

# Challenge 13: Waste Not, Want Not

Quest 3 of 3: Save Our World





# Waste Not Want Not

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#### Introduction

Let kids become mindful of the value of the food they eat with the "Waste Not, Want Not" challenge!

Children will understand that food and waste have a cost and learn to make a grocery list.

## Lesson Objectives

- ★ Students will learn that food has a monetary value.
- ★ Students will make a Grocery List.

#### You Will Need...

★ Food Journal\* 1 sheet per student

1 sheet per student

★ Rainbow coloring supplies\*

★ Grocery List Examples

Homework Sheet\*

★ Activity Materials\*

1 per group

Badges, sandwich bag, fake coins, die, grocery list template

\*Additional preparation needed



# Lesson Plan

# Class Warm Up

#### Discussion Question:

What is a Grocery List? Why is it important to make a Grocery List before going to the store?

## Vocabulary Preview

- Food Waste Left over food or food scraps that are put in the trash, that maybe could be saved or used for another purpose
- **2**. **Grocery store** Shop or market where you can buy food
- **3**. **Grocery list** List of items to buy at a grocery store

# Helpful Hints

Get the class warmed up for this lesson by asking a discussion question.

#### Class Story

Welcome back to our adventures with the Food Heroes! The Food Heroes have decided to invite all of their friends over for a big party. Sage, Sweet Sara, Planter Pete, Fresh Frank, Trixie, and all our other friends are coming over! The Food Heroes frantically get ready by cleaning the house and putting up decorations. There is so much going on, that all the Food Heroes go to the store and each buy many ingredients for dinner, instead of just sending over one Food Hero with a grocery list!

Clay gets home first, excited to make noodles.

"I'm home!" Says Terra, coming in next with a bag of leafy greens to make salad.

Then, Kai and Ava run in and say, "We're here, and we need the kitchen!" They are carrying armfuls of vegetables for soup.

Finally, Jade strolls in with even more vegetables and a bag of rice. "How about we roast vegetables tonight, everyone?" she says.





After everybody has made their entrance, they turn to each other and realize what has happened— the Food Heroes have bought way too much food for this party because they didn't plan well!

"This happens all the time! Whether it's for a party or groceries, we always buy too much food! Our home is beginning to smell from all the food that's gone bad and been wasted, and oh dear, now we have so much more!" Says Jade.

The smell of waste if wafting through the room, until seemingly out of nowhere, a giant, green, dirty, stinky, slimy, yucky, blob appears at the door, and rolls into the house. He is surrounded by a cloud of bugs and plastic water bottle and bags stick out from his sides.

"I am Wasteful Willie! Everything I touch becomes toxic, and as you humans throw more and more away, the unsorted trash only makes me stronger and undefeatable! Some things in me will never be rid of and so my power continues to grow."

Wasteful Willie's smell is stinking up the kitchen and spreading throughout the house.

"We need to figure this out quickly, before the party gets started!"
Says Clay. "Next time, we've got to make a grocery list before we go shopping, or at least do something so this won't happen again!"

"Stop!" Yells Kai, "We figured out the solution to Food Waste!"

Willie freezes in place and turns around. He didn't expect the Food Waste Heroes to figure it out so quickly! He asks them, "How can that be? That's impossible! I will only stop stinking up your home and leave if you can list three things you can do prevent food waste, then I will leave you alone."

With a smile on his face, Clay says, "That's easy! One: make a shopping list of only the foods you need. Two: only buy items that you need. And three: keep in mind while you shop that food waste equals wasted money."

Wasteful Willie cries in surprise!

The odor around him turns into clean, fresh air, and the flies surrounding him vanish. All the Food Heroes breathe in and out, enjoying the crisp air.

"Well, you defeated me this time, Food Heroes! I'm leaving now, but I'll be back to get you" he says, as he tries to slip out the door.

"Wait!" shouts Clay. "Why don't you come back tonight for our party? Even you must get tired of your stink sometimes. The more, the merrier!" Share food and spread the news, Food Heroes are here!
Join our crew!





"Oh... I've never been invited to a party before. No one has ever wanted to sit with me for long because of my stink," says Wasteful Willie, flattered.

"Well, there won't be any food waste tonight, so you won't need to be stinky! Join us!" says Ava.

Wasteful Willie thinks for a moment, but then happily agrees. The Food Heroes cheer and let Wasteful Willie come in to prepare for dinner. Let the party start!

#### Mini-Lesson

#### **Grocery List:**

Discuss with the class that there is a lot of money, time and energy put into providing the food we all eat. This starts from farmers, truck drivers and then parents who work very hard to bring food home to their children and even cook it.

Highlight that wasting food is thus wasted money, time and energy. Moreover, it is harmful to the planet that uses a lot of its energy to produce this food.

One way to reduce the food we waste is to plan what to buy ahead of time and look at what we already have at home, in order to not buy too much food. To do this, we make a grocery list.

Ask students about their experiences grocery shopping with their parents.

## **Class Activity**

#### Role-Play:

In this activity children will take turns role-playing different scenarios at the grocery store to highlight the importance of planning ahead before purchasing food to prevent food waste. There are four Badges to help show children which role they are playing in each scenario. The four roles include: a shopper, a grocery clerk, Wasteful Willie and a Food Hero Buddy. You may run the role-plays with the whole class then have kids work in groups of four and try on their own.





#### **Class Activity**

#### Role-Play:

In this activity children will take turns role-playing different scenarios at the grocery store to highlight the importance of planning ahead before purchasing food to prevent food waste. There are four Badges to help show children which role they are playing in each scenario. The four roles include: a shopper, a grocery clerk, Wasteful Willie and a Food Hero Buddy. You may run the role-plays with the whole class then have kids work in groups of four and try on their own.

In each scenario the shopper starts with 10 gold coins, this is the maximum number of cards they can buy since each food item costs 1 gold goin. After the shopper buys a certain number of cards from the grocer using the gold coins the Food Hero Buddy's role is to eat the food the shopper has purchased. The Food Hero Buddy can only eat the amount of Cards that they role on a die. The rest of the Cards are considered Food Waste and go to Wasteful Willie.

#### Role-Play Scenario 1

In the first scenario ask the shopper to pick 10 menu cards. The shopper will then hand the paper bag full of food to our grocer, which will cost 10 coins so all the money is spent.

Then ask the Food Hero Buddy to role a die, the number that is shown is the number of food cards the Food Hero Buddy can eat, consider the rest of the food, waste. The student playing Wasteful Willie can take the remaining cards and throw them in a "trash". Highlight that that food that was wasted is equal to the number of gold coins.

★ Write the value for ten minus the number rolled on the dice on the board. For example, if the roll was 2, then the amount of money wasted is 10-2 = 8.

#### Role-Play Scenario 2

In the second scenario, ask the Food Hero Buddy role the die before the shopper goes "shopping". That number will represent the amount of food the Food Hero Buddy can eat. Use the Grocery List to write items from the Power Cards and Menu Cards up to the number the Food Hero Buddy rolled on the die.

#### Materials:

- Badge for each role (shopper, grocer, Wasteful Willie, Food Hero Buddy)
  - Paper bag
  - Grocery list
  - Pile of Menu Cards
    - 10 gold coins
    - · One big die

You can choose a different group to act out this scenario.

Help groups make the list and write the food names on the board.



The shopper then hands the paper bag full of food to out grocer and pays using the gold coins one for each card as before.

Now, the Food Hero Buddy can eat the food! Remember, the Food Hero Buddy can eat all of the Menu Cards from the shopper because the amount of cards matches the number we rolled on the die! Now, our shopper has no more Food Cards! The Food Hero Buddy eats the corresponding amount of food by taking the number of Menu Cards, leaving the shopper with no Food Cards (no food is wasted). The student playing Wasteful Willie won't be able to collect any food waste for the trash.

Highlight the amount of money saved:

- ★ Write on the board "Money saved: [10 # amount]".
- ★ In the example, the dice roll is 2. The amount of money saved is then 10 2 = 8.

In each round have the students practice simple math to determine how much food is wasted or how much money is saved. You can expand on the above two scenarios. You can act out these scenarios with different groups as often as you wish, depending on your time.

Let's go back to our Food Heroes and see if the Wasteful Willie has been stopped!

#### At-Home Mission

Complete a page of the Food Journal.

Complete the Make a Grocery List Homework Sheet to complete with your family. Please plan out the groceries you will need to buy for the next week. Make sure there are at least 6 real foods on your grocery list. The next time you go to the grocery store, you can use this grocery list!



# Grocery List

Fruit:	Vegetables
Apple	Spinach Spinach
Banana	Carrots
The state of the s	The same of the same and the same of the s
and the second s	The state of the s
The state of the s	and the second s
The state of the s	and the second s
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Other:	
Milk  Mike A state of the state	
Eggs	
The state of the s	
The state of the s	
The state of the s	



















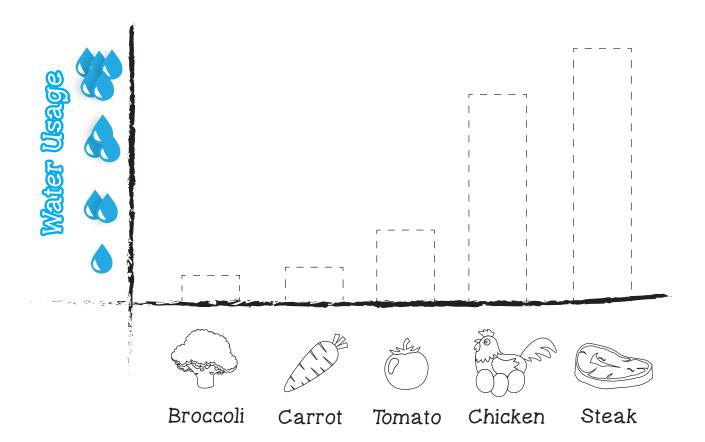
# Grocery List

Fruits:	Vegetables:
and the state of t	
and the second s	
and the second and th	
and the state of t	
and the state of t	
Others:	
	and the second s



# Color the Graph!

How much water does each food waste?



# Make a Grogery List!

Which foods waste the least amount of water?

1.

2. \_\_\_\_\_

3. \_\_\_\_



# Waste Not Want Not



#### Introduction

Let kids become mindful of the value of the food they eat with the "Waste Not, Want Not" challenge!

Children will learn to eat until they are appropriately full.

## Lesson Objectives

- ★ Students will learn the importance of eating until only 80% full
- ★ Students will practice portion control, by filling a plate from a buffet.

## You Will Need...

★ Food Journal\* 1 sheet per student ★ Homework Sheet\* 1 sheet per student

Rainbow coloring supplies\* ★ Activity Materials\* 1 per group

★ Posters of Trash, Refrigerator, and Buffet
★ Stomach sheet
1 per student

\*Additional preparation needed

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Helpful Hints



# Lesson Plan

#### Class Warm Up

#### Review:

Review with the class the three ways to prevent food waste:

- 1. Make a shopping list of only the foods you need.
- 2. Only buy items that you need.
- **3**. Keep in mind while you shop that food waste equals wasted money.

#### Discussion Question:

Have you ever been to a buffet or buffet-style dining before? What did you see?

Get the class warmed up for this lesson by asking a discussion question.

## Vocabulary Preview

- 1. Trash Waste we throw away
- **2. Buffet** A meal where there is a lot of different food to choose from, people may take as much or as little as they like
- **3**. **Portion** Amount of food that should be eaten in a meal
  - **4. Leftovers** -Food that is not eaten after a meal, can be taken home, and eaten later
  - 5. Stomach Part of the body where the food goes after it leaves your mouth and where the first digestive juices are added







#### Class Story

Last time we helped the Food Heroes prepare a party with Wasteful Willie, and the party was a smashing success! Everybody enjoyed themselves.

At the party, Jade went up to Wasteful Willie and said, "Thanks for helping us, Wasteful Willie! You led us on a journey to understand the value of food, and now, I feel like we can also start understanding the value in other things we use every day. Looking at all the trash in you made me think about how many things we really use, every day!"

"Exactly!" Says Terra, "I no longer think you are wasteful, so you need a change of name... hmmmm... what about, Willie the Whiz!? For your smarts in trash sorting, gratefulness, and consciousness in our consumption practices!"

Willie was so excited to have a new name, and he jumped and danced in celebration.

Now, weeks have passed since the party, and Willie the Whiz wants to take the Food Heroes out to dinner to show his gratitude to them for welcoming him and teaching him about reducing waste. He calls up the Heroes and asks, "Hey everyone! I used to love going to the buffet down the street, can I treat you to dinner there? At the all-you-can-eat buffet, anyone can eat what they want!"

The Food Heroes agree with enthusiasm. They have never gone to a buffet before!

"And hey, kids, your teacher will pass out some gold coins for you to use. I'll pay for your lunch today too, let's go!" Says Willie the Whiz.

As the Food Heroes walk in, they see the buffet has long lines of delicious steaming food. Mountains of rice, heaping piles of vegetables, noodles, soups, fruit, and more! The Food Heroes are just drooling looking at it!"

"Here we are!" Says Willie, "go ahead and serve yourselves by picking up foods you like to eat and putting them on your plate. At each table, you should see many different types of delicious foods. Take a big piece if you want a very large portion of this food on your plate, and take a small piece if you only want a small portion of food on your plate."

Jade has never seen so much food in one place! Kai is bouncing his leg, impatient to start eating. Terra is silent, her eyes wide at the sheer amount of food in front of her. Ava is already running towards the plates! Clay laughs and turns to Treasure Ted: "My friends are all impatient to get to the buffet," he says, "thanks so much for treating







us. This food looks great! We're all hungry, so let's eat!"

The Food Heroes dig in and eat all the food until their stomachs are completely full.

Clay falls back in his chair and exclaims, "Wow, what a delicious meal! But I'm so stuffed now, and I feel a little uncomfortable, like my stomach is going to explode!"

Jade giggles at Clay. "I told you not to overeat!" She tells him. "Once you hit 80% full, it's better to stop eating. 80% full is when you are not hungry anymore and when you feel like you don't need one more bit of food to be satisfied."

On the other side of the table, Ava is feeling anxious with her half-full plate of food. "Willie the Whiz, I'm sorry, but this time I took too much food! I can't finish this," she says.

"It's ok, I know you were still trying to be aware of your food," Willie replies, "so why don't you take your food to-go? You can eat it it for lunch tomorrow."

Kai leans in to agree. "That's right! There are so many people in this world that don't have enough food to eat. Besides, wasted food is wasted money! We need to make sure we do everything to stop food waste."

"Everybody should take leftovers home!" Says Ava. "The food that went through so many people and resources in order to get to our plates shouldn't be wasted. Taking it home will help us appreciate every bite. Thanks for joining us for this delicious meal!"

#### Mini-Lesson

#### At the Buffet:

Teach children what a buffet is and the importance of only taking the amount of food we can eat to be 80% full. Show them the stomach poster with the line to 80% to illustrate. Explain that the stomach can't do its job to digest or break down food properly if we eat over 80% which will result in a stomach ache.

Secondly, if we take too much food, we are wasting food. Explain the reasons why wasting food is bad. Some of the reasons are that other people on the planet are very hungry, it contributes to climate change and is also loosing personal money since food costs money.

Food Heroes!
Everyday we do our part
to protect our body,
mind and heart.





#### **Class Activity**

## Reducing Food Waste:

In this activity, we are going to take a trip to a buffet in the classroom.

**Preparation:** Put an assortment of large and small pictures (approx. 25) on each group's table from the food sheet posters. There should be enough of each size for each student (i.e. four to five small portions and four to five large portions, depending on the number of students seated at each table). Give each student a paper plate.

#### Part 1: Going to the Buffet

Next in groups, ask students to pick big and small pictures of food to glue onto their plate as if they were at a buffet. Big pictures = big servings. Small pictures = small servings. Students get to decide how much to take, but remind them to be careful of not taking more actually needed. Just like a real buffet, there are different foods like noodles, rice, chicken, broccoli stir fry, dumplings, fruit, skewers, steak slivers on stir fry, red bean soup, and ice cream balls.

After a few minutes of letting the students pick their buffet, collect (or have the Food Hero Buddies collect) the remaining pictures and give them back to the teacher. Once each student is done collecting portions for their plate, have them look at how much they put on their plates.

Ask them to reflect on the amount of food they choose. Is it too much? Too little?

#### Part 2: Stomach or Store

**Preparation:** Give each student a stomach sheet and a bowl of pom poms.

For each big portion children took, they should glue three Pom Poms on their stomach sheet. For each small portion, they can put one pom Pom on the sheet. Ask students to look at their plates and put the corresponding number of pom poms on their stomach sheet. See who has overpassed the 80% full line because they took too many large food portions in the first part of class.

Any students that took over the 80% line can take their extra food portions and practice putting them into the refrigerator as "left-overs". You can use the refrigerator and trash picture to illustrate that they can save extra food and eat it later, rather than throw it into the trash.

#### **Materials:**

- Paper plates (1 per student)
- •Various pictures of food dishes, large and small (approx. 25 per group)
- •Trash and refrigerator pictures
  - •Pom Poms
  - •Stomach Visual Poster (1 per student)

Pause between questions to give students time to think and answer.



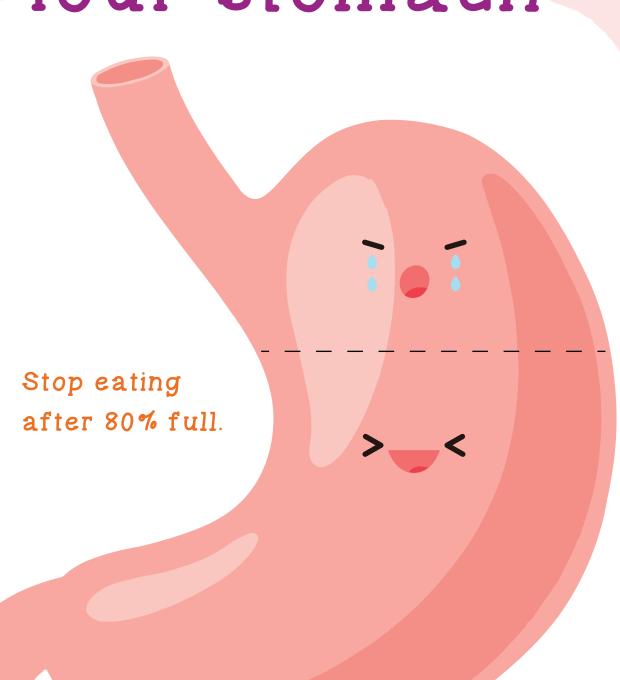
## At-Home Mission

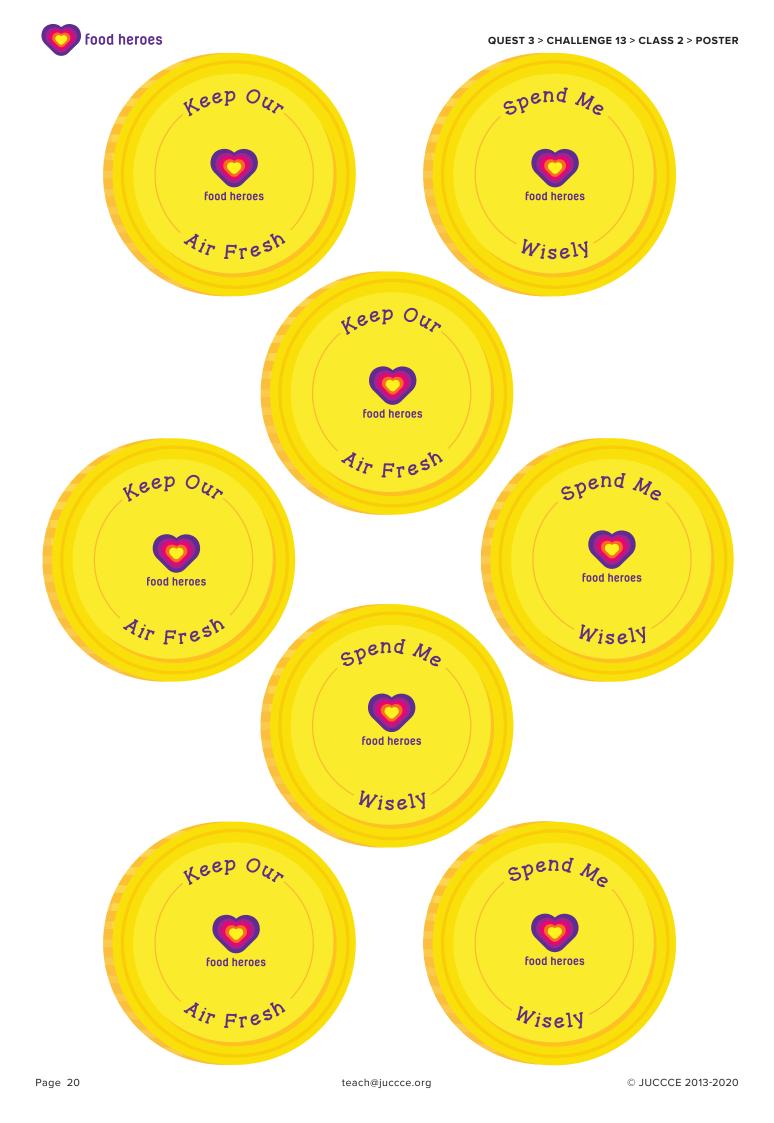
On the homework sheet, fill out the stomach with your favorite Superboost and Sidekick foods until it is only 80% full. You can cut out pictures or draw them.

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# Your stomach





















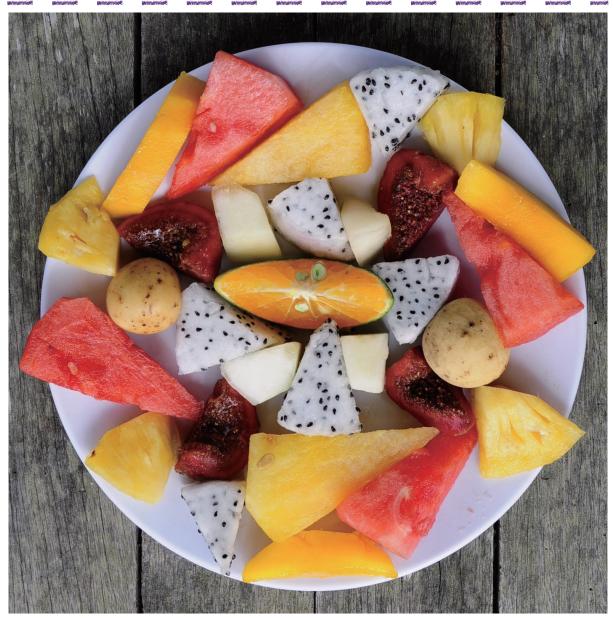






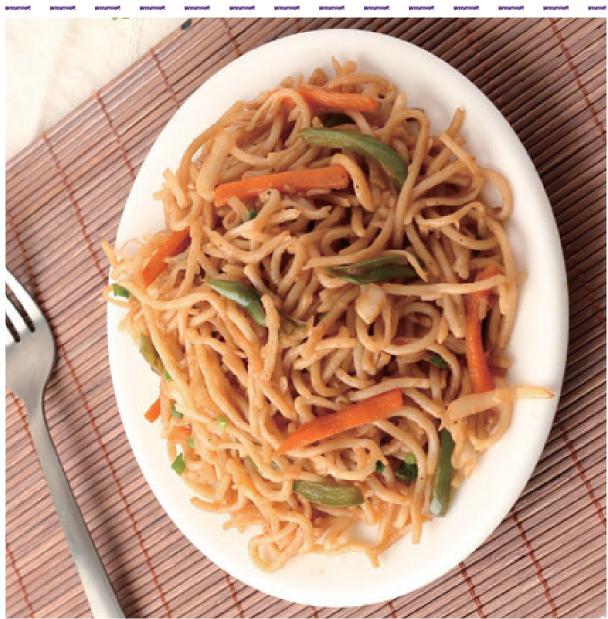




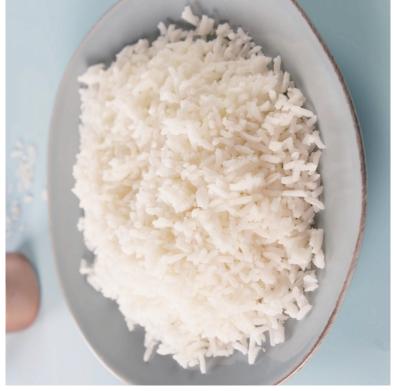


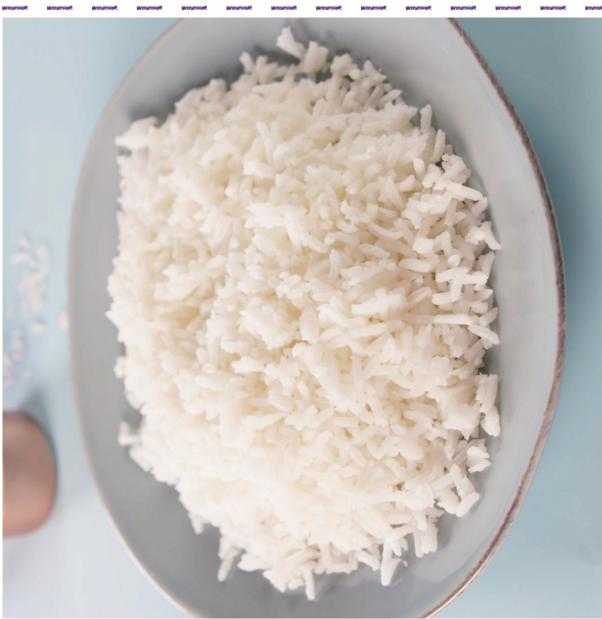






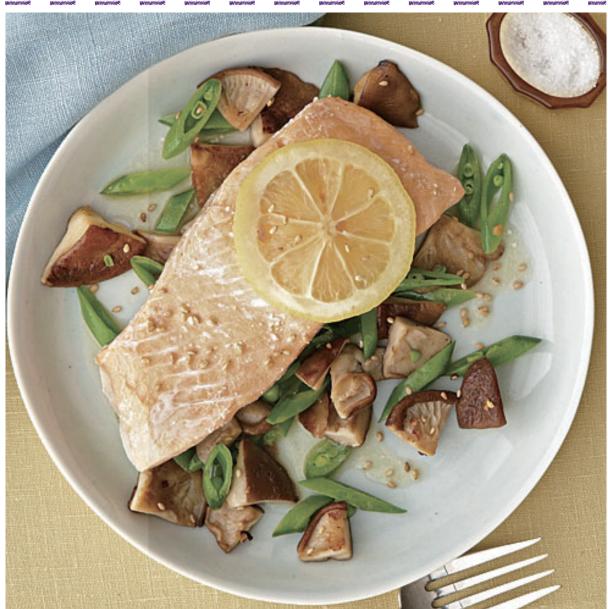


















# At-Home Mission



Name: \_\_\_\_\_

Draw food inside the stomach until it's 80% full.

80%

