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**Topic:** Community health and nutrition programs

**Title:** The more sedentary activity on the weekend, the higher risk of obesity in Indonesian children

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Indonesia is currently facing nutritional transition including displacement of traditional activity to sedentary activity. Active playing, moving and reducing sedentary activities during weekend activities are expected to minimize risk of obesity. The objectives of the study are as follows 1) to describe the difference in sedentary activity duration during weekdays and weekend, and 2) to examine relationship between sedentary activities during school day and weekend, with obesity. A total of 244 obese and 244 non-obese children were recruited from Yogyakarta in 2012. Obese subjects were from elementary schools with BMI-for-Age > 95th percentile identified from previous survey. Non-obese subjects were children from the same schools. Weight and height of the children were measured using a calibrated digital weighing scale and microtoice by trained nutritionists. Data of screen-based activities were collected using one-week physical activity recall questionnaires. BMI of the subjects were computed using WHO Anthro2005. Statistical analysis was done using STATA. The study showed that obese children have longer duration of sedentary activity than non-obese children. On weekend the difference of sedentary duration between obese and non-obese children is 56 minutes, whereas on school days only 47 minutes ( $p < .0001$ ). Children who have longer duration of sedentary on school day are more likely to be obese [OR=3.56; CI: 2.41-5.26]. Similarly children with longer duration of sedentary activities on weekend are more likely to be obese [OR=7.91; CI: 5.18-12.09]. Children with longer duration of sedentary activities on weekend have high likelihood to be obese than it counterpart.