



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Amber L. Moenich	Project Number J1120
Project Title Blood Pressure, Pulse, and Body Mass Index	
Abstract Objectives/Goals My objective was to determine which gender has higher blood pressure, pulse, and body mass index. Methods/Materials I sent home student permission slips to all 30 5th/6th grade students in my class. Informed consent was obtained from 18 students. I weighed each student, measured the student's height, and took their blood pressure and pulse. I charted my data, and I calculated the body mass index (BMI). I then calculated the mean, median, mode, and range for the blood pressure, pulse, height, weight, and BMI. Finally, I compared all data to find out which gender had higher results. Results The females had a higher pulse than males by 5 beats. The males had a higher systolic blood pressure by 22 mm Hg, higher diastolic blood pressure by 11 mm Hg, and they were taller by 2 inches, weighed more by 29 pounds, and had a higher BMI by 4 kg/m ² . Conclusions/Discussion I was able to prove my hypothesis for pulse and blood pressure, but was not able to prove my hypothesis for BMI. The BMI was higher in the males because 58% of the males were overweight, and by definition, BMI tells us body fatness.	
Summary Statement I compared blood pressure, pulse, and body mass index of 5th and 6th grade boys to girls.	
Help Received Mother helped type my charts and graphs and helped with type formatting.	