## **Dear Educator,**

Taking care of the environment is everyone's responsibility, including young people. In fact, green engineering is becoming an important part of STEM and environmental science programs in schools.

This spring, when you teach about the importance of protecting the environment, add depth to your recycling lessons by taking a closer look at single-use foodservice packaging - what it is, why it's used, and why it can sometimes be a smarter choice than reusable china, glassware, and silverware.

The standards-based activities in this kit, created by the curriculum experts at Young Minds Inspired (YMI) together with the Foodservice Packaging Institute, support deeper-level thinking skills and stimulate discussion about real-world issues. The activities are also designed to seamlessly integrate with and enhance your classroom STEM and ELA curriculum for students in grades 4 through 6.

Please share this program with other teachers in your school. The materials are copyrighted, but you may make as many copies as necessary to meet your students' needs.

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## **Target Audience**

Students in grades 4-6

## **Program Objectives**

- **Explore** why single-use foodservice packaging is used and how it compares to its reusable counterparts in different circumstances.
- **Encourage** students and families to recycle and/or compost their foodservice packaging, where possible.
- **Teach** that sustainability should be part of our everyday lives.

## **Program Components**

- This one-page teacher's guide
- Two reproducible student activity sheets
- Science and language arts standards

## **How to Use This Program**

Download and photocopy this teacher's guide and the two activity sheets. Prepare the materials for each activity in advance.

### **ACTIVITY 1**

## **The Complete Package**

Ask students to describe the packaging of the foods in their favorite restaurants. Students will probably mention pizza boxes, paper drink cups, plastic trays, plastic and cardboard serving boxes. Then ask the students why they think the food is packaged that way. Tell them that today's methods of food packaging were not always available. For example, in the early 20th century, school children shared glasses at water faucets, and people on trains drank water from barrels using a shared dipper — not exactly sanitary practices! As a result, paper cups were invented.

Explain to students that using foodservice packaging is not only sanitary, but sometimes, it can also be less expensive and better for the environment than using reusable items and sanitizing them. Show your students the short, information-packed video, "Our Take on Takeout Packaging" (available at

## youtube.com/watch?v=-0YS9kRDcyU).

Tell students to use their thinking smarts when it comes to packaging and the environment. For example, is a company that uses paper coffee cups hurting the environment? Not necessarily, if those cups can be recycled or composted and save both water and energy by not washing reusable mugs. Conclude by showing the students the short, informative video "What's Wrong With Reusables?" available at

### voutube.com/watch?v=TM3sEj4AdC8.

Pass out the worksheet and have students complete Part A on their own. Then ask them to share their answers with the class. Before beginning Part B, give them an idea to get them started. For example, single-use packaging reduces the chance of spreading germs and bacteria. (A 2012 study in Sacramento County, CA, found that nearly 30 percent of reusable items tested had higher than acceptable bacterial counts.) Other answers might touch on convenience, waste, and economic issues.

Extension Activity: Have students research how foodservice packaging is used in their school and if it is beneficial to the school regarding economics, sanitary concerns, and convenience factors.



## **Package Deal**

Ask students to raise their hands if they think they'd like to own their own business when they are adults. Ask them to keep their hands raised if they would like to run a food business such as a food truck, coffee house, restaurant, or café. What would be the best part about running such a service? The worst? Let students share their ideas.

Pass out the activity sheet. Tell students that they are going to read about Mr. Carter, a new café owner who wants his business to be as sustainable as possible. He wants to limit his cafe's impact on the environment while still attracting customers and achieving a profit. Then have them help Mr. Carter decide whether to use re-usable items, single-use foodservice packaging, or a combination of both. They will need to work out the math to determine the monthly costs of each option. They will also consider factors other than cost, such as health impact and customer preferences. Finally, they will write a recommendation about which choice the cafe owner should make, and why.

## **Resources**

fpi.org ymiclassroom.com



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Activity 1 Reproducible Master

# The Complete Package

# Part A.

There are a lot of "green" issues to consider when schools, restaurants, and companies decide about the types of foodservice packaging they are going to use. After watching "Our Take on Take-Out Packaging," read and answer the questions.

1.	A coffee shop attracts customers by saying they are saving the environment
	by using reusable plates and cups. At the end of each day, they use a lot of
	energy and water to wash and dry the dishes. Are they really "saving the
	environment"? Why or why not?



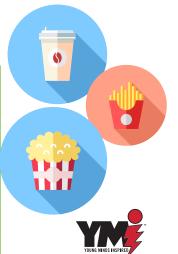
2. A day care center decides to start serving lunch to its students each day. It has a kitchen, but no dishwasher, and can only afford to pay one person to run the entire lunch program. The center decides to purchase recyclable paper plates and cups to use for the lunch program. Do you think this is a good decision? Why or why not?



# Part B.

Think about what you learned about foodservice packaging from your teacher and the videos. What are the pros and cons of using foodservice packaging? Hint: Consider the cost, sanitary concerns, convenience, impact on the environment, etc. Write your thoughts below:

Pros:	Cons:





FOODSERVICE PACKAGING

Activity 2 Reproducible Master

# Package Deal

Meet Mr. Carter, a café owner who wants your help to decide how he can limit his cafe's impact on the environment while still attracting customers and making a profit. First, help him determine the costs of reusable items vs. single-use foodservice packaging:

## Part A. The info on reusable items:

- Initial cost for reusable dishes, silverware, and cups: \$3,000
- Initial cost for shelves, racks or dollies to store reusable items: \$5,000
- Initial cost of an industrial dishwashing machine: \$5,000
- Monthly cost to replace broken, discarded, or stolen items: \$200
- Cost per month to hire a part-time employee to run the dishwasher/put away dishes: \$1,000
- Monthly water and electricity bills (for heating water and using the dishwasher): \$200

Add it up for Mr. Carter.

His total initial investment: \$\_\_\_\_\_

His total monthly cost: \$\_\_\_\_\_

The info on single-use packaging:

- Monthly cost to purchase recyclable or compostable foodservice packaging: \$5,000
- Additional monthly waste removal and recycling or composting costs due to the single-use packaging: \$300

Total monthly cost of single-use packaging: \$\_\_\_\_\_

Part B. Here are some things Mr. Carter is thinking about to make his café a success and limit his impact on the environment.

- He estimates that many of his customers will get their food and beverages "to go."
- He likes the idea of putting his logo on to-go packaging as a way of promoting his café.
- He is afraid that if he uses single-use foodservice packaging, his customers will think he does not care about the
  environment.
- He is interested in adding a composting program to collect food scraps, and maybe even packaging.
- He wants to be sure his café is a sanitary place.
- He is wondering whether he should allow customers to bring in their own reusable mugs or packages.

What advice would you give Mr. Carter? What choices do you think he should make? Explain below and on the back:





Learn more about foodservice packaging at www.fpi.org

