

Damaged Cells

Question:

Are cells in vegetables damaged when they're cooked?

Experiments:

To examine osmosis across the cell membrane.

Materials:

You will need:

- Salt, water
- petri dishes
- 1 cooked potato
- 1 raw potato

Method:

1. Make a small hollow in each piece of potato.
2. Place salt in the hollowed out potatoes.
3. Place the potato pieces into the petri dishes hollow side up.
4. Place water around each potato in each petri dish.

Result:

The salt dissolved in the raw potato, but did not dissolve in the cooked potato.

Conclusion:

Water passed from the petri dishes through the healthy cell walls of the raw potato. It didn't pass through the cell walls of the cooked potato because its walls were damaged during cooking.

Find out more!

The cell membrane performs a vital function allowing water to pass through it (osmosis).