

# Sleep patterns and cardiometabolic risk in schoolchildren from Cuenca, Spain

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Sleep seems to have a significant influence on the metabolic syndrome (MetS). However, results in this association are still inconsistent in children. The aim of this study was to examine the influence of sleep characteristics in the MetS (index and factors) in Spanish children. Cross-sectional study including a sample of 210 children aged 8-to-11-years belonging to 20 schools from the province of Cuenca, Spain was conducted. Cardiometabolic risk and actigraphy sleep patterns were determined and analysed using correlation coefficients, ANCOVA models and a propensity score derivation model. Overall, children in the lower time in bed category and those who went to bed later (> 23:15h) showed worse values in the cardiometabolic profile and risk index. Differences were observed when the total time in bed was below 9h 15mins. Our study shows that short sleep duration could be a risk factor for cardiometabolic risk in children, and bedtime may independently influence this risk. In addition, our data suggests that children's sleep hygiene should be incorporated in parenting educational programs. Copyright: © 2018 Lucas-de la Cruz et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.