

Should you store cut vegetables in plain tap water or salted water? Experiment to find out. Your teacher will give your group two halves of a carrot or two slices of potato, along with tap water, table salt, and other materials you might like to use for collecting data.

**Materials**

- Carrots
  - Potatoes
  - Water
  - Salt
  - Weight Scales
- 200 ml beakers



**Procedure**

- 1.) Work with your group to design a procedure for your experiment. Have your teacher approve your procedure before you carry it out.

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- 2.) Predict what you think will happen to the vegetable samples.

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- 3.) Design a table to collect data for your experiment.

**Analysis**

1.) What happened to your vegetable samples? Were your predictions correct?

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2.) What direction was the water flowing in each sample, into or out of the vegetable? How do you know?

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**Extension**

3.) Previously you learned about the importance of surface-area-to-volume ratio of cells. How could you extend your procedure to examine the relationship between surface-area-to-volume ratio and the rate of osmosis?

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