



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

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| Name(s) Maya A. Hotz | Project Number J1716 |
| Project Title What Starter with Which Milk Makes the Creamiest Yogurt? | |
| <p style="text-align: center;">Abstract</p> <p>Objectives/Goals The problem I am trying to solve with my project is to find out how to make really creamy yogurt. I learned from my research about different ingredients that could be used to prepare yogurt. This gave me an idea for my hypothesis. Since some yogurts are creamier than others, I decided the differences must come from the ingredients used. Therefore, I hypothesized that the ingredients highest in fat content would make the creamiest yogurt. I experimented with three milks with varying fat contents and two yogurt starters, also with different fat contents.</p> <p>Methods/Materials Experiment Design: To test my hypothesis I performed 6 experiments using 2 different starters* and 3 types of milk with varying fat contents. My constants are the: amount of milks, amount of starters, amount of time the milks were boiled (2 minutes), all milks were cooled to 110 degrees F. and all the recipes were warmed for 10 hours. My variables were: the types of milk used, 2% cow's milk, 1% goat's milk, and soymilk and the yogurt starters: Fage brand Greek non-fat yogurt and Brown Cow whole milk yogurt. The variables changed the creaminess of the experiments. To measure the variables I had people do a blind taste test and rate the different yogurts for creaminess. *To make yogurt at home an active (living) culture is necessary as a "starter." Active living cultures refer to the living organisms found in some yogurts such as lactobacillus bulgaricus.</p> <p>Results My data showed the high fat content milk mixed with the non-fat yogurt starter was judged the creamiest. The yogurt made with the highest fat content did not turn out to be the creamiest, so I didn't prove my hypothesis.</p> <p>Conclusions/Discussion I have learned that ingredients with the most fat content do not necessarily make the creamiest yogurt. If I did this experiment again, I would try to find a better way to judge 'creaminess'.</p> | |
| Summary Statement What starter with which milk makes the creamiest yogurt? | |
| Help Received Mother helped type report and individuals volunteered for blind taste testing. | |