

Can you extract DNA from a strawberry?

You Will Need

- 70% isopropyl rubbing alcohol
- 3 large strawberries
- 1/3 cup water
- 1/2 teaspoon salt
- 1 tablespoon liquid dish soap (such as Dawn)
- Measuring cup
- Measuring spoons
- Mixing bowl
- Cheesecloth
- Funnel
- Tall drinking glass
- Small drinking glass
- Resealable plastic food storage bag
- Tweezers

Directions

1. Chill the bottle of rubbing alcohol in the freezer.
2. Completely line the funnel with the cheesecloth, and place the tube of the funnel down into the tall glass.
3. In the mixing bowl, mix together the water, salt, and liquid dish soap. This is your extraction liquid.
4. Cut the stems from 3 large strawberries. Place them in the resealable plastic bag.
5. Add 3 tablespoons of the extraction liquid to the bag. Lay the bag flat on its side and press out all of the extra air. Seal the top of the bag tightly.
6. Use your hands to squish and squeeze the strawberry mixture for 2 minutes.
7. Pour the strawberry mush from the bag into the funnel. Let it drip into the glass until there is very little liquid left in the funnel.
8. Pour the filtered strawberry mixture from the tall glass into the small drinking glass so it is one quarter full.
9. Take the rubbing alcohol out of the freezer. Using the measuring cup, measure 1/2 cup of cold rubbing alcohol.
10. Tilt the small drinking glass with the filtered strawberry mixture and SLOWLY pour the rubbing alcohol down the side of the glass. Pour until the alcohol has formed about a 1-inch deep layer on top of the strawberry mixture.
11. Use your tweezers to collect the cloudy clumps that form between the alcohol and strawberry layers. This is the strawberry DNA!
12. Analyze the DNA clump. What do you observe? Do you think the DNA of other fruits or vegetables will look the same? Experiment to find out!