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### **Habitual Alcohol Consumption and its Relationship to Physical Fitness in College-age Students**

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Alcohol consumption is common among college-aged students and may influence an individual's physical activity levels and physical fitness performance. **PURPOSE:** To determine if alcohol consumption habits of college-aged students is correlated with aerobic and/or anaerobic fitness levels. **METHODS:** Twenty-six subjects (9 females, 17 males) participated in this study. They filled out a Physical Activity Readiness Questionnaire, alcohol consumption risk assessment measure, and a physical activity survey. We conducted four fitness tests on the subjects as performance variables: hand grip dynamometer to test hand grip strength, YMCA step-test to measure aerobic fitness, 1-min sit up test to test anaerobic fitness, and a maximum quantity push up test to also measure anaerobic fitness. **RESULTS:** We ran an independent t-test to determine if there were differences between males and females in alcohol risk ( $t(24)=-0.814$ ) and physical activity ( $t(24)=-0.342$ , neither of which were significant ( $p>.05$ ). Spearman's Rho correlations were used to correlate alcohol risk with the fitness measures, but none were significant ( $p>.05$ ). Significant correlations did exist between fitness measures, such as between grip strength and sit-ups ( $r=.65$ ,  $p<.001$ ), grip strength and push-ups ( $r=.66$ ,  $p<.001$ ), and sit-ups and push-ups ( $r=.67$ ,  $p<.001$ ). There were no significant differences in the results of a one-way ANOVA assessing alcohol risk and physical activity ( $F(2,23)=1.45$ ,  $p>.05$ ). **CONCLUSION:** We determined that we cannot predict performance variables based on alcohol consumption. A reason for this could be that the experiment was short term and that side effects of drinking take longer to show. Another limitation was that all of the participants were physically active and not sedentary.