



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

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Project Title Sugar or Not: Cereal Effects on Blood Glucose	
Objectives/Goals To determine if certain cereals or oat meals affect the blood sugars in non-diabetics.	
Abstract	
Methods/Materials Materials: 8 different measured cereals or oatmeals with measured milk or water 9 volunteers (all non-diabetics) Blood sugar meters, alcohol pads, lancets Methods: Each Person tested each cereal at least once or twice Control - each person obtained 10-12 hour fasting blood sugar Specified amounts of cereal and milk or water were consumed. Blood Glucose Measurement performed one hour after the last bite of cereal. No exercise between the last bite of cereal and the blood glucose measurement.	
Results The best average was a small 4.5 increase in blood glucose for the Cream of Wheat. The worst average blood glucose was a 22.67 increase for Frosted Flakes. There was no cereal that had a consistent low blood glucose or very high blood glucose effect on each volunteer.	
Conclusions/Discussion Non-diabetics should be able to regulate their blood glucose independent of the amount or type of cereal consumed. However, I discovered that there were many changes in blood sugars due to the different types of cereals. The "healthy" cereals did not produce the best sugars. There was not one cereal that produced the best sugars for all the volunteers. Examination of complete nutritional facts such as carbohydrates, fats, protein, and calories for each cereal resulted in possible reasons for higher blood sugars. The sugar content alone was not the only indicator to cause high blood sugars.	
Summary Statement To determine if certain cereals or oat meals affect the blood sugars in non-diabetics.	
Help Received Mother, certified diabetic educator, trained volunteers (mostly pharmacists) to take proper blood sugar tests or performed tests herself for the volunteers.	