

Celery Straws

Article written by: Kate Marsland, Master Gardener

We all know that plants "drink" water with their roots, but did you ever wonder how the water gets to all the other parts of a plant? When you do this kitchen science experiment, you'll be able to see how the water gets from the bottom of a plant to the very top! Once again, you probably already have all the supplies you'll need.

Here are the supplies you'll need:

- **Three pieces of celery with the leaves on top**
- **A jar filled with water**
- **Red food coloring**
- **A paring knife**

This is a good project to start in the morning. Begin by adding eight to ten drops of food coloring to the water in your jar. Be careful, because red food coloring can really stain your clothes! Then, slice a little of the bottom of your celery, and put the celery, cut side down, into the jar of water. If you're not allowed to use a knife, get help from a grown-up. Set the jar in a safe place where it will get bright sunlight, and wait a few hours.

After lunch, or when you get home from school take out one piece of celery. Cut about an inch off the bottom. What do you see? There should be a lot of red dots where the red water has entered the celery. Keep cutting away little bits of the celery until you can't see any more red. How far did the red water get in those few hours?

In the evening, remove another piece of celery. This time, scrape or slice off the outside layer of celery. Does it look different than the first time? By now, you should be able to see the long tubes that the celery uses to drink water, because they'll be red! If you're careful, you can even pull the tubes apart from the rest of the piece. Those tubes are like drinking straws and all plants have something like them. That's how the water gets from the roots to the rest of the plant.

By the next morning, you'll be able to see the red dye in the leaves of the last piece of celery. The longer you leave the celery in the water, the redder the leaves will get. If you want to do more with this experiment, do it over with a carrot, or put a white daisy in the colored water for a few days. You'll love what happens!

If you like silly stories, read **The Giant Carrot** by Jan Beck. To learn another unusual way plants use water, look for **Cactus** by Cynthia Overbeck. You'll be surprised!

In February we'll be doing a fun project called *The Amazing Potato People!*