

How to Extract DNA

1. Chop the onion into small pieces and place inside the blender container.



[Chopped onion](#)

2. Measure out 200 ml (1 cup) of the water. Pour this into a glass and add one level teaspoon of salt. Microwave the salty water for one minute (High) then stir well.



[Add salt to water](#)

3. Add enough of the salty water to just cover the onion.



[Add salty water to onion](#)

4. Blend the mixture for about 10 seconds.



[Blend mixture](#)

5. Pour the onion-salt-water mixture through the strainer and collect the liquid in a glass. The DNA from the onion is in this liquid.



[Strain liquid](#)

6. Measure out 50 mls (1/4 cup) of the onion liquid and pour it into a glass.



[Measure liquid](#)

7. Add 2 teaspoons of dishwashing detergent to the glass containing the 50mls (1/4 cup) of onion liquid. Stir very gently.



[Add detergent](#)

8. Measure out 100 mls (1/2 cup) of methylated spirits. Slowly add the methylated spirits to the glass containing the onion-detergent mixture.



[Add methylated spirits](#)

9. Now wait for the DNA to appear! The DNA is white, rising up from the bottom of the glass. Be patient as it may take a few minutes to appear. (If no DNA appears after 5 minutes, try again using suggestions from [What went wrong?](#))



DNA rising from the bottom of the cup to the top

Clean up the kitchen. The methylated spirits and DNA from your experiment should be poured down the sink.

Extracting DNA: What Went Wrong?

Don't worry, experiments don't always work—try it again.

If no DNA appeared in your glass it may be because the experiment took too long. Try doing it again but a bit more quickly.

Try a different combination of ingredients and you may get better results. Using a different brand of bottled water or detergent changed our results. Trying a different type of salt (eg table salt, cooking salt or iodised salt) may also help. Our most successful experiment used 'The Original Adams Ale' pure Australian water, 'Morning Fresh' detergent and 'Mermaid' iodised salt.

You might like to try extracting DNA from something else in your kitchen. Kiwi fruit, peas, yeast and wheat germ all work well.

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Taken from:

<http://museumvictoria.com.au/scidiscovery/dna/howto.asp>

English measurements in parentheses added