

## HYDRATED POTATO

We're going to see what happens to a potato when its in different types of water! Imagine this potato is your body and what happens to our bodies if we don't keep healthy and hydrated.

*Here's a few facts you may want to read before carrying out this activity:*

### What is hydration?

Hydration is the process of replacing water in the body. Did you know the human body is made up of between 60 to 70% water?

### Why is hydration important?

Hydration is important because its this water that helps with body temperature, removing waste from the body and making sure your vital organs work properly.

### How do we stay hydrated?

We stay hydrated by drinking water and other drinks and eating certain foods.

### What causes dehydration?

Things that can cause de-hydration are, sweating, drinking too much caffeine (tea and coffee), exercise, heat and not drinking fluids.

### How long can humans last without drinking anything?

There are lots of factors that can change this but the general rule is that humans can survive for 3 days without drinking anything.

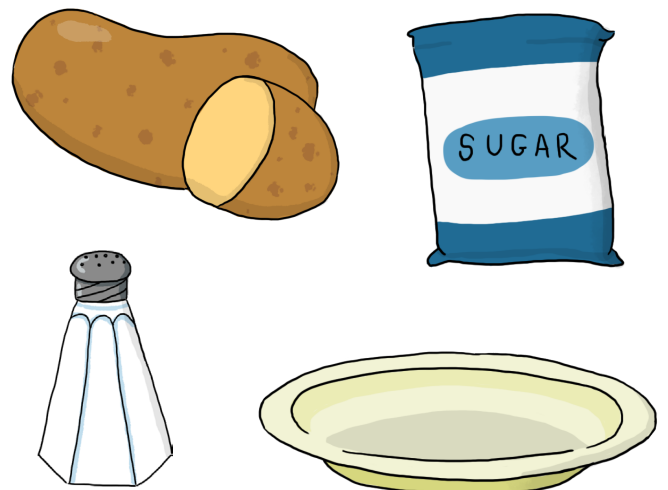
## HYDRATED POTATO

### Welcome to the hydrated potato experiment!

Adult supervision and assistance is required for parts of this activity.

#### To carry out the activity you will need:

- 1 potato
- 3 small saucers, bowls or jars for water
- Salt
- Sugar
- Knife - *Help from an adult*



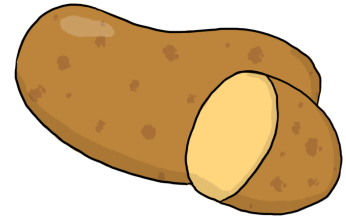
1. First have an adult cut the potato into three even strips. You can leave the skin on.
2. Next add water to each saucer. Make sure it is enough water to cover the entire piece of potato.
3. Label 1: salt, 1: sugar and 1: plain
4. Next, add salt to the saucer labelled salt. Make sure it is at least two tablespoons and stir until it is completely dissolved. In the saucer labelled sugar, add the same amount of sugar as you did salt. Leave the plain saucer as just water
5. Now add your potato pieces! Leave the potato piece alone in the different types of water for 1-2 hours, then come back and observe!
6. Answer the questions on the next page about what's happened to the potato

## LET'S CHECK WHAT HAPPENED...

Looking at the different potatoes describe each of them below, using adjectives such as shrivelled, dried out, mushy etc. Imagine this is your body when you've had some sugar in drinks or salt on your food?

### 1. What happened to the 3 different potatoes?

- Salt \_\_\_\_\_
- Sugar \_\_\_\_\_
- Plain \_\_\_\_\_



### 2. Why do you think the plain potato is different?

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### 3. What do you think would happen if you put the salt potato back into the plain water? *(try it – see if you're right!)*

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### 4. What things can make us become dehydrated like the potato?

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### 5. Which drink would be better after exercise? *(circle the right answer)*

FIZZY DRINK

WATER

TEA

MILK

COFFEE

We hope you had fun learning about hydration and why it is important to stay hydrated with this little experiment!

**BENEFITS OF DRINKING TAP WATER**



HOW OFTEN	DRINKS
Up to 6-8 glasses per day	Drinking tap water is a great choice, it keeps you nice and healthy and hydrated.
Have regularly	Milk is a great fluid to keep you hydrated and gives you calcium, vitamin B and protein. Be careful of milky drinks such as milk shakes or hot chocolate though as they usually have added sugar in them!
In moderation	Fruit Juices are good to have sometimes, those that contain 100% fruit juice are the best ones to have as they haven't been mixed with other sugars. They can be quite acidic so don't have them too often as this can harm your teeth. You could dilute these with water to.
1 per day	Smoothies are nice for a treat; they are a great source of having up to 2 of your 5 a day fruit and veg in a fun and tasty drink!
Maybe 1 per day	Low calorie/diet or zero drinks are ok to have now and again, they are mixed with extra additives or sugars so watch out on those teeth!
As a treat	Soft drinks containing sugar are not only bad for your teeth but your body too

