. When all groups are done, ask each group to present their newspaper to the rest of the class.

Before the session ends, announce the top three outputs and their corresponding points. You will also tally all the scores garnered by the groups throughout the program to determine the overall winner.

NOTE TO TEACHER

Refer to the PDF file named ‘Culminating Activity’ for a description of the concluding activity for this program.