An intervention on eating habits of children and teenagers of a group of schools in Portalegre

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Introduction:

It is well accepted that non healthy diet may lead to overweight and obesity in children. In this study we report a longitudinal analysis and an intervention on eating habits of children and teenagers of the **Grouping Bonfim**, aiming for a potential improvement on children and teenagers daily diet and consequent changes in their' Body Mass Index. Eating habits of children and teenagers from a **Grouping Régio** were also evaluated to plan a future intervention.

Methods:

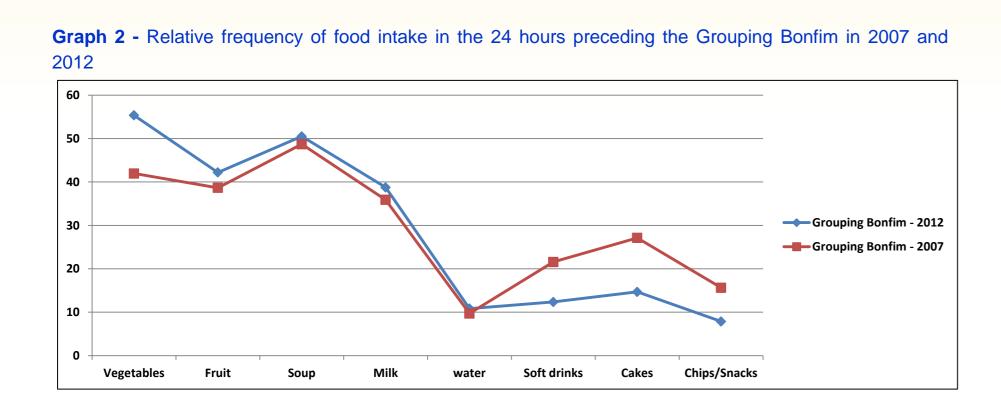
Children and teenagers with ages between 6-17 years old were studied, collecting information about their anthropometric data, eating ingestion of 24 hours, physical activity, teeth health and parents' professional occupation. Children and teenagers were assessed in two distinct time periods: 2007 (only children of **Grouping Bonfim**) and 2012. In between, interventions in class rooms, schools and in the general community were undertaken as part of the "Project Healthy Eating in Schools County Portalegre" (only for children and teenagers of **Grouping Bonfim**).

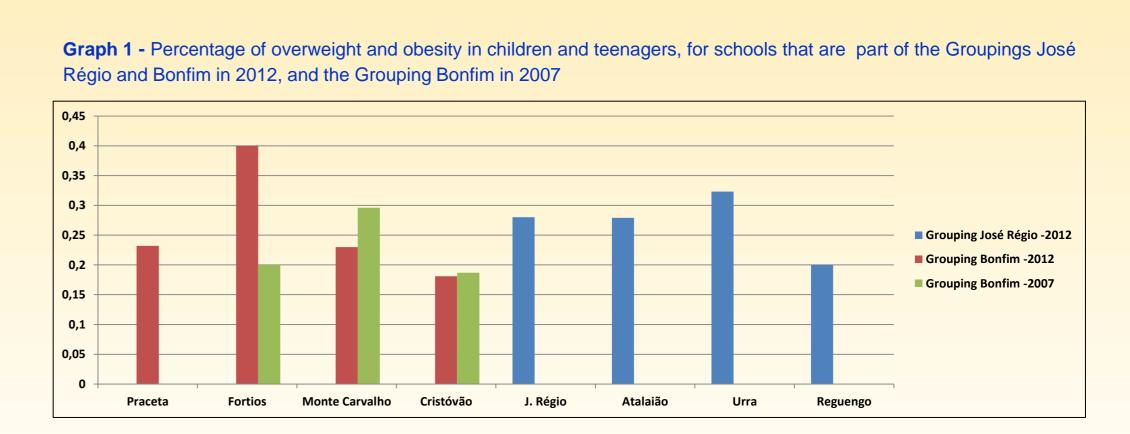
Results:

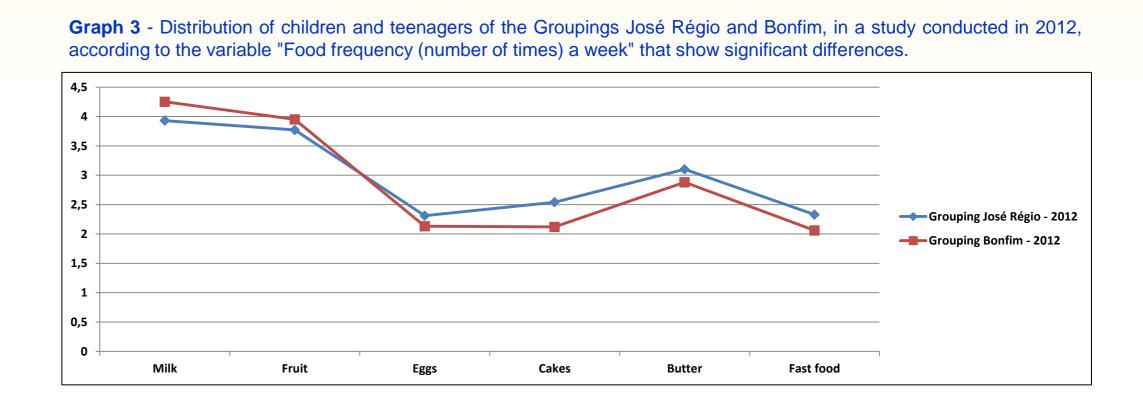
In 2007, the non-healthy diet was a predictor of overweight and obesity in children and teenagers of **Grouping Bonfim**. In the 2012 school sample, waist circumference was positively related with ingestion of more high-energy food and with high blood pressure. As result of the intervention, children and teenagers increased their consumption of fruit, vegetables and milk and decreased the amount of high-energy food on their diet. Simultaneously to diet changes, overweight and obesity rates diminished by 5% for girls and 3% for boys. In comparison, children and teenagers from **Grouping José Régio** eat more high-energy food, such as cakes, butter and fast-food and their overweight and obesity rates are higher by 1.7% (girls) and 2.3% (boys).

Table 1 - Number of parameters that define the metabolic syndrome in children and teenagers with overweight and obesity in Groupings José Régio and Bonfim in 2012

Parameters defining the metabolic syndrome according to Cruz et al, 2004	Number of parameters present	Grouping José Régio (2012)				Grouping Bonfim (2012)			
		Girls		Boys		Girls		Boys	
		N	%	N	%	N	%	N	%
	0	10	6,75	7	5,20	12	8,43	10	6,00
Percentile waist circumference ≥ 90	1	16	10,82	15	11,14	10	7,03	13	7,80
Percentile blood pressure > 90	1	5	3,38	2	1,48	5	3,51	3	1,80
	2	10	6,75	9	6,68	10	7,03	11	6,60







Conclusion:

The non-healthy diet of children and teenagers is related with their overweight and obesity and is directly related with some of the Metabolic Syndrome risk factors. Teaching the community about healthy eating habits was effective. Similar initiatives should be consider to continue improving the eating habits of children and teenagers.

Referências Bibliográficas

- CDC. (2011). Healthy Weight: Assessing your Weight: BMI: About BMI for Children. Retrieved from http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html
- Fernández JR, D. R., Pietrobelli A, Allison DB. (2004). Waist circunference percentiles in nationally representative samples of African American Children, European, American and Mexican-Americans and Adolescents. *J Pediatr*(145), 439-444
 IDF, I. D. F.- (2007). The IDF consensus definition of Metabolic Syndrome in Childrens and Adolescents Symposium conducted at the meeting of the IDF Task Force on Epidemiology and Prevention, Bruxelas Bélgica.

















