Objective: The present study had the objective of comparing the lipid profile, nutritional status and body composition of adolescents and their parents. Methods: A cross-sectional study was conducted with 120 adolescents from 10 to 13 years old, public schools students from the city of Viçosa, Minas Gerais, Brazil and their respective biological parents (104 mothers and 82 fathers). Data was collected regarding weight, height, waist and hip circumference, body fat, triglycerides, total and fraction cholesterol. Besides, taking the skinfold measurements (bicipital, tricipital, subscapular and suprailiac) of the adolescents; and evaluation of sexual maturity, excluding those that were in stage 1 according to Tanner. The statistical treatment includes descriptive analysis, the use of the Student's t-test, Mann Whitney, and Pearson and Spearman correlation. An Odds Ratio was conducted with a confidence interval of 95%, considering p < 0.05 significant. Results: A positive and significant correlation was seen for weight, BMI and total cholesterol between father and son; for all the variables, except body fat and wait/hip ratio between father and daughter; for weight and height between mother and son and BMI between mother and daughter. Adolescents that had both parents with hypertriglyceridemia, with inadequacies of LDL or HDL presented, respectively 19, 20 and 4 times more chances of presenting the same alterations. Conclusion: This study confirmed differences in the anthropometric measurements, body composition and lipid profile between children of overweight, eutrophic and underweight parents, as well as greater chance for the adolescent to present an altered lipid profile when the parents also have presented that alteration.

Keywords
Nutritional status, Body composition, Adolescents, Parents, Hyperlipidemias.