

Grade 8

Breaking Breakfast Barriers

Healthful Living Objective(s)

- 4.02 Analyze barriers to personal healthful eating patterns and describe strategies for overcoming these barriers.
- 4.03 Evaluate the benefit of consuming adequate amounts of Vitamins A, E, and C, magnesium, calcium, iron, fiber, folic acid, and water and a variety of foods that contain high amounts of each nutrient.
- 4.04 Demonstrate the ability to develop a healthful personal eating plan that incorporates food choices inside and outside of the home setting.

English Language Arts Objective(s)

- 1.01 Narrate a personal account which: creates a coherent, organizing structure appropriate to purpose, audience, and context; establishes a point of view and sharpens focus; uses remembered feelings; selects details that best illuminate the topic; and connects events to self/society.
- 1.03 Interact in group activities and/or seminars in which the student: shares personal reactions to questions raised; gives reasons and cites examples from text in support of expressed opinions; and clarifies, illustrates, or expands on a response when asked to do so, and asks classmates for similar expansion.
- 2.01 Analyze and evaluate informational materials that are read, heard, and/or viewed by: monitoring comprehension for understanding of what is read, heard and/or viewed, recognizing the characteristics of informational materials, summarizing information, determining the importance and accuracy of information, making connections to related topics/information, drawing inferences and/or conclusions, generating questions, and extending ideas.
- 3.02 Continue to explore and analyze the use of the problem-solution process by: evaluating problems and solutions within various texts and situations, utilizing the problem-solution process within various contexts/situations, constructing essays/presentations that respond to a given problem by proposing a solution that includes relevant details, and recognizing and/or creating an organizing structure appropriate to purpose, audience, and context.

Information Skills Objective(s)

- 2.05 Determine accuracy, relevance, and comprehensiveness of information resources.
- 5.01 Respond to reading, listening, viewing experiences orally, artistically, dramatically, through various formats (print, graphical, audio, video, multimedia, web-based).
- 5.03 Describe, support an opinion, and/or persuade an audience using a variety of media formats (print, graphical, audio, video, multimedia, web-based).

Teacher Resource(s)

- N.C. Division of Public Health, North Carolina Nutrition Education and Training Program, *Students Succeed with School Meals, Fact Sheet - What's on the Menu?*, www.nutritionnc.com

Material(s) Needed

- U.S. Department of Agriculture, School Breakfast Toolkit, *Benefits of Breakfast Flyer*, www.fns.usda.gov/cnd/Breakfast/expansion/benefitsbreakfast.pdf
- *Breakfast Facts: True or False?* Teacher Key
- School Breakfast Menu

Handout(s)

- *Breakfast Facts: True or False?*
- *Me in the Morning*
- *Breaking My Breakfast Barriers*

Focus

Begin this lesson by discussing the benefits of breakfast. Ask the class:

- What are the benefits of breakfast? *Accept all reasonable answers from students.*

Distribute the *Breakfast Facts: True or False?* handout. Explain that there are 11 statements on the handout and their task is to read through the statements and determine which statements are true and which are false. (Nine of the statements are true and two are false.) Have students work on this handout independently or in small groups. When the students are done, debrief the class using the *Breakfast Facts: True or False?* teacher key. Poll the class by reading through each statement and asking students to raise their hands based on whether they believe the statement is true or false. If there is a divergence of opinion, ask students who hold different views to explain the rationale for their opinions. Share the answers with the class. Mention any other details included on the teacher key to elaborate on the statement. If the statement is false, revise the statement with the class and have students make the changes on their handouts. Continue the discussion by asking students to reread the list of statements and circle the three that are the most important to them.

Teacher Input

Many people know that breakfast is an important health habit, but they still do not eat breakfast. Before we can make a behavior change, it is often necessary to know what prevents us from making the change.

Discuss breakfast skipping by polling the class with the following questions:

- How many have you have heard, read or been told by someone that breakfast is the most important meal of the day?
- How many of you skip breakfast once in a while?

- How many of you skip breakfast at least once a week? More than once a week?
- What might be some reasons that students your age skip breakfast? *Accept all reasonable answers from students.* **Answers:** Not hungry in the morning. No time. Nothing to eat.
- How many of you do not feel hungry when you wake up?
- How many of you have ever skipped breakfast because you did not have time to eat?
- Some people do not like typical breakfast foods. How many of you fall into this group?

Whatever the reason, when you skip breakfast, you may affect your ability to learn as well as your overall well-being.

Practice and Assessment

Distribute the *Me in the Morning* handout. Explain to students that the first four questions on the handout help collect data about what they do and how they feel in the morning. Give students a few minutes to complete the handout.

Begin the discussion about breakfast barriers by pointing to the types of barriers listed on the handout. Read out the first statement, “I’m afraid that I’ll gain weight if I eat breakfast”. After this statement, the letter “M” is listed.

- Ask the class if anyone has a guess as to what type of breakfast barrier “M” stands for. *Accept all reasonable answers.* **Answer:** “M” stands for “Misinformation”.

Ask students to write “Misinformation” on the line opposite the first statement of Question 5. Go through the remaining statements under Question 5. Identify and discuss the type of breakfast barrier that each example represents. Have students write each type of barrier on the appropriate line.

- Statement 2 – “I” stands for “Image”. Sometimes, we choose behaviors that are not in our best interest, because we are more concerned about how we are perceived (both by ourselves and others) than what is the healthier choice for us.
- Statement 3 – “H” stands for “Hunger”. Some people are not hungry when they first wake up. Their lack of hunger is their barrier to eating breakfast.
- Statement 4 – “A” stands for “Availability”. Some students have particular preferences for foods. If the foods they like are not available in their homes, students can talk with their families about having these items available and also help with shopping for or preparing these foods. Students also may not like typical breakfast foods. They do not have to eat typical breakfast foods to make healthy choices in the morning. The School Breakfast Program, if available at your school, offers a variety of choices. Students can choose to eat breakfast at school.
- Statement 5 – “T” stands for “Time”. For many students, there is not enough time to include breakfast and still be ready for school in time. On top of that, many students have to be at school early for athletic practices, band rehearsals and other extra-curricula activities, allowing even less time for breakfast.

Distribute *Breaking My Breakfast Barriers* handout. First, ask students to write down the breakfast benefit that is most important to each of them on the lines at the top of the left-hand column. Explain, that as they make plans to work breakfast into their lives, it is valuable to keep in mind the pay-offs or benefits for making the changes. Recognizing the benefits they want to achieve can help to motivate them.

Next, have them refer to the *Me in the Morning* handout to identify their most significant barriers. Ask each student to write that barrier on the *Breaking My Breakfast Barriers* handout. Working in small groups, have students assist each other in doing two things:

1. Generate three to five ideas for actions each individual can take to overcome his or her barriers) to breakfast.
 - Example 1: A student who does not have enough time in the morning might go to bed 15 minutes earlier and wake up 15 minutes earlier so he or she could eat breakfast.
 - Example 2: A student who is not hungry upon waking up can participate in the School Breakfast Program once they get to school.
2. Think of two nutritionally adequate breakfasts each student would be willing to eat, along with a plan for where and when he or she will eat these meals.

Find out if the School Breakfast Program is offered in your school. If it is, find out what types of service options are available, i.e., traditional school breakfast in the cafeteria, school breakfast in the classroom, grab n’ go school breakfast, etc. Also, obtain a copy of and review the school breakfast menu. Encourage students to consider choosing school breakfast each morning.

When students have finished their work, discuss their results. For each type of barrier, find out what “Ideas for Action” the groups have identified and share them with the entire class.

Adapted from *Bridges to Wellness, Connecting School Meals and Classroom Learning: Make Breakfast Count*, School Nutrition Foundation and National Dairy Council. Available at www.nutritionexplorations.org.

Benefits of Breakfast



Eating breakfast can help improve math, reading, and standardized test scores.^{i ii iii}

Children who eat breakfast are more likely to behave better in school and get along with their peers than those who do not.^{iv v}

Breakfast helps children pay attention, perform problem-solving tasks, and improves memory.^{vi vii}

Children who eat school breakfast are likely to have fewer absences and incidents of tardiness than those who do not.^{viii}

By eating breakfast, students get more of important nutrients, vitamins and minerals such as calcium, dietary fiber, folate and protein.^{ix x}

Studies have shown that children who eat breakfast on a regular basis are less likely to be overweight.^{xi xii xiii}

Eating breakfast as a child is important for establishing healthy habits for later in life.

Schools that provide breakfast in the classroom to all students have shown decreases in tardiness and suspensions as well as improved student behavior and attentiveness.^{xiv xv}

What you eat for breakfast can have an impact on learning. One study showed that eating breakfast food high in fiber and low in sugar for breakfast helped students sustain the cognitive effects of breakfast.^{xvi}

School Breakfast provides $\frac{1}{4}$ the recommended amounts of protein, calcium, iron, vitamin A, and vitamin C for the day.^{xvii}

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- ⁱⁱ Murphy JM, Pagano M, Nachmani J, Sperling P, Kane S, Kleinman R. "The Relationship of School Breakfast to Psychosocial and Academic Functioning: Cross-sectional and longitudinal observations in an inner-city sample." *Archives of Pediatric and Adolescent Medicine* 1998; 152:899-907.
- ⁱⁱⁱ Alaimo K, Olson CM, Frongillo EA Jr. "Food Insufficiency and American School-Aged Children's Cognitive, Academic and Psychosocial Development." *Pediatrics* 2001; 108(1):44-53.
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- ^v Alaimo K, Olson CM, Frongillo EA Jr. "Food Insufficiency and American School-Aged Children's Cognitive, Academic and Psychosocial Development." *Pediatrics* 2001; 108(1):44-53.
- ^{vi} Wesnes KA, Pincock C, Richardson D, Helm G, Hails S. "Breakfast reduces declines in attention and memory over the morning in schoolchildren." *Appetite* 2003;41(3):329-31.
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- ^{viii} Murphy JM. "Academics & Breakfast Connection Pilot: Final Report on New York's Classroom Breakfast Project." Nutrition Consortium of NY State. Albany, NY. July 2005
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- ^x Wilson NC, Parnell WR, Wohlers M, Shirley P. "Eating breakfast and its impact on children's daily diet." *Nutrition & Dietetics* 2006; 63:15-20.
- ^{xi} Breakfast Eating and Weight Change in a 5-Year Prospective Analysis of Adolescents: Project EAT (Eating Among Teens) Maureen T. Timlin, Mark A. Pereira, Mary Story, and Dianne Neumark-Sztainer *Pediatrics* 2008; 121: e638-e645
- ^{xii} American Dietetic Association. Childhood Overweight Evidence Analysis Project: updated 2006. Available at: www.adaevidencelibrary.com/topic.cfm?cat=1046.
- ^{xiii} Dubois L, Girard M, Potvin Kent M, Farmer A, Tatone-Tokuda F Breakfast skipping is associated with differences in meal patterns, macronutrient intakes and overweight among pre-school children *Public Health Nutr.* 2008 Mar 18:1-10
- ^{xiv} Murphy JM, Pagano ME, Patton K, Hall S, Marinaccio J, Kleinman R. "The Boston Public Schools Universal Breakfast Program; Final Evaluation Report." Massachusetts General Hospital, Boston, MA, 2000.
- ^{xv} Murphy JM et. al. "Maryland Meals for Achievement Year III Final Report." Massachusetts General Hospital, Boston, MA, 2001.
- ^{xvi} Caroline R. Mahoney, Holly A. Taylor, Robin B. Kanarek, Priscilla Samuel. Effect of breakfast composition on cognitive processes in elementary school children. *Physiology and Behavior* 85 (2005) 635-645
- ^{xvii} Section 9(f)(2)(B)(ii), Richard B Russell National School Lunch Act.

Breakfast Facts: True or False? Teacher Key

Statement	True or False?	Additional Information	Suggested revision of false statements
1. Breakfast eaters are calmer and less anxious than breakfast skippers.	True		
2. Students who eat breakfast may do better on tests than students who don't eat breakfast.	True	This is why students are urged to eat breakfast on days when there is standardized testing at school. It's important to eat breakfast every day, including non-testing days, in order to perform better at school.	
3. Breakfast skippers are less likely to be overweight than breakfast eaters.	False	Breakfast eaters are less likely to be overweight than breakfast skippers. If students are concerned about weight management, breakfast is an important tool to help them meet their goal.	Breakfast eaters are less likely to be overweight than breakfast skippers.
4. Students who eat breakfast are more likely to get all the nutrients they need to stay healthy than those who don't eat breakfast.	True	A nutritious breakfast provides at least 25% of the nutrients your body needs during the day.	
5. Breakfast eaters do better in math than breakfast skippers.	True		
6. Students who eat breakfast have more energy than students who skip breakfast.	True	A nutritious breakfast (including school breakfast) provides about 25% of the energy your body needs each day. By fueling yourself each morning, you provide your body with energy needed for the day's activities.	
7. Students who eat breakfast are more likely to get along with their classmates than breakfast skippers.	True		
8. Students who eat breakfast are more likely to get headaches and stomachaches in the morning than those who don't eat breakfast.	False	Students who don't eat breakfast get hungry, and this causes headaches and stomachaches. Breakfast skippers often spend time in the nurse's office with complaints of stomachaches.	Students who don't eat breakfast are more likely to get headaches and stomachaches in the morning than those who do eat breakfast.
9. Students who eat breakfast have faster memory recall than breakfast skippers.	True		
10. Breakfast eaters may make fewer errors in school than breakfast skippers.	True		
11. Students who eat breakfast are better able to focus on learning than students who skip breakfast.	True	Students who don't eat breakfast are more likely to be hungry, and hunger interferes with the ability to concentrate.	



Breakfast Facts: True or False?

Directions:

1. Read the 11 statements below about “Breakfast Eaters” and Breakfast Skippers”.
2. Based on your knowledge of nutrition and breakfast, see if you can identify the two false statements.

	True?	False?
1. Breakfast eaters are calmer and less anxious than breakfast skippers.		
2. Students who eat breakfast may do better on tests than students who don't eat breakfast.		
3. Breakfast skippers are less likely to be overweight than breakfast eaters.		
4. Students who eat breakfast are more likely to get all the nutrients they need to stay healthy than those who don't eat breakfast.		
5. Breakfast eaters do better in math than breakfast skippers.		
6. Students who eat breakfast have more energy than students who skip breakfast.		
7. Students who eat breakfast are more likely to get along with their classmates than breakfast skippers.		
8. Students who eat breakfast are more likely to get headaches and stomachaches in the morning than those who don't eat breakfast.		
9. Students who eat breakfast have faster memory recall than breakfast skippers.		
10. Breakfast eaters may make fewer errors in school than breakfast skippers.		
11. Students who eat breakfast are better able to focus on learning than students who skip breakfast.		



Me in the Morning

Directions:

Answer questions 1-4 by placing a mark on the continuum to describe how you usually feel. For question 5, mark all statements that apply to you.

1. When the alarm rings, I....

Want more sleep	<div style="position: absolute; top: -10px; left: 20px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 40px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 60px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 80px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div>	Am ready to get up
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2. No matter what time I get up in the morning, I feel....

I must rush	<div style="position: absolute; top: -10px; left: 20px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 40px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 60px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 80px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div>	I have enough time
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3. When I get out of bed....

I'm not hungry	<div style="position: absolute; top: -10px; left: 20px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 40px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 60px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 80px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div>	I'm hungry
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4. When I do eat breakfast, I prefer....

Typical breakfast foods (cereal, toast, eggs, etc.)	<div style="position: absolute; top: -10px; left: 20px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 40px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 60px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div> <div style="position: absolute; top: -10px; left: 80px; border-left: 1px solid black; border-right: 1px solid black; width: 10px; height: 10px;"></div>	Non-typical breakfast foods (leftovers, sandwiches, etc.)
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5. What gets in the way of eating breakfast? (Check all that apply.)

Types of Breakfast Barriers

Title _____

- | | |
|---|---|
| <input type="checkbox"/> I'm afraid that I'll gain weight if I eat breakfast. | M |
| <input type="checkbox"/> I believe eating breakfast is for little kids. | I |
| <input type="checkbox"/> I'm really not hungry early in the morning. | H |
| <input type="checkbox"/> The food I like isn't available. | A |
| <input type="checkbox"/> I don't have enough time to eat. | T |



