



## A tasty test

Compare how you and a butterfly taste sweet things with this simple experiment.

### You'll need:

- water
- an empty 2-L (8-c.) bottle
- a large, clean bucket or basin
- sugar
- a large spoon
- a bowl

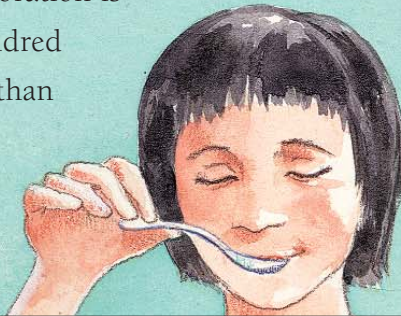
You should find that the sugar solution in the bucket did not taste sweet because there was so little sugar compared to the amount of water. The solution in the bowl should have tasted very sweet. It is hard for you to taste the sweetness in the bucket solution, but a butterfly would find it very sweet. In fact, it would taste as sweet to the butterfly as the solution in the bowl tasted to you.

1. Pour 6 bottles of water into the bucket. Stir in 15 mL (1 tbsp.) of sugar.



2. Taste the sugar solution. Can you taste the sweetness in the water?

3. Now pour 60 mL ( $\frac{1}{4}$  c.) of water into a bowl and add 15 mL (1 tbsp.) of sugar. Stir well and then taste the sugar solution. How does it compare to the solution in the bucket? This solution is about two hundred times sweeter than the bucket solution.



### Tasting without tongues

Butterflies, moths and flies taste with their feet, and many other insects taste with their antennae. Mussels and scallops test their food with their tentacles. If you were a catfish you could tell if something was good to eat by swimming close to it, because your body would be covered with taste buds.

