

Diets of teenage boys often low in nutrients and high in salt

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A new study adds weight to the existing international and Australian evidence that a high proportion of teenage boys' consume foods that are low in essential nutrients and high in salt

The most recent study, conducted on a group of 44 healthy secondary students aged 13 to 15 attending the School of Sport Championship, a competitive sports high school in Warsaw, Poland shows that deficiencies in multiple nutrients including, potassium (69.2%), folate (52.6%) and calcium (50%) were common.

Moreover, the researchers found that all participants in the study were at risk of inadequate intake of vitamin D (100 percent) in relation to the estimated average requirement (EAR). They believe that this is due to a very low intake of fish among this cohort.

The study authors noted their concerns about the poor vitamin D intake during adolescence because bone remodelling is at its highest level during this period and inability to attain sufficient bone mass may increase the risk of developing osteoporosis later in life.

The findings from this study is in line with other studies conducted across nine European countries over the past decade.

Another Polish study done in 2010 study also on sports students, found that teenage boys frequently eat between meals, had abnormal eating habits, and insufficient intake of nutrients. Teenage boys were more likely to eat sandwiches, cured meats, sweets and energy drinks between meals, while teenage girls were more like to eat fruit and vegetables.

The [2007 Australian National Children's Nutrition and Physical Activity Survey](#) showed a large proportion of teenage boys were not meeting the EAR for several nutrients including calcium (56%), magnesium (66%), vitamin A (79%) and folate (86%). In addition the consumption of sodium in all age groups exceeded the recommended upper level of intake. The survey also found that a significant number of Australian children may not be consuming sufficient amounts of vitamins D and E.

The Australian National Children's Nutrition and Physical Activity Survey found that only 2% of teenage boys were meeting the serve recommendations of the Australian Dietary Guideline for both fruits and vegetables (which is ≥ 1 to 3, and ≥ 2 to 4 serves daily, respectively).

The present study researchers found that the intake of phosphorus within the study group was above the EAR, and postulated that this may be due to consumption of highly processed foods. They also found that almost 100 percent of study subjects had an intake of sodium which exceeds the upper level of recommended intake – on average the intake of sodium exceeded the average intake value by over 3.5 times, which equates to 13.8 g per day.

They propose that adequate levels of all nutrients are not being attained due to the boys' low intake of fruits and vegetables, wholegrain cereals, milk and dairy products.

Sources;

[Rocz Panstw Zakl Hig. 2016;67\(1\):59-68.](#)

[Rocz Panstw Zakl Hig. 2010;61\(1\):71-4.](#)

Department of Health and Ageing (2008). [Australian National Children's Nutrition and Physical Activity Survey – Main Findings](#). AGPS, Canberra