Introduction: The aim is to evaluate the association between food intake of Brazilian adolescents and their mothers, according to maternal nutritional status.

Methods: Adolescents, 10-18 years, and their mothers, from National Dietary Survey 2008-2009, Brazil, had weight and height measured and answered two food records on non-consecutive days. Seven food groups were created: Beans and legumes; Vegetables; Fruits; Crackers; Cookies; Sodas; Sugar-sweetened beverages. The proportion of energy intake from each food group was estimated. Maternal nutritional status was classified in normal weight, overweight and obesity. Regression linear was used to assess dietary relationship between adolescent-mother dyads. Complexity of the sample design was considered. Analyzes were performed in SAS v.9.3.

Results: A total of 3981 adolescents and their mothers were included, 51.2% of adolescents were boys. The average age was 14.8 years old for adolescents and 42.6 for mothers. Overweight and obesity observed among mothers were 34.8% and 19.3%, respectively. Adolescents reported higher consumption of crackers, cookies and sodas than their mothers in all categories of maternal nutritional status, and lower consumption of beans, vegetable, fruits and sugar-sweetened beverages (P<0.05). Offspring of normal weight mothers reported eating less crackers (1.90%) and sugar-sweetened beverages (1.26%) when compared to the offspring of others mother's nutritional status (P<0.05).

Conclusion: Dietary intake of Brazilian adolescents and their mothers seems to be associated, according to maternal nutritional status. Adolescents eat more ultraprocessed food than their mothers. Moreover, offspring of mothers without
excessive weight consume less crackers and sugar-sweetened beverages, considered markers of a unhealthy diet.