



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> <b>Gabrielle E. Jardini</b>	<b>Project Number</b> <b>J1315</b>
<b>Project Title</b> <b>Yeast: The Fungus Among Us</b>	
<b>Objectives/Goals</b> For my Science Project I am testing in what environment yeast will grow best in. Yeast creates alcohol (ethanol) by a process called fermentation. It takes one molecule of sugar and chemically changes it, into two molecules of ethanol and carbon dioxide. I will use four different test substances which are: baking soda, flour, sugar and vegetable oil.	
<b>Abstract</b> <b>Methods/Materials</b> I will measure the carbon dioxide generated through fermentation, by mixing water, yeast, and four different test substances into a bottle for each. Then a balloon will be placed on the opening of the bottle, and I will measure the carbon dioxide measuring the circumference of the balloon after thirty minutes. The materials used are: 177mL baking soda, 12 round balloons, 177mL flour, 4 rubber bands, 177mL sugar, 1 measuring tape, 177mL vegetable oil, 1 timer, 60mL baking yeast, 1 funnel, 1772mL warm water, 2 cups, 4 empty water bottles, and 1 heater (optional).	
<b>Results</b> Of the four substances used, flour produced the most ethanol and carbon dioxide.	
<b>Conclusions/Discussion</b> I think that flour produced the most ethanol and carbon dioxide because I used baking yeast. If I had used wine yeast, sugar might have made more ethanol and carbon dioxide. This information is useful because if you need to produce any kind of alcohol you know to use the substance that is most productive.	
<b>Summary Statement</b> I am testing what environment yeast grows in best.	
<b>Help Received</b> Mother helped fix procedures, and took pictures. Teacher corrected completed project.	