# Abstract citation ID: ckad160.1256 Prevalence of overweight among Tunisian adolescents: Trend analysis 1996-2016

#### Mariem Zribi

M Zribi<sup>1,2,4</sup>, N Zoghlami<sup>1,6</sup>, J Elati<sup>3,4,6</sup>, P Traissac<sup>5,6</sup>, H Aounallah-Skhiri<sup>1,2,4</sup>

<sup>1</sup>National Institute of Health, INSP, Tunis, Tunisia

<sup>2</sup>Faculty of Medicine of Tunis, University of Tunis el Manar, Tunis, Tunisia <sup>3</sup>INNTA, National Institute of Nutrition and Food Technology, Tunis, Tunisia <sup>4</sup>Nutrition Surveillance and Epidemiology, SURVEN, Research Laboratory, Tunisia

<sup>5</sup>IRD, UMR 266 MoISA - University Montpellier, CIRAD, CIHEAM-IAMM, INRAE, CIRAD, CIHEAM-IAMM, INRAE, Institut Agro, Montpellier, France <sup>6</sup>JEAI-TANIT, Tunis, Tunisia Contact: zribi.mariem.fmt@qmail.com

## **Background:**

Overweight among adolescents is a growing public health concern worldwide, and Tunisia is no exception. However, prevalence trends of overweight among Tunisian adolescents have not been well documented. This study aimed to determine prevalence trends of overweight among adolescents in Tunisia between 1996 and 2016.

## Methods

Data were collected from three national surveys conducted in Tunisia between 1996 and 2016. The first was conducted in 1996 (n = 729). The second was the Epidemiological Transition and Health Impact in North Africa Survey (TAHINA-2005, n = 1019), and the third was the Tunisia National Health Examination Survey (THES-2016, n = 482). All surveys used a similar methodology and included a representative sample of the Tunisian population. Overweight was defined as Body Mass Index  $\geq$  85th percentile. STATA software was used for statistical analysis and chisquared test for trend was performed.

## **Results:**

A total of 2230 participants was enrolled (sex ratio = 0.99). The prevalence of overweight among adolescents increased from 10.8% (4.3% for boys and 17.7% for girls) in 1996 to 18.9% (17.2% for boys and 20.7% for girls) in 2005, then to 30.5% (22% for boys and 39.2% for girls) in 2016. Linear trend test concluded to significant increase in overweight prevalence estimated at 179.6% in two decades. The results showed a significant effect of time on overweight prevalence (p < 10-3), as well as a significant effect of sex group (p < 10-3). The model estimated that the prevalence of overweight increased by 1.29%

per year from 1996 to 2016. The odds of overweight increased significantly over time, with an Odds Ratio (OR = 1.79, (95% CI: 1.39-2.30)) for TAHINA survey and (OR = 2.80 (95% CI: 2.21-3.55)) for THES survey.

# **Conclusions:**

Our study showed a significant increase in the prevalence of overweight among Tunisian adolescents over the past two decades. It is crucial to refine the analysis of associated risks to develop targeted interventions and adapt current policies.

### Key messages:

- The prevalence of overweight increased significantly among Tunisian adolescents in the past two decades.
- Targeted interventions and policies to address this issue are therefore urgent.