BMD (BL: -2.4±0.7, PI: -0.9±0.44), serum calcium (BL: 9.5±0.6, PI: 10.5±0.52) and vitamin D (BL: 17.6±1.9, PI: 42.7±6.9) was observed. Locomotor problems were reduced among group B compared to 11.11% in group A. Post interventional BMD (t: -2.16, P≤0.05), serum calcium (t: -4.05, P≤0.001) and vitamin D (t: -4.20, P≤0.001) of group B was significantly higher compared to group A.

Conclusions: Higher doses of vitamin D and calcium (daily) supplementation is more effective in optimizing BMD, serum calcium and vitamin D levels among elderly people.

Keywords: (maximum 5): Calcium, vitamin D, BMD

**149/1092. Evaluating whole-community interventions and their impact in childhood overweight prevalence: evidence from decreasing prevalence in low SES**

**Author(s):** (1) Maria-Joao Gregorio; (2) Pedro Graca; (3) Terry Huang; (4) Jean-Michel Borys.


**Introduction:** The implementation of strategies to reduce social gaps in obesity is at the frontline of international health policy agendas. EPODE, a childhood obesity prevention methodology, has been implemented, since 2004, across different communities around the world. The previous evaluation of the two original, pilot EPODE towns in northern France, already showed success at reducing the overall overweight prevalence among children and across all socioeconomic levels.

**Objectives:** To analyse trends in childhood overweight and obesity prevalence, between school years 2007/2008 and 2012/2013, in 7 EPODE communities of varying socioeconomic status (SES) in France in the historical area of EPODE where the methodology is applied since 1992.

**Method / Design:** Cross-sectional, school-based survey conducted in interventions communities under the EPODE program. For the two school years, anthropometric measures (weight and height) were evaluated of all 5-to 12-years-old children attending school from 7 different towns in Flandre-Lys region (France). In 2007/2008 and 2012/2013, respectively 3094 and 2849 were included in this survey. SES was measured according to the value of median household income in each town. Chi-square test was used to examine overweight and obesity prevalence according to town SES.

**Results:** There were no significant differences in overweight and obesity prevalence between years 2007/2008 and 2012/2013, although there was a decreasing trend in the overall prevalence from 15.1% to 14.3%. The prevalence of overweight and obesity in low SES towns decreased from 17.4% in 2007/2008 to 14.4% in 2012/2013. The same trends were observed for both boys and girls separately, although statistical significance was not reached among boys.

**Conclusions:** Our findings suggest that community-based interventions have different impacts in childhood overweight and obesity prevalence according SES towns after 20 years of implementation. Community-based interventions evaluated shown to be still effective in children from low SES towns, whereas less in high SES towns.

**Keywords:** (maximum 5): obesity, community-based, SES, EPODE

**149/1097. Vegetarian and vegan diets in children – pre-study with preliminary data**

**Author(s):** Markus Keller; Stine Müller.


**Introduction:** Vegetarian (VG) and vegan (VN) diets are becoming more and more popular. In addition many VG and VN parents raise their children without meat or even any foods of animal origin. To date only few studies have been conducted with VG and almost none with VN children. Thus, there is an urgent need to investigate the nutritional and health status of VG and VN children.

**Objectives:** The aim of this pre-study was to collect preliminary data of VG and VN children in Germany, in order to prepare a cross-sectional study.

**Method / Design:** Data were collected via an online survey, contacting parents of VG and VN children.

**Results:** Data were obtained from 384 VG and 331 VN children (53.7% female, age range 0-13 y, median age 3.0 [±3.5] y). Self-administered body weights and heights were mostly within the normal range, but approximately one quarter of the children <2 y had a low body weight (<P10: VG 21.2%, VN 17.4%) and height (<P10: VG 24.2%, VN 29.5%) and one sixth of the children ≥2 y had a low BMI (<P10: VG 16.7%, VN 17.6%). The vitamin B12 supply of VN children was mainly by breast milk, enriched foods and supplements. A high percentage of the children (92.4%) had been at least partially breast fed. The major motives of the parents for a VG or VN diet were ethical (72.2%) and health (21.4%) reasons.

**Conclusions:** There are a considerable number of VG and VN children in Germany. Self-administered weights and heights indicate a normal growth. However, a substantial proportion of VG and VN children are thinner and smaller than omnivorous children in the German reference population. Further research is necessary to assess the impact of VG and VN nutrition on child development.

**Keywords:** (maximum 5): Vegetarian, vegan, children, growth, motives