Introduction: A significant increase in the prevalence of obesity has occurred worldwide mainly in developing countries. A large amount of complementary feeding consumed by children during their first year of life are unhealthy foods even among children with low birth weight. This study aimed to evaluate the factors that influence this behavior in Brazilian children with low birth weight.

Methods: Cross-sectional study based on Breastfeeding Prevalence Research in Brazilian Municipalities, held during the 2008 multivaccination campaign, which assessed the situation of complementary feeding in 64 municipalities, including the 27 state capitals and the Federal District. This is a representative sample of the Brazilian population. We analyzed the consumption of unhealthy foods, such as cookies, salted snacks, soft drinks, processed juice, sugar/honey and coffee, by children with low birth weight aged between six and 12 months according to breastfeeding status, mother’s age (<20, 20-35, ≥35) parity and maternal education (<8, 8-11, >11).

Results: This study included 2,370 children and the consumption of unhealthy foods was 76.8%. Among younger mothers (<20 years) and schooling less than eight years, there was higher consumption of unhealthy foods (78.4% and 81.1%, respectively) with dose response relationship and p for trend < 0.001. In primiparous the consumption of unhealthy foods is lower (72.8%) than in others (77.4%) (p=0.015). Breastfeeding didn’t affect intake of unhealthy foods.

Conclusion: The consumption of unhealthy foods by Brazilian children with low birth weight between six and 12 months was high, indicating a need for developing effective strategies to combat the consumption of unhealthy foods in Brazilian children as a way of preventing obesity and chronic diseases.