Conclusions Preschoolers are considered a very important target group, since early, healthy eating habits represent the most efficient method to preserve the state of health in the long run. Overweight and obesity were correlated with the consumption of sweetened beverages and sweets and also with sedentary behavior. Families should be educated to be aware of the impact they have on their children's development and health.

PP-031 EVALUATION OF NUTRITIONAL STATUS USING BIOELECTRICAL IMPEDANCE ANALYSIS IN CHILDREN WITH INFLAMMATORY BOWEL DISEASE

[1]Aelita Kamalova*, [1]Elnara Safina, [1]Aliya Gaifutdinova, [1]Razilya Rakhmaeva, [2]Railya Nizamova Nizamova. *[1]Kazan State Medical University; [2]Children's Republican Clinical Hospital*

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Aim An evaluation of body composition changes in children with inflammatory bowel diseases (IBD).
Material and Method We assessed body composition using bioelectrical impedance analysis (BIA) in 89 children aged 5–18 years with IBD (57 children with ulcerative colitis (UC), 32 – with Crohn's disease (CD).
Results Children with CD were more likely to have fat mass (FM) deficiency (38%) than UC (18%), p=0.036. FM deficiency was detected both at the CD onset and in CD remission. 25% UC patients had excess FM, in CD it was 6% (p=0.028). The active cell mass (ACM) was low in 78% of children with CD and 65% with UC. A quarter of all IBD patients had skeletal muscle mass (SMM) deficiency. Decreased lean mass (LM) was in 59% of CD patients and 54% of UC. Low phase angle (PA) < 5.4 was detected more often in CD relapse (p=0.029). The average indicators of FM, ACM and PA were significantly lower in newly diagnosed IBD (onset) in contrast to children who were in remission. The average body composition indicators did not differ depending on the use of corticosteroids in the history of the disease. Children with CD receiving TNF-α blockers had significantly high indicators of TM, ACM and PA. A third of UC patients had normal anthropometric parameters; however, nutritional status impairments were revealed using BIA.
Conclusions IBD in childhood are characterized by frequent body composition disorders, which are manifested by deficiency or excess FM, as well as a deficiency of LM in more than half of the patients, ACM in ˜70% of children and a deficiency of SMM in almost a third of children. These components and the PA values are significantly lower at the IBD onset than in the remission. Active CD are characterized by more profound body components deficiency and low PA values compared to active UC.

PP-032 THE RESULTS OF THE ASSESSMENT OF THE STATE OF BONE TISSUE IN CHILDREN WITH GLYCOGEN STORAGE DISEASE

[1]Andrey Surkov*, [1]Anna Arakelyan, [1]Evgenii Bessonov, [2]Elizaveta Maleto, [2]Valeriia Lucenko. *[1]Petrovsky National Research Centre of Surgery, Moscow, Russia; [2]Pirogov Russian National Research Medical University, Moscow, Russia*

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Aim To assess the state of bone tissue in children with GSD
Material and Method A retrospective (with analysis of medical documentation) one-stage study was conducted, which included 61 children with GSD (40 boys, 21 girls) aged 9 months to 17 years 10 months, median age - 5 years 9 months [4 years 3 months; 7 years 10 months]. The distribution by GSD types was: Ia – 6, Ib – 13, III – 15, VI – 5, IX – 22 children. All patients underwent radiography of the hands and wrist (RHW) with the calculation of bone age (BA), 33 patients also performed the determination of bone mineral density (BMD) of the lumbar spine by the dual-energy X-ray absorptiometry (DERA) taking into account BA and Z-score calculation.
Results Normal BA calculated according to the RHW data corresponded in 9 patients (14.8%), BA less than chronological age – in 46 (75.4%), BA exceeding chronological age – in 6 (9.8%) of 61 children. At the same time, its lag was most often found in children with GSD VI, III and Ib types, rarely – with GSD Ia and IX types. BMD indicators were normal in 13 (39.4%), decreased in 15 (45.5%), osteoporotic in 5 (15.1%) of 33 children.
Conclusions 75.4% of patients with GSD have BA less than chronological age, 15.5% already have osteoporosis, and 45.5% have a decrease in BMD, and therefore they are at risk for the development of osteoporosis.

PP-033 EFFECT OF INSULIN-LIKE GROWTH FACTOR 1 ON THE PHYSICAL DEVELOPMENT OF CHILDREN WITH CYSTIC FIBROSIS

Dilorom Akhmedova*, Muzayyanakhon Alyaviya. *Tashkent Paediatric Medical Institute*

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Aim To determine the effect of insulin-like growth factor-1 on the physical development of children with cystic fibrosis (CF).
Material and Method Studies were carried out to determine the physical development of children according to the standards of growth and development of children recommended by WHO and IGF-1 level in 40 children with CF aged 0 to 3 years. The patients were divided into three groups: Group 1 - 11 (27.5%) children with BAZ -2CO nutritional disorder, Group 2 - 14 (35.0%) children with BAZ -3CO nutritional disorder; Group 3 - 15 (37.5%) patients without nutritional disorder.
Results According to our study results, the mean level of insulin-like growth factor-1 in group 1 children was 23.45±5.5 ng/ml (with a norm of 60.0–350 ng/ml), in group 2 children - 28.2±8.4 ng/ml, and in group 3 without nutritional disorders - 133.0±28.1 ng/ml. Growth retardation is an important problem in children with CF, in group 2 -group according to HAZ parameters all children had severe growth retardation < -3SO. According to WAZ parameters, children with CF in groups 1–2 had moderate to severe weight deficiency (62.5%). In group 3, all children were within normal limits.
Conclusions IGF-1 level affects the physical development of the majority of children with CF (62.5%): the lower its level, the more pronounced the lag in growth and development of children. Determination of IGF-1 in children can be used as one of the criteria for evaluation and prognosis of development of children with CF.