



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

<b>Name(s)</b> Yonatan Y. Halevy	<b>Project Number</b> <b>J0316</b>
<b>Project Title</b> <b>Stressed Out? Stretch Out!</b>	
<b>Abstract</b> <b>Objectives/Goals</b> In this project, it was attempted to find out if shoulder shrugs or neck rolls help to reduce stress. <b>Methods/Materials</b> To test this, over 100 subjects from the Soille San Diego Hebrew Day School were taken and asked to take an electronic stress test. The stress test consisted of a wire on a piece of wood. Attached to the wire were a ring and a buzzer. The subject must pass the ring along the wire without touching the wire. If the wire is touched, the buzzer will buzz. After they took it, they were then asked to do an exercise based on what group they were in. The three groups were neck rolls, shoulder shrugs, and no exercise. After, they took the stress test again. The results were based on how much change there was between the two scores. If the score increased, it showed that the subject did better and stress was reduced. <b>Results</b> The results of this project were as follows. In the shoulder shrugs group, only 14 of the subjects improved, 18 of them did worse, and 10 of them stayed the same. In the neck rolls group, 23 of the subjects improved, 9 of the subjects did worse, and 8 of the subjects stayed the same. In the no exercise group, 11 of the subjects improved, 10 of the subjects did worse, and 11 of the subjects stayed the same. <b>Conclusions/Discussion</b> Overall, the shoulder shrugs group's scores decreased, the neck rolls group's scores increased, and the no exercise group's scores varied. Neck rolls were the most effective exercise for stress reduction.	
<b>Summary Statement</b> Do neck rolss or shoulder shrugs help to reduce stress?	
<b>Help Received</b> Adult friend helped design board.	