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Effect of alcohol on sports performance in athletes

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Abstract
The main purpose of the study was to determine the Effect of Alcohol on Sports Performance in Athletes. In this study 15 male subjects of event 1500 mts were selected though Stratified Sampling Method, from Pune city. The age of the subjects were of 25 years and above. The athletes had to undergo pretest and posttest where the post test was conducted after making the athletes consume 60 ml of alcohol one night before the post test. The result was formulated by using Independent't' Test. The result reveals that statistically there was no significant difference (table 't' value>calculated 't' value).
The statistical technique independent 't' test was used to analyze the data and the level of significance was fixed at 0.05.

Keywords: alcohol, sports performance

Introduction
Overall, alcohol is detrimental to sports performance because of how it affects the body during exercise. It does this in two main ways. Firstly, because alcohol is a diuretic, drinking too much can lead to dehydration because the alcohol makes your kidney produce more urine. Exercising soon after drinking alcohol can make this dehydration worse because you sweat as your body temperature rises. Combined, sweating and the diuretic effect of exercise make dehydration much more likely. You need to be hydrated when you exercise to maintain the flow of blood through your body, which is essential for circulating oxygen and nutrients to your muscles. "Dehydration leads to reduced performance," says Professor Greg Whyte, an expert in sports performance. "Hydration also helps control your body temperature so you're more likely to overheat if you've been drinking alcohol." Secondly, alcohol interferes with the way your body makes energy. When you're metabolising, or breaking down alcohol, the liver can't produce as much glucose, which means you have low levels of blood sugar. Exercise requires high levels of sugar to give you energy. If your liver isn't producing enough glucose, your performance will be adversely affected. "If your body is forced to run from your supplies of fat rather than blood sugar, you will be slower and have less energy and won't be able to exercise as intensely," says Professor Whyte. As a result, your coordination, dexterity, concentration and reactions could be adversely affected too. Both of these effects are immediate which is why it's not advised to exercise or compete in sport soon after drinking alcohol.

Methodology
15 athletes of age group 25 years and above were selected from Pune City. The test conducted was 1500mts run on standard track where the athletes have to complete 1500 mts i.e three and half laps of the standard track of 400 mts continuously. The performance was measured through taking down the timing of every athletes. The score in seconds is determined by the time taken by the atheles to complete 1500mts in minimum possible time. For the data analysis independent t-test was used as statistical tool. The level of significance was 0.05.

Method of measurement of variable
For the purpose of establishment reliability of the data the tests was 1500mt run. One day recovery was given to the subjects between pre and posttest.

Data Analysis

Table 1: Comparison of pre-test and post test 1500 mts run of the group

Performance	Mean Pre-Test	Mean Post- Test	S.D (Pre & Post)	'T' Table Value
1500 mts Run	384.786	344.1927	38.090,27.050	1.761

*Significant at. 05 level. T 0.5 (14) =1.61563

Discussions and Conclusions
Many researchers claimed that intake of alcohol one night before the competition does not increase the performance.
Following conclusions were drawn after the analysis of the data-:

- There is no significant difference in pre and post-test of the group. Hence alcohol did not show any effect after intake.
- Intake of alcohol does not affect the sports performance in athletes after intake.

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