## Planning Health in School" (PHS) Programme in Portugal: helping adolescents to change their diet to improve their nutritional status Margarida Vieira

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Overweight and obesity in European 7-11 years young people is above 20% (IASO, 2012). Portugal is reaching 30% obesity among the young population (Valente et al., 2010). It becomes critical to investigate effective strategies to promote positive changes in children's eating behaviours, which methodology can be replicated. Thus, the educational programme "Planning Health in School" (PHS) was designed to promote healthy eating habits in adolescents by integrating healthy eating knowledge with their active participation in changing their attitudes and behaviours, with teachers' driving action and families' support, in an attempt to reduce the tendency for the rising numbers of adolescents who are at risk of being overweight or obese.

For this presentation, the effects on grade-6 adolescents' nutritional status after one full school-year of PHS programme implementation was assessed. The sample consisted of 452 adolescents of four elementary schools of one Portuguese town: mean age  $11.0\pm0.7$  (range 10 to 14 years-old) and was divided in two groups: the intervention group (IG) with 219 subjects and the control group (CG) with 233. The PHS programme was applied to IG only. The CG was only submitted to the assessments applied to both groups before and after the PHS implementation: anthropometric assessment (height, weight, BMI and waist circumference) and eating habits and physical activity (questionnaire).

After the IG PHS implementation both height and waist circumference (WC) improved as compared with the baseline assessment and the CG. The IG adolescents grew up more (3.6 cm) than the CG ones (3.1 cm) showing significant differences by t-test (p = 0,000). The IG adolescents decreased their WC (-0.4 cm) whereas the CG ones increased their WC (+0.3 cm) with significant differences (p = 0,014). Both weight

and BMI showed better results for the IG but no significant differences were found compared to the CG (p > 0.05). Further analysis on sex differences are going on.

These preliminary results showed that PHS programme improved anthropometric outcomes effectively, which together with other results on changing healthy eating habiths (Vieira & Carvalho, 2013) show that the PHS programme is an appropriate methodology to prevent the rise of adolescents' overweigh and obesity.