

Cystic Fibrosis Research News

Title:

Dietary intake of energy-dense, nutrient-poor and nutrient-dense food sources in children with cystic fibrosis

Authors:

Sutherland Rosie^a, Katz Tamarah^b, Liu Victoria^a, Quintano Justine^c, Brunner Rebecca^c, Tong Chai Wei^a, Collins Clare E^d, Ooi Chee Y.^{a,e}

Affiliations:

^aDiscipline of Paediatrics, School of Women's and Children's Health, University of New South Wales, Sydney NSW 2052, Australia.

^bDepartment of Nutrition and Dietetics, Sydney Children's Hospital, High Street, Randwick NSW 2031, Australia.

^cUniversity of Wollongong, Northfields Avenue, Wollongong NSW 2522, Australia.

^dSchool of Health Sciences and Priority Research Centre in Physical Activity and Nutrition, Faculty of Health and Medicine, University of Newcastle, University Drive, Callaghan NSW 2308, Australia.

^emiCF Research Centre and Department of Gastroenterology, Sydney Children's Hospital, High Street, Randwick NSW 2031, Australia

What was your research question?

Has the CF diet become a 'junk food' diet? And if so, what causes a large amount of junk food to be eaten by children with CF?

Why is this important?

Eating a diet that is high in energy and fat is an important part of CF care. For children with CF, following the CF diet leads to better weight gain, which is linked to improved lung function and survival. However, meeting these energy and fat targets can be difficult for children and their families, and this may lead them to rely on junk foods. Junk foods are tasty, convenient and cheap, but they are low in vitamins and minerals that are essential for health and wellbeing.

What did you do?

We compared the diets of 80 children with CF and 80 children of the same age and sex who did not have CF. These children were aged 2-18 years and were attending the CF clinic at the

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Sydney Children's Hospital, Randwick. To be included in the study, children with CF could not be following a diet other than the CF diet (for example, vegetarian or gluten-free) and could not have a gastrostomy. All children or their parents completed a questionnaire designed to measure what they eat. The results of the questionnaire were then analysed.

What did you find?

We found that children with CF ate much more junk food than children who did not have CF. For children with CF, 44% of their daily diets came from junk foods, compared to 31% for children without CF. Although both groups of children ate more junk food than is recommended (1-3 servings/day, or 5-20% of daily dietary intake), children with CF consistently ate more of these foods. This was especially true for children of school-age and those who lived in rural or disadvantaged areas. Children with CF met dietary targets for energy and fat, but this was mostly due to eating more junk foods.

What does this mean and reasons for caution?

This is the first study to look at junk food intake in children with CF. Our results suggest that the CF diet is at risk of becoming high in junk foods and, therefore, low in vitamins and minerals which are also needed for health and wellbeing. This is especially concerning for children of school age, and those who live in poorer suburbs or are from rural areas. Considering the increasing incidence of obesity among children with CF, a personalised approach to nutrition management in CF is becoming important. This study was limited by being from a single centre. However, these children represent a diverse group from across the state of New South Wales.

What's next?

Future research should include multiple centres in Australia and abroad. We need to look at whether children eating a high junk food diet are still meeting vitamin and mineral requirements, and how this diet will affect their health in the longer-term.

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