MISSION DESCRIPTION

In this activity, participants prepare their lunch like an astronaut on the International Space Station (ISS). Create a lunch with foods similar to those on the ISS such as dehydrated fruits and vegetables, tortillas, fish pâté, tuna, beans, and instant rice.

MISSION PREPARATION

TIMELINE

Breakdown	Duration
Set-up	
Have participants help	5–10 minutes
Pre-load space food videos	
Explanation of the activity	5 minutes
Have participants design their space lunch	10-15 minutes
 If participants want dehydrated vegetables, give them the option of rehydrating them. If they want to rehydrate them, they can put the vegetables in the bowl and the activity facilitator can pour hot water on them. Allow vegetables to rehydrate for a minimum of 1 minute. 	variable
Participants can eat and chat while watching the space food videos	30 minutes
Clean-up	10 minutes
Total	60 to 70 minutes

Difficulty: **EASY**Duration: **60-70 MINUTES**Materials: **MODERATE**

GOAL

To teach participants about eating in space while exposing them to a variety of food and creative ways to prepare it

OBJECTIVES

By the end of the activity, participants will be able to

• Explain how a meal can be assembled in space



MATERIALS

- · Allergen declaration form
- Food items for lunch
 - Whole grain tortilla pack
 - Black beans
 - Instant rice
 - Dehydrated vegetables such as tomatoes or mushrooms (packaged without oil or added salt)
 - Hummus or salsa
 - Tuna
- Can opener
- Spoons/forks to use for beans, rice, vegetables, hummus or salsa, tuna
- · Kettle and microwave access
- Small bowls for participants to rehydrate vegetables (optional)
- Plates (encourage participants to bring a plate from home)

A FEW DAYS BEFORE THE ACTIVITY

Print allergen declaration form and have participants and parents fill it out & sign it.

SET-UP

- Pre-load or download some of the space food videos below
 - On the menu in orbit https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1_pvy8iogo&search=david+food
 - How do astronauts season their meals in space? https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1_h2w68fcq&search=meal
 - The five senses in space: taste
 https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1_qj77pzt9&search=food
 - Chili for space https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1_vuqmzo9n&search=chili
 - Honey in space https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1_y0gyi5u8&search=honey
 - Chris Hadfield and some incredibly floating Canadian space food https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1_78lisjrr&search=food
 - Chris Hadfield's space kitchen
 https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1 wyojwwhf&search=food
 - Chris's kitchen part deux: space spinach strikes back
 https://www.asc-csa.gc.ca/eng/search/video/watch.asp?v=1_hrjcbe42&search=eating
- Have a clean table or workstation for the food, plates, utensils, serving spoons, and napkins
- Cook instant rice in microwave
- Place foods on table and open packages
 Note: Keep hummus, vegetables, beans, and salsa on opposite side of the table from the tuna with separate spoons to prevent cross-contamination.





ACTIVITY

Participants will have a fun "space lunch" where they will use food items similar to those commonly found on the International Space Station (ISS) to create a meal.

EXAMPLE OF COST BREAKDOWN (BEFORE TAX)*

Item	Each	For 30 participants
Chunk Light Tuna in Water 170 g	\$1.17	\$3.51 (3 cans)
Whole Wheat Tortillas 7" (10 tortillas)	\$2.97	\$8.91 (3 packs)
No Salt Added Black Beans	\$0.88	\$2.64 (3 cans)
Instant Long Grain White Rice, 700 g	\$3.47	\$3.47
Sun Dried Tomatoes, 85 g	\$2.47	\$2.47
Traditional Hummus, 454 g	\$4.97	\$4.97
Cutlery Combo	\$2.88	\$2.88
Paper Napkins	\$1.97	\$1.97
TOTAL	\$20.78	\$30.82

^{*}Prices taken from Walmart.ca. You do not need to buy these specific items.

POSSIBLE MEAL COMBINATIONS

1. Vegetarian bean burrito

- 1 tortilla
- 1 tbsp. hummus or salsa
- 3 spoonfuls of beans
- 2 spoonfuls of rice
- 2 dehydrated vegetables*

Instructions

- 1. Put tortilla on plate.
- 2. Spread 2 tbsp. hummus or salsa onto tortilla.
- 3. Spoon the beans and rice onto tortilla.
- 4. Place 2 dehydrated tomatoes onto tortilla.
- 5. Carefully roll the burrito.
- 6. Eat & enjoy!

2. Tuna burrito

- 1 tortilla
- 1 tbsp. hummus or salsa
- 2 tbsp. tuna
- 2 spoonfuls of rice
- rehydrated vegetables

Instructions

- 1. Put tortilla on plate.
- 2. Spread hummus or salsa onto tortilla.
- 3. Spread tuna onto tortilla.
- 4. Spoon rice onto tortilla.
- 5. Rehydrate some vegetables and then place on tortilla.
- 6. Carefully roll the burrito.
- 7. Eat & enjoy!



^{*}using dehydrated vegetables will add a crunchy texture

ALLERGEN DECLARATION FORM

n class, we will be providing ingredients for participants to make their own "space lunch" on	(date
Please disclose any food allergies your child has. If you do not wish for your child to participate, pleas	e provide lunch fo
his day.	
Participant name:	
Emergency contact name:	
Emergency contact number:	
Participant's food allergies: (if none, write "none")	
Parent/Guardian signature:	
Date signed:	
Participant signature:	
Nate signed:	



