feats were examined, and available infant 6 week weight measurements recorded.

**Results** In total, 368 (81.8%) mothers provided any formula milk to their infants at 6 weeks; of these, 14 (3.8%) reported to adding solid foods to their infant’s bottle feeds. Almost 50% of formula feeding mothers (n = 181) reported to changing their infant’s formula type/brand at least once during the first 6 weeks, mainly due to increased hunger and feeding frequency (2–3 hourly) (54.8%). Where 6 week infant weight measurements were available (n = 184), a mean of 205ml (SD 45ml) of formula milk/kilogram body weight/day was consumed by these infants.

**Conclusion** Several formula feeding practices with potential implications for later obesity risk were identified in this study including premature introduction to solids (≤ 6 weeks) and consumption of excessive formula milk volumes at 6 weeks relative to infant feeding guidelines. Early provision of recommended feeding guidelines including specific advice on age-appropriate milk volumes to parents who formula feed should be considered in obesity prevention programmes.

**EVALUATION OF NUTRITIONAL KNOWLEDGE AND ASSESSMENT OF DIETARY INTAKE OF SECOND GRADE SCHOOL CHILDREN**

**Aim** Assessment of nutritional knowledge and physical activity rate among the children and evaluation of their nutritional intake.

**Methods** Cross-sectional study was conducted in randomly selected schools of Tbilisi. In each school was selected one group of the second grade children and their parents by cluster selection method. A population of 290 children aged 6–8 years and their parents were interviewed.

**Results** In general, the level of knowledge related to rich sources of nutrients was poor. The most of the children can’t identify the role of calcium (72.6%), proteins (63.1%) and iron (84.6 %). Children prefer to eat foods they like (71.8%), such as sweets and cakes, hamburgers and etc. The most of the children (83.3%) have normal weight for age, underweight was revealed in 3.1%, overweight in 12.3% and obesity in 1.4% cases. The assessment of dietary intake showed that intake of fruits and vegetables, as well as milk and milk products is quite low, while intake of bread and pastry, and sweets are quite high. Daily consumption of sweets was significantly higher in girls (64.2%) than in boys (47.5%) (p<0.01). Only 62 % of children eat the breakfast, most children 60.4% view TV during the meal time or play computer games. The most of the children play the active games approximately 30–60 minutes, quite often children play active games only 20–30 minutes.

**Conclusion** The dietary intake of children does not correspond to WHO recommendations. It is recommended to implement nutrition education programs for children an parents.
Objective The aim of the study was to detect the prevalence of obesity in teenagers, the presence of the complications of the disease and alimentation pattern.

Material and method We had studied 162 teenagers from “Gr. Antipa” collegium, Brasov. the protocol of the study consist in clinical examination, body mass index calculation (BMI), and a questionnaire regarding alimentation and physical exercises.

Results In our study cohort 102 subjects (62.96%) had BMI on the 95th percentiles for age and sex, 18 (11.11%) on the 97th percentiles and 7 (4.3%) on the 99th percentiles. 152 (93.82%) had had alimentation disorders (sweets, soda, chips, fast-food almost daily and fresh fruits occasionally). 110 children (67.90%) had a sedentary life (TV, PC, no physical exercises). The main complications detected were hypertension (27%), hypercholesterolemia (50%), diabetes mellitus type 2 (8%) and secondary amenorrhrea (6%).

Conclusions Overweight and obesity is a reality in teenager cohort. More, there are present complications of the disease even in childhood. The main cause of the obesity is “life style” which include alimentation disorders and poor physical exercises. All the efforts should be made in education of the adolescents for the prevention of the obesity because an obese child shall become an obese young adult with degenerative cardiovascular pathology.

Design and methods A cluster-randomized wait-listed controlled study at 6 Bronx, NY elementary schools. Two schools received CHAM JAM. We randomly selected a subset of 3rd grade students from intervention and control schools to measure physical fitness. Physical fitness testing included heart rate (HR) response to submaximal exercise assessed with a modified step test at baseline and 3-months post-intervention. Students stepped up and down on step of calculated height for 3 minutes at a step cadence of 22 ascents/minute. We measured HR pre-exercise, at peak exercise, and at 1-, 2-, and 3-min recovery period. Hierarchical linear models were used to evaluate differences in mean HR between and within the groups. Models controlled for gender, age, and BMI.

Results A total of 378 students participated (intervention, 176; control, 202). Between-group difference in HR change revealed that intervention group achieved significantly greater decrease in HR than control group.

Conclusions The CHAM JAM intervention improved physical fitness.

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Background and Aims Body composition is more important than body weight and body fat is a good guideline used to evaluate health Status better than sole weight. The aim of this study was to compare BIA and BMI to evaluate body weight status in autistic children.

Methods Eighty-one children and adolescents aged 7–13 years old were selected randomly from 4 autism-specific schools in Tehran in 2011. Body composition of children was measured using BIA.

Results The findings revealed that on the basis of body mass index (BMI), 41.9% of children were normal weight (BMI<85th), but 16% were overweight (BMI<85th) and 14.3% were underweight (BMI<5th). Based on percent body fat (PBF), 76.5% of children were normal body fat (PBF<85th), 3.7% of children were under the 5th percentile, 12.3% were overweight (PBF<85th) and 7.4% were above the 95th percentiles.

Conclusions Although using BMI is simple and easy method for evaluating body weight status, measuring body fat by BIA is another alternative which give better picture of body composition in different health settings.

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Conclusions The CHAM JAM intervention improved physical fitness.

Background and Aims The aim of this study is to present food patterns in schoolchildren in our region and to stress the role of healthy nutrition in the prevention of CHD.

Methods Two hundred schoolchildren, aged from 7–15 years, examined at University Children’s Hospital, are included in this study. They are selected at random and mostly suffer from respiratory infections, throat infections, rheumatic fever, etc. Except history, physical examination, laboratory and anthropometric measures, an questionnaire regarding to food habits was filled by all patients.

Results Of 200 examined children, there were 150 (75.0%) with normal weight (<97 percentile), 36 (18.0%) underweight (<3 percentile) and 14 (7.0%) overweight or obese (>97 percentile). There were 10 (5.0%) children with dislipidemia and 6 (3.0%) with hypertension. The questionnaires analysis revealed many unhealthy habits: 75.0% prefer processed and fast food, 85.0% sweetened fruit drinks and soda. On the other hand, the consumption of healthy food, such as: milk, honey, fruits, whole grains, vegetables, functional foods, fish etc is very low.

Conclusion This paper underlines the link between food and health, especially in children; they, as a very vulnerable segment of population are often “victims” of food industry which offer them: high content of salt, sugar, trans fat.

Abstract 1454 Table 1 Adjusted differences in HR between groups

<table>
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<th>SE</th>
<th>p value</th>
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Conclusions The CHAM JAM intervention improved physical fitness.

Background and Aims CHAM JAM, a classroom-based physical activity intervention, has been effective in increasing physical activity levels in elementary school students. The objective if this study was to determine the impact of CHAM JAM on physical fitness.

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