ENERGY DRINK VS. SPORT DRINK ON MAX EXERCISE TEST PERFORMANCE
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Abstract

• Randomized cross-over design

Methods (cont’d)

• Each subject consumed 5 ml/kg/body weight of either Red Bull or Gatorade upon arriving to the lab

• After 20 minutes, the subject began the exercise test on a treadmill

• The Bruce protocol was used: increasing speed and elevation every 3 minutes

• The maximal values of heart rate, RPE, and VO2max were not significantly different between the 2 different drinks (p > 0.05)

• There was no statistically significant difference between Red Bull and Gatorade for the duration of exercise (p > 0.05)

Methods

• Five physically active college students (3 males, 2 females) from the University of Texas at Arlington volunteered to participate in this study

• Instrumentation:
  - A bioelectrical impedance device was used to analysis each subject’s body fat percent.
  - A heart rate monitor was attached to each subject’s chest, a mouthpiece was inserted into the subject’s mouth, and a nose clip was worn in order to measure oxygen consumption by the sensormedics metabolic cart

• Randomized cross-over design

Results

Table 1: Mean results for Red Bull and Gatorade on max exercise test performance

<table>
<thead>
<tr>
<th>Heart Rate (bpm)</th>
<th>RPE</th>
<th>VO2max (ml/kg/min)</th>
<th>Time of Exercise (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Bull</td>
<td>189.2 ± 6.6</td>
<td>17.8 ± 1.5</td>
<td>40.5 ± 10.9</td>
</tr>
<tr>
<td>Gatorade</td>
<td>189.2 ± 3.3</td>
<td>18.2 ± 0.7</td>
<td>39.8 ± 7.2</td>
</tr>
</tbody>
</table>

Conclusions

• The results of this study indicate that Red Bull and Gatorade have the same effect on max exercise performance

• Neither drink appeared to be more beneficial than the other

• Further studies should be done to gain additional knowledge in this area

• A larger sample size and an addition of a control group may be good ideas to better future studies