

[Institute, 2011](#)). The expert panel's guidelines also include comprehensive screening and treatment guidelines for children with cardiovascular disease risk factors.

- Diagnosis of obesity is paramount in enhancing care of obese pediatric patients. Current laboratory (cholesterol or glucose) screening rates (10%) are inadequate in the outpatient setting ([Patel, Madsen, Maselli, et al, 2010](#)).
- Testing for cardiovascular risk factors: HDL cholesterol, LDL cholesterol, fasting glucose, HgbA1C, BP, thyroid stimulating hormone, and ALT should be considered in pediatric patients with increased waist circumference and even normal BMI ([l'Allemand-Jander, 2010](#)).
- In obese children, LDL cholesterol, HDL cholesterol, total cholesterol, and triglycerides are significantly different from subjects who are not obese ([Simsek, Balta, Balta, et al, 2010](#)).
- Serum triglyceride levels are a predictive risk factor of carotid intima-media thickness ([Simsek, Balta, Balta, et al, 2010](#)).
- In children and adolescents (12 to 19 years old) fasting non-HDL cholesterol levels were strongly associated with metabolic syndrome. A non-HDL cholesterol threshold of 120 mg/dl indicated borderline risk for metabolic syndrome, and a threshold of 145 mg/dl indicated high metabolic syndrome risk ([Li, Ford, McBride, et al, 2011](#)).
- Cholesterol levels in childhood are a major population predictor for adult cholesterol levels ([Daniels, Greer, and Committee on Nutrition, 2008](#)).
- Precursors of atherosclerosis are present in young people. The atherosclerotic process begins early in life with early phases characterized by the development of fatty streaks in the vessels (PDAY study) ([Enos, Holmes, and Beyer, 1953](#); [Strong, Malcom, McMahan, et al, 1999](#)).
- Atherosclerosis is related to the presence and degree of