



## PREVALENCE OF CHILDHOOD OBESITY AND OVERWEIGHT IN PORTUGAL AND GREECE - COSI 2010

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### INTRODUCTION

WHO/Europe Childhood Obesity Surveillance Initiative (COSI)<sup>1,2</sup> is an ongoing, systematic process of collection, analysis, interpretation and dissemination of descriptive information for monitoring excess body weight in the WHO European Region. The system aims to measure trends in overweight and obesity in children aged 6-8 year-olds, every two years.

Here we are presenting and comparing the results of the second COSI round (2010), for schoolchildren age 7 years for two countries of Southern Europe: Portugal and Greece.

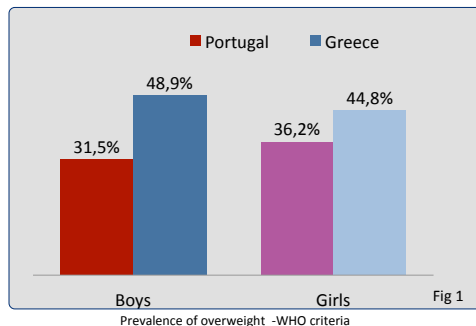
### METHODOLOGY

4020 children (910 age 7 years) from 172 schools participated in the study in Portugal and 5701 (1293 age 7 years) from 150 schools in Greece (national representative samples). Height and weight were directly measured by trained fieldworkers. Overweight (including obesity) and obesity prevalence were calculated using the international body mass index cut-offs according to WHO criteria. Dietary and exercise patterns were assessed through standardized COSI school and family questionnaires.

### RESULTS



**Results:** Means values of height and weight and Height/Age (H/A) and Weight/Age (W/A) z-scores (Table 1) showed that Greek children are higher and heavier than Portuguese children but both have positive H/A and W/A z-scores. Prevalence of overweight (including obesity\*) (Fig.1) in children age 7 years was 31,5% (14,2%\*) in boys and 36,2% (12,2%\*) in girls (according to WHO definition) in Portugal and 48,9% (23,9%\*) in boys and 44,8% (14,2%\*) in girls in Greece. In both countries dietary and exercise patterns were found very similar with children presenting poor food habits, i.e. low healthy food consumption at school and low level of physical activity.(Table 2)



	Height cm (H/A z score)		Weight kg (W/A z score)	
	Greece	Portugal	Greece	Portugal
BOYS	128,5 (0,71)	126,4 (0,35)	29,5 (1,17)	27,0 (0,61)
GIRLS	127,8 (0,70)	125,5 (0,33)	29,1 (1,05)	27,2 (0,66)

Table 2: Physical activity level

	Portugal (%)	Greece (%)
Transport Home to School = Car	57,2	44,9
Transport Home to School = walking	24,8	45,9
Children registered in sport clubs 2x/week	45,7	65,2
Schools with physical activity lessons at 2 <sup>nd</sup> grade > 90min/week	79,6	60,2
Schools with playgrounds	98,3	97,2

### CONCLUSION

Portugal and Greece are two of the countries with higher prevalence of overweight and obesity across Europe. This has been consistently higher in Southern European countries which also share several similarities on dietary patterns and physical activity levels among primary school children, suggesting that active implementation of policies or interventions to counteract overweight and obesity are needed.

1- World Health Organization Europe. WHO European Childhood Obesity Surveillance Initiative- Implementation of round 1 (2007/2008) and round 2 (2009/2010). Trudy Wijnhoven, Joop van Raaij, João Breda. WHO (Eds). WHO Regional Office for Europe, 2014. Available at [http://www.euro.who.int/\\_data/assets/pdf\\_file/0004/258781/COSI-report-round-1-and-2\\_final-for-web.pdf](http://www.euro.who.int/_data/assets/pdf_file/0004/258781/COSI-report-round-1-and-2_final-for-web.pdf)

2- Wijnhoven TA, van Raaij J, Spinelli A, Starc G, Hassapidou M, Spiroski I, Rutter H, Martos E, Rito AI, Hovengen R, Pérez-Farínós N, Petruskiene A, Eldin N, Braeckewelt L, Pudule I, Kunešová M, Breda J: WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6–9-year-old children from school year 2007/2008 to school year 2009/2010. BMC Public Health, 14:806, 2014.