

Gojaznost kod školske dece kao faktor rizika po zdravlje

Obesity in school children as the health risk factor

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APSTRAKT

Cilj. Studija je imala za cilj da utvrdi da li postoji oštećenje zdravlja kod školske dece i adolescenata sa povećanom telesnom masom a koja su različitog uzrasta.

Metode. U studiji dizajna preseka uključena su deca koja su svrstana u tri grupe: od I-IV razreda, od V-VIII i srednjoškolke. Neinvazivnim fizikalnim pregledom određeni su studijski parametri a uzeti su uzorci krvi za laboratorijske analize. Određen je stepen uhranjenosti putem izračunavanja indeksa telesne mase (BMI), vrednosti krvnog pritiska, procenat masti u organizmu (Deurenberg-ova formula), holesterol i trigliceridi. Podaci su analizirani metodama deskriptivne statistike i testiranja hipoteze, uz $p \leq 0.05$.

Rezultati. U studiji je bilo 10 dečaka i 30 devojčica, dobi 13.1 ± 2.8 godina (srednja vrednost, SD), sa vrednostima sistolnog krvnog pritiska 118.8 ± 14.1 mmHg i dijastolnog krvnog pritiska 78.5 ± 5.5 mmHg, serumskog holesterola 4.48 ± 0.72 mmol/L i triglicerida 1.26 ± 0.71 mmol/L i indeksa telesne mase-ITM 30.72 ± 4.68 kg/m². Normalno uhranjenih je bilo 4 (10%), deca sa prekomernom telesnom masom 14 (35%), gojaznih I stepena 13 (32.5%), gojaznih II stepena 7 (17.5%), gojaznih III stepena 2 (5%) a prosečni udeo masnog tkiva u telu je bio $38.0 \pm 6.1\%$. ITM je bio značajno veći kod dece starijeg školskog uzrasta i srednjoškolaca nego kod dece u mlađim razredima osnovne škole ($p=0.006$) i značajno je korelirao sa uzrastom, sistolnim i dijastolnim pritiskom i vrednostima triglicerida u krvi ($p<0.05$).

Zaključak. Aktuelni status uhranjenosti dece uključene u studiju predstavlja značajan rizik od razvoja bolesti, kao što su kardiovaskularne (npr. hipertenzija) i oboljenja metabolizma (npr. metabolički sindrom).

Ključne reči: gojaznost, indeks telesne mase, deca, adolescenti, krvni pritisak

ABSTRACT

Objective. The study aimed to determine whether there is damage to the health of school-age children and adolescents with increased body mass and which are of different ages.

Methods. The cross-sectional study included children who were divided into three school groups: grades I-IV and V-VIII and secondary school. Physical examination of study parameters included non-invasive measurement and blood samples which were taken for laboratory analysis. Body mass index (BMI), blood pressure, percentage of body fat (Deurenberg's equation), cholesterol and triglycerides were recorded. Data were analyzed using descriptive statistics and hypothesis testing, with $p \leq 0.05$.

Results. There were 10 boys and 30 girls, aged 13.1 ± 2.8 years (mean, SD), systolic blood pressure 118.8 ± 14.1 mmHg and diastolic blood pressure 78.5 ± 5.5 mmHg, serum cholesterol 4.48 ± 0.72 mmol/L and triglycerides 1.26 ± 0.71 mmol/L, and body mass index-BMI 30.72 ± 4.68 kg/m². Normal weight had 4 (10%) children, overweight were 14 (35%), obese grade I were 13 (32.5%), obese grade II were 7 (17.5%), obesity grade III were 2 (5%) and average body fat was $38.0 \pm 6.1\%$. BMI was significantly higher in children of school age and high school than children in lower grades ($p=0.006$) and significantly correlated with age, systolic and diastolic blood pressure and blood triglyceride levels ($p<0.05$).

Conclusion. Current status of child nutrition included in the study represent a significant risk of disease developments, such as cardiovascular (e.g. hypertension) and metabolic illnesses (e.g. metabolic syndrome).

Key words: obesity; body mass index; child; adolescent; blood pressure.

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