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Water vs Gatorade

The purpose of my project is to answer the question “Does water or Gatorade keep your heart rate down while exercising?” I predicted that Gatorade would help keep your heart rate down while exercising. I tested the affect of water and Gatorade on 6 subjects that were around the same age and weight. I tested the resting heart rate of all the subjects with both the water and Gatorade as the control in my experiment. I tested the subjects on 2 different days. The temperature on both days was 49 degrees. There was very little wind on both days. The only factor that was changed on purpose was the type of liquid the students drank. I measured the heart rate with a Pulse Ox machine borrowed from a local health clinic. I measured each subjects heart rate before the liquid was drank and then 20 minutes after liquid was consumed. Measurements were also taken after exercising, with a 20 minute rest period between. The subjects ran 1 lap around Savage stadium. They relaxed for 20 minutes and ran again with a measurement taken after each run. My results showed that while resting the subjects’ average heart rate was 96.26 for the water and 88.95 for the Gatorade with a difference of 7.49, Gatorade being the lower. Exercising the average heart rate for those subjects that drank water was 154.25 and Gatorade was 154.58 with water being lower by only .33. In conclusion my prediction was incorrect; Gatorade did not have a lower average heart rate than water. Water had a lower average heart rate than Gatorade when exercising.