



Abstract

Nutrition of Young Children Living in Households Accessing Food Grants and Foodbanks: Findings from the *Growing Up in New Zealand* Cohort Study [†]

Sarah Gerritsen ^{1,*} , Amanda D'Souza ², Tyla Goodsell-Matthews ³, Sarah-Jane Paine ⁴, Boyd Swinburn ³ and Clare Wall ⁵ 

¹ Social and Community Health, School of Population Health, University of Auckland, Auckland 1142, New Zealand

² Department of Public Health, University of Otago, Wellington 6242, New Zealand; amanda.dsouza@otago.ac.nz

³ Epidemiology and Biostatistics, School of Population Health, University of Auckland, Auckland 1142, New Zealand; tyla.matthews@auckland.ac.nz (T.G.-M.); boyd.swinburn@auckland.ac.nz (B.S.)

⁴ Te Kupenga Hauora Māori, University of Auckland, Auckland 1142, New Zealand; sj.paine@auckland.ac.nz

⁵ Dietetics and Nutrition, School of Medical Sciences, University of Auckland, Auckland 1142, New Zealand; c.wall@auckland.ac.nz

* Correspondence: s.gerritsen@auckland.ac.nz; Tel.: +64-9-923-4262

[†] Presented at the Nutrition Society of New Zealand Annual Conference, Online, 2–3 December 2021.



Citation: Gerritsen, S.; D'Souza, A.; Goodsell-Matthews, T.; Paine, S.-J.; Swinburn, B.; Wall, C. Nutrition of Young Children Living in Households Accessing Food Grants and Foodbanks: Findings from the *Growing Up in New Zealand* Cohort Study. *Med. Sci. Forum* **2022**, *9*, 55. <https://doi.org/10.3390/msf2022009055>

Academic Editors: Rachel Brown, Sally Mackay, Helen Eyles and Shabnam Jalili-Moghaddam

Published: 26 July 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract: Good nutrition in early childhood is essential for optimal brain development, growth, learning to eat, and establishing healthy food preferences. Little is known about exposure to food insecurity among young children in Aotearoa New Zealand and the impact of this on child nutrition. This study sought to understand the relationship between household food grant/foodbank use when children were aged 9- and 54-months old and eight indicators of early childhood nutrition. Data were from the *Growing Up in New Zealand* cohort ($n = 6032$) born in 2009/10. Descriptive and multivariate logistic regression were used. At 9 months of age, 12% of mothers reported using food grants/foodbanks in the past 12-months, decreasing to 8.4% at 54-months. However, these were largely different families. Ethnic inequities were marked: 34.5% of tamariki Māori and 40.3% of Pasifika children experienced food grant/foodbank use at either or both time points. Children living in households accessing food grants/foodbanks were significantly more likely to have poorer nutrition across the eight indicators. After adjustment for differences in household income and size, child ethnicity, mother's age and education, and neighbourhood deprivation, infants whose mothers had made use of special food grants/foodbanks were more likely to have tried sugary drinks (AOR:1.45, $p < 0.01$) and unhealthy foods (AOR:1.44, $p < 0.01$) compared to other infants. At 54-months of age, they were nearly twice as likely to be served a low variety of vegetables (AOR:1.91, $p < 0.01$) compared to other children. In the early 2010s, the use of food grants/foodbanks was common in young families, and ethnic inequities were stark and persistent. Food insecurity was associated with multiple aspects of child nutrition. Policy responses to food insecurity must be made in meaningful partnerships with Māori and Pasifika whānau and communities, and enable sufficient support for families with young children, to ensure all tamariki have the best nutritional start in life.

Keywords: food insecurity; poverty; child nutrition; longitudinal cohort; infant feeding; early childhood

Author Contributions: Conceptualization, C.W., B.S., S.G. and A.D.; methodology, S.G.; formal analysis, T.G.-M.; writing—original draft preparation, S.G. and A.D.; writing—review and editing, S.-J.P., C.W., B.S. and T.G.-M.; supervision, S.G. and C.W.; project administration, T.G.-M.; funding acquisition, S.G., A.D., B.S. and C.W. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Ministry of Social Development through the Children and Families Research Fund Round Three.

Institutional Review Board Statement: The Growing Up in New Zealand study was conducted in accordance with the Declaration of Helsinki, and approved by the Health & Disability Ethics Committee, Ministry of Health (NTY0806055).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Access to *Growing Up in New Zealand* data is restricted, with approval granted by the GUiNZ Data Access Committee. More information is available from <https://www.growingup.co.nz/access-growing-data>.

Conflicts of Interest: The authors declare no conflict of interest.