Sustainable, Healthy Food Systems

New Zealand College of Public Health Medicine Policy Statement

Position statement

The New Zealand College of Public Health Medicine (NZCPHM) recognises malnutrition, obesity and diet-related non-communicable diseases (coronary heart disease, stroke and diabetes) and their confluence with sustainability/climate change, as significant public health challenges to urgently address. The NZCPHM calls for a long term, government-led national food strategy that delivers nutritional health, food equity, environmental restoration, reduced GHG emissions, and growing prosperity.[1]

The NZCPHM broadly supports the content and recommendations of two 2019 reports published by *The Lancet*: The Lancet Obesity Commission's '*The Global Syndemic of Obesity, Undernutrition and Climate Change*';[2] and The EAT-Lancet Commission's '*Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems'*.[3] These reports recommended strategic objectives must be adopted to substantially reduce malnutrition, obesity and the impact of nutrition-related climate damage.

Key messages

Globally and in New Zealand, the confluence of malnutrition and obesity with sustainability and climate change is a significant public health issue. Current diets and food production systems are unsustainable.

In New Zealand, burdens of disease and inequity in health outcomes from food insecurity are significant. The COVID-19 pandemic is increasing food insecurity in New Zealand too.

Policy responses to malnutrition, obesity and climate change have been slow and inadequate.

New Zealand needs:

- a broad, ecological policy approach that addresses the underlying drivers of poor diet and unsustainable food production and uses multiple levels of influence and policy tools synergistically.

- population-level shifts towards plant-based diets, sustainable food production systems and minimisation of food waste.

The NZCPHM calls for a long term, government-led national food strategy that delivers nutritional health, food equity, environmental restoration, reduced greenhouse gas (GHG) pollution, and growing prosperity.

Background

The context of public health and NZCPHM policy statements

Public health is the art and science of preventing disease, prolonging life, and promoting health through the organised efforts of society.[4] Public health has historically been the biggest driver of better health for people.[5] Advancements in public health in the last 100 years, such as vaccination, control of infectious diseases through clean water and improved sanitation, and the recognition of tobacco use as a health hazard, have led to much better health and wellbeing and substantially longer life expectancy.[6]

The NZCPHM represents the medical speciality of public health medicine in New Zealand. Public health medicine is defined as the branch of medicine concerned with the epidemiological analysis of the health and health care of populations and population groups. It involves the assessment of population health and health care needs, the development of policy and strategy, health promotion, the control and prevention of disease, and the organisation of services. Public health is focussed on achieving health equity across ethnic, socioeconomic, age, ability, gender, sexual identity, and cultural groups, and promoting environments in which everyone can be healthy.[7]

Public health medicine specialists have a professional responsibility to act as advocates for health for everyone in society.[7, 8, 9]This means the NZCPHM advocates for and supports evidence-informed[10] equity-enhancing[11] policy on food and nutrition that accords with te Tiriti o Waitangi, the United Nations' Sustainable Development Goals, and health promotion and Health in All Policies approaches, each grounded in the societal[i], economic and environmental determinants of health.[18] For sustainable food and nutrition, the NZCPHM calls for urgent action to address the obesogenic environment, unsustainable food productions systems and malnutrition and food insecurity in New Zealand.

Further information on the context of public health and NZCPHM policy statements is available on the [NZCPHM website](#).

Nutrition, Food Production and Climate Change

Overall, current diets are detrimental not only to human health but also planetary health, as the global food system drives both our climate change crisis and the growing burden of disease.[19, 20] **A wide-spread shift towards plant-based diets, comprising mostly of vegetables, fruits, legumes and whole grains is needed urgently.**

Not only are plant-based diets significantly less climate-polluting than animal-based foods (especially red and processed meats), but they have significant co-benefits for health.[19] Recent detailed modelling estimates that in New Zealand **a population-level shift in consumption to align with the NZ Dietary Guidelines would confer diet-related emissions savings of 4-42%,** depending on the degree of dietary change and food waste minimised.[19] This shift could also result in discounted population lifetime health gains of 1.02 to 1.46 million quality-adjusted life years (QALYs) and health system cost offsets of NZ$13.9-20.2 billion, costed over the lifetime of the current New Zealand population.[19]

Earlier modelling indicates that **optimised diets that are both healthy and environmentally sustainable can also be inexpensive – a win-win on all three fronts**.[21] Increasing fruit and vegetable

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[i] Societal determinants of health include commercial, political, governance, economic, cultural, even religious determinants — being the societal structures that are the conditions for health and disease. Each of the structural determinants eventually impact on health in a positive or negative way.

consumption is an important component of a widespread shift towards plant-based diets; however a range of interventions and investments will be required to increase fruit and vegetable production to adequate levels, both internationally and in New Zealand, including developing technologies, reducing food waste; and to increase consumer awareness.[20]

The reports of the Lancet Obesity Commission[2] and the EAT-Lancet Commission[3] have highlighted the inextricable links between malnutrition, food production and sustainability/climate change. The reports present a reanalysis of malnutrition in all its forms (child and maternal undernutrition, overweight and obesity, other dietary risks e.g. non-communicable diseases such as coronary heart disease, stroke and diabetes).

The Lancet Obesity Commission report (2019) describes how malnutrition in all its forms, including obesity, undernutrition and other dietary risks for non-communicable diseases (NCDs), has become the greatest contributor to ill-health and premature death globally.[2] The report identifies a **'Global Syndemic', comprising a synergy of pandemics (obesity, undernutrition and climate change) which co-occur, interact with each other, share common underlying drivers, and affect people in every country**.

The EAT-Lancet Commission report (2019) states **the need for a 'Great Food Transformation' – a transition from current unhealthy and unsustainable diets, to healthy diets from sustainable food production systems and large reductions in food losses and waste**.[3] The Commission's guide to a 'Great Food Transformation' is based on global scientific targets established from best evidence for healthy diets and sustainable food production.[3]

Healthy diets have an appropriate caloric intake, are predominantly plant-based, and minimise intake of animal source foods, saturated fats, refined grains and highly processed foods.[3] The guide describes a healthy reference diet consisting specifically of vegetables; fruits; whole grains; legumes; nuts and unsaturated oils; low to moderate amount of seafood and poultry; and no or low quantity of red meat, processed meat, added sugar, refined grains and starchy vegetables.

The EAT-Lancet Commission notes that food production is one of the largest drivers of global environmental change, acting through greenhouse gas emissions, biodiversity loss, freshwater use, interference with global nitrogen and phosphorous cycles and land-system change.

A shift towards sustainable agriculture will mean food production for the world's population should use no extra land, safeguard existing biodiversity, reduce consumptive water use, reduce nitrogen and phosphorous pollution, produce zero carbon dioxide emissions, and no further increase in methane and nitrous oxide emissions.[3] On a smaller scale, food production practices which promote productivity and resilience and reduce harmful environmental effects are already being developed, such as pest control, pollination, water regulation, and nutrient cycling. These approaches may have potential to transform global food production systems.

The two Lancet reports press for a broad, ecological approach to address the underlying societal, political, socio-economic and commercial drivers of poor diets and food production – using multiple levels of influence and a range of policy tools, synergistically.

In particular, the NZCPHM supports the Lancet Obesity Commission's call for the creation of "**collaborative platforms to join up the current silos of effort into local, national and global networks working on double-duty and triple-duty actions**. (This includes) linking initiatives to connect the silos at local (eg. health and non-health organisations), national (across health, education, social affairs, agriculture, and climate change ministries), and global levels (eg. United

Nations Framework Convention on Climate Change and Decade of Action on Nutrition) to foster systemic thinking, share innovative solutions, and synergise efforts."[22(p.4)]

This joined-up action could be achieved with a Health in all Policies approach.[23] This is a structured approach to working across sectors, with a focus on ensuring that factors affecting health and wellbeing are explicitly considered and addressed in planning and policy development.[24] Tools can include health impact assessments, environmental design for health promotion and sustainability, integrated planning, and health equity assessments.

Food Production Systems and Climate Change

Current food production systems are unsustainable and are a major driver of climate change. They lead to changes in land use, depletion of freshwater resources, and pollution of aquatic and terrestrial ecosystems through nitrogen and phosphorous inputs.[25] **Global food production has contributed to the crossing of a number of planetary boundaries that define a stable Earth system and a safe operating space for humanity**.[3, 25] With the world's projected population growth estimated to reach 10 billion by 2050, current dietary trends and food production systems will compound the threat to humans and the planet.[3] The global burden of NCD's is predicted to worsen, and the effects of food production on greenhouse gas emissions are predicted to further destabilise the Earth system.[3]

The EAT-Lancet Commission's report[3] combines detailed environmental accounts with a model of the global food system that tracks production and consumption worldwide.[3] The findings suggest that dietary changes towards plant-based diets (and a major reduction in meat consumption) are required to mitigate climate change. **'Flexitarian' diets could more than halve greenhouse gas emissions** while also reducing other environmental impacts like fertiliser application. Improving management practices and technologies in agriculture are also necessary to limit pressures on agricultural land, freshwater extraction and fertiliser use. Increasing yields from existing croplands, balancing application and recycling of fertilisers and improving water management could, along with other measures, halve the impacts.[3]

The Intergovernmental Panel on Climate Change's report '*Climate Change and Land*' (2019) assesses the implications of climate change for land management and food production.[26] It encompasses climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems; and assesses how land use contributes to climate change and how climate change affects land management, food production and security, and nutrition.[26] The report highlights the more than half a billion square kilometres of land on Earth; and how **destructive land use patterns (ie. agriculture, deforestation, and development of wetlands) now contribute 23% of all human-caused greenhouse gas emissions**. It calls for coordinated action, and identifies balanced diets featuring plant-based foods like coarse grains, legumes, fruits and vegetables and sustainably-sourced animal products as presenting major opportunities to adapt to and limit climate change.[26]

Food loss/waste

The current food system is extremely wasteful and inefficient. Food waste is caused by excessive grading and sorting of produce, spoilage (actual or perceived), over-buying of perishables and consumer habits, as well as transportation, storage, refrigeration and packaging inefficiencies.[27] Food loss (a decrease in quantity or quality of food intended for human consumption) results from inefficiencies in agricultural production, harvesting, handling, transportation and storage of crops.[27] The Food and Agriculture Organization of the United Nations estimates that **each year, around one third of the food produced globally, that is 1.3 billion tonnes, is lost or wasted**.[28]

The EAT-Lancet Commission's report suggests that, in order **to maintain the food system within environmental limits, food loss and waste needs to be halved**; at a global scale, this could reduce environmental impacts by up to a sixth (16%).[3] Reducing food loss and waste would help mitigate the impacts of climate change by eliminating unnecessary CO_2 emissions and reducing land, water and energy resource use.[27, 28]

Moreover, reducing food loss and waste will aid in meeting the rising demand of healthy diets for all.[27] This is because nutrient-rich foods, which comprise the core parts of healthy-diets (like fruits, vegetables, nuts and dairy products) tend to be costlier to produce, highly perishable and prone to pests and diseases, making them more prone to waste and loss. Less food waste would therefore help meet the needs of the world's growing population and aid in the achievement of the United Nations Sustainable Development Goal (SDG) 2, which focuses on resolving hunger and malnutrition, and SDG 12, which calls for a halving of food waste across the globe.[3, 27]

Malnutrition, the Burden of Disease and Inequity in New Zealand

In recent times, **malnutrition in all its forms**, including obesity, undernutrition and other dietary risks for non-communicable diseases (NCDs), **has become the greatest contributor to ill-health and premature death**.[2] Globally more than 820 million people have insufficient food, and many more consume an unhealthy diet.[3] Poor quality diets give rise to overweight, obesity and NCDs like cardiovascular disease, type II diabetes, high blood pressure and cancer.

Poor diets associated with micronutrient deficiencies such as a lack of vitamins and minerals have serious health and economic costs.[27] It is estimated that 2 billion people worldwide are micronutrient deficient. Micronutrient deficiencies can impact and impair people's well-being, learning capacity, child and adolescent development, labour-productivity and generate mounting healthcare costs. For instance, the cumulative economic cost of cognitive impairment and lower labour productivity due to anaemia is on average 4% of GDP for low-income countries. Some of the most important micronutrient deficiencies are linked to calcium, iron, vitamin A and zinc.

The Lancet Obesity Commission's report indicates that poor diets globally account for almost 20% of disability-adjusted life years (DALYs) lost (with high blood pressure being the next most important risk factor globally, at 8% of DALYs).[2] In 2016, one in five deaths globally were associated with poor diets.[29] Transitioning from current diets to healthy diets has the potential for significant health gain and can avert an estimated 10.8-11.6 million deaths per year (19-23.6% reduction).[3]

Food Insecurity in Aotearoa New Zealand

Diet and high body-mass index (BMI) are known to be significant risk factors for ill health in Aotearoa New Zealand. The most recent Ministry of Health Burden of Disease report describes **dietary risks as accounting for 9.4% of total DALY losses**.[30] Moreover, in New Zealand, health loss from NCDs (including those related to inadequate nutrition) is a big contributor to health inequity.

Food insecurity, ie. a lack of access to safe, nutritious and affordable food, is a major issue in New Zealand and has contributed to the country's high NCD rates.[31] The **underlying determinant of food insecurity is inadequate income**. Food insecurity also leads to psychological stress associated with a sense of stigma and shame at being unable to provide nutritious food and hence to poorer mental health.[31] In New Zealand, Māori, Pacific and those living in areas of high deprivation are more likely to experience food insecurity.[32] In the wake of the COVID-19 pandemic and its national response, ensuring adequate incomes for food security is even more pressing.

Food insecurity impacts on physical health, through micronutrient deficiency and macronutrient excess, since inexpensive foods tend to have low nutritional value. Frequent consumption of these foods gives rise to obesity, diabetes, heart disease, cancers and other non-communicable diseases.[31] **In 2018/19, New Zealand had the third highest obesity prevalence amongst OECD countries,**[33] **with 31% of New Zealanders over 15 years being obese**.[34] In 2013, obesity was the leading cause of health loss in New Zealand, accounting for about 9% of all illness, disability and premature mortality.[35]

High Deprivation

The *2008/2009 New Zealand Adult Nutrition Survey* reported that food insecurity was strongly correlated with high deprivation index, meaning the higher the deprivation level of a neighbourhood, the greater the number of households experiencing food insecurity in that area.[36] The survey **estimated that 7.3% of New Zealand households, equivalent to 113,000 families, severely struggle to afford sufficient food to feed everyone**.[36] Since 2008/2009, given trends in income, deprivation levels and the cost of living, it is likely that the number of households experiencing food insecurity in New Zealand has increased.[37] The 2015/16 NZ Health Survey indicated 19.0% of children living in households experiencing severe-to- moderate food insecurity in 2015/16, with a smaller proportion (1.6%) living in households with severe food insecurity[38] –again important differences by ethnicity and deprivation. Pressure on NZ foodbanks has jumped during the COVID-19 pandemic.

To survive, families living in highly deprived areas frequently forgo healthy food to make ends meet. Subsequently, they increase intake of inexpensive, highly processed, products which are readily available and require little cooking or storage costs. These foods tend to have low nutritional value, are calorie-dense and have high sodium and fat content.[37] This is reflected in *New Zealand Health Survey 2017/2018* statistics which show that adults and children living in the most deprived areas are, respectively, 1.6 and 2.1 times more likely to be obese than their counterparts living in the least deprived areas.[39]

Low-income families face challenges obtaining nutritious food due to inadequate incomes and high housing costs but also due to the abundance of unhealthy food in highly deprived areas. High deprivation neighbourhoods tend to contain a higher density of fast-food outlets than low deprivation neighbourhoods, meaning that in these environments, unhealthy food is more readily available.[40, 41]

A Tiriti o Waitangi consideration of food systems and food insecurity

Both Māori and Pacific People experience greater barriers to health and access to health services.[12, 42] **Māori and Pacific communities also disproportionately share the burden of food insecurity, with one third of Māori households and one half of Pacific households experiencing food insecurity**.[31]

Indigenous Food systems

Historically, indigenous diets tended to consist of foods acquired through traditional methods such as fishing, hunting, gathering or own production.[43] Traditional food is central to indigenous cultures and economies and these food practices reinforce indigenous culture and identity. Māori are tangata whenua or people of the land, that is 'belonging' to the land, rather than 'owning' it; land is considered an anchor for collective identity, not just economic foundation.[44]

Similarly, **the practice of Mahinga kai, or traditional food gathering places and practices, is a fundamental aspect of Māori culture – and which encompasses more than just the provision of food.**[45,] Mahinga kai includes the relationships between healthy environment, healthy people, and reinforces genealogical ties or whakapapa as well as cultural resilience.[46, 47]

Indigenous economies have relied on subsistence production, that is, sustenance at a minimal level, as well as natural resources.[43] While this may have contributed to food security for indigenous communities, their reliance on natural resources also makes them vulnerable when the land they use is not recognised and protected as theirs, in law or otherwise.[43] Colonisation transformed Māori relationships with land, from an anchor of collective identity to that of an economic asset.[44] Many Māori hapu and Iwi participated collectively in agriculture prior to the 1860's.

However, loss of land through unjust land purchases, war and confiscation reduced Māori participation in the emerging New Zealand economy. The introduction of new European foods and new ways of living meant that many traditional forms of hunting and gathering kai declined, as native bush was cleared for farming, and increasing industrialisation polluted rivers and streams.[48, 49] **In some cases, due to loss of land, Iwi not only lost mahinga kai practices but also the economic basis for survival.** From the 1920's onwards, the land that remained in Māori ownership was insufficient to support the growing population, which helped drive an urban transition.

Today, living close to ancestral lands is increasingly difficult, challenging the capacity of whānau to produce kai.[44] Demand for pasture has driven up prices for land leasing and purchasing, and some Māori landowners have found it easier to lease out their land to farmers or sell it, to sustain better living conditions in cities.[44]

The impact of the current Western food system on Māori food patterns and health

A 'nutrition transition' marked by changes in diets, patterns of work and leisure occurring alongside industrialisation, urbanisation, economic development, and globalisation, has occurred around the world.[43] Most indigenous populations have also undergone a Westernisation of diet and lifestyle. This includes a change in physical activity pattern to fit an industrialised country model and lead increasingly sedentary lives.[50] The Westernisation of diet and lifestyle has resulted in a shift away from consuming foods acquired through traditional methods, towards increased consumption of pre-processed foods and drinks high in refined carbohydrates and saturated fat.[43] **Loss of access to Mahinga kai due to colonisation and urbanisation, and also the nutrition transition where traditional foods have been increasingly replaced by the globalised food system, has resulted in a loss of food sovereignty with increasing food insecurity for many Māori today.**[49]

The high rates of food insecurity are **compounded by Māori experiencing inequitable access to the determinants of health, such as education, employment, income, and housing, and experiencing greater barriers to health and access to health services**.[51]Māori are overrepresented in areas of high deprivation and consequently face greater exposure to higher levels of health risks and unhealthy behaviours.[12] Māori households tend to disproportionately have lower incomes than other population groups.[52] This is significant, as household income directly impacts on food availability.[53] As such one third of Māori households experience food insecurity.[31]

The nutrition transition, Westernisation of diet and lifestyle and increasing food insecurity are giving rise to chronic diseases such as diabetes and obesity. This suggests that indigenous peoples' traditional diet and activity level may be protective against chronic diseases.[43] Parallel with other indigenous populations around the world,[50, 54, 55] the prevalence of chronic disease is disproportionately high in Māori. The latest New Zealand health survey reported that 48% of Māori adults and 16% of Māori children are obese, much more than obesity in European/other adults (29%) and children (8%).[56]

A just transition for Māori

Revitalising traditional kai sources has potential to improve food security for Māori, by increasing the availability of kai to households.[49] This is already being done in a number of ways. In the past, Māori have fought to protect traditional kai through legal means.[49, 57, 58] The rights of Māori to participate in the management of freshwater resources as kaitiakitanga (guardianship) is recognised under the Resource Management Act.[59]

Other initiatives include replenishing fish stocks through customary management and garden projects.[49] Māori community gardens or māra kai produce nutritious food to sustain communities and also foster social cohesion, reinforce a sense of shared identity rooted in ancestral lands, provide an opportunity for cultural revitalisation of beliefs, values, knowledge and practices and strengthen the sense of responsibility to protect this cultural heritage.[44] They are an opportunity to pass on cultural heritage, bring together whānau, and to express rangatiratanga (self-determination) and mana whenua (ancestral links with the land).[60, 61]

Food security for Māori has also been improved through increasing income to households through the development of traditional industries like fisheries, aquaculture and horticulture and subsequent employment opportunities for Māori.[49, 53]

Improving food security for Māori is crucial, and has the potential to reduce inequities, improve Māori access to the determinants of health, enhance Māori cultural knowledge and practices, promote Māori values, and support tino rangatiratanga (self-determination).[49] However, there remain substantial barriers to revitalising traditional kai sources, awaiting redress. These include tensions between the Crown and Māori goals and models of resource management, economic pressures resulting in severely depleted fishing stocks, and pollution of freshwater and marine fish because of more intensive farming. Economic development from traditional kai and community development resulting from traditional kai initiatives are also likely to be in conflict with one another.[49]

The NZCPHM upholds te Tiriti o Waitangi as the basis for partnership with Māori, recognises the special relationship between iwi Māori and the Crown under te Tiriti o Waitangi, and recognises that Māori have the right to tino rangatiratanga and to monitor and evaluate the Crown.[12] This extends to the management of mahinga kai, guardianship of natural resources and health inequities amongst Māori arising from food insecurity.

Complementary to te Tiriti are the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the International Covenant on Civil & Political Rights (ICCPR), which New Zealand has supported and ratified, respectively.[12, 62, 63] The UNDRIP and ICCPR contain provisions regarding the special rights of Indigenous Peoples to access traditional foods; therefore, **the inequities facing indigenous communities, in health and nutrition, are not only a public health problem but also a human right issue**.[43]

Government policies and actions that do not adequately address and respect the interests, culture and lifestyle of indigenous peoples have the potential to fuel the nutrition transition, undermine indigenous Peoples' right to traditional food and to promote inequities amongst indigenous communities.[43] Western values like individualism and capitalism undermine indigenous values such as communalism and sharing, thereby reducing the food and livelihood security of the most vulnerable and increasing inequalities.[43] In New Zealand this requires a rapid decolonisation of the food system.

Māori cultural, social, and economic infrastructures are intimately linked to the natural environment. Nearly half of all Maori assets are invested in industries sensitive to both climate change and future climate policy.[64, 65] Equitable policies for Māori and non-Māori are necessary to ensure that they are not impacted differentially by existing and future challenges relating to climate change.

Policy Inertia and Change

Responses to undernutrition, obesity and climate change have been slow and inadequate, stunted by vested commercial interests and insufficient demand for change, resulting in policy inertia.[2] **Current governance systems have created operating conditions which favour the mass production of ultra-processed food from unsustainable production practices**.[2] This includes industry's privileged access to decision makers to maintain these business operating conditions. Efforts to include environmental sustainability principles in dietary guidelines have been met with pressure from powerful and highly resourced food lobbies, including the likes of the beef, dairy, sugar, ultra-processed food and beverage industry sectors.[3] Transnational food and beverage manufacturers have opposed government attempts to regulate commercial activities such as imposing a sugar-sweetened beverage tax or changing agricultural subsidies.[2]

Experience from public-private partnerships involving voluntary actions with weak monitoring and accountability structures indicates these partnerships have limited impact. By contrast, **a strong regulatory approach**, such as that used by the Chilean government, who adopted a combination of policy tools including food labelling, taxation and regulation of marketing, **has significant potential to impact and improve food systems**.[2]

Given the burden of disease on humans and the danger to planetary health, the need for a transition in the way we produce and consume food (ie. sustainable food production for healthy diets) has never been greater.

The two Lancet reports suggest that a broad, ecological approach is needed to tackle this crisis.[2, 3] Actions must be taken to address the underlying societal, political, socio-economic and commercial drivers of poor diets and food production, using multiple levels of influence, with consideration of various policy tools, synergistically.

The Lancet Obesity Commission's report discusses the necessity of multiple-duty actions to act on different drivers of the syndemic simultaneously, such as re-orienting food/agriculture, transport, urban design and land-use systems. **Addressing the current policy inertia requires a transformative social movement, at community, national and global levels – and framing the narrative as a Global Syndemic**, with shared underlying drivers and interactions.[2] This work is an advance for public health thinking that integrates all three (as syndemics relating to misaligned consumption and other fundamental structural wrongs) – and with specific dietary advice.

The EAT-Lancet Commission's report suggests that actions to achieving the Great Food Transformation will require significant changes, including:

- a greater than 50% reduction in global consumption of unhealthy foods, like meat and sugar,
- a 100% increase in consumption of healthy foods, such as nuts, fruits, vegetables, and legumes, with variation across the regions,
- no additional land use to ensure sustainable food production for 10 billion people,
- safeguarding existing biodiversity,
- reducing consumptive water use and managing water responsibly,
- substantially reducing nitrogen and phosphorous pollution,
- producing zero carbon dioxide emissions and,
- no further increase in methane and nitrous oxide emissions,
- a minimum 75% decrease in yield gaps,
- global redistribution of nitrogen and phosphorous fertiliser use, recycling of phosphorous, radical improvements in efficiency of fertiliser and water use,
- rapid implementation of agricultural mitigation options to reduce greenhouse-gas emissions,
- adoption of land management practices that shift agriculture from a carbon source to sink.[3]

Key recommendations from both Lancet reports are provided as Appendices One and Two.

Converging NZ work on healthy, sustainable food systems

Many government agencies, food companies and civil society groups in New Zealand are focussing on food systems in relation to health, environmental sustainability, and equity (including food insecurity).[1] For example:

- The Ministry of Primary Industries' current overarching strategic principles for food systems include sustainability and prosperity (if not health or equity).

- The Ministry for the Environment has work underway assessing food systems and planetary boundaries.

- Many food businesses, including Fonterra, are moving towards sustainable practices.

There needs however an overarching strategic plan for healthy, sustainable food systems that moulds collective action.[1] This is where:

- The 2014, 2017 and 2020 Food Environments Policy Index reports show virtually no government progress on making food environments healthier. Experts who made these ratings have called for a National Food Systems and Nutrition policy as their top recommendation.[1]

- The Koi Tū: The Centre for Informed Futures report on The Future of Food and the Primary Sector has called for a long term strategy for sustainable food systems that is led by government but coordinated across sectors.[66]

- Multi-sector movements such as Food Dialogues Aotearoa, EAT NZ and Health Coalition Aotearoa are calling for a national food strategy.

Recommendations

The NZCPHM broadly supports the recommendations of both the Lancet Obesity Commission[2] and the EAT-Lancet Commission[3] reports (attached as Appendix one and two). **The strategic objectives**

recommended in these reports must be adopted in New Zealand to substantially reduce malnutrition and obesity and the impact of food system-related climate damage.

The NZCPHM calls for a long term, government-led over-arching multi-sector national food strategy that delivers nutritional health, food equity, environmental restoration, reduced GHG emissions, and growing prosperity.[1] This strategy should **join up the current silos of effort into local, national and global networks working on double-duty and triple-duty actions**. This includes linking "initiatives to connect the silos at local (eg. health and non-health organisations), national (across health, education, social affairs, agriculture, and climate change ministries), and global levels (eg. UN Framework Convention on Climate Change and Decade of Action on Nutrition) to foster systemic thinking, share innovative solutions, and synergise efforts".[22 (p.4)]

The national strategy should include healthy, sustainable dietary guidelines, and be supported by national nutrition surveys of adults and children repeated at regular intervals.

The NZCPHM calls for transforming, including decolonising, the current New Zealand food system, to achieve a healthy, sustainable system for food and nutrition. To ensure that the transition is fair and just, it will be necessary to work with industry and food producers to identify, create, and support new economic and employment opportunities that produce low emissions. An important component is equity in food and nutrition outcomes for Māori (where achieving equity for Māori will mean achieving equity for all).

The NZCPHM calls for government actions aimed at:

1. Upholding te Tiriti o Waitangi by:

- recognising the rights of Māori as tangata whenua to self-determination and kaitiakitanga over natural resources,
- enabling Māori leadership and participation in the development of actions [67] to eliminate inequities arising from food insecurity,[12]
- including Māori in the design and evaluation of policy targeted at eliminating food insecurity for Māori, to ensure their needs and aspirations are captured.[43]

2. Taking a rights-based approach to traditional food systems that:[43]

- is guided by international human rights law standards that make it clear that good nutrition should be regarded as a fundamental human right, such as the Convention on the Rights of the Child and the UN Right to Food.
- respects, protects and promotes the special rights of Māori, to their culture as per the UNDRIP and ICCPR, to Mahinga kai and traditional lifestyles,
- promotes and actively facilitates traditional production systems and indigenous economies,
- implements policies consistent with the right to food, particularly Maori peoples' special rights to traditional foods,
- supports the UN **Sustainable** Development Goal to "end hunger, achieve **food security** and improved **nutrition** and promote **sustainable** agriculture" (SDG2).[13] This mahi should be conducted under the NZ Treasury's Living Standards framework[68, 69] that encompass a broad set of indicators to show a more rounded measure of success (including natural, social, human, physical and financial capital), rather than just focusing on gross domestic product (GDP).

3. Create and/or strengthen local and regional governance processes that can help elevate or shift towards local, healthy food systems. This would involve supporting people to garden much more – both as households and communities; supporting people to shop locally much more; and supporting non-consumption of global food products from outside New Zealand. It may also include actions to counter the influence of multinational corporations on national food policy.

4. Firmly regulating the emitters of greenhouse gases and other pollutants that contaminate food, land and bodies of water thus threatening the safety of mahinga kai sources and food security.[43]

5. Supporting Māori with Treaty settlements that will facilitate access to ancestral lands and revitalisation of mahinga kai,[49] and that will honour the main recommendations of Stage One of the WAI2575 Waitangi Tribunal Health Services and Outcomes Inquiry, in particular ensuring a commitment to achieving equitable health outcomes for Māori.[70]

6. Continuing to support and develop governance arrangements that recognise and promote Māori as kaitiaki.[49]

7. Acknowledging, investigating, and working to reduce the impacts of globalisation, which include over-marketing and consumption of ultra-processed foods. They may also undermine community use of traditional kai sources.

8. Supporting community actions, in particular Māori health promotion community initiatives, such as Māra, with regular evaluation of effectiveness as well as enablers and constraints. A particular focus should be on reorienting local food systems to being healthy and sustainable.[49]

9. Reorienting economic development in ways that enhance health and sustainability, for example in traditional kai initiatives.[49]

Finally, the NZCPHM also notes and acknowledges the related and relevant, if separate, recommendations specific to population health on addressing obesity in New Zealand, including sustainable food and food systems, made by the New Zealand Medical Association (NZMA)'s *Policy Briefing: Tackling Obesity*[71] and the Royal Australasian College of Physicians (RACP)'s *Position Statement on Obesity*.[72]

Links with other NZCPHM policies

First 1000 days
Climate change
Sustainability
Childhood obesity
Child poverty
Health Equity
Māori Health
Pacific Peoples Health

Acknowledgement

References

1. Mackay S, Sing F, Gerritsen S, Swinburn B. Benchmarking Food Environments 2020: Progress by the New Zealand Government on implementing recommended food environment policies & priority recommendations. Auckland: University of Auckland, 2020.
(https://www.informas.org/2020/06/19/food-epi-nz-2020/)

2. Swinburn BA, Kraak VI, Allender S, et al. The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report. Lancet. 2019;393(10173):791-846.
(https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2932822-8)

3. Willett W, Rockström J, Loken B, et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. Lancet. 2019;393(10170):447-92. Erratum in: Lancet. 2019;393(10171):530.
(https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)31788-4.pdf)

4. Acheson D. Public Health in England: The Report of the Committee of Inquiry into the Future Development of Public Health Function. London: HMSO, 1988.

5. World Health Organization. WHO Regional Committee for Europe: Advancing public health for sustainable development in the WHO European Region. EUR/RC68/17. Copenhagen: WHO Regional Office for Europe, 2018.
(http://www.euro.who.int/__data/assets/pdf_file/0004/380029/68wd17e_AdvancePublicHealth_180624.pdf?ua=1).

6. Centers for Disease Control and Prevention. Ten Great Public Health Achievements -- United States, 1900-1999. MMWR Morb Mortal Wkly Rep. 1999;48(12):241-3.
(https://www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm).

7. New Zealand College of Public Health Medicine. A Prescription for Health and Equity for All. NZCPHM briefing for the Incoming Minister of Health. Wellington: NZCPHM, 2017.
(https://www.nzcphm.org.nz/media/108722/2017_bim_a_prescription_for_health_and_equity_for_all_final.pdf).

8. New Zealand Medical Association. Consensus statement on the role of the doctor in New Zealand. NZMA Position Statement. Wellington: NZMA, 2011.
(https://global-uploads.webflow.com/5e332a62c703f653182faf47/5e332a62c703f6aa372fc4af_Consensus-statement-on-the-role-of-the-doctor-in-New-Zealand-November-2011.pdf)

9. New Zealand Medical Association. Consensus statement on the role of the doctor in New Zealand. NZMA Position Statement. Wellington: NZMA, 2011.
(https://www.nzma.org.nz/publications/role-ofthe-doctor-consensus-statement)

10. Gluckman P. Enhancing evidence-informed policy making: a report by the Prime Minister's Chief Science Advisor. Wellington: Office of the Prime Minister's Chief Science Advisor, 2017.
(http://www.pmcsa.org.nz/wp-content/uploads/17-07-07-Enhancing-evidence-informed-policymaking.pdf)

11. New Zealand College of Public Health Medicine / New Zealand Medical Association. NZCPHM Policy Statement on Health Equity (adopting the New Zealand Medical Association Position Statement on Health Equity 2011). Wellington: NZCPHM, 2016.
(https://www.nzcphm.org.nz/media/58923/2016_11_17_nzcphm_health_equity_policy_statement.pdf)

12. New Zealand College of Public Health Medicine. NZCPHM Policy Statement on Māori Health. Wellington: NZCPHM, 2015.
(https://www.nzcphm.org.nz/media/89786/2015_11_30_m_ori_health_policy_statement.pdf)

13. United Nations. Sustainable Development Goals.
(https://www.un.org/sustainabledevelopment/sustainable-development-goals/).

14. World Health Organization. The Ottawa Charter for Health Promotion. First International Conference on Health Promotion, Ottawa, 21 November 1986.
(http://www.who.int/healthpromotion/conferences/previous/ottawa/en/index1.html)

15. World Health Organization. The Bangkok Charter for Health Promotion in a Globalized World. 2005.
(http://www.who.int/healthpromotion/conferences/6gchp/hpr_050829_%20BCHP.pdf).

16. World Health Organization. Adelaide Statement II. Outcome Statement from the 2017 International Conference Health in All Policies: Progressing the Sustainable Development Goals. 2017.
(http://www.who.int/social_determinants/SDH-adelaide-statement-2017.pdf).

17. World Health Organization. Health in All Policies (HiAP) Framework for Country Action. Geneva: WHO, 2013.
(http://www.who.int/healthpromotion/frameworkforcountryaction/en/)

18. United Nations. Transforming our world: the 2030 Agenda for Sustainable Development. 2015.
(https://sustainabledevelopment.un.org/post2015/transformingourworld).

19. Drew J, Cleghorn C, Macmillan A, Mizdrak A. Healthy and Climate-Friendly Eating Patterns in the New Zealand Context. Environmental Health Perspectives. 2020;128(1):017007.
(https://ehp.niehs.nih.gov/doi/full/10.1289/EHP5996)

20. Mason-D'Croz D, Bogard J, Sulser T. Gaps between fruit and vegetable production, demand, and recommended consumption at global and national levels: an integrated modelling study. The Lancet Planetary Health. 2019; 3(7):e318-29.
(https://www.sciencedirect.com/science/article/pii/S2542519619300956)

21. Wilson N, Nghiem N, Ni Mhurchu C, Eyles H, Baker MG, Blakely T. Foods and dietary patterns that are healthy, low-cost, and environmentally sustainable: a case study of optimization modeling for New Zealand. PLoS One. 2013;8(3):e59648.
(https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0059648)

22. The Global Syndemic of Obesity, Undernutrition and Climate Change: The Lancet Commission report: A Policy Brief for national and municipal governments, civil society, funders, businesses, and international agencies. 2019.
(https://www.foodpolitics.com/wp-content/uploads/ObesityCommission_Policy-Brief_Lancet_19.pdf)

23. World Health Organization & Finland. Ministry of Social Affairs and Health. Health in all policies: Helsinki statement. Framework for country action. Geneva: World Health Organization, 2014.
(https://www.who.int/publications/i/item/health-in-all-policies-helsinki-statement)

24. Health in All Policies Team, Community and Public Health. Tools to Support a Health in All Policies Approach: A guide for moving from theory to practice. Christchurch: Canterbury District Health Board, 2018.
(https://www.cph.co.nz/wp-content/uploads/HiAPToolkit.pdf)

25. Springmann M, Clark M, Mason D, et al. Options for keeping the food system within environmental limits. Nature. 2018; 562:519-25.
(https://www.researchgate.net/publication/328200342_Options_for_keeping_the_food_system_within_environmental_limits)

26. Intergovernmental Panel on Climate Change. Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Geneva: IPCC, 2019.
(https://www.ipcc.ch/report/srccl/)

27. Global Panel on Agriculture and Food Systems for Nutrition. Preventing nutrient loss and waste across the food system: Policy actions for high-quality diets. Policy Brief No. 12. London: GloPan, 2018. (http://glopan.org/sites/default/files/Downloads/GlopanFoodLossWastePolicyBrief.pdf)

28. Food and Agriculture Organisation of The United Nations. Global food losses and food waste. Rome: FAO, 2011. (http://www.fao.org/3/a-i2697e.pdf)

29. GBD 2017 Diet Collaborators. Health effects of dietary risks in 195 countries, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet. 2019;393(10184):1958-72. (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30041-8/fulltext)

30. Ministry of Health. Health Loss in New Zealand 1990–2013. A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study. Wellington: MoH, 2016. (https://www.health.govt.nz/system/files/documents/publications/health-loss-in-new-zealand-1990-2013-aug16.pdf)

31. Science Media Centre. Food insecurity – the issues and the solutions Expert Reactions. Wellington: SMC, 2011. (https://www.sciencemediacentre.co.nz/2011/08/12/food-insecurity-the-issues-and-the-solutions/)

32. Ministry of Health. Nutrition Survey. Wellington: MoH, 2011. (https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/past-surveys/nutrition-survey)

33. Organisation for Economic Co-operation and Development. Obesity Update 2017. OECD, 2017. (https://www.oecd.org/els/health-systems/Obesity-Update-2017.pdf)

34 Ministry of Health. Annual Update of Key Results 2018/19: New Zealand Health Survey. Wellington: MoH, 2019. (https://www.health.govt.nz/publication/annual-update-key-results-2018-19-new-zealand-health-survey)

35. Ministry of Health. Annual Update of Key Results 2015/16: New Zealand Health Survey. Wellington: MoH, 2016. (https://www.health.govt.nz/publication/annual-update-key-results-2015-16-new-zealand-health-survey)

36. University of Otago and Ministry of Health. A Focus on Nutrition: Key Findings of the 2008/09 New Zealand Adult Nutrition Survey. Wellington: MoH, 2011. (https://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/past-surveys/nutrition-survey, https://www.health.govt.nz/system/files/documents/publications/a-focus-on-nutrition-v2.pdf)

37. Graham R. Fill a hungry belly or meet nutritional guides? The impossible choices facing low-income families. Child Poverty Action Group, 2018. (https://www.cpag.org.nz/fill-a-hungry-belly-or-meet-nutritional-guides/)

38 Ministry of Health. Household food insecurity among children: New Zealand Health Survey. Wellington: MoH, 2019. (https://www.health.govt.nz/publication/household-food-insecurity-among-children-new-zealand-health-survey)

39. Ministry of Health. Obesity Statistics. Wellington: MoH, 2018. (https://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/obesity-statistics)

40. Sushil Z, Vandevijvere S, Exeter D, Swinburn B. Food swamps by area socioeconomic deprivation in New Zealand: A national study. Int. J. Public Health. 2017;62(8):869-77. (https://www.researchgate.net/publication/317087451_Food_swamps_by_area_socioeconomic_deprivation_in_New_Zealand_A_national_study)

41. Pearce J, Blakely T, Witten K, Bartie P. Neighbourhood Deprivation and Access to Fast Food Retailing: A National Study. Am J Prev Med. 2007;32(5):375-82. (https://www.otago.ac.nz/wellington/otago020172.pdf)

42. New Zealand College of Public Health Medicine. NZCPHM Policy Statement on Pacific Peoples' Health. Wellington: NZCPHM, 2019. (https://www.nzcphm.org.nz/media/87942/2019_12_05_pacific_peoples_health_policy_statement.pdf)

43. Damman S, Eide WB, Kuhnlein HV. Indigenous peoples' nutrition transition in a right to food perspective. Food Policy. 2008;33(2):135-5. (https://www.sciencedirect.com/science/article/pii/S0306919207000498)

NZCPHM Sustainable Food policy statement | November 2020

44. Hond R, Ratima M, Edwards W. The role of Māori community gardens in health promotion: a land-based community development response by Tangata Whenua, people of their land. Glob. Health Promot. 26(3_Supp):44-53. (https://journals.sagepub.com/doi/full/10.1177/1757975919831603)

45. Ministry of Health. Food and Nutrition Guidelines for Healthy Older People: A Background Paper. Wellington: Ministry of Health; 2013. (https://www.health.govt.nz/system/files/documents/publications/food-nutrition-guidelines-healthy-older-people-background-paper-v2.pdf)

46. Pehi P, Kanawa L, Lambert S, Allen W. The restitution of marae and communities through mahinga kai: building the management of Maori customary fisheries. Auckland: Nga Pae o te Maramatanga and Otago University, 2009. (http://www.maramatanga.ac.nz/sites/default/files/FinalReport_3Nov09Pip%20Peehi_LK.pdf)

47. Wham C, Maxted E, Dyall L, Teh R, Kerse N. Korero te kai o te Rangatira: nutritional wellbeing of Māori at the pinnacle of life. Nutr Diet. 2012;69:213–6 (https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1747-0080.2012.01618.x)

48. Petrie H. Chiefs of Industry: Maori Tribal Enterprise in Early Colonial New Zealand. Auckland: Auckland University Press; 2006. (https://aucklanduniversitypress.co.nz/chiefs-of-industry-maori-tribal-enterprise-in-early-colonial-new-zealand/)

49. McKerchar C, Bowers S, Heta C, Signal L, Matoe L. Enhancing Maori food security using traditional kai. Glob. Health. Promot. 2015;22(3):15-24. (https://journals.sagepub.com/doi/abs/10.1177/1757975914543573)

50. Uauy R, Albala C, Kain J. Obesity trends in Latin America: transiting from under-to overweight. J. Nutr. 2001;131(3):893s-899s. https://academic.oup.com/jn/article/131/3/893S/4687035

51. Robson B, Cormack D, Cram F. Social and Economic Indicators. In Robson B, Harris R editors. Hauora Māori Standards of Health IV. Wellington: Te Rōpū Rangahau Hauora a Eru Pomare; 2007, 21–32. (https://www.moh.govt.nz/NoteBook/nbbooks.nsf/0/C3C40E20B25D301ECC2573B500014445/$file/hauora-iv.pdf)

52. Rashbrooke M (ed.). Inequality: A New Zealand Crisis. Wellington: Bridget Williams Books; 2013. (https://www.bwb.co.nz/books/inequality)

53. Bowers S, Carter K, Gorton D, Heta C, Lanumata T, Maddison R, et al. Enhancing food security and physical activity for Māori, Pacific and low-income peoples. Wellington: Clinical Trials Research Unit, University of Auckland; GeoHealth Laboratory, University of Canterbury; Health Promotion and Policy Research Unit, University of Otago; Te Hotu Manawa Māori; 2008. (https://www.otago.ac.nz/heppru/otago022605.pdf)

54. Montenegro RA, Stephens C. Indigenous health in Latin America and the Caribbean. Lancet. 2006;367(9525):1859-1869. (http://www.rightlivelihoodaward.org/fileadmin/Files/PDF/Literature_Recipients/Montenegro/Montenegro_-_Indigenous_Health.pdf)

55. Ring I, Brown N. The health status of indigenous peoples and others. BMJ. 2003;327:404. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC188480/)

56. Ministry of Health. Obesity Statistics. Wellington: MoH, 2018. (https://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/obesity-statistics)

57. The Waitangi Tribunal. Kaituna River Claim. Wellington: Department of Justice, 1984. (https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_68496990/Kaituna%20River%201984.pdf)

58. The Waitangi Tribunal. Te Ika Whenua Rivers Report. Wellington: Department of Justice; 1998. (https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_68382633/Te%20Ika%20Whenua%20Rivers%201998-compressed.pdf)

59. Ministry for the Environment. Using the Cultural Health Index: How to Assess the Health of Streams. Wellington: MfE, 2006.
(https://www.mfe.govt.nz/publications/cultural-health-index-streams-and-waterways-feb06)

60. Earle M. Cultivating Health: Community Gardens as a Public Health Intervention (Thesis, Master of Public Health). Wellington: University of Otago; 2011.
(https://ourarchive.otago.ac.nz/handle/10523/2078)

61. Sharples P. Launch of Maara Kai Programme (Speech). Wellington: New Zealand Government; 2009.
(https://www.beehive.govt.nz/speech/launch-maara-kai-programme)

62. Ministry of Justice. International Covenant on Civil & Political Rights.
(https://www.justice.govt.nz/justice-sector-policy/constitutional-issues-and-human-rights/human-rights/international-human-rights/international-covenant-on-civil-and-political-rights/)

63. Key J. National Govt to support UN rights declaration. Wellington: New Zealand Government; 2010.
(https://www.beehive.govt.nz/release/national-govt-support-un-rights-declaration)

64. King DN, Penny G, Severne C. The climate change matrix facing Maori society. in: Nottage RAC, Wratt DS, Bornman JF, Jones K. (eds). Climate change adaptation in New Zealand: Future scenarios and some sectoral perspectives. Wellington: New Zealand Climate Change Centre, 2010. pp100-11.
(https://www.researchgate.net/publication/273737386_The_climate_change_matrix_facing_Maori_society)

65. Kenny G. Adaptation in Agriculture: Lessons for resilience from Eastern Regions of New Zealand. in: Nottage RAC, Wratt DS, Bornman JF, Jones K. (eds). Climate change adaptation in New Zealand: Future scenarios and some sectoral perspectives. Wellington: New Zealand Climate Change Centre, 2010. pp56-69.
(https://www.researchgate.net/publication/225992995_Adaptation_in_Agriculture_Lessons_for_Resilience_From_Eastern_Regions_of_New_Zealand)

66. Bardsley A, Coates B, Goldson S, Gluckman P, Kaiser M. The future of food & the primary sector: the journey to sustainability. Auckland: Koi Tū: The Centre for Informed Futures, Umnivesrity of Auckland, 2020.
(https://informedfutures.org/the-future-of-food-the-primary-sector/)

67 Ministry of Health. Whatua – Summary Report: Engagement for the development of Whakamaua: Māori Health Action Plan 2020-2025. Wellington: MoH, 2020.
(https://www.health.govt.nz/system/files/documents/publications/whatua-summary-report.pdf)

68. The Treasury. He Puna Hao Pātiki: 2018 Investment Statement. Wellington: The Treasury, 2018.
(https://treasury.govt.nz/publications/investment-statement/2018-investment-statement).

69. The Treasury. Living standards. 2018.
(https://treasury.govt.nz/information-and-services/nz-economy/living-standards).

70. The Waitangi Tribunal. Hauora: Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry. Wellington: 2019.
(https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_152801817/Hauora%20W.pdf)

71. New Zealand Medical Association. Policy Briefing: Tackling Obesity. Wellington: NZMA, 2014.
(https://www.nzma.org.nz/__data/assets/pdf_file/0015/32082/NZMA-Policy-Briefing-2014_Tackling-Obesity.pdf)

72. Royal Australian College of Physicians. Action to prevent obesity and reduce its impact across the life course RACP Position Statement on Obesity. Sydney: RACP, 2018.
(https://www.racp.edu.au/docs/default-source/advocacy-library/racp-obesity-position-statement.pdf)

Adopted by Council: [date]

Key Recommendations from the Lancet Obesity Commission: 'The Global Syndemic of Obesity, Undernutrition and Climate Change: A Policy Brief for national and municipal governments, civil society, funders, businesses, and international agencies'
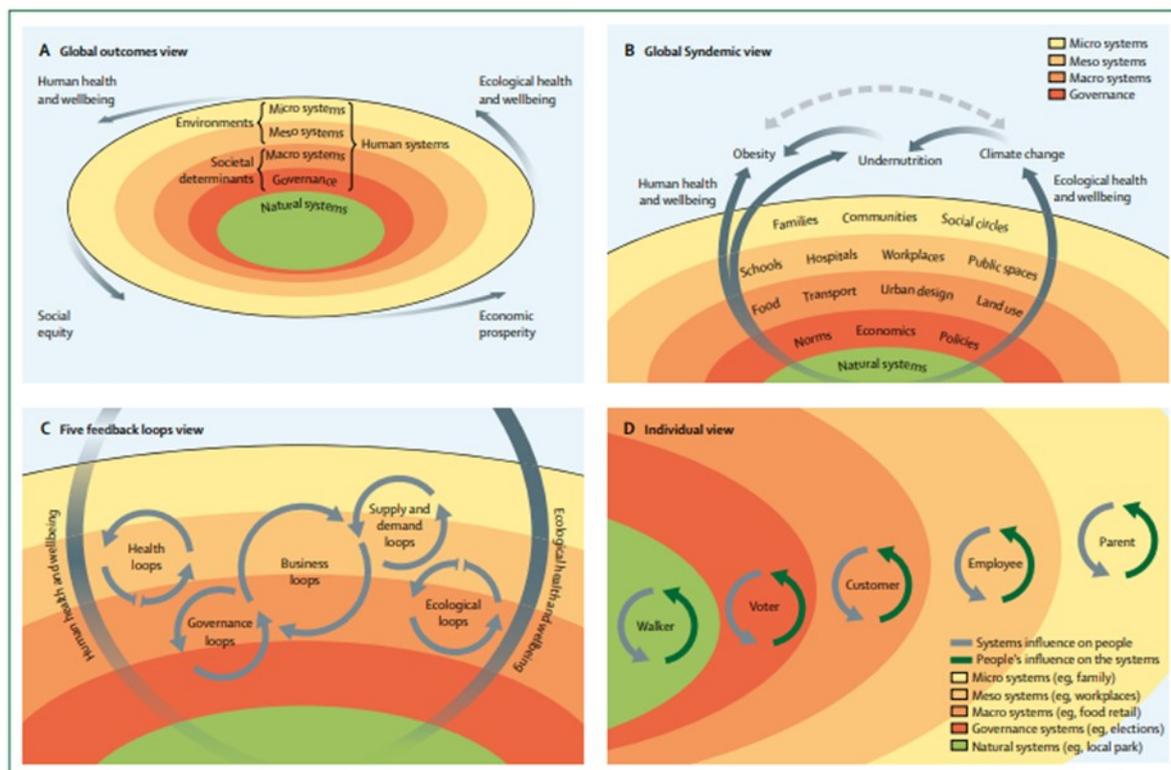

Figure: The Systems Outcomes Framework: The consequences of intersecting natural and human systems.[2]

Actions for All	1. Think in Global Syndemic terms to focus on common systemic drivers that require collective actions by multiple actors.
	• Create the narrative of common systemic drivers and double-duty or triple-duty actions to underpin the social movements at local, national and global levels.
	2. Create collaborative platforms to join up the current silos of effort into local, national and global networks working on double-duty and triple-duty actions.
	• Link initiatives to connect the silos at local (eg, health and non-health organisations), national (across health, education, social affairs, agriculture, and climate change ministries), and global levels (eg, UN Framework Convention on Climate Change and Decade of Action on Nutrition) to foster systemic thinking, share innovative solutions, and synergise efforts.
Actions for Nations and Municipalities	3. Reduce poverty and inequities to reduce the toll of The Global Syndemic, which will disproportionately impact poor people.
	• Implement strategies to achieve the UN's Sustainable Development Goal 1 as a priority for all countries.

4. Fully implement human rights obligations to protect socially disadvantaged populations, especially children and women, and mobilise actions to create healthy and active environments for all people.

- Incorporate the rights recognised by international law, including the right to health, the right to food, cultural rights, the rights of the child, and the implied right to a healthy environment, into national constitutions and laws under the umbrella of the Right to Wellbeing.

5. Reduce the influence of large commercial interests in policy development processes to enable governments to implement policies in the interests of public health, equity, and planetary sustainability.

- Institutionalise clear and robust conflicts of interest management for policy development.

- Strengthen democratic institutions such as freedom of information laws, declarations of political donations, independent ombudsman and commissioner positions, and platforms for civil society engagement in public policy decision-making.

6. Eliminate subsidies for products that contribute to The Global Syndemic and redirect funding to actions that mitigate it.

- Increase awareness of the impact of subsidies on the true costs of food and car use to build support for sustainable agriculture and sustainable modes of transportation.

- Redirect existing government subsidies for beef, dairy, sugar, corn, rice, and wheat (about $US0·5 trillion a year) to sustainable farming for healthful foods.

- Redirect subsidies for fossil fuels (about $US5 trillion a year) to renewable energy and sustainable transportation systems.

7. Provide clear and understandable information to consumers on the health and environmental impacts of food products to enable informed choices and create a demand-driven market shift for products that support sustainable food systems.

- Use nutrition labelling to alert consumers to products high in sugar, salt, and saturated fat, and stimulate industry reformulation.

- Add sustainability indicators, such as carbon and water footprints, to food labels to help consumers make sustainable choices.

8. Expand municipal actions on air pollution and traffic congestion to include action on healthy and resilient urban transport and food systems.

- Invest in urban design and transportation systems to foster walking, cycling, and public transport and build urban food systems for resilience, health and equity.

- Strengthen national and international networks of cities to share resources and innovative strategies to address The Global Syndemic.

9. Support community coalitions to mobilise action at the local level and to create pressure for national policies that reduce The Global Syndemic.

- Support systems-oriented, community-based interventions that create healthy, resilient and sustainable local environments and advocate for supportive national policies.

	10. Re-orient business models to produce beneficial outcomes for people, the planet, and profits so that business shifts its focus from short-term, profit-only outcomes to sustainable models that explicitly include benefits to society and the environment.
	
	    • Incorporate the costs of damage to health and the environment from business processes and products into the costs of doing business rather than onto taxpayers or future generations.
	
	11. Accelerate national commitments to achieve the UN Sustainable Development Goals to create the broad, cross-sectoral efforts needed to address The Global Syndemic.
	
	    • Establish specific, measurable, achievable, relevant goals and a timetable for achieving them.
	
	    • Build in accountability systems for achieving these goals.

Actions for Civil Society	12. Act to increase demand for policies to address The Global Syndemic.
	
	    • Build civil coalitions to advocate for specific policies, eg. healthy food in schools or public transport infrastructure, and for deeper, more transformative changes, eg. restricting commercial influences in public policy-making and enacting human rights legislation.
	
	13. Monitor policy implementation to increase independent accountability for actions to mitigate The Global Syndemic.
	
	    • Combine existing food policy monitoring platforms with new monitoring platforms for physical activity and climate change
	
	    • Use policy monitoring evidence to hold governments and corporations to account for addressing The Global Syndemic.
	
	    • Prioritize research for policy-relevant, empirical and modelling studies on the dynamics of The Global Syndemic and the impacts of double-duty and triple-duty actions.

Actions for Funders	14. Use development aid and loans as a mechanism to encourage double-duty or triple-duty actions to address The Global Syndemic.
	
	    • Incorporate policy development to improve governance, food systems, and land use to address The Global Syndemic as an essential component of technical assistance and loans from funders such as the World Bank, development agencies, and other funders.
	
	15. Develop a global 'Food Fund' to support the efforts of civil society organisations to increase pressure to create healthy, sustainable, equitable food systems.
	
	    • In addition to calls for a US$70 billion dollar investment over 10 years to achieve the global targets to reduce undernutrition, philanthropic investors should invest US $1 billion dollars to strengthen the social advocacy from civil societies to demand complementary policy actions to tackle The Global Syndemic.
	
	16. Fund research on indigenous and traditional knowledge to understand the paradigms, practices and products that promote optimal planetary health.
	
	    • Establish a 'Seven Generations Fund' based on the Iroquois concept of decision-making for seven generations hence so that indigenous knowledge and worldviews can be researched, recognized internationally, and incorporated into policies that impact on human and environmental health.

Actions for International Agencies	17. Establish a Framework Convention on Food Systems as the comprehensive, legal framework to bind countries to collectively create food systems that promote health, equity, environmental sustainability, and economic prosperity.
	• Use the constitutional provisions of UN agencies and/or regional bodies (eg. European Union, Pacific Forum) to develop a Framework Convention on Food Systems for Member States to ratify and enact nationally.
	18. Monitor the implementation of policies recommended by the UN and other authoritative bodies to address obesity, undernutrition, climate change and their determinants.
	• Work with researchers, civil society organisations and governments to build independent accountability systems for the actions of governments and the private sector to mitigate The Global Syndemic.

Eat-Lancet Commission's Framework for a Great Food Transformation
The Great Food Transformation will require widespread, multi-sector, multi-level action to change food consumption and production and their subsequent effects on human health and the environment.

Learnings from Past Successful Global Transformations

Firstly, systems change as extensive as required by the Great Food Transformation would require **engagement of actors at all scales, in all sectors working towards a shared set of goals**. This aligns with Sustainable Development Goal 17, 'A successful sustainable development agenda requires partnerships between governments, the private sector and civil society…'
Secondly, **scientific research** is needed to improve the current unhealthy, unequal, unsustainable global food system. Interdisciplinary research and monitoring are crucial to maintaining the scale and pace of change.
Thirdly, the **full range of policy tools** must be used. Policymakers may rely on the implementation of soft policy interventions, which target consumer actions, such as consumer advice, information, education and food labelling. However, solely targeting individual choice ignores the upstream determinants of unhealthy diets and is an insufficient public health approach. Reframing the narrative would allow for analysis of the upstream determinants and support hard policy interventions such as laws, fiscal measures, subsidies and penalties, trade reconfiguration and other economic and structural measures.

The Commission's vision, alongside scientific targets for healthy diets and sustainable food production, **integrates food, health and environmental policy into several associated areas such as trade, economics, rural livelihoods, equity, culture, society and community**. This is because, change in food production and consumption, along the food supply chain, is insufficient to achieving the Great Food Transformation. Engagement from sectors along the food supply chain including; processing, storage, logistics, retail and food service is also required, because these sectors hold great economic leverage and cultural influence in food systems. Thus, the Commission calls for more work on these stages of global food systems.

Readily Implementable Strategies for a Great Food Transformation
These strategies indicate entry points for further context specific national, regional, city and local change.

Strategy	Both
Seek international and national commitment to shift towards healthy diets.	1. Improve the availability and accessibility to healthy diets from sustainable food systems. - In high-income countries offer reduced portions, choice and packaging and introduce innovative packaging to preserve perishable foods. In low-income countries 2. Make healthy diets from sustainable food systems affordable. 3. Restrict advertising and marketing of unhealthy, unsustainable foods, and support the distinction of healthy diets from sustainable food systems. 4. Educate individuals on healthy diets from sustainable food systems. 5. Promote sustainable diets that are both flavoursome and culturally appropriate. 6. Engage physicians and health-care service workers with other industries to advise food service industries and to redesign public food provisions such as that available in school cafeterias and hospitals.

Reorient agricultural priorities from mass-producing of food to producing healthy food.	Reframe food policies to shift the emphasis from high volumes of output to high diversity of crops and nutritional quality of foods produced.
Sustainably intensify food production generating high-quality output	Better adapt agricultural practices to soil characteristics, water availability and climatic drivers of evapotranspiration.
Strong and coordinated governance of land and oceans	Stop expansion of new agricultural land at the cost of natural ecosystems, in order to achieve effective land governance. Regulatory measures include land-use zoning, prohibiting land clearing, incentives for protecting natural areas including forests.
At least halve food loss and waste, in line with the global Sustainability Development Goals	Substantially reduce the amount of food lost or waste from production to consumption. This will require technological solutions along the supply chain and public policies.[24]

Tools for a Great Food Transformation

Moving towards a Great Food Transformation requires good data on each country's status of their diet and food system.
Gaining consensus on the scientific targets for healthy diets and sustainable production, set by this commission, is a first step to urging actors to agree on a common agenda. Targets can then be refined and engaged with at all policy levels.
"Because these goals cross-cut political, sectoral, and geographical boundaries, an integrated approach is needed. Integrated approaches can be advanced by establishing formal and frequent interactions between governing groups."
"Engineering change across the food system is complex enough, but if multi-level, multi-actor, multi-sector, multi-disciplinary change is required, governance faces serious challenges. Because many governments have adopted laissez-faire approaches to consumer choice, the leadership required by governments and food system actors is considerable. This leadership demands coordination, consultation, and good policy facilitation by important policy actors."
"Domestic spending will need to increase for policy instruments supporting healthy diets from sustainable food systems. The absence of dedicated funding to support the transformation towards sustainable food systems is a crucial barrier to progress.354 Investment flows can be leveraged in innovative ways to create multiple wins across the sustainable development challenges. Donors and multi-lateral organisations should be engaged, and reporting processes by the Organisation for Economic Cooperation and Development could be refined to improve tracking of this funding."
"Building an alliance of forces that can operationalise the Commission's broad recommendations is challenging. These alliances could include actors at all stages of the food system and operate at all scales so that local actions can be in line with global goals. Such alliances can play a part in bolstering support for the agenda on healthy diets from sustainable food systems and exert influence within and outside of government."

"Many annual official or officially approved reports by reputable bodies already exist. Some health-oriented reports might be broadened to include sustainability aspects or, vice versa, environmental or food security reports might include strong nutritional and cultural dimensions. The alternative would be initiating a new annual or biannual report on healthy diets from sustainable food systems; methodology for this report would need to be replicable at national and other levels. In addition, monitoring and reporting should go beyond lists of actions and statistics of effects to include regular synthesis and dissemination of lessons learned. Transferable lessons should be spread widely to inspire action."

"Food Transformation can help to meet existing agreements such as the SDGs, the Paris Agreement, and elements of the WHO-Food and Agriculture Organization Decade of Nutrition Action, but a new Convention or agreement is almost certainly needed. The Commission recommends that international bodies review whether a new oversight body or bodies might be needed, or whether existing bodies could coalesce or have their remit and functions revised to provide necessary focus on healthy diet for all from sustainable food systems"