



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.) Thallia R. Bird	Science Fair Use Only
Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) Good Bugs to Eat: The Amount of Yogurt Bacterium Between Organic versus Non-Organic Yogurt	J1204
Preferred Category (See page 5 for descriptions.) 12 - Microbiology	Division <u>X</u> Junior (6-8) _ Senior (9-12)
Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.	
Objective: To determine which yogurt, organic or non-organic, will have the most amount of yogurt bacteria. Method: I inoculated twelve petri plates of soy agar with 5% sheep blood with cotton swabs, 10-micro liter loops or 1-micro liter loops and then incubated them in 35 C (95 F) and 42 C (107.6 F). The dilution is half yogurt and half saline solution. Diluted non-organic yogurt streaked with a 10-ml loop incubated at 35 C; one at 42 C. Diluted organic yogurt streaked with a 10-ml loop incubated at 35 C; one at 42 C. Diluted non-organic yogurt streaked with a 1-ml loop incubated at 35 C; one at 42 C. Diluted organic yogurt streaked with a 1-mL loop incubated at 35 C; one at 42 C. Undiluted non-organic applied with a cotton swab then streaked with a 1 mL loop, one incubated at 35 C: one at 42 C. Undiluted organic applied with a cotton swab then streaked with a 1 mL loop, one incubated at 35 C: one at 42 C. Two plates used as a control one incubated at 35 C; one at 42 C. I put the petri plates in candle jars because yogurt bacteria grow better in an oxygen depleted environment. I incubated them for 48 hours. Results: The non-organic yogurt grew slightly better in both temperatures. Conclusion: By my observation, my hypothesis was incorrect. The non-organic yogurt bacteria grew slightly more profusely than the organic yogurt bacteria.	
Summary Statement (In one sentence, state what your project is about.) My project is to determine the difference in the amount of yogurt bacteria between non-organic and organic plain yogurt.	
Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. Used lab equipment at Frank Howard Hospital with the supervision of Judy Ferleman, a Clinical Laboratory Scientist; Marette Myers for mentor consultation; Mother helped type the report.	