

# ASTRONAUT TRAINING:

Mission Assignment: Explore your taste buds!

**STAY HEALTHY!** Before handling any food products, please thoroughly wash your hands.

**FOOD SAFETY!** Each member of the group can taste the liquids (unless you are allergic to some foods).



From the early 1960s, astronauts found that their taste buds did not seem to be as effective when they were in space.

## Why not?

On Earth, gravity pulls on the fluid in our bodies, moving it down into our legs. In space, this fluid is spread across the body. This is called Fluid Shift.

This change can be seen in the first few days of arriving in space when astronauts have a puffy face as fluid moves into the face (this is called Moon Face).

The puffy face feels like a heavy cold and this can cause taste to be affected in the short term by reducing their ability to smell. spy

After a few days the fluid shift evens out as the human body adapts.

In the long term, taste is largely affected by the other odours in the small station (e.g. body odours, machinery). The sense of smell is very important to tasting food.

### **How do we combat this?**

When food seems to lose its flavour, astronauts ask for condiments, such as hot sauces, honey, soy sauce and BBQ.

## **Follow these instructions to train like an astronaut!**

1. Make a note of the container you are currently at, your results must be added in the correct row in the table below (e.g. enter the results for bowl three on row three).
2. One member of your group must not put on a blindfold and one member put pinch their nose (or use a nose plug or clip).
3. Remove the lid from your container and dip your dropper into the bowl and collect a sample of the liquid. Place the liquid on your tongue and consider the flavour. Note: if you are wearing a blindfold, another member of your team should place the liquid on your tongue.
4. Note down your results on the table below without giving your crew mates any indication of what you have tasted. Make sure you record the results on the correct row. What was the flavour (sweet, salty, sour etc.)? Can you guess what you are tasting? How intense was the flavour (from 0-10, where 10 = very strong)?
5. When all members of your crew have tasted the food, place the lid back on the container and move to the next item in a clockwise direction. Act sensibly - if there are too many people at one bowl, wait until they are finished.
6. At each item, switch which member wear the blindfold and pinches their nose.
7. Repeat the activity from Step 2 at each bowl until you have tried all foods available and recorded your results below.

	<b>Sense affected (sight, smell, none)</b>	<b>Taste (sweet, sour, salty, etc.)</b>	<b>Intensity (0-10)</b>	<b>Identified food</b>
<b>Container 1</b>				
<b>Container 2</b>				
<b>Container 3</b>				
<b>Container 4</b>				
<b>Container 5</b>				