

CALIFORNIA STATE SCIENCE FAIR**2001 PROJECT SUMMARY****Your Name** (List all student names if multiple authors.)**Maria Rodriguez****Science Fair Use Only****S1519****Project Title** (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9)**Recovery Time and Pulse Rate: Which Sport Fits You?****Division****S Junior (6-8) S Senior (9-12)****Preferred Category** (See page 5 for descriptions.)**15 - Physiology****Abstract** (Include Objective, Methods, Results, Conclusion. See samples on page 14.)

Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.

My problem was to determine how different types of training affect the heart's recovery time for athletes in three different sports. How does recovery time in different athletic sports vary after running the distance of half a mile at different times of the season?

I hypothesized that throughout the season of three different sports (baseball, softball, and track), the more training the athletes go through, the faster that they would recover after exercise. In addition, the runners in track would recover even faster than the athletes in baseball and softball, who do less running. The test included taking the athletes' resting pulse, and then having them run their warm-up laps (half a mile), and then taking their pulse again. After this, their pulse was taken until their pulse rate was back to their normal resting pulse, to determine recovery time. I determined that the athletes from the track team had a faster recovery time than the athletes from the baseball and softball teams, as their season progressed.

Summary Statement (In one sentence, state what your project is about.)

My project is about variations in pulse rate of three different sports.

Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4.

My biology teacher helped me with the subject and getting started. The coaches from the three different sports helped by letting me use their team members, and the team members especially helped by being the primary subjects.