Nutrition of young children in households accessing food grants and food banks

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Aims and methods

This study sought to understand the relationship between household food insecurity when children were aged 9- and 54-months old and 8 indicators of early childhood nutrition.

Data were from the Growing Up in New Zealand cohort

Descriptive and multivariate logistic regression were used.

Three indicators from the NZiDep (Salmond et al 2014):

Birth cohort recruited via pregnant women with babies due April 2009 to March 2010 (n=6,032) born in Auckland, Counties Manukau and Waikato. Broadly generalizable to births 2007-2010

Note: Pre-Covid19 shock to our food system
Food bank/special grant use among families with young children

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>9 months</th>
<th>54 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori (n=768)</td>
<td>26.8</td>
<td>18.9</td>
</tr>
<tr>
<td>Pacific (n=742)</td>
<td>31.1</td>
<td>23.6</td>
</tr>
<tr>
<td>Asian (n=693)</td>
<td>4.8</td>
<td>2.8</td>
</tr>
<tr>
<td>European/Other (n=3721)</td>
<td>6.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Total (n=6032)</td>
<td>12.2</td>
<td>8.4</td>
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</tbody>
</table>

Striking ethnic differences in food bank and special food grant use

Food bank use may be greater than cross-sectional figures suggest

16% of families had accessed a food grant or food banks before their child was 5 years - higher than at either time point measured (12% at 9-months and 8% at 54-months)

The one in five families facing food insecurity are not always the same families over time.

More than 60% of families that had made use of food grants/banks when their child was 9-months old no longer reported needing that support by 54-months.
Effect of food bank use on child nutrition

Figure 14: Indicators of poor infant nutrition when the mother/primary caregiver had made use of special food grants or food banks compared to other infants compared to those who had not at the 9-month interview (total cohort)

Figure 15: Indicators of poor nutrition at 54-months of age when the mother/primary caregiver was forced to buy cheaper food in the past 12 months, compared to other children

Effect of food insecurity on tamariki Māori nutrition

If household used food bank in past 12 months:
80% more likely to have tried unhealthy drinks* (AOR: 1.80, p<0.01) at 9-months of age, compared to other Māori babies.

At 54-months of age:
• more likely to eat a low variety of fruit (AOR: 2.24, p=0.03) and
• more likely to have 3+ soft drinks a week (AOR: 1.88, p=0.01), compared to other tamariki Māori.

→ Short term increased risk of nutritional deficiencies, overweight and tooth decay
→ Taste preference for sugary drinks/foods

*After adjustment for differences in household income and size, mother’s age and education, and neighbourhood deprivation

Pacific children whose mothers reported they had made use of special food grants or food banks in the past 12 months, were 2.5 times more likely to have a low variety of vegetables at 54-months of age, compared to other Pacific children (AOR: 2.54, p-value <0.01)

- Short term increased risk of nutritional deficiencies
- Lack of opportunities for taste exposure and development
- Lack of opportunities for adult role modelling
- Long term increased risk of fussy eating

*After adjustment for differences in household income and size, mother’s age and education, and neighbourhood deprivation

Policies to reduce food hardship in childhood require:

- specific attention to early childhood
- meaningful partnerships with, and advance the aspirations of Māori and Pacific whānau and communities, given the marked ethnic inequities, and the cultural significance of food
- a comprehensive food policy developed to improve breastfeeding and child nutrition
- a disruptive reimagining of our food system (see Food for Thought by Ronji Tanielu)
Thank you!

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