Strawberry DNA

Owen Lister

Brief: Owen’s research was inspired by the third-grade science fair at his school.

Introduction

DNA is a genetic copy of our parents traits, I recently read that it is possible to extract DNA from strawberries using household products. Is it possible to see DNA from other sources without a microscope?

Hypothesis

If we use household items we will be able to extract DNA from strawberries but not from oatmeal or kiwi, because that would be too difficult.

Materials

measuring cup and spoons, rubbing alcohol, salt, water, dishwashing liquid, small bowl, cheesecloth, funnel, tall drinking glass, 3 strawberries, 2 kiwis, 1/2 cup of oatmeal, 3 sandwich bags, 3 small jars, 3 bamboo skewers.
Methods
mix 1/2 teaspoon of salt, 1/3 cup of dishwashing liquid in a small bowl. Place the funnel in the top of the drinking glass and line it with cheesecloth. Place the funnel in the top of the drinking glass and line it with cheesecloth. Remove the stem of the strawberries. Put the strawberries in the sandwich bag and squeeze them for two minutes. Add three tablespoons of extraction liquid, and squeeze for another minute. Pour the strawberry mixture into the funnel and let it drain into the glass. Pour the mixture into a small jar. Slowly pour 1/4 cup of chilled alcohol down the side of the small jar. The DNA rises up into the alcohol layer and can be removed with the bamboo skewer. Repeat these steps with the kiwis and oatmeal.
Results
the DNA from the strawberries was the thickest and most clumpy. The oatmeal produced the most DNA, but it was not as clumpy as the DNA from the strawberries. The DNA from the kiwis was the thinnest and the hardest to remove with the bamboo skewer. Strawberries have eight copies of DNA in each cell. This is why the DNA from the strawberries was the thickest. It took longer for the kiwis' DNA to get to the top than the strawberries and oatmeal.

Conclusions
My hypothesis was wrong. When I finished the kiwi and the oatmeal, I saw that there was some DNA in the cup and the oatmeal's cup.

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About the Author: Owen is a third-grade student at Dan Mills Elementary School.