Objective: We can define Metabolic Syndrome (MS) as a pathological condition associated to resistance to insulin and hyperinsulinemia that presents a high risk of developing type 2 Diabetes mellitus and atherosclerotic cardiovascular disease. The objective of this study is to determine the incidence of such syndrome within a population of girls and teenagers, comparing, in turn, its relation with the nutritional diagnose and the incidence according to the diagnostic criteria used (NCEP-ATP III or International Diabetes Federation, IDF).

Methods: A transverse descriptive study was carried out over 90 patients between 9 and 19 years old, who concurred to the girls and teenagers polyclinic of the Montevideo Military Hospital. The different components of the syndrome's diagnosis were valued through medical history, physical exam and venous blood. We compared the incidence of the MS according to the diagnostic criteria used and the patient's nutritional state.

Results: An MS diagnosis was carried out in 12 patients according to the NCEP-ATP III criteria (13.3%) and in 8 patients according to the IDF criteria (8.8%). A total of 14 patients were diagnosed with overweight (15.5%) and 9 with obesity (10%). Within the patients with overweight, 3 presented MS (3.3%) and within the obese ones, 6 presented it (6.6%) according to the NCEP-ATP III criteria, while, according to the IDF ones, 2 (2.2%) and 5 (5.5%).

Conclusions: The prevalence of MS in the analyzed population of girls and teenagers was 8.8% and 13.3% according to the criteria used, while the prevalence of obesity was 10% and that of overweight was 15.5%, thus showing that 1 over 10 analyzed girls already present an MS diagnosis and/or obesity before reaching adulthood, figures that should put us on alert, since they mark the health prognosis in such population.