

## Association of sports and physical activity with obesity among teenagers in Poland

Childhood and adolescent overweight and obesity is a global challenge. Obesity is a risk factor for chronic disease including but not limited to type 2 diabetes mellitus, hypertension, and cardiovascular disease. Physical activity and exercise appear to be an important component of childhood and adolescent obesity prevention interventions, and "can support weight maintenance efforts and prevent the progression of chronic diseases later in life." This study assessed the "relationship between body mass index and sports and physical activities in an unbiased, random sample of teenagers residing in mid-north eastern Poland."

1364 participants from 10 schools in Warszawa and 380 participants from 3 schools in Ciechanow were recruited onto the trial. Subject to parental consent, an internet-based survey was shared and completed by students to collect data on variables including duration spent on physical activity, leisure time activities, study hours, computer use, back pain, mood, and weight. The prevalence of overweight and obesity was lower when compared to data from other countries and equally distributed between the two cities. Yet, results suggest that the local environment and lifestyle factors determine the risk of weight gain, as the prevalence was slightly higher in Warszawa. Physical inactivity amongst participants increased the risk of overweight or obesity 2-fold.

Despite the absence of statistically significant results, obesity appeared to be more likely in teenagers who were inactive. The reasons for this are two-fold – teenagers spend a significant amount of time (6 h/day) engaging in sedentary activities and increasingly they indicate a preference for shorter exercise sessions.

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