

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

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Project Number

S0407

Project Title

DNA in a Pickle?

Abstract

Objectives/Goals

The objective is to determine if the brining process does destroy the DNA of a cucumber.

Methods/Materials

Brining cucumbers, brined pickles, and DNA extracting equipment. DNA was extracted from each of the four differently brined pickles and also from the fresh cucumber. Measure to see the amount of DNA extracted from each of the five separate samples.

Results

The fresh cucumber produced the most amount of DNA. The first brined sample did not spool any DNA. The second sample, just like sample number one, did not spool any DNA. The second sample, just like sample number one, did not spool any DNA. The fourth sample showed no signs of DNA.

Conclusions/Discussion

The results of this experiment show that the brining process does affect the DNA structure of a cucumber. I was able to extract DNA from the fresh cucumber, but not able to extract DNA from any of the brined pickles. Using this information I can say that the brining process does destroy the DNA in a cucumber. With that in mind, I begin to wonder if the integrity of DNA is compromised, will it create a health concern?

Summary Statement

This project is about the outcome of DNA in the brining process of a cucumber.

Help Received

Lori Steward helped make board and come up with idea; Dr. Joseph Landolph helped with further information.