

Nutrition Science Summary



Teenage Boys and Breakfast

A secondary analysis of the 2007 National Children's Nutrition & Physical Activity Survey

Summary

Breakfast choice can be a strong indicator of overall diet quality in adolescent boys.

A recent analysis of the 2007 National Children's Nutrition and Physical Activity Survey, conducted by Flinders University¹ into the breakfast habits of Australian adolescent boys, has found:

- Adolescent boys who consume ready-to-eat-cereal (RTEC) for breakfast have significantly higher intakes of calcium, iron, folate, magnesium and zinc compared to those who eat another type of breakfast or skip breakfast entirely. Intakes of these nutrients are higher at both breakfast and throughout the day.
- Adolescent boys who consume RTEC at breakfast consume less sodium and less fat at breakfast, and have a higher physical activity level than those who consume another choice of breakfast.

How Important is Breakfast Choice for Adolescent Boys?

Numerous studies have shown that those who eat breakfast have higher intakes of many essential nutrients, as well as lower fat intakes, lower BMI's and healthier lifestyle habits, than those who skip breakfast²⁻⁵.

What is less clear is how different breakfast choices influence overall dietary intake and lifestyle. The type of breakfast eaten may be of particular importance for adolescent boys, as it is a time of rapid growth and development, high nutritional requirements, and often associated with less than optimal dietary habits⁶.

Breakfast Choice Drives Diet Quality

To determine the importance of breakfast choice, adolescent boys aged 12-16 years (n=781) were divided into three groups; 'RTEC consumers' (42% of boys), 'other breakfast consumers' (38%) and 'breakfast skippers' (20%).

Both breakfast groups (RTEC and other breakfast consumers) were found to have lower body weights and waist circumferences when compared to those that skipped breakfast.

There was no difference in BMI or waist circumference between RTEC consumers and other breakfast consumers. However, RTEC consumers had significantly higher intakes of a number of key nutrients at breakfast and over the whole day compared to both other breakfast consumers and breakfast skippers. These nutrients included calcium, iron, magnesium, zinc, thiamine, riboflavin and folate.

The National Children's Nutrition and Physical Activity Survey of 2007 remains the most comprehensive national picture to date of the diet and lifestyle habits of Australian children⁷. The vast dataset, studying 4,487 children aged 2-16 yrs, has been used to generate many more detailed analyses since the original publication of the main findings in 2008.

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A Boost to Fibre Intake

Dietary fibre is an important nutrient during adolescence, where it helps to provide good digestive and metabolic health. RTEC was found to provide 18% of the total daily dietary fibre intake in boys who consumed this type of breakfast.

RTEC consumers maintained a significantly higher fibre intake over the whole day than both the other breakfast eaters and breakfast skippers. Also, a higher number of 14 to 16 year-old RTEC consumers met their daily fibre adequate intake.

What about the Sodium and Sugar in Cereal?

RTEC consumers had significantly lower sodium intake at breakfast than other breakfast eaters. RTEC also provided just nine percent of total daily sodium intake.

RTEC consumers had a significantly higher sugar intake at breakfast than other breakfast eaters, assisted by higher milk intakes. RTEC contributed just over a third of total sugar consumed at breakfast, and seven percent of total sugar consumed throughout the day.

Despite the higher sugar intake RTEC consumers had a similar body weight and waist circumference to other breakfast eaters, and were leaner than the breakfast skippers.

Conclusion

Compared to another breakfast choice, boys who consume RTEC:

- Consume less sodium at breakfast
- Have a higher sugar intake at breakfast, but a similar body weight and waist circumference
- Are more able to meet recommendations for thiamine, riboflavin, folate, magnesium, zinc, calcium and iron.

“Adolescence is a critical age for growth and development when adequate nutrient intake is paramount – this is especially important for boys. But it’s also an age when consumption of breakfast can start to drop-off which can impact overall nutrition.”

Dr Jessica Grieger, lead researcher.

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