

Food and Nutritional Issues in Aotearoa



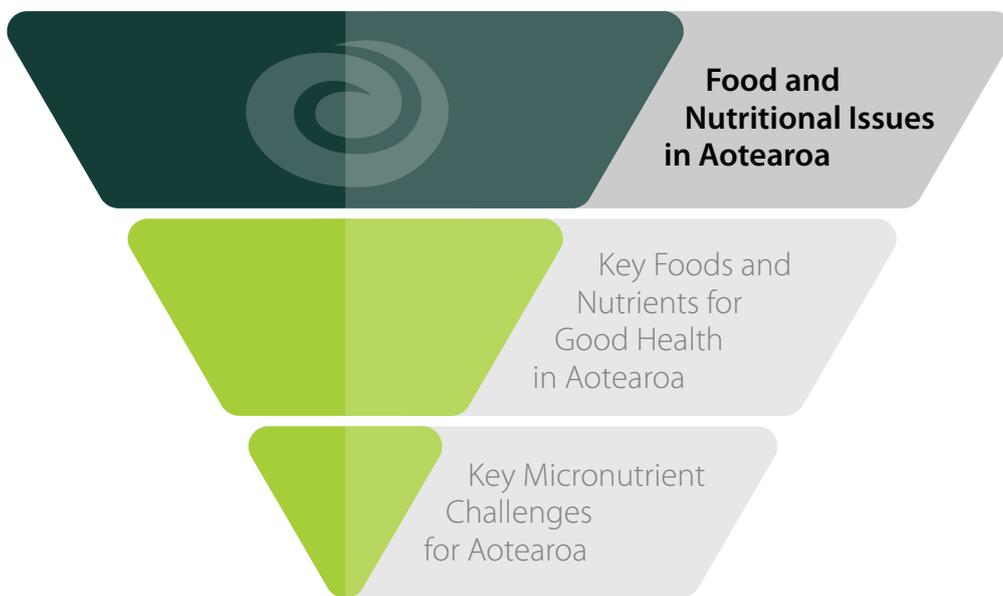
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Everyone in Aotearoa New Zealand has a right to live, grow, learn, and work in an environment that provides access to healthy, affordable, and safe food.

Activity and Nutrition Aotearoa (ANA) is a national organisation with a vision that everyone in Aotearoa can and does eat well and leads an active life.

ANA is often asked, what is the current nutritional status of people living in Aotearoa?

These issues papers, for the first time, collate the latest research in one place. Together they give an integrated picture covering selected nutritional issues in three papers. Food and Nutrition Issues in Aotearoa is the first of the three:



CALL TO ACTION

ANA urgently demands the regular, robust collection of data to monitor food and nutrition trends and identify emerging nutritional issues and ways to address them.

In addition, a national nutrition strategy is needed to underpin research, interventions, policies, evaluations and future strategies.

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1. Preamble

1.1 Why was this paper written?

Activity and Nutrition Aotearoa (ANA) is a national organisation with a vision that everyone in Aotearoa can and does eat well and leads an active life.

In 2014, ANA facilitated the development of the Healthy Communities, Healthy Lives: NZ Public Health Nutrition and Physical Activity Sector Vision 2024 ⁽¹⁾, which identified two priorities relating to food: 'Healthy, safe, affordable food' and 'Restrict marketing messages'. We found the priority areas from this vision are still relevant today, six years down the track.

ANA is often asked, what is the current nutritional status of people living in Aotearoa? The authors Dr Leanne Young (NZ Registered Dietitian) and Dr Sally Mackay (Registered Nutritionist) have worked with Alison Pask, (NZ Registered Dietitian and ANA Executive Director) and Dr Geoff Kira (Ngā Puhi) to attempt to answer this question.

1.2 What is this report about?

The information described in this report is drawn from research and key papers and guidelines, but it is not a literature review. Data from national surveys is used where possible. However, some smaller, regional studies have also been included.

In many of the areas identified, there is limited information to describe the current situation and for this reason this paper is not a full comprehensive report on all food and nutrition issues in Aotearoa however aims to document a selection of relevant research on key issues in one place. Its purpose is to generate discussion with the desire to find ways to improve food and nutrition issues for Aotearoa. We found a lack of data collected with much information out of date and in some cases 18 years out of date making it difficult to answer the question on the nutritional status of those living in Aotearoa.

1.3 Impact of COVID-19

During the writing of this report COVID-19 further highlighted food security issues in Aotearoa and impacted on the social economic determinants of health. The impacts of this are significant however have not been included in this report.

2. Introduction

Everyone in Aotearoa has a right to live, grow, learn, and work in an environment that provides access to healthy, affordable, and safe food. But there are many challenges in achieving healthy diets for all. A healthy diet relies on access to adequate safe, nutritious, affordable, accessible food that is both enjoyable and culturally appropriate.

Food security disproportionately affects Māori and Pacific populations and children living in socio-economically deprived neighbourhoods and the consequences are far-reaching.

A healthy diet not only addresses nutrient deficiencies, it reduces the risk of Long-Term Conditions such as such as diabetes, cancer, obesity and cardiovascular disease ⁽²⁾. Specific foods and eating patterns are also more likely to support emotional ⁽³⁾ and mental health ⁽⁴⁾. Productivity is improved in the workplace ⁽⁵⁾ and at school students who eat well do better in class ⁽⁶⁾.

In this paper, we outline some of the factors contributing to suboptimal population nutrition. These include: an unhealthy food environment with ultra-processed foods easily accessible and less availability of healthy foods such as fruit and vegetables; marketing and advertising of high energy food and drink; and lack of food security in households experiencing severe material hardship. These are all barriers to healthy eating patterns, body weight and the health of our most vulnerable populations.

Activity and Nutrition Aotearoa calls all stakeholders including government to come together to develop a comprehensive long-term plan to support the health, the environment and the economy of New Zealand.

3. The socio-economic determinants of nutrition

The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen throughout the world and within New Zealand.

The current approach to public health strategy in New Zealand recognises that broader factors, such as general socioeconomic, cultural and environmental conditions, gender and culture, living and working conditions, social and community influences, and individual lifestyle factors affect health.

This paper highlights two of these issues: Food security and culture.

3.1 Food Security

Food security means having access to sufficient affordable, safe, nutritious food.

However, research shows that many people experience food insecurity. In New Zealand, food insecurity is largely the result of a lack of enough money for food, although other socio-cultural factors play a role. In households, food insecurity occurs when adults or children do not have reliable access to adequate food, when caregivers feel stressed and anxious about providing food, or are forced to rely on charity or emergency assistance programmes.

Food security in New Zealand is regularly measured. The New Zealand Health Survey uses an eight-item questionnaire ⁽⁷⁾, which shows that children in food-insecure households have poorer parent-rated health status, less than optimal nutrition and are more likely to be overweight or obese. They also have a higher prevalence of developmental or behavioural difficulties ⁽⁷⁾. Parents of children in food-insecure households are more likely to report psychological and parenting stress, as well as having poorer self-rated health status. Furthermore, families with food insecurity are likely to struggle to meet competing demands (e.g., food, housing and health care) as a result of limited financial resources.

According to the New Zealand Health Survey ⁽⁷⁾:

- More than 30% of households with children spend more than 40% of income on housing ⁽⁸⁾.
- In 2018, 148,000 children (13%) lived in households experiencing material hardship, and 6% of children lived in households experiencing severe material hardship ⁽⁸⁾.
- Food remained the main reason for needing hardship assistance between 2014 and 2019, and the number of grants is increasing ⁽⁸⁾.
- In 2015/16, almost one in five children (19%) lived in severely to moderately food-insecure households ⁽⁷⁾.
- The most deprived neighbourhoods or households, whose primary caregiver received a benefit, were more likely to experience food insecurity. Of Pacific children, 37% lived in food-insecure households. Of Māori children, 29% lived in food-insecure households ⁽⁷⁾.

ANA calls for all stakeholders to collectively develop a national Nutrition Strategy that includes national food security actions and addresses the social determinants of health.

3.2 Culture

In New Zealand, ethnic identity is an important dimension of health inequalities. Many factors that impact on nutrition are influenced by culture. These include language, religion, social rituals, music, art and food.

Māori and Pacific populations' health status is demonstrably poorer than others living in Aotearoa. Below is a brief introduction that acknowledges the importance of culture for Māori and Pacific households.

Māori and food (kai)

A Māori worldview (te ao Māori) lies at the heart of Māori culture interacting with and strongly influencing every aspect of Māori culture. The Māori perspective of health and well-being is founded upon unique Māori principles, knowledge and skills.

This holistic concept of health includes spiritual, mental and physical wellbeing, not only of individuals but of communities and the environment and the relationships that link these.

The importance of Māori well-being and Te Whare Tapa Whā developed by Mason Durie is well known to those working in public health, with its strong foundations and four equal sides, the symbol of the whareni illustrates the four dimensions of Māori well-being. Programmes seeking positive outcomes for Māori need to be grounded in Māori realities, knowledge and aspirations.

Food is central to life for Māori, as it is for many cultures. Māori consider kai crucial for social gatherings, as a way of showing respect for others, and a sign of authority (they can provide for whānau). So essential was kai to early Māori society, deities were assigned to it. According to Māori, all things – and food is no exception – possess a mauri or life force. It follows that foods without life force are highly processed and of low nutrition.

Today, the diet of tangata whenua is very different from what it once was. Historically, kai could be harvested in amounts that provided a balanced nutritious diet, but now food sources are increasingly susceptible to human-generated contamination. Pollution and over-fishing have depleted seafood stocks ⁽¹⁾. Some Māori have been able to follow a more traditional food culture, but this is the exception rather than the rule.

ANA acknowledges that actions to improve Māori health recognise Te Tiriti o Waitangi obligations of the Crown. Addressing the root causes of health inequalities including the social, economic, cultural and historical factors that fundamentally determine health must be part of the solution.

Pacific and food

Food plays an important social and cultural role in all Pacific societies, over and above human biological needs for nourishment and survival. In traditional settings, food is used as a means of maintaining societal norms and practices and affirming one's identity and place.

The Fonofale Model developed in the 1980s is a dynamic model where all aspects have an interactive relationship with each other. This model incorporates values and beliefs of Samoans, Cook Islanders, Tongans, Niueans, Tokelauns and Fijians whereas a similar but unique model called the Fonua model is a Tongan framework of health which comprises of five dimensions of life which are inter-dependent and complementary to each other. To maintain harmony in life, health issues must be addressed at all dimensions including physical, spiritual, mental, community and environmental.

**ANA recognises the importance of cultural factors being valued, valid and legitimate.
A multisectoral approach to address the socio-economic determinants of nutrition must prioritise cultural values.**

4. What do we know about food consumption and diet-related risk factors?

The regular monitoring of food consumption provides quantitative information about the amount and types of foods consumed, and when and where these foods are consumed. This information is essential when it comes to developing, monitoring and informing health and nutrition policies, guidelines and services and designing appropriate interventions.

The data is used for dietary modelling to enable risk assessment and the development of regulations relating to food composition such as mandatory fortification. Survey data enables the identification of opportunities to reduce or increase nutrients of concern in the food supply. It also allows us to model changes required to set realistic targets (e.g. sodium intake) and identify the dietary patterns of sub-groups to enable appropriate interventions and determine areas for future research.

The most recent New Zealand food consumption surveys were conducted 18 years ago in children aged 5 to 14 years (2002)⁽⁹⁾ and 11 years ago in adults aged 15 years + (2008/09)⁽¹⁰⁾ leaving policy makers and researchers having to make decisions on data that is out of date. Considerable food choice changes have occurred over the past decade and the food supply is now being fortified with iodine and folic acid.

The New Zealand Health Survey collects data related to nutrition, obesity and non-communicable disease (NCD) risk. Data are reported for gender, age groups, ethnic group and neighbourhood deprivation. There are a few questions on dietary habits in the core survey. The 2018/19 included a module on dietary habits for adults and children to be published in 2021. The 2014/15 survey included a biomedical module⁽¹¹⁾ which included biomarkers of cardiovascular disease, diabetes, kidney and liver function; and nutrition intake or status (blood folate, urinary iodine, sodium and potassium).

Currently, there are no regular, government-funded surveys of the greater New Zealand food environment and the physical, economic, policy and socio-cultural surroundings that influence people's food choices.

The Ministry for Primary Industries has done some monitoring of the food supply through food composition. The most recent Total Diet Survey (2016)⁽¹²⁾, monitored concentration levels in foods and dietary intake of contaminants and some key elements (including sodium) from a simulated New Zealand diet for key population groups.

The data available on food and nutrition in Aotearoa is out of date and there is an urgent need for the regular robust collection of data to monitor food and nutrition trends.

ANA recommends investing in national surveys of food consumption, nutrient status and food security. Data relating to priority population groups (Māori and Pacific) is essential to determine interventions that could improve health outcomes.

5. Life-course nutrition

A life course approach looks at life experiences across generations for clues to current patterns of health and disease, while recognising that both past and present experiences are shaped by the wider social, economic and cultural context.

A life course approach to nutrition in New Zealand prioritises maternal and childhood health for the first 1,000 days as this is known to affect chronic disease risk and health outcomes in later life.

5.1 Maternal nutrition, pregnancy and breastfeeding

Healthy eating patterns are particularly important before conception, during pregnancy and whilst breastfeeding.

Healthy eating patterns and maintaining a healthy weight can lower the risk of hypertensive disorders and gestational diabetes during pregnancy, and improve birth outcomes and the long-term health of the child ⁽¹³⁾.

Maternal obesity is associated with lower initiation of breastfeeding and shortened duration, and less adequate milk supply ⁽¹⁴⁾. The risk of developing type 2 diabetes for women who have had gestational diabetes during pregnancy can be reduced by diet ⁽¹⁵⁾.

The Ministry of Health reviewed the New Zealand Eating and Activity Guidelines for pregnant and breastfeeding women in 2019, and the updated guidelines are still to be released. The Ministry of Health offers guidelines on weight gain during pregnancy ⁽¹³⁾ and a Quick Reference Guide for health professionals on the screening, diagnosis, and treatment of gestational diabetes ⁽¹⁵⁾.

The nutrients folate, iron, calcium, vitamin B12, vitamin D and iodine are particularly important for pregnant and breastfeeding women ⁽¹⁶⁾. The Ministry of Health states that folic acid supplements are required from four weeks before conception to 12 weeks after ⁽¹⁷⁾, and iodine supplements are required during pregnancy and breastfeeding ⁽¹⁸⁾.

The Ministry for Primary Industries is currently considering mandatory folic acid fortification of bread or flour ⁽¹⁹⁾.

The link between alcohol and Foetal Alcohol Spectrum Disorder (FASD) is also recognised ⁽²⁰⁾, with the Ministry of Health recommending that the safest option during pregnancy is to avoid alcohol altogether.

The areas of concern needing more up-to-date investigation are:

- **Folic acid and iodine supplementation:** A study in 2010 showed that only one-third of mothers take folic acid supplements for the recommended period, and about half of pregnancies are unplanned ⁽²¹⁾.
- **Unhealthy dietary patterns:** The same study showed one-quarter of pregnant women do not meet any of the Eating and Activity Guidelines recommendations for daily servings from each food group ⁽²¹⁾.
- **FASD:** A 2015 discussion paper estimated that 3% to 5% of children may have FASD ⁽²⁰⁾ and that 10% of pregnancies are exposed to excessive amounts of alcohol ⁽²⁰⁾.
- **Diabetes:** A 2014 study showed 6.6% of women who are pregnant have diabetes, and the prevalence is increasing, particularly among women of Māori, Pacific and South Asian ethnicity ⁽¹⁵⁾.
- **Duration of exclusive breastfeeding:** Breastfeeding is initiated for almost all infants, but only 16% were exclusively breastfed at age six months, and 37% were partially breastfed for ≥12 months ⁽²²⁾. Plunket data ⁽²³⁾ indicates that 'European' and 'Other' mothers had higher rates of breastfeeding than other ethnic groups, with rates for Pacific the lowest. Women living in areas of higher deprivation are also less likely to exclusively breastfeed.

5.2 Infants, children and young people

Childhood is a time of growth, particularly during infancy and adolescence. Many adult eating behaviours, food preferences, and attitudes toward food have their roots in childhood ⁽²⁴⁾. Appropriate feeding of infants and young children is central to early health, well-being, growth, and development ⁽²⁴⁾. Inequities in childhood feeding practices contribute to lifelong health inequities ⁽²⁴⁾.

The New Zealand Food and Nutrition Guidelines for Healthy Children ⁽²⁵⁾ recommend introducing complementary foods at about six months. They also suggest offering iron-rich foods, providing a range of types and textures of complementary foods that match development needs. A delay in introducing foods that may result in a food allergy can increase the likelihood of an allergy when introduced ⁽²⁶⁾.

But, overall, there is limited information about children's nutrition issues, food consumption and behaviours in New Zealand. The only comprehensive Children's Nutrition Survey was conducted in 2002 ⁽⁹⁾. However some more recent surveys, such as the New Zealand Children's Food and Drinks Survey 2007 ⁽²⁷⁾, the Youth Health Survey 2012 (adolescents) ⁽²⁸⁾, the New Zealand Health Survey (2+ years) ⁽²⁹⁾ and Growing Up in New Zealand ⁽³⁰⁾ include questions on dietary habits. Still, much of the current information regarding the nutritional habits of infants, children and young people is from data more than a decade old.

The areas of concern needing more up-to-date research and action include:

- **Early introduction to solid foods:** 34% before five months (early), 57% of infants are introduced to solid foods at five or six months, and 4% from seven months (late) ⁽³⁰⁾.
- **Lack of variety in infant diets:** Half (53%) of infants at nine months of age are eating food from each of the four food groups at least once a day ⁽³⁰⁾.
- **Need for iron-rich foods:** Four-fifths of infants at nine months eat iron-rich foods daily (meat, fish, shellfish, fortified infant rice or cereal) ⁽³⁰⁾. However, there is no national data on the iron status of 2- to 4-year-old children.
- **Lack of vegetable intake for all ages:** One-third of infants ⁽³⁰⁾ and 46% of children aged two to 14 years ⁽²⁹⁾ meet recommendations of vegetable intake for their age.
- **Overweight and obesity:** 31% of children aged two to 14 years were overweight or obese in 2018/19 ⁽²⁹⁾, with ethnicity and neighbourhood deprivation influencing rates.
- **High fizzy-drink consumption:** 10% of children aged two to 14 years have fizzy drinks three or more times a week ⁽²⁹⁾. Fizzy drinks were consumed four or more times a week by 23% of adolescents, especially males and those living in areas of higher deprivation ⁽²⁸⁾.
- **Irregular breakfast frequency (adolescents):** 16.7% of adolescents hardly ever eat breakfast ⁽²⁸⁾, with older adolescents, females and those living in areas of higher deprivation less likely to eat breakfast.
- **Iron deficiency:** The Children's Nutrition Survey conducted in 2002 found 5.5% of girls aged 11 to 14 years had iron deficiency (1.2% with anaemia) ⁽⁹⁾.
- **Increasing incidence of type 2 diabetes:** This is a significant issue for New Zealand's future health status. Type 2 diabetes has traditionally been diagnosed in adults with the overall incidence of children under 15 years of age now recorded at 1.5/100,000. Research shows the risk disproportionately associated with girls and children from high-risk ethnic groups ⁽³¹⁾.
- **Food allergies:** Anecdotally, food allergies in children have increased, but Allergy New Zealand states the prevalence is difficult to identify as there are limited studies in New Zealand.
- **Eating disorders:** Ministry of Health data shows the number of people using eating disorder services in 2015 was 1,354 compared with 897 in 2011 ⁽³²⁾. The increase in numbers partly reflects an increase in access.
- **Cooking skills:** In 2016, 80% of secondary school students reported that they could cook a meal from basic ingredients ⁽³³⁾. However, those who lived in homes experiencing poverty were more likely to report not having any cooking ability.

5.3 Older adults

The number of people aged 65+ years is projected to grow to just over one-quarter (26.7%) of the population by 2063, particularly people aged 85 years and older⁽³⁴⁾. Life expectancy has also increased to 79.5 years in men and 83.2 years in women. Māori, Pacific and Asian populations are younger than the total population⁽³⁴⁾.

A person's nutrition risk increases as they get older. About one-half of older adults living in the community are at risk of poor nutrition^(35,36). The most common risk factors include unintentional weight change, eating alone, weight dissatisfaction and low milk-product intake⁽³⁵⁾.

As a person ages, their energy needs decrease, but their nutrient needs remain similar. Reduced muscle and bone mass have been associated with increased frailty, reduced cognitive function and older people are more likely to become care dependent. Those identified at higher nutrition risk are also more likely to be hospitalised⁽³⁷⁾.

The key behaviours influencing healthy ageing include nutrition and physical activity⁽³⁸⁾. Physiological changes may result in reduced appetite and/or the ability to chew, a reduction in nutrient absorption (including iron and Vitamin B12), and the loss of vision and/or mobility, both of which may affect a person's ability to shop and cook adequately. In addition, psychosocial and environmental changes, including isolation, loneliness, depression and reduced income, can all impact significantly on food intake, potentially increasing the risk of malnutrition. The effects may be worse for disadvantaged older people. Older Māori also have a higher nutritional risk compared with non-Māori⁽³⁶⁾.

ANA calls for regular food and nutrition monitoring. This must identify key nutrition issues for pregnant and breastfeeding women, children and older adults with priority for Māori and Pacific.

6. Food environments

Food environments are best described as the collective physical, economic, policy and socio-cultural surroundings, opportunities and conditions that influence people's food and drink choices and nutritional status ⁽³⁹⁾.

One of the main factors contributing to food choices is unhealthy food environments. Ultra-processed foods are easily accessible and there are substantial inequalities in access to healthy food.

Currently there are limited regulations, policies and incentives to encourage change towards creating healthier food environments.

The local environment influences the ability to grow and harvest food, the availability and accessibility to healthy food at a retail level and in places where people work, learn, gather (e.g. events, recreation centres) and live.

New Zealand studies have found there are more fast food and convenience stores within easy travelling distance for people living in deprived areas ⁽⁴⁰⁾. Recent research found that the density of unhealthy food outlets and location of these near home or school was not associated with obesity in children. However, area deprivation and unhealthy dietary behaviour were ⁽⁴¹⁾.

Barriers to children's fruit and vegetable intakes identified by a West Auckland community were the saturation of fast-food outlets, the marketing of unhealthy foods, the high cost of fresh produce compared with fast food, parents having little time for food preparation, and declining cooking skills and knowledge. The community's recommendations to improve fruit and vegetable intake (not already identified in other topic areas) were better access to affordable fruit and vegetables (e.g. vegetable delivery truck), identifying retailers selling healthy food and opportunities to improve cooking and gardening skills ⁽⁴²⁾.

ANA calls for more robust regulations, policies, interventions and incentives to encourage change towards creating healthier food environments in Aotearoa.

6.1 Sustainable diets

In addition to healthy diets there has been a significant interest in sustainable food systems and diets as part of a solution to the global environmental crisis facing all countries of the globe.

The global food system is driving a mega-problem of malnutrition and climate change ⁽⁴³⁾, responsible for up to 29% of all anthropogenic greenhouse gas emissions ⁽⁴⁴⁾ as well as significant soil degradation, biodiversity loss, and nitrogen and phosphorus cycle disruption. International research has highlighted the benefits to the health of the planet and humans of widespread uptake of plant-based diets. The EAT Lancet Report ⁽⁴⁵⁾ outlines a planet-friendly diet. Compared with the traditional Western diet, this would require eating less dairy, red meat and poultry and eating more fruit, vegetables, whole-grains, legumes and nuts. Foods that are health-promoting tend to be more climate-friendly, such as vegetables, fruits, legumes, and whole-grains ⁽⁴⁶⁾.

Shifting the population to healthier, sustainable diets requires international and national commitments. A strong and coordinated governance of land and oceans is required with long term, multisectoral commitment and investment.

A recent New Zealand study ⁽⁴⁷⁾ developed a food emissions database to estimate climate, health and health system cost impacts associated with shifting current consumption (based on the 2008/09 Adult Nutrition Survey) ⁽¹⁰⁾ to a range of dietary scenarios that conform to the New Zealand Eating and Activity Guidelines, with differing ratios of foods from plant and animal sources. At a population level, this would result in diet-related emissions savings of 4% to 42% depending on the degree of dietary change and food waste minimisation. As the modelled scenarios became increasingly climate-friendly, the population-level health gains and health system cost savings also tended

to increase. The lacto-vegetarian and vegan scenarios had the lowest emissions and highest health gains.

Food waste is a massive issue that not only comes with a large price-tag but also puts an unnecessary strain on the environment by wasting natural resources. New Zealand lacks data on food waste. However, based on UK data, it is estimated that avoidable food waste contributes 12% of daily diet-related emissions, particularly from wasted vegetables, meat, seafood and eggs⁽⁴⁷⁾.

The evidence for the introduction of more sustainable diets is compelling. However, if a person adopts a dietary pattern with no or little animal products, there is a risk the diet may be low in iron and zinc and will be low in Vitamin B12. Currently, there is no data collection in New Zealand to monitor this. Guidelines on following a vegan eating pattern are absent from the suite of resources provided by the Ministry of Health.

ANA calls for further research on the issues and implications of more sustainable diets. As an immediate starting point ANA would like to see the Ministry of Health adding plant-based vegan eating guidelines to the suite of resources currently available.

6.2 Food systems

The Food and Agriculture Organization⁽⁴⁸⁾ describes a food system as encompassing all the stages of keeping a population fed: growing, harvesting, packing, processing, transforming, marketing, consuming, and disposing of food. The current global agro-industrial food system is controlled by a few multinational corporations, has a long supply chain, and is dominated by ultra-processed foods. Local food systems contain a shorter supply chain, with minimally processed food supplied by local farmers and domestic consumption. Food policy councils in some areas of New Zealand work across sectors to engage with governments, communities, local businesses, and individuals to support the shift to sustainable local food systems enabling equitable access to nutritious food and growing healthy, connected, thriving communities.

In 2015, a Master's of Dietetics thesis⁽⁴⁹⁾ explored the barriers and enablers to New Zealand city councils in developing and implementing food and nutrition policy. Research shows councils have limited resources to prevent unhealthy food outlets opening, and not many have initiatives that support retailers to promote healthy food choices, although weekend markets and farmers markets are common⁽⁵⁰⁾.

Local initiatives include community gardens, vegetable boxes, maps of fruit trees and harvesting guides and social enterprises that enable sustainable food provision. However, there is no formal structure for the people behind these initiatives to communicate with government.

Several studies describe aspects of the food system and initiatives, such as food policy councils, that work to improve the situation. For example, the Aotearoa Food Policy Network⁽⁵¹⁾ is an inclusive national voice for the diverse participants in food systems.

ANA recommends further exploration of local food systems, such as council food policies and social enterprises that enable sustainable food provision.

6.3 Food labelling

The 2019 New Zealand State of the Food Supply report ⁽⁵²⁾ described the packaged food supply in supermarkets as generally unhealthy, with 60% of products having a low Health Star Rating (HSR) (<3.5), more than 50% of foods were discretionary, and 69% of products were ultra-processed.

The Health Star Rating (HSR) is a voluntary front-of-pack labelling system. The nutrient profiling system allocates stars to foods based on their nutrition content (energy, risk nutrients: saturated fat, sodium, total sugars, and beneficial components: dietary fibre, protein, fruits, vegetables, nuts, legumes). By 2018, only 21% of products in the Nutritrack packaged food database carried an HSR ⁽⁵³⁾.

A 2018 survey found 28% of shoppers used the HSR to help choose a product ⁽⁵⁴⁾. A five-year review, undertaken in 2019, suggested changes, including to the algorithm concerning sugar and sodium, and recommended its continuation as a voluntary system, advocating that mandatory compliance should be considered if the HSR is not displayed on 70% of target products within five years ⁽⁵⁵⁾. But many public health experts believe that the HSR system should be mandated now, due to the low number of foods with an HSR on the label ⁽⁵⁰⁾.

New Zealand has a robust system of regulating the use of nutrition content and health claims on food labels ⁽⁵⁶⁾. Health claims must be based on pre-approved food/health relationships or self-substantiated according to government requirements, and they are only permitted on foods that meet nutritional criteria, as defined by a nutrient profiling model (Nutrient Profiling Scoring Criterion). But although nutrition content claims also need to meet certain criteria, there are no generalised nutritional criteria that restrict their use on 'unhealthy' foods per se ⁽⁵⁰⁾.

Food Standards Australia New Zealand is considering a range of policy options concerning the labelling of sugars on foods and drinks after public consultation in 2018 ⁽⁵⁷⁾. It was considered that quantifying added sugars in the nutrient information panel (NIP) best met the desired outcome and that a pictorial approach applied to sugary beverages warrants further consideration.

ANA believes everyone in Aotearoa would benefit from eating food as close to its natural state, for example vegetables, fruits, and whole grains and eat less ultra-processed foods. Advice should focus on a whole-of-diet approach, encouraging variety and balance of foods and using consistent messages ⁽⁵⁸⁾.

6.4 Food and beverage marketing

The marketing and advertising of high energy food and drink influences children's food choices and consumption ⁽⁵⁹⁾. A Lancet Commission WHO UNICEF report ⁽⁶⁰⁾ on the future of children led by the Rt Hon Helen Clark found ample evidence that voluntary self-regulation by industry does not work. It recommended a legally binding instrument to effectively regulate commercial appeals to children as a crucial step in stopping the rise of childhood obesity.

In 2017, the New Zealand Advertising Standards Authority (ASA) published a new code – the 'Children and Young Peoples Advertising Code' – which includes specific food and beverage advertisements rules for children (up to 14 years) and young people (up to 18 years) ⁽⁶¹⁾. The advertising of occasional food, as defined by the Ministry of Health Food and Beverage Classification system (now retired), is unable to be 'targeted at children'.

Public health academics have criticised the definition used by the ASA as too narrow in scope and not accurately capturing the advertising to which children are actually exposed ⁽⁶²⁾. Given the disparities in obesity for Māori, Pacific and children from low-income families ⁽²⁹⁾, it is these children who stand to benefit most from effective action. The experience of Healthy Auckland Together when making complaints on inappropriate, unhealthy food and beverage advertisements under the ASA code highlighted flaws in the self-regulatory system ⁽⁶³⁾. These included the way the audience is currently defined, lack of coverage of social media, sponsorship arrangements of companies and brands, and lack of enforcement of the code.

The monitoring of different settings in New Zealand found extensive exposure to unhealthy food, including on television during child peak-viewing times, on food company websites, outdoor advertising around schools, and food packaging ⁽⁴⁰⁾. Promotional strategies and premium offers are common marketing techniques to children. Most exposure occurs at home, in public spaces and at school ⁽⁶⁴⁾.

ANA supports introducing government-led regulation about marketing unhealthy food to under 18s. This must go beyond traditional sources of advertising to be future proofed to include of social media, sponsorship, influencers and role models and other forms of marketing.

7. The nutrition workforce

The public health nutrition workforce is important for the improvement of the diet-related health of a population ⁽⁶⁵⁾. Core functions for public health nutrition practice have been identified under three main categories: research and analysis, building capacity and intervention management ⁽⁶⁶⁾.

Public health nutrition workforce is made up of a variety of skillsets ranging from academics, registered dietitians, registered nutritionists, nurses, communicators and community health workers. Services are provided by a wide range of agencies including government, non-government, community agencies, universities, and the private sector ⁽⁶⁵⁾. New Zealand lacks research on nutrition workforce development, especially for priority Māori and Pacific populations.

Qualified dietitians and nutritionists play an important role in advancing a healthy lifestyle, promoting evidence-based, practical nutrition information that is culturally appropriate, and responding to and correcting misinformation ⁽⁶⁷⁾.

ANA has a strong reputation for delivering evidence-based nutrition professional development to those working in the public health workforce.

ANA says a stocktake of training needs of the public health workforce is needed to identify gaps for future public health nutrition workforce development in Aotearoa. This should be an important part of the proposed National Nutrition Strategy.

8. Recommendations

ANA calls all stakeholders, including government, to come together to improve access to healthy food for everyone living in Aotearoa.

Together we must:

1. Strengthen food and nutrition monitoring including:

- food security, food consumption and nutrient status
- priority for Māori and Pacific populations
- key nutrition issues, particularly for pregnant and breastfeeding women, children and older adults
- enabling appropriate policies and interventions.

2. Develop a National Nutrition Strategy to include:

- food security and the social determinants of health, prioritising cultural values
- regulations, policies and incentives to create healthier food environments, including government-led regulation about marketing unhealthy food to under 18s
- research about sustainable diets and inclusion of plant-based diets in the Healthy Eating Guidelines
- an analysis of local food systems
- a workforce development strategy for public health nutrition.

CALL TO ACTION

ANA urgently demands the regular, robust collection of data to monitor food and nutrition trends and identify emerging nutritional issues and ways to address them.

In addition, a national nutrition strategy is needed to underpin research, interventions, policies, evaluations and future strategies.

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