

feeds 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.

1449 **THE GROWTH AND NOURISHMENT OF PUPIL POPULATION IN THE MUNICIPALITY OF NOVI SAD IN SCHOOL YEARS 2010/2011 AND 1996/1997- COMPARISON**

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¹M Hadnadjev, ¹M Budakov, ²D Hadnadjev, ¹M Bratic. ¹Paediatrics Department, Health Centre Novi Sad; ²Center for Radiology, Clinical Center Vojvodina, Novi Sad, Serbia

Purpose to examine the growth and nourishment of the school children in Novi Sad, in the school year 2010/2011 and 1996/1997 and determine differences in growth and nourishment between two school year periods.

Methods During regular health checks in primary and secondary schools in Novi Sad, we registered a total number of children with average height (from -1.5 SD to $+1.5$ SD), tall ($+2$ SD, $+3$ SD), short (-2 SD, -3 SD), with normal weight (from -0.5 SD to $+1$ SD), obese ($+1.5$ SD to $+3$ SD), and thin pupils (from -1.5 SD to -3 SD).

Results From the total of 40861 pupils (7–19 years) in school year 2010/2011, we examined 15222 (37.25%):11095 (41.52%) in primary and 4127 (29.19%) in secondary schools, and in school year 1996/1997, from the total of 23248 enrolled pupils, 20704 (89.05%) were examined, in primary schools 12135 (94.80%) and in secondary schools 8569 (82.01%).

After comparing data from primary and secondary schools, in the school year 2010/2011, a statistically significant difference was in favor of primary school children, where there was the number of obese children ($p=0.000$) and thin children ($p=0.000$) in 2010/2011, while the number of obese children in secondary school in the school year 1996/1997 accounts for obese ($p=0.000$) and thin children ($p=0.000$), which is favor of secondary school children.

Conclusion Comparing the data between two school years, there were significantly more obese and thin children in 2010/2011 in primary schools, while in 1996/1997 there were more in secondary schools.

1450 **EVALUATION OF NUTRITIONAL KNOWLEDGE AND ASSESSMENT OF DIETARY INTAKE OF SECOND GRADE SCHOOL CHILDREN**

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¹M Kherkheulidze, ¹N Kavlashvili, ¹E Kandelaki, ²T Manjavidze. ¹Pediatrics, State Medical University; ²MoLSHA, Tbilisi, Georgia

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 (68.1%) 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 show, 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 and parents.

1451 **NUTRIENT ADEQUACY OF THE DIETS OF UAE INFANTS AND TODDLERS**

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¹Y Abdulrazzaq, ²S Abdulla, ³G Balhaj, ⁴N Nagelkerke. ¹Paediatrics, UAE University, Al Ain; ²Paediatrics, Latifa Hospital, Dubai; ³Paediatrics, Al Ain Hospital; ⁴Community Medicine; UAE University, Al Ain, United Arab Emirates

Background Compared with other population subgroups, less is known about the dietary status of UAE infants and toddlers, especially how subgroups of different ages vary in their food consumption and nutrient intakes.

Objectives To assess the nutrient adequacy of the diets of UAE infants and toddlers 6 to 24 months of age.

Design Descriptive analysis of the usual nutrient intakes of infants and toddlers using 24-hour recall.

Subjects Families were recruited consecutively from the infants attending the preventive medicine department for immunization, until the number needed was attained. The study included UAE national infants (infants born to UAE national fathers) only. A sample of 1,000 infants and toddlers was selected from 2 cities, Dubai and Al Ain, in the UAE.

Results Percentage of breast feeding was found to be 49.6% in infants aged 6–11 months and 38.4% at 12–24 months. 65.6% percent of infants 6 to 11 months consumed cow's milk or camel's on a daily basis before the recommended age of 12 months or later. In most infants aged between 6 and 12 months had higher than the RDA levels of energy, protein, fats and carbohydrates, but surprisingly toddlers ingested less fat than RDA.

Conclusions More parents and caregivers can benefit from guidance about the introduction of developmentally appropriate, micronutrient-rich first solid foods such as iron-rich infant cereals, iron-fortified grain products, meats, soft fruits, and cooked vegetables and the importance of breastfeeding through the first year of life.

1452 **OBESITY AND ALIMENTATION PATTERN IN ADOLESCENT HEALTH**

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BE Popovici, M Mitrica. Pediatrics, Faculty of Medicine 'Transilvania' University Brasov, Brasov, Romania

Introduction Obesity is one of the most important health problems in children all over the world. The disease is detected more often nowadays and is correlated with lifestyle.