Introduction: Recent researches has pointed an increase on iodine excretion in Brazilian schoolchildren and it may be caused by excessive consumption of iodized salt. This study aimed to quantify the urinary iodine excretion in children and adolescents of elementary schools at Rio de Janeiro, Brazil.

Methods: This was a cross-sectional descriptive survey realized at the Rio de Janeiro city with elementary schoolchildren aged between 6 and 19 years old. The following variables were collected: age (years); sex; weight (kg) and height (cm); 12 hours Urine. The urinary iodine content was given by Sandell-Kolthoff method modified by Esteves.

Results: The total sample consisted in 101 schoolchildren, 52 % male, mean age 12,5±8,0 years. The prevalence of iodine deficiency was found in 3% (expected below 5 %, according to the WHO), with 1% and 2 % of moderate and slight deficiency. Excessive iodine excretion was found in 84%.

Conclusion: There was a high prevalence of iodine excess in the sample, suggesting high intake of salt as sodium chloride and the high consumption of process and ultraprocess food.