



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Jaye M. Kasper	Project Number 22586
Project Title Does A Simple Stretching Program Increase Flexibility in the V-Sit Reach?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals I wanted to find out if a simple 5 minute stretching program to be done daily over 3 weeks wouldt significantly increase a person#s flexibility in the V-Sit Reach. The V-Sit Reach is a flexibility test that is performed sitting down. The subject bends forward as far as possible with arms outstretched. The V-Sit score is how many centimeters the middle fingertip extends past the feet.</p> <p>Methods/Materials Thirty six middle school students were divided into two groups, consisting of 17 subjects in a Training group (daily stretchers over 3 weeks) and 19 subjects in a Non-Training group (who only participated in the initial and final V-Sit Tests). I measured their flexibility 2 weeks apart to obtain 2 different V-Sit scores using a 74.5 cm wide exercise mat and measuring tape with centimeters. The Training group didx 5 minute daily stretching routine that I designed. It contained 5 stretching exercises.</p> <p>Results The Training group#s average initial V-Sit score was 1.4 cm and decreased 0.6 cm to make 8.8 cm for their average final V-Sit score. The Non-Training group#s average initial score was 6.5 cm and decreased 2.3 cm to get 4.2 cm average final score.</p> <p>Conclusions/Discussion There were many variables that may have affected my results. Some of the questions I wondered about were: were my subjects honest in performing the daily stretching, did the weather contribute to how well subjects performed, how much physical activity did they do that included stretching before I tested them, and did my subjects in my Training group like to exercise? I would take these questions into consideration were I to redo my project. In conclusion, my results along with a T-Test showed that stretching for x minutes per day for 3 weeks did not significantly improve V-Sit Reach scores.</p>	
Summary Statement I wanted to see if a 3 week stretching program would significantly increase V-Sit Reach scores, but my results did not show a significant increase.	
Help Received PE teacher helped find kinesiology information	