and

Shiraz University of Medical Sciences, Iran

Increasing prevalence of childhood obesity has been associated in part to diet quality. is study examined the relationship between body composition and nutritional quality of the meals, in primary school children in Shiraz (Iran).

is cross-sectional study was done on 431 primary school student (219 boys and 212 girls) aged between 6 and 10 years. Using standard methods anthropometric indices including weight, height, body fat and waist circumference (WC) were measured and body mass index (BMI) was calculated. Also, three 24-h dietary records (two weekdays and one weekend) were taken. e linear regression test was used to determine relationship between percent of energy intake of macronutrients in each meal with body composition. Data were analyzed using SPSS version 19.

e mean age of participants was 7.8±1.03 years and the mean BMI was 16.03±2.71 kg/m2. Results showed that WC was inversely associated with the percentage of energy intake from breakfast (β=-2.04; CI: -4, 0.002) but it was not signi cant anymore a er adjustment for total energy intake. Also, the percentage of energy intake from fat content of snacks were signi cantly associated with BMI (β=1.47; CI: 0.36, 2.59), and WC (β= 0.43; CI: 0.02, 0.85) even a er adjusting for total energy intake. ere were no associations between other meals quality and body composition indices.

Our study showed that snacks quality but no other meals were associated with WC and BMI, and having fatty snacks was related to central and abdominal obesity among children.

shivafaghih@gmail.com

and

[1]Chungnam National University, South Korea

[2]Korea University, South Korea

Most previous researches on obesity are based on the premise that obesity is simply caused by imbalance between calorie intake and expenditure and thereby, metabolism involved in obesity is almost ignored. As a result, we have no consensus yet on the cause of the obesity.

We have reviewed the basics of the metabolisp-5 1pe-5.9 (a)hm inogbsnd thaoum3 (a)19 (a)-5 (l)-3 (a)19