

Can Your Exercise Habits Affect Your Blood Lipids and Resting Blood Pressure Values?

Jenna Bautch & Jayne Byrne, MS, RDN, LD

Introduction:

- The American College of Sports Medicine (ACSM) recommends aerobic and anaerobic exercise to improve fitness and reduce the risk for cardiovascular disease.

Purpose:

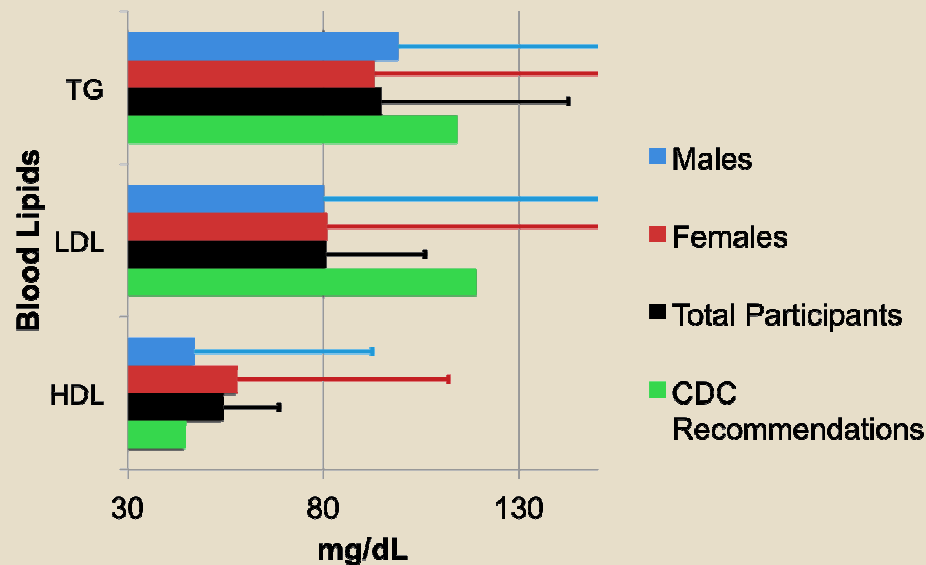
To examine if college students' exercise habits relate to their fasting blood lipids and resting blood pressure measurements (RBP).

Methods:

- IRB approval and informed consents were obtained.
- 104 college students completed an exercise questionnaire regarding the frequency and duration of aerobic and anaerobic exercise performed over a one-week span.
- Students' fasting HDLs, LDLs, TGs and RBP values were matched to completed exercise questionnaires.
- Analyzed using SPSS to determine correlations between exercise habits/blood lipids and exercise habits/RBP and to establish differences between sexes for lipids and RBP.

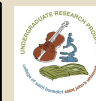
	CDC	TGs	LDLs	HDLs
Recommendation	< 115 mg/dL	< 120 mg/dL	< 120 mg/dL	> 45 mg/dL

Mean Comparison Between Total Participants, Males, and Females With the CDC Recommendations for Blood Lipid Values



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Results:

- Physical activity (PA) was not correlated to fasting blood lipids or RBP.
- 71% met the ACSM recommendations for 30 minutes of moderate-intense PA 5 days/week.
- 75% of students meet the CDC for TGs, 95% for LDLs, and 70% for HDL measurements.
- Males had significantly lower HDLs (~47±12 mg/dL) compared to women (~58±14) (p=0.01).
- Males had significantly higher resting diastolic blood pressure readings compared to women (p=0.01).

Conclusion:

- Students being typically active may have led to the lack of correlation between PA and blood lipids.
- Males are at a higher risk due to lower HDLs and high DBP than females.
- 29% of students do not meet the ACSM recommendations, 15% also do not meet the CDC recommendations.