

MODULE 3—ANALYZING RESULTS

GENE EXPRESSION CHANGED BY COCAINE

D'Finer
 takes the lead when it's time to analyze the results and define the cause of the results and the degree of certainty about the cause.

What Caused the Results? Describe the results of the study in terms of each item listed below. Write your answers in the space provided. *Modified from Bradford-Hill considerations on causality

Answers Here:

1. Strength of Relationship:

Study bias or factors negatively affecting the experiment make the results less reliable.
 List factors that affected the study results.

2. Consistency:

Were the results similar in repeated trials or in different studies? Explain. If so, the results are more reliable.

3. Compare Test Group to Control:

How did the test and control groups compare? This helps establish the cause of any observed change.

4. Strength of Effect:

An increase in the treatment that results in an increase in observed change helps verify that the independent variable caused the results. Was this true in this study? Explain.

5. Plausibility:

Is there a reasonable way to explain how the treatment might cause the observed changes? Explain.

6. Study Design:

What kind of study design was used?

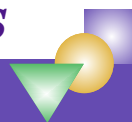
7. Analogy:

How could you find out if the results of this study are similar to those of other studies?



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Think about your answers to the previous questions. What probably caused the results found in this study?

How did the use of cocaine affect gene activity in mice?

Why was it important to do the experiment to test SIRT boosters and SIRT blockers?

Why are the results of this study important for the general public to know?
