

Active Commuting to School, Weight Status, and Cardiometabolic Risk in Children From Rural Areas: The Cuenca Study

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Purpose. The aim of this study was to examine (a) whether distance from home to school is a determinant of active commuting to school (ACS), (b) the relationship between distance from home to heavily used facilities (school, green spaces, and sports facilities) and the weight status and cardiometabolic risk categories, and (c) whether ACS has a positive impact on schoolchildren's health. **Method.** A cross-sectional study was conducted with 956 schoolchildren aged 10 to 12 years from the province of Cuenca, Spain. Height, weight, fat mass, waist circumference, blood pressure, fasting plasma lipid profile, insulin, fitness, physical activity, and ACS were measured. Distances from home to facilities were measured by a geographic information system, and a validated metabolic syndrome index was used. **Findings.** Children living closer to school (less than 600 m) commuted actively to school more frequently than children living further away (more than 800 m). Normoweight boys lived further away from sports facilities than overweight/obese peers, and children presenting higher cardiometabolic risk levels lived closer to school than those who did not. No differences were found between children who daily walked/cycled to school and those commuting actively to school less frequently in body mass index, metabolic syndrome index, fitness, and physical activity. **Conclusions.** ACS had no positive impact on schoolchildren's health. Distance to school is an indicator of active commuting. However, it seems that not enough physical activity is done to prevent obesity and cardiometabolic risk factors in rural areas. © 2014 Society for Public Health Education.

cardiovascular disease

child health

health promotion

obesity

physical activity/exercise

social determinant of health

lipid

blood

blood pressure

body mass

Cardiovascular Diseases

child

cross-sectional study

exercise

female

fitness

human

male

morphometrics

procedures

risk factor

sanitation

school

Spain

statistics and numerical data

traffic and transport

walking

Blood Pressure

Body Mass Index

Body Weights and Measures

Cardiovascular Diseases

Child

Cross-Sectional Studies

Exercise

Female

Humans

Lipids

Male

Physical Fitness

Public Facilities

Risk Factors

Schools

Spain

Transportation

Walking