

# Age of menarche and its relationship with body mass index and socioeconomic status Edad de la menarquia y su relación con el nivel socioeconómico e índice de masa corporal

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**Background:** A decline in the age of menarche was observed from early 1900s to the 1970s.

However, it is not known if a further decline occurred thereafter. **Aim:** To evaluate the age of menarche in girls from Santiago, Chile and its relationship with body mass index (BMI) and socioeconomic status.

**Material and Methods:** We studied 1302 healthy girls aged 7 to 19 years. Age of menarche was evaluated through a questionnaire to the patient and her parents. Kaplan-Meier curves were used to determine age of menarche and Cox regression analysis was employed to evaluate the effect of the type of school and BMI on the age of menarche. **Results:** The mean age at menarche was  $12.7 \pm 0.04$  years. Girls from public and private schools had their period at  $12.5 \pm 0.1$  and  $13.05 \pm 0.05$  years respectively. A negative correlation between z scores for BMI and age of menarche was observed ( $r = -0.3$ ;  $p = 0.001$ ). Girls whose menarche occurred before 11.5 years had higher z scores for BMI and a larger proportion were overweight.