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THE BASAL AND POSTEXERCISE BLOOD LIPID IN YOUNG STUDENTS WITH AND WITHOUT REGULAR EXERCISE HABIT

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Objective To explore the effect of exercise habit on the basal and postexercise blood lipid in young students.

Methods This study included 76 students (19.3 ± 1.1 years) with and without good exercise habit. The total cholesterol (TC), triacylglycerol (TG), low-density lipoprotein (LDL-C) and high-density lipoprotein (HDL-C) were measured before and after exercise of 900 m walking within 9 min.

Results (1) The TG and LDL-C levels reduced significantly after exercise, but other parameters did not significantly change. (2). The two groups with and without regular exercise habit had similar sex ratio, age and BMI, but the basic levels of TC and LDL-C, and LDL/HDL ratio were significantly lower in the regular exercise group than in seldom exercise group. (3). In the regular exercise group the post exercise TG level was significantly lower than pre-exercise (0.69 ± 0.39 vs 0.84 ± 0.40 mmol/l, $p < 0.05$), but did not in seldom exercise group (0.97 ± 0.43 vs 1.01 ± 0.40 mmol/l, NS). The decrease amplitude of TG after exercise was significantly greater in regular exercise group than in seldom exercise group (0.15 ± 0.35 vs 0.04 ± 0.26).

Conclusion The young people with good exercise habits, not only have better fasting lipid profile, but can better use triglycerides in the exercise.