

**Supplementary Material Table 1.** Summary of measures of overweight/obesity and physical activity in SAP 2 and SAP 3 used in the present analyses

Variable	measured/ self- report	Available for	Description
<i>Overweight/obesity</i>			
Height	measured	SAP 2 + 3	measured without shoes in light clothing
Weight	measured	SAP 2 + 3	measured without shoes in light clothing
Waist circumference	measured	SAP 3	measured in relaxed standing position using a SECA 201 measuring tape (SECA GmbH&Co, Hamburg, Germany)
Hip circumference	measured	SAP 3	measured in relaxed standing position using a SECA 201 measuring tape (SECA GmbH&Co, Hamburg, Germany)
Percent body fat	measured	SAP 3	measured with bioelectrical impedance analyses (BIA) using the device Helios (Helios, Forana, Frankfurt, Germany)
<i>Physical activity</i>			
Long IPAQ	self- report	SAP 3	Long International Physical Activity Questionnaire used in a written, self-administered format. For questionnaire see <a href="https://sites.google.com/site/theipaq">https://sites.google.com/site/theipaq</a>
4 questions for moderate and vigorous physical activity	self- report	SAP 2 + 3	Think about physical activities that make you breathe at least a bit harder than normal, such as brisk walking, hiking, dancing, yard work or several sport activities. 1) On how many days a week do you engage in such activities? (⇒days/week) 2) How long on average are you active on one of these days? (⇒minutes) 3) How often do you engage in physical activities that get you out of breath or make you sweat? (⇒daily, 4-6 times per week, 2-3 times per week, once a week, once a month, less than once a month, never) 4) How many hours per week do you engage in physical activities that get you out of breath or make you sweat? (⇒not at all, about half an hour, about 1 hour, 2-3 hours, 4-6 hours, 7 or more hours)

Abbreviations: IPAQ, International Physical Activity Questionnaire; SAP, SAPALDIA (Swiss Cohort Study on Air Pollution and Lung and Heart Disease in Adults)