



Testing the Effect of Various Oils on Skin Hydration



Name: _____

Date: _____

QUESTION

How do different oils affect the hydration (moisture) of the skin?



HYPOTHESIS

Predict which oil you think will keep skin the most hydrated and which will be the least effective. Explain why.



MATERIALS

- 5 different oils (e.g., coconut oil, olive oil, almond oil, jojoba oil, grapeseed oil)
- Small bowls or containers
- Cotton swabs
- Moisture meter (skin moisture monitor) or alternative (see note below)
- Notebook or data sheet
- Timer or clock
- Mild soap
- Water
- Paper towels

Note: If you don't have a moisture meter, see the "Alternative Method" in the procedure.

PROCEDURE

1. Wash your forearm with mild soap and water. Pat dry and wait 15 minutes.
2. Measure and record the baseline skin moisture on each test area (or take a baseline photo for the alternative method).
3. Label five areas on your forearm with the names of your oils. Leave a similar-sized area for each oil.
4. Apply a small amount of each oil to its marked area using a cotton swab. Use the same amount for each.
5. Wait 30 minutes.
6. Measure and record the skin moisture of each area.
7. Repeat measurements at 2 hours and 4 hours.
8. Compare the results to see which oil kept your skin the most hydrated and which was the least effective.

ALTERNATIVE METHOD (if no moisture meter)

Take clear close-up photos of each test area at each time point (0, 30 min, 2 hr, 4 hr). Compare which areas look less dry or flaky over time.

DATA TABLE

Record skin moisture readings (higher numbers = more hydrated)

Oil	Baseline (0 min)	30 min	2 hours	4 hours
Coconut Oil				
Olive Oil				
Almond Oil				
Jojoba Oil				
Grapeseed Oil				

ANALYSIS

1. Which oil resulted in the highest skin moisture at 4 hours?

2. Which oil resulted in the lowest skin moisture at 4 hours?

3. How did your results change over time for each oil?

4. What patterns or trends do you notice?



CONCLUSION

Did your results support your hypothesis? Why or why not?

Which oil would you recommend for keeping skin hydrated?
Why?



SAFETY FIRST: This experiment is for external use only. Do not apply oils to broken or irritated skin. Stop use if any irritation occurs. Keep all materials out of reach of young children.