



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> Casey G. Zucco	<b>Project Number</b> <b>J1036</b>
<b>Project Title</b> <b>Which Sweetener Tastes Best? Which Is Best for You? A Comparison of Five Sweeteners</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My purpose was to see which of five sweeteners were preferred by children and adults, and compare those results with research on the health benefits and risks of the sweeteners: Table sugar, Xylitol, Sucanat, Honey and Splenda <b>Methods/Materials</b> I made five bottles of Kool-Aid with the different sweeteners. Subjects were seven children, ages seven to 12, and 12 adults. Subjects tasted samples of the five drinks, and ranked them according to what they liked best to least from 1- 5. I added up the scores for each sweetener for both children and adults, and for all subjects combined. <b>Results</b> The results were very close between table sugar and Xylitol for adults and all subjects combined, as the best liked sweetener. The children preferred table sugar most, with Xylitol a close second. The least liked sweetener for both children and adults was Sucanat. Children preferred Honey to Splenda, and the reverse for adults. <b>Conclusions/Discussion</b> My research showed that Xylitol is the healthiest sweetener tested, because it does not promote sugar highs, diabetics can use it, and it does not promote cavities, and actually helps prevent them. The taste test showed that it tastes very much like table sugar. Xylitol may have a slight laxative effect if taken in large amounts. I conclude that it is better to use Xylitol than table sugar. Splenda is not as popular tasting and it is made with chlorine, so I wouldn't recommend it.	
<b>Summary Statement</b> Five sweeteners were compared for taste preferences of children and adults, and health benefits and risks.	
<b>Help Received</b> Mother helped with spelling and some of the typing.	