



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Cullen M. Wilson	Project Number J1017
Project Title Jump For It!	
Abstract Objectives/Goals The objective of this study was to see if plyometric drop jumping done twice weekly over a five week period could increase the vertical jump of similarly highly trained athletes. Methods/Materials Nine members (8 subjects, 1 control) of a competitive 13 yr. old soccer team were tested to see if drop jumping could increase their vertical jump. Vertical jump was measured before and after the test period, which was twice weekly for 5 weeks. Vertical jump was calculated by measuring each subject's standing height (arms raised above their head), and subtracted from their jumping height (average of 4 standing jumps measured at the peak of the jump). Subjects were instructed how to drop jump from a 12" platform, and each session included a running warm-up and 3 sets of 10 repetitions of drop jumps. All participants(including control)continued their standard soccer workout 3 times weekly. Results Vertical jump increased at least 3/4" in all test subjects. Subjects with the greatest increase in vertical jump at the end of the study were those with the lowest vertical jump in the beginning of the study. The control lost over 1 3/4" in vertical jump, which I did not expect. Conclusions/Discussion Drop jumping, a high impact form of plyometric exercise, can increase vertical jump over a relatively short period of time in highly trained athletes, without resulting in injury. My coach has agreed to include drop jumping in our workouts as a result of this study.	
Summary Statement This project tested and proved the effectiveness of a plyometric exercise, drop jumping, on increasing the vertical jump of highly trained 13 year old athletes.	
Help Received My mother helped me lay out the board; my socccer team helped by being participants.	