Comparison of Cholesterol and Glucose Levels between College-Aged Males and Females
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Dyslipidemia and diabetes are becoming more prevalent in America and at younger ages. According to ACSM guidelines, LDL levels ≥ 130 mg/dL or HDL levels <40 mg/dL suggest dyslipidemia. A blood glucose level ≥100 mg/dL is considered pre-diabetic. **PURPOSE:** To determine rates of dyslipidemia and pre-diabetes among a cohort of college-aged males and females. **METHODS:** Whole blood (40µL) was collected via fingerstick. Blood was then injected into a lipid profile plus glucose cassette for analysis with a Cholestech LDX system (Alere, Inc., Waltham,MA). **RESULTS:** This cohort consisted of 145 male (average age 22.3 years) and 124 female participants (average age 22.0 years). For males, average lipid values were: total cholesterol, 162.1 mg/dL, LDL level, 91.6 mg/dL, HDL was 50.4 mg/dL, triglycerides103.9 mg/dL, and blood glucose was 90.2 mg/dL. Of the males, 38 (26%) of those participants were considered dyslipidemic and 20 (14%) were pre-diabetic. Overall, 53 (36%) of male participants were either dyslipidemic or pre-diabetic. For females, average lipid values were: total cholesterol, was 165.1 mg/dL, LDL 77.0 mg/dL, HDL was 63.8 mg/dL,and triglycerides were 110.7 mg/dL. Blood glucose averaged 89.5 mg/dL. Of the females, 21 (17%) of those participants were considered dyslipidemic and 13 (11%) were pre-diabetic. Overall, 34 (27%) of female participants were either dyslipidemic or pre-diabetic. **CONCLUSION:** Though the average levels of cholesterol and glucose are normal, it is important to note that 36% of the male participants and 27% of the female participants are considered to have either dyslipidemia or pre-diabetes. Rates of dyslipidemia in our sample are higher than those reported by the CDC for 20-39 year old adults (11.7%).