

# Remarkable Increase In The Prevalence Of Overweight and Obesity Among School Age Children In Antalya, Turkey, Between 2003 - 2015

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**Background:** The prevalence of childhood obesity is increasing all over the world and leading to an increase in obesity-related health problems such as adult obesity, cardiovascular diseases, type 2 diabetes and depression (1). There is no nationwide systematic study investigating obesity trends in Turkish children (2).

**Objective and hypotheses:** The aim of this study is to determine the prevalence of overweight(OW) and obesity(OB) among school age children, to compare the data with those of 2003 and to observe the change in body mass index (BMI) in Antalya, Turkey.

**Method:** The study included 58 schools from 124, throughout the city centre of Antalya, Turkey during the period of March-April 2015. A number of 1687 school children (boys 873, girls 814) aged 6-14 years were chosen from 61092 children, using a population based stratified cluster sampling method. BMI was calculated by measuring the weight and standing height. Age and gender specific international cutoff points of BMI, recommended by Cole et al.<sup>3</sup> were used to determine the prevalence of OW and OB. Overweight was defined as BMI between 85<sup>th</sup> and 95<sup>th</sup> percentile, and obesity as BMI above the 95<sup>th</sup> percentile.

## Results:

**The overall prevalence of OB was 9.8% while OW was 23.2%.**

There was no significant difference between boys and girls for OW prevalence. **However OB prevalence was higher in boys (11.3 %) than girls (8.1%) (p<0.05).**

The distribution of prevalence of OB and OW according to age groups is shown in Figure 1.

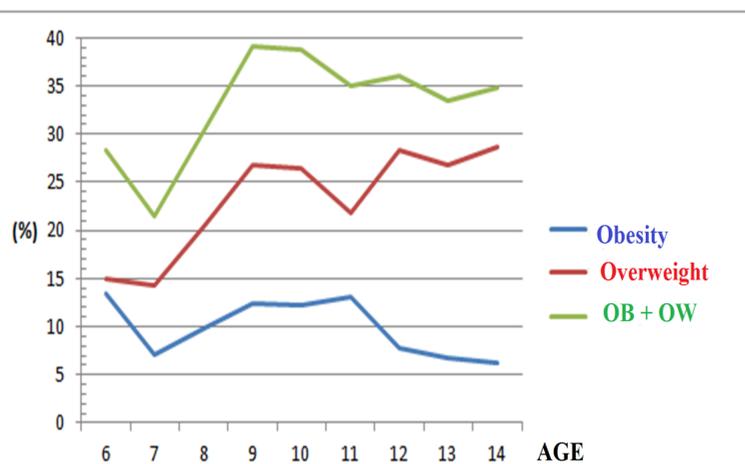
Comparing with 2003 data, the values of BMI were found to be increased in all age groups (Figure 2).

The prevalence of obesity and overweight showed an increase up to 2-3 times from 2003 to 2015 (Table 1).

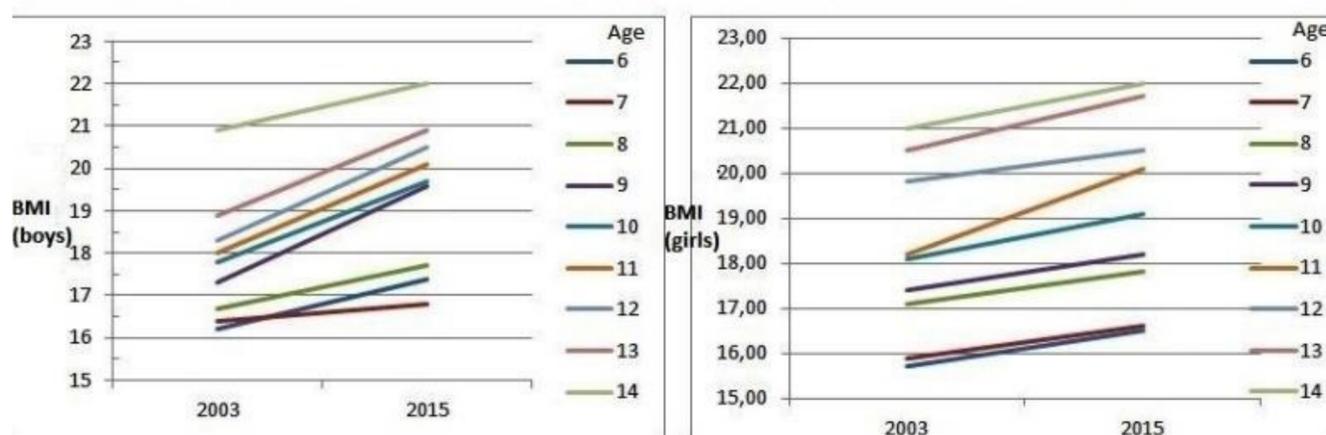
**Table 1.** The comparison of 6-14 years old school children in Antalya, between 2003-2015

	2003*	2015	p
Number	1775	1687	-
Age (year)	6-14	6-14	-
Gender (girls/boys)	867/908	814/873	>0,05
Obesity (%)	3,4	9,8	0,0001
Overweight (%)	14,6	23,2	0,0001
OB + OW (%)	18	33	0,0001

\* Reference 4



**Figure 1.** The percentage of OB and OW in different ages



**Figure 2.** Comparison of the value of BMI among 6-14 years old school children in different ages and genders between 2003 - 2015

**Conclusion:** The prevalence of obesity is increasing progressively in Antalya, Turkey. Because obesity is a major health problem, determination the prevalence of obesity and overweight at regular intervals and taking measures in this regard is critical.

The authors have no conflicts of interest

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