

Aotearoa, land of the long wide bare cupboard

Food Insecurity in New Zealand Part 1:
Fat, famished or starved in a land of plenty?

"We are guilty of many errors and many faults, but our worst crime is abandoning the children, neglecting the fountain of life.

Many of the things we need can wait.

The child cannot.

Right now is the time his bones are formed, his blood is being made, and his senses are being developed.

To him, we cannot answer 'Tomorrow'.

His name is today."

Gabriela Mistral

Nobel Prize in Literature 1945

Fat, famished or starved in a land of plenty?

*Elaine Rush, Emeritus Professor of Nutrition,
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More than 160,000 children – that’s around one in five – live in households that experience ‘food poverty’. That means they live without access to either enough food, or the variety of wholesome foods required for health. Why is this? The causes are complex but are driven by poverty, inequity and location.

It is an indictment of New Zealand society that urgently needs addressing, particularly for children, where the need is most. New Zealand needs a national food strategy – a food revolution – so that the population is not malnourished and all our children are nurtured.

We have to do better.

What do we mean by ‘food security’ and ‘food poverty’?

Food security means having easy access to enough healthy food every day. Food security issues are closely linked to social and economic development, and to health across the life-course. Foods must be culturally and socially acceptable but the price and availability of food are the main limiting factors for food security.

On the other hand, food poverty means not having easy access to the right foods, and not having enough resources to obtain enough healthy food every day. Lack of resources includes not enough money, time, skills and/or inadequate access to food sources and storage (like refrigerators, freezers, food stores and gardens). Food poverty affects families and whanau and particularly impacts on the growth and development of children.

Food poverty has a myriad of negative outcomes:

One outcome of food poverty is malnutrition, which means the body is not provided with all the essential nutrients in the required quantities at the right times for optimal growth, development, function and repair.

Malnutrition can result in people being underweight or obese. For example, being hungry and not having enough food to meet basic needs can result in loss of body weight or stunted growth. However, people can still eat food and experience ‘hidden hunger’. This is not having enough of the essential vitamins and minerals – which can lead to difficulty in thinking, poor health, productivity and even death.

Malnutrition can also cause a host of other conditions like anaemia, rickets, reduced immunity, and scurvy. The list goes on. These are diseases of the third world but they are happening in New Zealand.

There are critical periods of growth when optimal nutrition for the rapidly dividing cells of the body will allow children to reach their potential. These are the first 1000 days^{1,2} (which is the time from conception to two years of age), childhood, and adolescence (when rapid growth and puberty also occur). This means that we need to spend money now to save money later.

The myriad outcomes of food poverty add to costs for the country, communities, families, whanau, and the individual. Investing in the better nutrition of children and all New Zealanders will put life into years, and years into life.

New Zealand needs a national food strategy – a food revolution so that the population is not malnourished and all our children are nurtured

The causes of food poverty are complex...

Food poverty is a wicked problem (a 'complex, unpredictable, open-ended, or intractable problem') which requires complex social solutions³. Food poverty is not a personal responsibility: it is a **societal responsibility.**^(Fig 1)

Food poverty occurs when society fails in its collective responsibility to ensure that affordable housing, money to live on, medicine, water, food and education are available to everyone. Societal responsibility means organisations, including business and government, and individuals act for the benefit of all of society including the most vulnerable.

The proximate causes of food poverty include geographical location in relation to the food supply, the cost of food (which in turn is determined by mark-ups in the supply chain), goods and services tax (GST), and problems of distribution.

Global influences are also impacting the food supply in New Zealand. The environment is a major determinant of public health and wellbeing: only if the planet is healthy can the people be healthy. Yet, overall the world is food insecure. It is generally agreed that our climate is changing and one of the major influences is the global food system. Food production and consumption, if continued in the same way, will change land-use, deplete fresh water, pollute ecosystems, and increase global warming through emission of green-house gases.

We shouldn't have food poverty in a land of plenty:

This crisis of food poverty is occurring in a country that promotes a clean green image and quality food. 45 percent of our land area is dedicated to the production of food. Dairy, beef, lamb, kiwifruit, apples, onions and wine dominate our exports, and we export enough energy to feed 4 times our population. That's 20 million people!

We also import enough food energy to feed the population twice over – 10 million people. New Zealand is one of the few countries in the world that could be self-sufficient and contribute to the global nutritional needs at the same time⁴.

Affordable and readily available food is a human right but the food price index in New Zealand continues to increase⁵. In the last 5 years, the overall cost of food has increased by 4 percent but fruit and vegetables have outstripped this, increasing in cost by 9 percent.

Farmers nurture their animals and crops, but we do not look after our children with the same care. In fact, at a policy level more attention is paid to the prevention of food poisoning than the quality of the domestic food supply. Food poisoning is a serious, notifiable public health concern and is monitored by the Food Standards Australia and New Zealand (FSANZ) (which is part of the Ministry of Primary Industry). Food poisoning is acute but chronic nutrition-related diseases such as obesity, cardiovascular disease, type 2 diabetes mellitus and some cancers are crippling our health system.

An urgent call-to-action is required.

Figure 1 demonstrates the vast number of factors that influence food poverty, and the interventions that are needed."

We can address food poverty at global, national and local levels:

On a global scale, changes to the types of food, and how they are produced are needed. For example, animal products produce three quarters of green-house emissions, so dietary changes (such as eating less red and other meats, and eating more vegetables, nuts and legumes) are needed⁶. Reduction of food waste before it reaches the market or is wasted by households is also required.

Some of the proximate causes of food poverty can be addressed at a local level by actions such as provision of

food by food banks and whanau, cooking classes, supplying milk and fruit in schools, and other charitable actions such as provision of lunches in schools. These are short term solutions that do not address the distal causes, and more fundamental changes are needed. After all, a lack of time to shop and prepare food, and lack of food storage facilities in homes are a result of low paid jobs, multiple part-time jobs and shift work taking time and parents away from eating together as a family, living wages not being paid⁷, and benefits not meeting the needs of families. Therefore, it is imperative that living wages are paid and benefit levels are raised so all children can be provided with adequate food for optimum health.

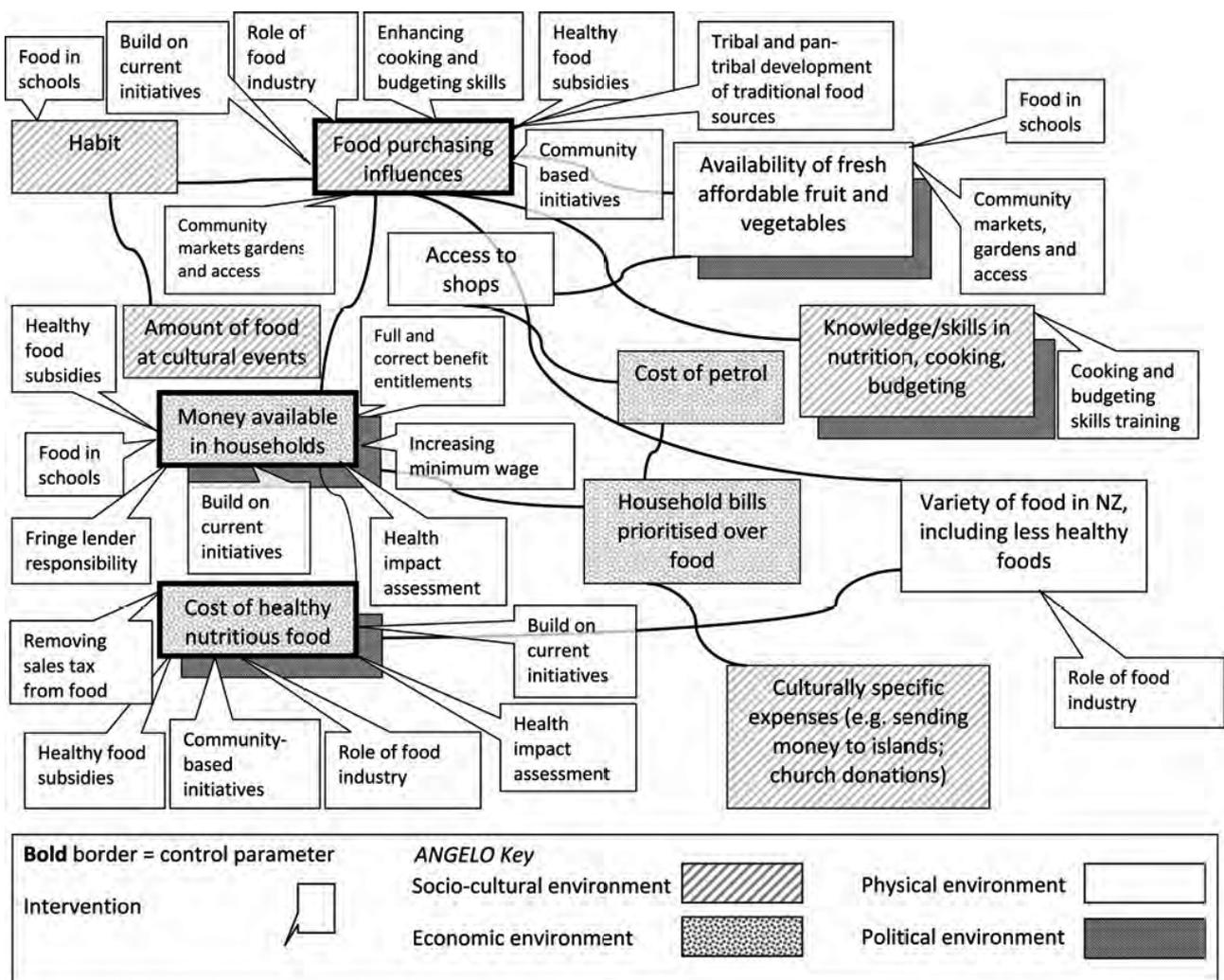


Figure 1: Food security system map with interventions
 Source: Tackling 'wicked' health promotion problems: a New Zealand case study L. Signal, M. Walton, Cliona Ni Mhurchu, et al. (2012) Health Promotion International. 28(1): 84-94.

We need a national food strategy to address food poverty.

In addition to ensuring adequate incomes, a national food strategy also needs to be developed.

Now, neither the Ministry of Health nor the Ministry of Primary Industries have an explicit role or responsibility to ensure New Zealanders have access to a food supply that meets the food-based dietary guidelines of the Ministry of Health.

This needs to change.

Although the reorientation of the budget process towards improving wellbeing opens opportunities for developing a national food strategy, a whole-of-government approach is required that puts people's wellbeing - especially that of children - first.

It is also important that this plan focuses on intergenerational outcomes. This can't just be a 3 year plan, it needs to be a plan that is future-proofed. A life course approach is needed⁸ because the consequences of malnutrition are intergenerational (the nourishment of the mother and father affect the nourishment of their offspring, and in turn their offspring).

As discussed above, malnourished children do not reach their potential as growth and development is not optimised and skills acquisition and employability are reduced.

Therefore, the child and youth well-being strategy needs a focus on food through policies and regulations that prioritise the importance of access to food through up-stream thinking, town planning, benefits and subsidies, and supporting the acquisition of food and budgeting skills early in life. It is the right of the child to be fed well.

The Government that we elect, and society overall, needs to do the right thing by our tamariki, to show kindness and caring for tamariki in all activities.

'It is the right of the child to be fed well. The government that we elect, and society overall, needs to do the right thing by our tamariki, to show kindness and caring for tamariki in all activities'

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References

1. Woo Baidal, J.A.; Locks, L.M.; Cheng, E.R.; Blake-Lamb, T.L.; Perkins, M.E.; Taveras, E.M. Risk Factors for Childhood Obesity in the First 1,000 Days: A Systematic Review. *Am J Prev Med* 2016, 50, 761-779, doi:10.1016/j.amepre.2015.11.012.1.
2. Blake-Lamb, T.L.; Locks, L.M.; Perkins, M.E.; Woo Baidal, J.A.; Cheng, E.R.; Taveras, E.M. Interventions for Childhood Obesity in the First 1,000 Days A Systematic Review. *Am J Prev Med* 2016, 50, 780-789, doi:10.1016/j.amepre.2015.11.010.
3. Signal, L.N.; Walton, M.D.; Ni Mhurchu, C.; Maddison, R.; Bowers, S.G.; Carter, K.N.; Gorton, D.; Heta, C.; Lanumata, T.S.; McKerchar, C.W., et al. Tackling 'wicked' health promotion problems: a New Zealand case study. *Health Promot Int* 2013, 28, 84-94, doi:10.1093/heapro/das006.
4. Kc, K.B.; Dias, G.M.; Veeramani, A.; Swanton, C.J.; Fraser, D.; Steinke, D.; Lee, E.; Wittman, H.; Farber, J.M.; Dunfield, K., et al. When too much isn't enough: Does current food production meet global nutritional needs? *PLoS One* 2018, 13, e0205683, doi:10.1371/journal.pone.0205683.
5. Statistics New Zealand. Consumers price index visualisation. Available online: <http://archive.stats.govt.nz/datavisualisation/cpi.html?> (accessed on 11 September 2018).
6. Willett, W.; Rockstrom, J.; Loken, B.; Springmann, M.; Lang, T.; Vermeulen, S.; Garnett, T.; Tilman, D.; DeClerck, F.; Wood, A., et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *Lancet* 2019, 393, 447-492, doi:10.1016/S0140-6736(18)31788-4.
7. Carr, S.C.; Parker, J.; Arrowsmith, J.; Watters, P.; Jones, H. Can a 'living wage' springboard human capability? An exploratory study from New Zealand. *Labour & Industry: a journal of the social and economic relations of work* 2016, 26, 24-39, doi:10.1080/10301763.2016.1152533.
8. Baird, J.; Jacob, C.; Barker, M.; Fall, C.H.; Hanson, M.; Harvey, N.C.; Inskip, H.M.; Kumaran, K.; Cooper, C. Developmental Origins of Health and Disease: A Lifecourse Approach to the Prevention of Non-Communicable Diseases. *Healthcare (Basel)* 2017, 5, doi:10.3390/healthcare5010014.

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