



# How to make red-cabbage indicator strips

By Mel Dash

One way to test the quality of fresh water is by finding out its pH value. A pH of 1 means it's very acidic, and a pH of 12 means it's very alkaline. Healthy rivers need to have a pH between 6.5 and 8.5 for most aquatic life to survive.

Anthocyanin is a purplish pigment found in many fruits and vegetables, including red cabbage.

When the pigment turns red/pink, this tells you that there is a low pH and acids are present.

When it turns blue/green, this shows there is a higher pH, and the conditions are more alkaline.

You can use red cabbage to make your own pH indicator strips to test the freshwater around where you live.

## You need

- Red cabbage leaves
- Blender
- Water
- Sieve
- Tray
- Rubber gloves
- Tongs
- Drawing paper (acid free is best)

## What to do

- 1 Put on your rubber gloves.
- 2 Fill the blender with two cups of water. (Or a container if you are using a stick blender.)
- 3 Add one large red-cabbage leaf.
- 4 Blend until the leaves have turned to pulp. (You may need an adult to help).
- 5 Pour the mixture into the tray through the sieve (to catch the pulp).
- 6 Add the paper, and leave for a few minutes to let the juice soak in.
- 7 Hang the paper to dry.
- 8 When it's dry, cut it into strips, and store it in an airtight container to be used in the next few days.



With special thanks to KCC member Esther who tested our experiment to check it was *Wild Things* worthy. Go to [kcc.org.nz/blog](http://kcc.org.nz/blog) to find out more about what household items you can test your cabbage strips on.