Healthy Eating – Healthy Action
Oranga Kai – Oranga Pumau:
A strategic framework
2003

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MINISTRY OF HEALTH
MANATŪ HAUORA

Foreword

Too many New Zealanders are dying or becoming ill from diseases or conditions that could be prevented by healthy eating and being physically active.

The evidence is clear that we must act now or face increasing rates of poor health and spiralling costs to the health and disability sector and society at large.

Getting people to improve their nutrition, and be more physically active is no easy feat. It poses major challenges to us personally and also requires changes to our social and physical environment. What we eat and how active we are is affected by a wide range of factors, such as affordability, taste and preference, culture, accessibility, time, safety, family and peer influences, skills, and convenience. Supporting people to eat well, be active and attain and maintain a healthy body weight requires a comprehensive and multi-sector approach.

Healthy Eating – Healthy Action. Oranga Kai – Oranga Pumau: A strategic framework shows the way forward and sets out a framework for making these changes happen. This strategy calls for a more integrated approach to addressing nutrition, physical activity and obesity, highlighting the importance of both individual behaviour and our environment.

As a companion to this strategy *Healthy Eating – Healthy Action. Oranga Kai – Oranga Pumau: A background*, sets out the key issues, evidence and justification for the framework. Both documents form the strategic direction for the development of a national implementation plan that will turn this strategy into reality.

I would like to thank the many individuals and organisations that contributed to this strategy, either by commenting on draft papers, attending consultation meetings, hui and fono and those who provided expert peer review. This is one issue where everyone can make a difference, so a healthy diet and a more active lifestyle is achievable for everyone.

Hon Annette King
Minister of Health

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Executive Summary

Far too many New Zealanders die prematurely or become ill from preventable diseases and conditions such as cardiovascular disease, diabetes, cancer and obesity. This follows a worldwide trend of increasing deaths from non-communicable diseases. Improving nutrition, increasing physical activity levels and achieving healthy weight across the population can reduce the risk of developing these diseases and conditions.

Improving nutrition, increasing physical activity and reducing obesity are population health priorities in the New Zealand Health Strategy. Because these issues are inherently inter-related, this draft strategy aims to forge an integrated approach to improving population health in these three areas.

Healthy Eating – Healthy Action: A strategic framework is a planning tool for action. It will help to define key priorities, establish a framework for addressing nutrition, physical activity and obesity, and drive our efforts over the next five years. It is supported by *Healthy Eating – Healthy Action: A background*, which provides the justification for the framework. Both of these important documents form the basis of the implementation plan for *Healthy Eating – Healthy Action*, which will be developed with the assistance of a group of key stakeholders co-ordinated by the Ministry of Health. It is anticipated that the implementation plan will identify, promote and co-ordinate culturally appropriate, effective and integrated programmes at national, regional, iwi and hapū, whānau and community levels.

Healthy Eating – Healthy Action is directed at a range of service providers and sectors. It identifies key policy priorities for the Ministry of Health, and will guide the funding of programmes and services by District Health Boards, and research priorities for the Health Research Council and other funders. It emphasises the need for partnerships outside the health sector, and offers guidance for intersectoral action with other central and local government agencies, non-governmental organisations and industry. *Healthy Eating – Healthy Action* also recognises the importance of addressing environmental modification as well as behavioural change to improve nutrition, increase physical activity and reduce obesity.

The principles of the Treaty of Waitangi and directions for reducing inequalities in health are fundamental elements of this strategy.

Key priorities for action are:

- lower socioeconomic groups
- children, young people, and their family and whānau (including older people)
- environments
- communication
- workforce.

In each priority area the rationale is provided for its selection, along with objectives (linked to the approaches for action) and suggestions for broad high-level actions that could be taken.

The approaches for action in the strategy are framed by the Ottawa Charter: working to ensure healthy policy, creating supportive environments, strengthening community action, developing personal skills, reorienting services and programmes, and monitoring, research and evaluation.

The key population health messages

To improve nutrition, increase physical activity and maintain a healthy body weight:

- eat a variety of nutritious foods
- eat less fatty, salty and sugary foods
- eat more vegetables and fruits
- fully breastfeed infants for at least six months
- be active every day for at least 30 minutes in as many ways as possible
- add some vigorous exercise for extra benefit and fitness
- aim to maintain a healthy weight throughout life
- promote and foster the development of environments that support healthy lifestyles.

The key population health messages for this strategy do not replace the Food and Nutrition Guidelines. The intention is to provide the reader with a simple summary of the key messages for Healthy Eating – Healthy Action.

These messages are appropriate at both a population and a personal level, because changing behaviour requires significant changes to both personal behaviours and the supporting environment. However, the specific wording and mode of communication of the messages will vary depending on the audience.

Part 1:
Introduction

Why do we need this strategy?

Sedentary lifestyles, poor nutrition and obesity are a growing international phenomenon. Globally non-communicable diseases are responsible for 60 percent of world deaths, and these deaths are related to changes in global dietary patterns and lifestyles (WHO 2002b). They are major and increasing causes of preventable disease, disability and death in New Zealand (Minister of Health 2000). Some health consequences, such as diabetes and cardiovascular disease, cause major disability and illness, and require costly, long-term treatment and support. Projections suggest we are facing a steep increase in obesity in the future.

The increase in obesity rates will have health impacts across the population, with a disproportionate burden falling on Māori and Pacific peoples (Ministry of Health 2002a). Physical inactivity has been directly associated with 8 percent of all deaths in New Zealand (Ministry of Health 1999). Obesity has serious financial consequences both for the health sector and for New Zealand's society and economy. It has been conservatively estimated that the national annual cost of obesity in 1991 (direct costs only) was $135 million. This was 2.5 percent of health expenditure in 1991 (Swinburn et al 1997). Using this percentage, the cost attributable to obesity in 2000/01 would be $247.1 million per annum.[1] The World Health Organization (WHO) has estimated that the cost of obesity for a country is 2–7 percent of the annual health budget (WHO 2000).

Aside from body weight, there are a number of other ways in which poor nutrition adversely affects health. These include micronutrient deficiencies as well as the specific nutritional needs of different population groups. Food security[2] is also a key issue addressed within this strategy. People on low incomes can struggle to afford high-quality food for a healthy diet (Department of Human Nutrition 2002).

Poor and inappropriate nutrition, sedentary lifestyles and rising obesity are not easy problems to tackle. Improving health outcomes requires co-ordinating and integrating efforts to change physical and social environments, target high-risk population groups, improve communication of key educational messages, and

[1] Based on 2000/01 figures of $9.884 billion spent on health and disability support services in New Zealand.

[2] Food security: Reliable access, in economic and practical terms, to the food needed for a healthy life for all members of the household (adequate in quality, quantity, safety and cultural acceptability).

develop a skilled workforce. There is compelling evidence not only that we must do something now to address the increasing burden of disease, but also that there can be significant benefits. For example, it has been predicted that universal adoption of a diet consistent with the Ministry of Health's Food and Nutrition Guidelines could have an impact on disease burden equivalent to the total elimination of smoking (Ministry of Health 1998).

The challenge is to make it easier for all New Zealanders to eat well and be more active. Internationally the WHO is recommending governments take strong actions to support improvements in nutrition, physical activity, and consequently a reduction in obesity and other non-communicable diseases (WHO 2002a).

Implementation of the strategy

The consultation undertaken for the development of this strategy identified strong support for an independent process to develop the implementation plan for the strategy. While this strategy proposes high-level actions, it does not attempt to prioritise actions or further develop high-level actions into specific programmes or projects.

A stakeholder working group, co-ordinated by the Ministry of Health, will develop the initial implementation plan, which will be task-specific and include timelines. It is anticipated that the implementation plan will need to be updated on a regular basis.

The interaction between nutrition, physical activity and obesity

Nutrition, physical activity and obesity are all key health issues in their own right. The strength in considering the three issues in one strategy is the extensive interrelationships and overlap that exists between them. The potential to form alliances between the different agencies working in nutrition, physical activity and obesity gives the strategy a broader base, a bigger workforce and a louder voice, both politically and in the community.

There are specific issues for nutrition that are completely independent of physical activity and the same applies to specific physical activity issues. However, for obesity the three key areas must work together to see any progress in reducing the burgeoning epidemic.

Although linked, the skill base for the two key areas is quite different. Maintaining and developing specialist skills in nutrition and physical activity must be not only maintained but enhanced.

Internationally the move to combat rising obesity involves an integrated approach for nutrition and physical activity. The WHO is promoting the development of supportive environments that foster increased physical activity and better nutrition. This includes the promotion of positive behaviours towards improved nutrition and increased physical activity, and recommending mounting a clinical response for those already considered obese (WHO 2002b).

Scope of *Healthy Eating – Healthy Action*

The scope of *Healthy Eating – Healthy Action* is broad, with the focus on meeting the needs of all New Zealanders but with a special recognition of the particular needs of Māori and other population groups at high risk, such as Pacific peoples. The strategy aims to:

- look at action in the health arena across public, primary, secondary and tertiary health care, and across public and personal health services
- identify appropriate areas for action at national, regional and local levels
- identify a range of key partnerships that could help to address each area for action, including government and non-government organisations, research and academic institutions, and industry and consumer groups.

While *Healthy Eating – Healthy Action* has a focus on improving both personal and population health, the underlying principles used in developing the strategy are those of the Ottawa Charter (WHO, et al 1986). It is well recognised in the Ottawa Charter that a comprehensive approach to health requires action from a range of sectors and at a range of levels.

The approach taken is also mindful of the key determinants of health. Income, poverty, employment and occupation, education, housing, culture, gender, and ethnicity have all been shown to have an important impact on health (Ministry of Health 2002b). Improving nutrition and physical activity cannot be considered in isolation from these determinants.

While *Healthy Eating – Healthy Action* does not address issues of food quality and safety specifically,[3] it does recognise that food quality is an important component of food security. Likewise, as reducing obesity is one of the key priorities of the New Zealand Health Strategy, obesity and overweight – rather than underweight – are the key issues of focus for this strategy.

Figure 2 (Part 3) illustrates the range of key partners that are important influencing factors for improving nutrition, physical activity and healthy weight. It is not an exhaustive list, but provides an idea of the breadth of partnerships needed in this area.

[3] The New Zealand Food Safety Authority has the lead responsibility for food quality and food safety issues.

The Treaty of Waitangi

The Treaty of Waitangi is New Zealand's founding document and is fundamental to the relationship between Māori and the Crown. The Treaty of Waitangi underpins *Healthy Eating – Healthy Action* and needs to inform the development of activities and services to address the diverse needs of Māori. The Treaty relationship is based on the following three principles:

- *partnership*: working with iwi, hapū, whānau and Māori communities to develop strategies for Māori health gain and appropriate health and disability services
- *participation*: involving Māori at all levels of the sector in planning, development and delivery of health and disability services
- *protection*: ensuring Māori enjoy at least the same level of health as non-Māori and safeguarding Māori cultural concepts, values and principles (Minister of Health and Associate Minister of Health 2002a).

The implementation of these Treaty principles is based on the understanding that Māori will have an important role in implementing *Healthy Eating – Healthy Action* for Māori. Responsibility for improving the quality and responsiveness of service delivery to Māori, however, does not just lie with Māori service providers. Mainstream services must also take appropriate action to address the nutrition and physical activity needs of Māori.

Reducing inequalities

Reducing social and economic inequalities among different groups of New Zealanders has been identified as a key priority by Government. Inequalities in health exist between socioeconomic groups, ethnic groups, people living in different geographic areas, and between males and females. People living in the most deprived circumstances have been shown to have greater exposure to health risks, poorer access to health and disability services, and poorer health outcomes. Health inequalities in New Zealand are greatest between Māori and non-Māori (Ministry of Health 2002b). Pacific peoples also have relatively poorer health than European New Zealanders, with data showing their health outcomes are somewhat better than Māori (Howden-Chapman and Tobias 2000).

There is a complex web of causality for health inequalities, and the approach to reducing them is also necessarily multifaceted. The Ministry of Health has published *Reducing Inequalities in Health* (Ministry of Health 2002b), which sets out an intervention framework that can be used at national, regional and local levels by policy makers, funders, service providers and community groups to assist them to achieve the Government's aim of reducing inequalities. The framework identifies the need for action that targets:

- social, economic, cultural and historical factors contributing to inequalities in health
- pathways through which these factors influence health (eg, health-related behaviours and environmental conditions)

- health and disability services
- the impact of poor health and disability on economic and social wellbeing.

National Plan of Action for Nutrition

The Public Health Commission's *National Plan of Action for Nutrition* (NPAN) (Public Health Commission 1995) focused on policy, programmes and research issues that help to improve health through improving food and nutrition using population-based strategies. Significant progress has been made on nutrition issues raised in NPAN. An evaluation of NPAN recommended a need for a stronger focus on healthy weight and physical activity while maintaining recommendations for improved nutrition (Brinsdon 1998). *Healthy Eating – Healthy Action* builds on the directions and recommendations from NPAN that have already been achieved, while recognising the need for new issues to be addressed and for a change in focus in some areas.

Indicators of change

Monitoring change is a key aspect to assessing our efforts to improve nutrition, increase physical activity and reduce obesity. Indicators are important to:

- monitor changes over time in nutrition, physical activity and obesity-related conditions
- provide an early warning system of the need to consider planned actions
- guide investment and prioritisation to achieve improved health outcomes.

The Ministry of Health is currently developing a new monitoring framework using existing monitoring data to measure progress on a range of public health outcomes. This will include a set of measures to assist with the monitoring of progress on *Healthy Eating – Healthy Action*. This framework is likely to include an appropriate balance of both process outcome measures and performance targets. In addition, the implementation plan that will follow *Healthy Eating – Healthy Action*, and which will outline in greater detail actions that need to occur in the next three to five years, will provide the springboard for setting specific targets.

How was *Healthy Eating – Healthy Action* developed?

This document has been developed with broad sector support and key stakeholder input. It is intended to build on existing work, international and national literature and the experiences of those working in the health, physical activity and food-related sectors in New Zealand. A range of activities have fed into this stage of development including:

- a review of relevant policy development in New Zealand
- a review of existing national services and programmes purchased by the Ministry of Health

- a descriptive epidemiological report
- an epidemiologial study estimating the number of deaths due to nutrition-related risk factors that are potentially avoidable
- identification of relevant Health Research Council funded research
- a review of key issues from the literature
- a review of national strategies from other countries
- a series of focus groups held around the country to seek input into the initial stage of the strategy development, which included Māori, Pacific peoples, researchers and academics, the public, primary and personal health providers, key interest groups, and food industry groups
- feedback from the national provider forums organised by Agencies for Nutrition Action in 2001
- consultation on the draft strategy *Healthy Action – Healthy Eating. Oranga Pumau – Oranga Kai. Towards an integrated approach to physical activity, nutrition and healthy weight for New Zealand* (Ministry of Health 2002c)
- publication of the analysis of feedback from the consultation (Ministry of Health 2002d)
- international peer review of the draft strategy
- redrafting of the framework document
- external peer review of the redrafted background sections
- establishment of a process for developing the implementation plan and next phase of the project.

Part 2:
Key Issues in Nutrition, Physical Activity and Obesity

Improved nutrition, moderate levels of physical activity and maintaining a healthy body weight have major implications for preventable disease, disability and death in New Zealand.

This section briefly summarises the health status of New Zealanders, and the key issues underpinning the development of this draft strategy. More detailed information on each topic is provided in the companion document *Healthy Eating – Healthy Action: A background*. Further information can be found in the District Health Board toolkits available on the Ministry of Health web site www.moh.govt.nz. The toolkits cover health status, burden of disease, current programmes, evidence for effective interventions and best practice.

Nutrition

Key population health messages to improve nutrition

- Eat a variety of nutritious foods.
- Eat less fatty, salty and sugary foods.
- Eat plenty of vegetables and fruits.
- Fully breastfeed infants for at least six months.

(Refer to the Food and Nutrition Guidelines series, Ministry of Health.)

There is an increasing recognition of the key role that diet and nutritional status play in maintaining health and preventing disease (obesity, heart disease, hypertension, stroke, type 2 diabetes, some cancers, osteoporosis, anaemia and dental caries). A number of dietary factors are important protective factors in these diseases, including vegetable and fruit intake. Key risk factors for these diseases include fat (particularly saturated fat) intake, sodium intake and total energy intake. Other areas of nutritional significance in New Zealand include iodine, selenium, folate, iron and calcium intakes, and the particular nutritional needs of different population groups.

Wider societal, cultural and environmental influences as well as individual behaviours have an impact on what and how much people eat. These factors include food prices, food supply, food technology, the media, individual preferences, social and cultural attitudes and socioeconomic status. For a number of New Zealanders healthy food choice is significantly reduced by lack of money. The National Nutrition Survey 1997 (NNS97) identified that lack of food security is an important issue (Russell et al 1999).

Nutrition data

- Two-thirds of all New Zealanders eat the recommended three servings of vegetables and half eat the recommended (at least) two servings of fruit. Māori and Pacific peoples are least likely to eat the recommended servings.
- Thirty-five percent of total energy comes from fat (30% is recommended). Māori have higher fat intakes than non-Māori.
- The rate of full or partial breastfeeding at six months is 60 percent (62% New Zealand European, 53% Māori, 60% Pacific infants) (Ministry of Health 2001).
- Twenty-seven percent of New Zealand households report that the variety of food they eat is limited by lack of money; 14 percent of households report that food runs out sometimes or often because of lack of money.

Source: Russell et al 1999.

Physical activity

Key population health messages to increase physical activity

- Be active every day for at least 30 minutes in as many ways as possible.
- Add some vigorous exercise for extra benefit and fitness.

(Refer to the New Zealand Physical Activity Guidelines, Hillary Commission 2001).

About one-third of New Zealand adults are insufficiently physically active to benefit health (Sport and Recreation New Zealand 2002). There is good evidence that at least 30 minutes of moderate-intensity physical activity on most, if not all, days of the week benefits health. Physical activity can reduce the risk, and modify the effects, of many major non-communicable diseases and conditions (cardiovascular diseases, cancers, diabetes, osteoporosis, obesity and depression). In general, physical activity improves glucose metabolism, reduces body fat and lowers blood pressure. These are the main ways in which it is thought to reduce the risks of cardiovascular diseases and diabetes (WHO 2002b).

Physical activity is influenced by both environmental and individual factors and has several dimensions: type, intensity, frequency, duration and context (eg, recreation, occupation, transport, incidental). The wider environment provides opportunities and presents barriers to physical activity (eg, urban design, safety, pollution, availability of parks and facilities). In addition to environmental factors, an individual's physical activity level is influenced by preferences and constraints, such as perceived enjoyment, skill, income, social/cultural attitudes, family commitments and health status. Approaches to increase physical activity must take account of the need to bring together key players to collaborate, co-ordinate, support and encourage more people to be physically active. It should also be recognised that people with disabilities are less likely to be physically active than the general population.

Physical activity data

- Two-thirds of New Zealand adults are physically active, and one-third are inactive.[4]
- The highest levels of physical activity are among 18–24-year-olds and over-50-year-olds.
- Among school-aged children and young people, physical activity levels decline significantly after age 16–17 years, particularly among young women.
- Physical inactivity has not been associated with socioeconomic status in New Zealand. However, those who have no qualifications are more likely to be sedentary than those with school and post-school qualifications.
- It appears that physical activity participation has decreased among children aged 5–17 years.

Source: 1998–99 Hillary Commission Sport and Recreation Surveys, and the 1996/97 New Zealand Health Survey

Obesity

Key population health messages to achieve and maintain a healthy weight

- Aim to maintain a healthy weight throughout life.
- Promote and foster the development of environments that support healthy lifestyles.

Obesity is a growing global public health problem. It is a major risk factor for many chronic, debilitating and life-threatening diseases. This epidemic is largely due to changing social and physical environments, in which people are consuming excess energy through food and drink and not expending adequate energy through physical activity. As with nutrition and physical activity, when tackling obesity it is important to intervene to change the environment as well as to effect individual change.

[4] Physically inactive includes 'sedentary' (no leisure-time activity in the previous 7 days) and 'relatively inactive' (some leisure time physical activity in the previous 7 days but less than 2.5 hours). Physically active includes 'relatively active' (at least 2.5 hours but less than 5 hours of leisure-time physical activity in the previous 7 days) and 'highly active' (5 hours or more of leisure-time physical activity in the previous 7 days).

Obesity data

- Thirty-five percent of New Zealand adults are overweight and a further 17 percent are obese (see Table 1).
- New Zealand data indicate that the prevalence of obesity is increasing. Between 1989 and 1997 the prevalence of adult obesity increased by 55 percent. It has also been estimated that by 2011 approximately 29 percent of the adult population will be obese (Ministry of Health 2002a).

Source: 1997 National Nutrition Survey

Table 1: Percentage of adults classified as obese or overweight

	NZ European and Others		Māori		Pacific peoples		Total population	
	Male	Female	Male	Female	Male	Female	Male	Female
Overweight (%)	41.0	29.8	30.0	32.7	59.2	28.8	40.4	30.1
Obese (%)	12.6	16.7	27.0	27.9	26.2	47.2	14.7	19.2

Source: Russell et al 1999
Notes: Obese: BMI > 29.9 for NZ European and Others; BMI > 31.9 for Māori and Pacific peoples.
Overweight: BMI 25–29.9 for NZ European and Others; BMI 26–31.9 for Māori and Pacific peoples.

Māori

Physical activity, nutrition and healthy weight are all important issues for Māori in terms of addressing the principles of the Treaty of Waitangi and reducing inequalities. The impacts of colonisation have led to major changes in the diet and physical activity patterns of Māori. Approaches to increasing physical activity, improving nutrition and achieving healthy weight must recognise the inter-relationship between the wider environment and the lives of the whānau and individual Māori. Māori approaches to health are primarily based on the view that hauora, or holistic health, is the product of wellbeing at physical, spiritual, psychological and social levels. Nutrition, physical activity and obesity services and activities delivered to Māori need to reflect an understanding of hauora Māori and approaches that appropriately address Māori health needs, using Māori models of health such as Te Whare Tapa Whā, Te Pae Māhutonga and Te Wheke.

Māori data

Nutrition

- Māori have higher fat intakes as a percentage of energy than non-Māori.
- A high proportion of young Māori and Māori women have inadequate calcium intakes.
- Māori are over-represented among the most deprived groups in New Zealand. In general, people in such groups face problems providing the quantity and quality of food needed for a healthy diet (Russell et al 1999).

Physical activity

- Māori and non-Māori are approximately equally active, and Māori children are much more likely than non-Māori or other ethnic groups to be regularly active. However, more Māori than non-Māori are sedentary.

Obesity

- Māori are more likely to be obese than other New Zealanders, except Pacific peoples: 27 percent of Māori men and 27.9 percent of Māori women are obese compared to 12.6 percent of European and other New Zealand men and 16.7 percent of other New Zealand women.

Source: 1998–99 Hillary Commission Sport and Recreation Surveys; 1996/97 New Zealand Health Survey; 1997 National Nutrition Survey.

Services and activities aimed at improving nutrition, increasing physical activity and reducing obesity among Māori will need to address the quality of service delivery to Māori. The responsibility for improving the quality of these services does not just lie with Māori providers: mainstream services also need to improve their accessibility and responsiveness to Māori.

Effective interventions for Māori need to recognise the interdependence of people, that the 'collective' and individual wellbeing of Māori are equally important and the need to work with people in their social context beyond the treatment of physical symptoms. *He Korowai Oranga: Māori Health Strategy* (Minister of Health and Associate Minister of Health 2002a) aims for whānau ora: Māori families being supported to achieve their maximum health and wellbeing, and indentifies four pathways that need to be addressed in order to progress whānau ora:

- development of whānau, iwi and Māori communities
- Māori participation in the health and disability sector – active participation by Māori at all levels of the health and disability sector
- effective health and disability services – timely, high-quality, effective and culturally appropriate services to improve health and reduce inequalities

- intersectoral – with the health and disability sector taking a leadership role across government sectors and government agencies to achieve whānau ora by addressing the broader determinants of health.

Whakatātaka: Māori Health Action Plan 2002–2005 (Minister of Health and Associate Minister of Health 2002b) is the implementation plan for *He Korowai Oranga*, and provides a framework and specific priority action areas to improve Māori health outcomes over the next two to three years.

Pacific peoples

Pacific populations in New Zealand are heterogeneous and culturally diverse. The migration of Pacific peoples to New Zealand, globalisation and urbanisation have brought changes to the Pacific lifestyle. Lack of physical activity and a poor diet have precipitated an epidemic of obesity and a high prevalence of non-communicable diseases among Pacific peoples compared to New Zealand Europeans.

Food has a central role in the cultural life of Pacific peoples. Food plays an integral part in all major occasions, and this is a key consideration in developing approaches to address obesity and nutrition. Physical activity has also reduced significantly due to migration into an urban environment.

Pacific data

Nutrition

- Pacific peoples are least likely to meet the recommendations for vegetables and fruit consumption (compared to Māori and European and others).

Physical activity

- Pacific peoples are slightly less physically active than Māori and non-Māori.

Obesity

- Pacific peoples are more likely to be obese than other New Zealanders (26% of Pacific men and 47% of Pacific women are obese).

Source: 1998–99 Hillary Commission Sport and Recreation Surveys; 1996/97 New Zealand Health Survey; 1997 National Nutrition Survey.

Other ethnic groups

'Other' ethnic groups are increasingly contributing to the ethnic diversity of the New Zealand population. The broadly defined 'Asian' population in New Zealand (major groupings include Chinese, Korean and Indian) has increased from 3 percent in 1991 to 6.6 percent in 2001, mainly due to immigration. The 2001 Census counted more people of Asian ethnicity than Pacific peoples. Almost two-thirds of the Asian population live in the Auckland urban area (Statistics NZ 2003).

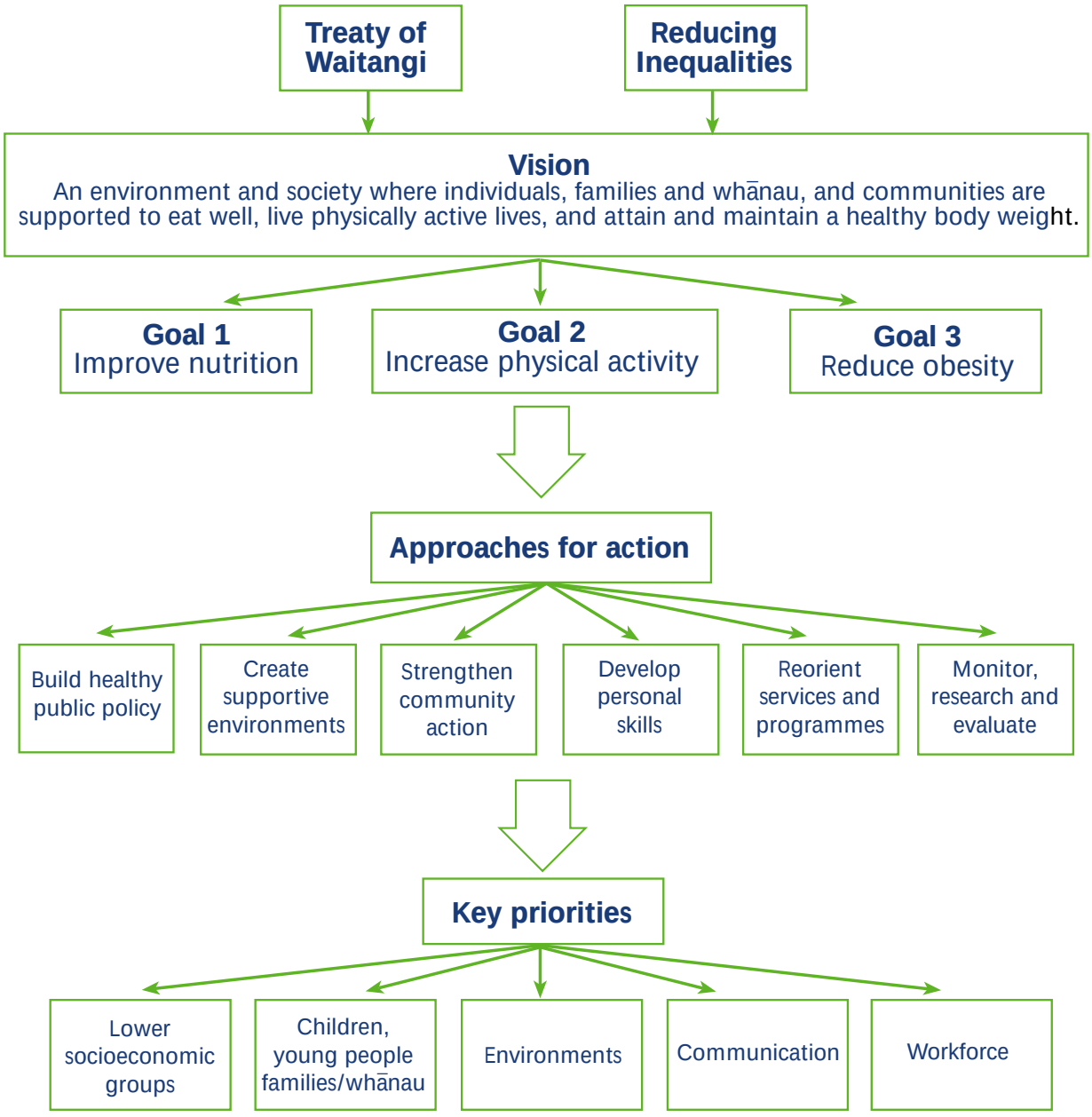
Over the 10 years from 1991 to 2001 the number of people born overseas rose from 527,337 to 698,628, an increase of 33 percent (compared with a 3% increase in the New Zealand-born population). The biggest increases were in people from northeast Africa, sub-Saharan Africa, north Africa–Middle East and southern – central Asia (Statistics NZ 2003). Currently there are limited reliable data on physical activity status, nutritional patterns or obesity for the smaller ethnic groups. Data from the 1998–99 Hillary Commission, Sports and Recreation Survey does show however, that men and women from other ethnic groups are least likely to be active, compared to Māori, European, and Pacific people.

Barriers to providing information on good nutrition and access to physical activity for these groups may include income, language and cultural factors. One New Zealand survey on physical activity found that language and comprehension are the main barriers, through hindering dissemination of information. Other barriers included cultural differences, embarrassment and image (Genet 2000).

Part 3:
The Framework

The *Healthy Eating – Healthy Action* framework (Figure 1) has been developed by building on existing work, consideration of national and international literature, and focused consultation with people in the health, physical activity and food-related sectors in New Zealand.

Figure 1: The *Healthy Eating – Healthy Action* framework



The framework is explained in more detail in the following pages.

Treaty of Waitangi and reducing inequalities

The Treaty of Waitangi and reducing inequalities are fundamental to this strategy, and all activities directed at improving health.

Vision

The vision focuses on the need for environmental and society-level support to assist people to eat well, lead physically active lives and attain and maintain a healthy body weight. This recognises that there are many social, economic, cultural and environmental barriers that need to be eliminated or modified to support individual behaviour change.

Goals

Underpinning this vision are three goals derived from the priority population health objectives from the New Zealand Health Strategy:

- improve nutrition
- increase physical activity
- reduce obesity.

Through the effective implementation of *Healthy Eating – Healthy Action* it is envisaged that, over time, these outcomes can be achieved.

Approaches for action

Six key approaches have been identified to guide actions for each of the priority areas, based on the Ottawa Charter:

- build healthy public policy
- create supportive environments
- strengthen community action
- develop personal skills
- reorient services and programmes
- monitor, research and evaluate.

Build healthy public policy

Policies are essential at all levels and across all sectors to underpin and support actions and change. Policy makers need to be made aware of the health consequences of any of their decisions, including both positive and negative impacts on nutrition and physical activity.

Create supportive environments

The links between people and their environment constitute the basis of a socio-ecological approach to health. Health cannot be separated from other goals. Changing patterns of life, work and recreation have a significant impact on health. The way society organises its social structures should help create a healthy society. In order to achieve change at the population and sub-population levels, co-ordinated efforts are required across key sectors and settings that can provide support to improve nutrition, encourage physical activity and attain and maintain a healthy weight (eg, transport, sport and recreation, education, local government, education, income support, health care).

Strengthen community action

This approach involves strengthening communities to gain the capacity to set priorities and make decisions on issues that affect their health in a sustainable way. A fully functioning community will be able to assess its own community health needs in terms of nutrition, physical activity and healthy weight, and take action to improve health outcomes in these areas. It will monitor performance, and evaluate the impact of initiatives on the local community.

Develop personal skills

This refers to enabling people to gain the knowledge and skills to meet life's challenges and to participate and contribute to society. As applied to nutrition, physical activity and healthy weight it relates to understanding why these issues are important to health and how to overcome possible barriers, and how to take opportunities to improve personal health by eating well, being more physically active and maintaining a healthy weight. Learning throughout life needs to be facilitated in the school, home, work and community settings.

Reorient services and programmes

The responsibility for health promotion in health (and related) services is shared among individuals, community groups, health professionals, health services, institutions and government. Promoting health also needs to extend beyond the health sector to other sectors that have an impact on the wider socio-ecological environment (including local government, education, transport, recreation, the sport and fitness sector, and the weight loss and food industries). Building on and integrating effective programmes and services and recognising where change in services may be more effective are essential.

Monitor, research and evaluate

Having up-to-date data on the health status of the population and evidence on those factors that influence it form the basis on which to build effective services and programmes. Evaluation of programmes to determine their effectiveness and measure progress must also be recognised as key aspects to all service delivery.

Improved collection of information, including ethnicity information, is needed to enhance service delivery to, and outcomes for, Māori and Pacific populations.

The New Zealand Health Monitor – a 10 year cycle of health-related surveys, (Ministry of Health 2002e) is an important aspect of any such data collection. The Ministry is also involved with surveillance to identify areas of change that are relevant to New Zealanders' health status. Collaboration of efforts in the monitoring area is key to making sure that efforts are making a difference.

Key priorities

Five priorities have been selected, after initial consultation, as most likely to result in progress towards the overall goals of the strategy:

- lower socioeconomic groups
- children, young people, and their families and whānau (including older people)
- environments
- communication
- workforce.

Priority 1:
Lower socioeconomic groups

For a significant number of New Zealanders a lack of money and resources poses a barrier to making healthy food choices and being physically active. Policies, programmes and services that improve nutrition and physical activity for these populations will result in significant health gains for New Zealand.

Priority 2:
Children, young people, and their families and whānau (including older people)

The family and whānau are central to supporting children and young people to adopt lifelong habits of physical activity and good nutrition. Parents, grandparents and caregivers can also learn from their children, and the benefits will influence the wider community. Healthy habits begin at birth, and infancy and preschool years are key learning times. In addition, evidence is increasingly showing that nutrition in the prenatal, infancy and childhood periods can shape health trends for a lifetime. A focus on family and whānau can also encourage the adoption of healthy patterns among older people, allowing them to be there to help their children/tamariki grow.

Priority 3:
Environments

The wider physical, social and cultural environments have a major influence on nutrition, physical activity and healthy weight. Nutrition is influenced by the availability and cost of food, advertising, and the rapidly expanding market of foods purchased outside the home, which are often high in fat, salt and sugar. Most of the levers to increase physical activity exist outside the health sector (eg, transport is largely influenced by regional and local government). Obesity is also strongly related to the physical environment, urban design, the convenience of motorised transport, labour-saving technologies and inactive entertainment options.

Priority 4:
Communication

Communication of consistent and reinforcing messages at all levels is a key element of promoting nutrition, physical activity and healthy weight. Clear messages on types of food and how much to eat, and what level and type of physical activity benefit population and individual health are essential. Accurate non-stigmatising messages must be communicated across sectors and by health and other professionals in various settings. Open and clear communication is also a vehicle for intersectoral collaboration, building trust, sharing ideas, and creating a supportive environment to improve health.

Priority 5:
Workforce

All those involved in the nutrition, physical activity and healthy weight sectors need to have not only effective skills but also a clear understanding of the key approaches, opportunities and barriers to improving health status in these areas. Key groups – particularly health professionals, community health workers, providers in other sectors (such as recreation, sport and fitness sectors, food industry, education, transport and local government) – all need to have knowledge and understanding of how the wider environment impacts on health and how personal behaviours can be changed effectively. Workforce development planning also needs to consider the makeup of the nutrition and physical activity workforce, and in particular needs to ensure that there are sufficient numbers of trained Māori and Pacific peoples to meet the needs of these population groups.

Principles

The following principles underpin and drive all activities that occur in the implementation of *Healthy Eating – Healthy Action*.

Relevance to target populations

The design and delivery of all programmes, services and research must be able to meet the needs of people from diverse backgrounds, including age, culture, disability, health status, and gender.

Long-term and comprehensive approach

Real population health improvements require long-term investment using a range of co-ordinated and complementary approaches. Very often small changes over a whole population can have significant benefits over time.

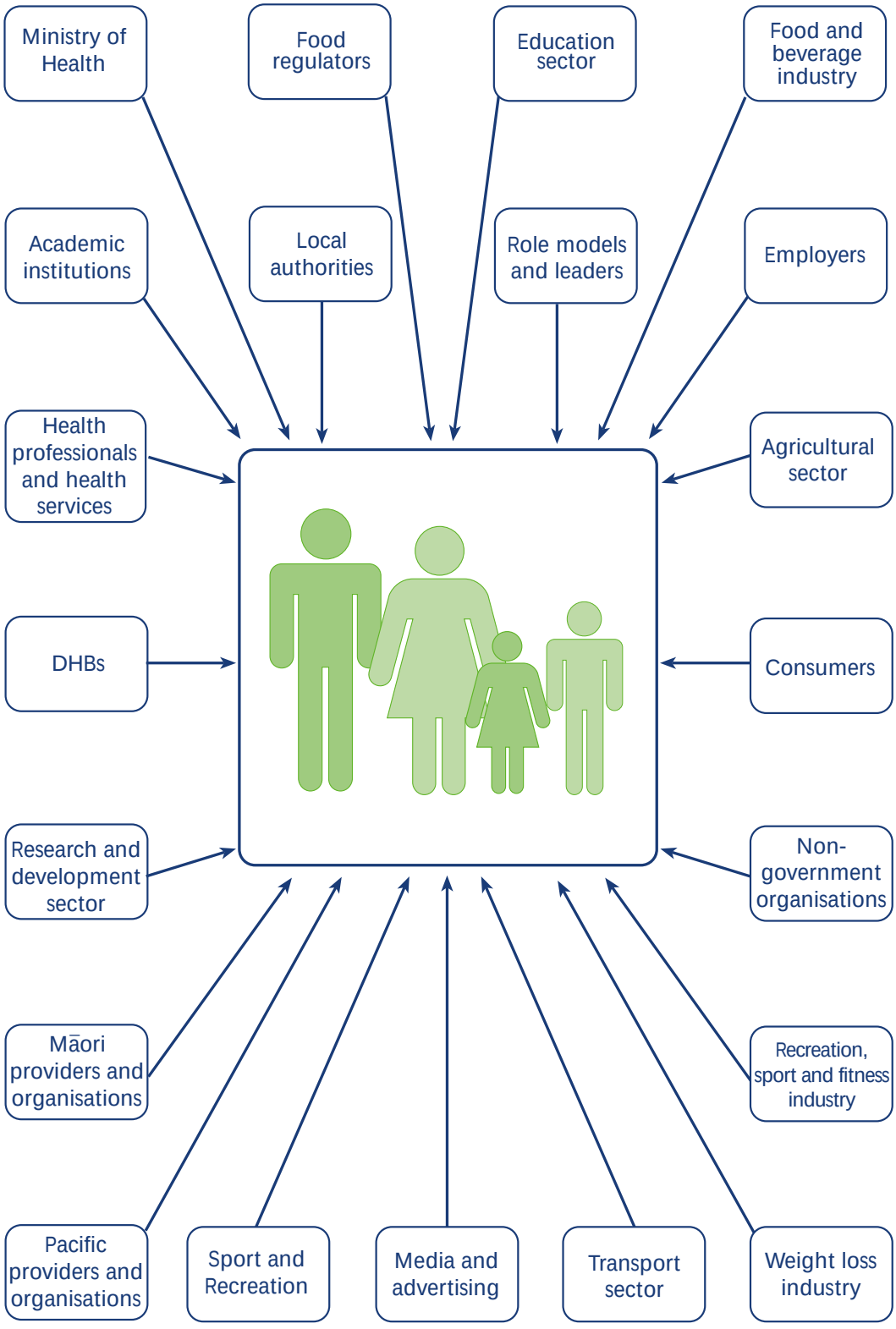
Critical periods of life

The life-course approach suggests that there are 'critical periods' of life that can alter future health status. For example, maternal under-nutrition in pregnancy has been linked to the child having an increased susceptibility to cardiovascular disease and diabetes in adulthood. The life-course approach also suggests that biological and social chains of risk can be broken at several stages of life through a range of targeted prevention and treatment interventions (Perry 1997).

Co-ordination and collaboration

Clearly the health sector alone cannot achieve the goals of this strategy, as the determinants of health often lie outside its direct control. Co-ordination and collaboration is required within the health sector, across other sectors and regions, between government and non-government organisations, and involving both the public and private sectors. The health sector can encourage and support action in other sectors by offering support and advising on the health impact of policies and trends. Key players in implementing *Healthy Eating – Healthy Action* are outlined in Figure 2.

Figure 2: Key stakeholders with the potential to influence nutrition, physical activity and obesity



Part 4:
Key Priorities

Outline of key priorities

For each priority area the strategy sets out the underlying rationale for selecting the key issues, and actions based around the goals of improving nutrition, increasing physical activity and reducing obesity. These priority areas are shaped by the approaches for action, guiding principles, goals and vision, and especially by the overarching Treaty of Waitangi and the reducing inequalities framework.

Each priority area identifies high-level actions directed at the whole population and/or specific sub-populations. More specific actions will be developed as part of the implementation plan. All mainstream providers are required to ensure that the services they deliver are appropriate for Māori. In addition, specific priority actions targeting Māori will be identified, as appropriate.

Priority 1:
Lower socioeconomic groups

Significant health gains can be achieved through improving nutrition, increasing physical activity and maintaining a healthy body weight among lower socioeconomic groups, who may have difficulty accessing good nutrition and being physically active.

Rationale

All New Zealanders should be supported to eat well and be physically active. For some New Zealanders this is not easy. Many people on very low incomes – including an over-representation of Māori and Pacific peoples, some new immigrants and refugees, some people with disabilities and other marginalised groups – have difficulty accessing the resources, facilities, food and services that help them to attain and maintain health.

Policies, programmes and services that assist in making the healthy choice an easy and accessible option for people with very limited money are key to improving the health and wellbeing of the nation.

Socioeconomic status is one of the key determinants of health (Ministry of Health 2002b). Socioeconomic disadvantage is associated with increased risk of obesity among women, diabetes and heart disease, and increased risk of micronutrient

deficiencies resulting from inappropriate diet or insufficient food. Although in New Zealand socioeconomic status has not yet been clearly associated with physical inactivity, this contrasts with overseas experience, which may indicate that the issue is one of measurement rather than lack of association. Also, there is an association between educational status and sedentary behaviour (people with no qualifications are more likely to be sedentary than people with school, or post-school qualifications) (Sport and Recreation New Zealand 2002). This indicator could be interpreted as a proxy for socioeconomic status.

People who are disadvantaged by socioeconomic status are often unable to access a wide range of services and facilities, such as health or recreation services (general practitioners, other health professionals, the weight loss industry, gyms, recreation and sports clubs, etc). Lack of money can also lead to poor housing, lack of cooking and storage facilities, or lack of transport to recreational facilities, supermarkets and fresh food markets.

Reducing the impact of socioeconomic conditions that impact on nutrition, physical activity and healthy weight cannot be achieved solely through the health sector. It requires broad commitment from government agencies, non-government organisations, industry and communities.

Pacific peoples generally are among the groups with the lowest incomes and have poorer health status than other non-Māori New Zealanders. In particular, the prevalence of overweight and obesity among Pacific peoples is high. Pacific communities, therefore, must be an important focus for approaches that aim to improve nutrition, increase physical activity and reduce obesity.

Māori

Māori are over-represented among lower socioeconomic New Zealanders. Inequalities in Māori health must be addressed taking into account the principles of the Treaty, and the need to support Māori development. Māori have higher rates of many of the key nutrition-related diseases. However, physical activity levels among Māori compare favourably to those of non-Māori, and Māori tamariki and rangatahi are more active than their non-Māori counterparts. This positive situation and the important role that sport and recreational activities (such as kapa haka) play in Māori society provide an opportunity to advance Māori health.

Physical activity also provides an opportunity to promote other aspects of Māori health, such as good nutrition, smoking cessation and moderate alcohol consumption, which can in turn reduce the risk of poor health.

Objective 1.1:
Build healthy public policies for lower socioeconomic groups

Policies, at all levels, need to be developed that identify and address the needs of lower socioeconomic groups.

Key actions

- Initiate and foster dialogue and action, at all levels and across all sectors, to develop and support policies for people on low incomes to improve their ability to purchase healthy food and access physical activity opportunities.
- Explore international policy developments in food security and opportunities to increase physical activity for those most at risk.

Objective 1.2:
Create supportive environments for lower socioeconomic groups

Environments need to be designed and modified to support lower socioeconomic groups to access healthy foods and be physically active.

Key actions

- Work with the food industry, local government and non-government organisations to encourage the increased availability of affordable, healthy food choices and physical activity opportunities.
- Create safe environments for physical activity, such as footpaths, access to public transport, lighting, parks etc.
- Create a range of environments that support healthy eating, which are accessible and appropriate for lower socioeconomic groups.

Objective 1.3:
Strengthen community action for lower socioeconomic groups

Inequalities in health can be reduced by working with lower socioeconomic communities and empowering them to develop their own solutions to improve nutrition, increase physical activity and attain a healthy weight.

Key actions

- Ensure communities most at risk are priorities for action (for improving) access to good nutrition and physical activity opportunities, through community development approaches.
- Ensure the needs of Māori and Pacific communities are a priority for action, especially in areas of high deprivation.

Objective 1.4:
Develop personal skills among lower socioeconomic groups

Inequalities in health will be reduced through increased knowledge of the benefits of good nutrition and physical activity, and how to access services and programmes designed to be accessible for those with limited money and resources.

Key actions

- Ensure education and health promotion resources and programmes that promote healthy eating and physical activity are appropriate and readily available for the most at-risk groups, including Māori, Pacific peoples, new immigrants/refugees, people with disabilities, people who are unemployed and those on low incomes.
- Extend health promotion programmes that are effective for people on low incomes or for people in lower socioeconomic groups.
- Ensure messages of the Food and Nutrition Guidelines are available and appropriate for low-income groups.

Objective 1.5:
Reorient services and programmes to focus on lower socioeconomic groups

All providers of nutrition and physical activity services and programmes should tailor programmes to meet the needs of lower socioeconomic groups.

Key actions

- Support the development of culturally appropriate weight-loss programmes and services that are accessible to lower socioeconomic groups, including Māori, Pacific peoples and at-risk immigrant groups.
- Support and expand services and programmes that are acceptable and effective for Māori and Pacific peoples.
- Expand effective services such as the Green Prescription Scheme to ensure access for people in lower socioeconomic groups.

Objective 1.6:
Monitor, research and evaluate the nutrition, physical activity, and overweight and obesity status of lower socioeconomic groups

Data and evidence need to be available to assess current status and effective ways to improve nutrition, increase physical activity and attain a healthy weight among lower socioeconomic groups.

Key actions

- Support research that identifies, monitors and evaluates issues and interventions for nutrition, physical activity and healthy weight that are relevant for lower socioeconomic groups.

Priority 2:
Children, young people, and their families and whānau (including older people)

Services and programmes will have a focus on the nutritional and physical activity needs of infants, children, young people, and their families and whānau, including older people, to build the foundation of health for a lifetime.

Rationale

It is well established that nutrition during foetal development, and during infancy, childhood and adolescence, is critical in determining adult health. Nutrition messages and issues differ according to age and the critical period of benefit. For example, nutritional status during pregnancy is linked to risk of birth defects and to later dental health. Breastfeeding can provide protection from a range of infectious diseases and adult chronic diseases, cardiovascular disease, some cancers and type 2 diabetes. Moderate physical activity in low-risk healthy pregnant women improves the likelihood of giving birth to a healthy baby (Clapp et al 2000).

New Zealand children and young people appear to be following global trends of increasing overweight and obesity. There are indications that activity levels have dropped in the past 10 years, with children and young people occupying themselves with high levels of television watching, and playing computer and video games (Dawson et al 2001). In addition, children are consuming increasing levels of convenience energy-dense foods and drinks. The 1997 National Nutrition Survey revealed that in 15–24-year-olds 8–10 percent of energy consumed came from non-alcoholic beverages, including soft drinks and other sugar-sweetened drinks (Russell et al 1999).

Because parents, caregivers and families provide some of the strongest influences in nutrition choices and physical activity patterns it is critical that approaches target the family and whānau where possible. Healthy food choices and physical activity patterns developed and reinforced at a young age can benefit the individual, but are also likely to impact on behaviours and choices of the wider family and whānau.

Outside the family; school, peer group, media, cultural, community and physical environments influence children and young people's food and drink choices and activity patterns. Approaches need to be developed within a cultural context; for example, with Pacific families, taking account of the cultural significance of feasting and using relevant settings such as the church for nutrition education. For schools, the Health Promoting Schools programme provides a framework to address the curriculum, school policies, school health services, and the social and physical environment. It also provides a valuable connection with families and the wider community.

It is important that the extended family is recognised in the development of appropriate action areas. With the growing population of older people, sound nutrition and physical activity can benefit longevity and quality of life. Physical activity for older people plays a key role in maintaining muscle and bone strength, the management of osteoporosis, cardiovascular diseases, some cancers and diabetes, as well as reducing the risk of falls.

Māori

Whānau (kuia, koroua, pakeke, rangatahi and tamariki) is recognised as the foundation of Māori society. As a principal source of strength, support, security and identity, whānau plays a central role in the wellbeing of Māori individually and collectively (Minister of Health and Associate Minister of Health 2002a).

Māori consulted for this project indicated that tamariki and rangatahi Māori must be a priority in *Healthy Eating – Healthy Action*. Tamariki and rangatahi make up a large proportion of the Māori population, so improvements in nutrition, food security and physical activity for young people will lead to health gains for the Māori population as a whole now and into the future. In addition, patterns of eating and activity in tamariki will be strongly influenced by members of the whānau, particularly parents but also grandparents, aunties, uncles and cousins. As such, interventions must support change in the whole whānau, and must not just be targeted at tamariki. Targeting nutrition and physical activity interventions to the whānau by utilising appropriate cultural approaches can also serve to strengthen the whānau and Māori communities more broadly. This approach is supported by *He Korowai Oranga: Māori Health Strategy*, whose overall aim is whānau ora: Māori families supported to achieve their maximum health and wellbeing (Minister of Health and Associate Minister of Health 2002a).

Objective 2.1:
Build healthy public policies for children, young people, and their families and whānau

Policies need to be developed that address the nutritional and physical activity needs of children, young people, and their families and whānau.

Key actions

- Promote the development of policies at all levels (national, regional and local) across all relevant sectors and in key settings, that support healthy food choices and participation in physical activity for children, young people, and their families and whānau, including older people.
- Promote the ongoing support and further development of policies that support breastfeeding.
- Investigate policy options to reduce adverse health outcomes related to nutrition and physical activity.

Objective 2.2:
Create supportive environments for children, young people, and their families and whānau

Environments need to be designed and modified to assist children, young people, and their families and whānau, including older people, to be active, eat well and attain a healthy weight.

Key actions

- Promote the development of environments, including infrastructure, that support healthy eating and physical activity for infants, children and young people, and their families and whānau, including older people.
- Promote the development of environments that are particularly mindful of the needs (including safety) of older people and people with disabilities.

Objective 2.3:
Strengthen community action for children, young people, and their families and whānau

Communities should be supported to develop initiatives that encourage good nutrition, physical activity and healthy weight among children, young people, and their families and whānau, including older people.

Key actions

- Support and foster well-evaluated programmes that have a whole of community and whole of family approach to improving nutrition and physical activity.

Objective 2.4:
Develop personal skills among children, young people, and their families and whānau

Children and young people and their families and whānau must be equipped with the knowledge and information to assist them to make healthy choices regarding food, to be physically active and to attain a healthy weight.

Key actions

- Ensure children, young people and their families and whānau receive and are responsive to consistent healthy messages from childcare, schools and health professionals about nutrition, physical activity and healthy weight.

Objective 2.5:
Reorient services and programmes to focus on children, young people, and their families and whānau

Providers of nutrition and physical activity programmes should incorporate an appropriate focus on children, young people, and their families and whānau.

Key actions

- Support the involvement of appropriate health professionals in the delivery of the Health and Physical Education Curriculum in schools.
- Support, evaluate and resource appropriate prevention, maintenance and treatment initiatives for overweight and obese children and young people that also address the needs of Māori and Pacific children.
- Support and develop programmes to encourage healthy eating and active lifestyles for older people.

Objective 2.6:
Monitor, research and evaluate physical activity and nutrition status in children, young people, and their families and whānau

Nutrition, physical activity, weight status and interventions must be monitored, researched and evaluated for children, young people, and their families and whānau, including older people.

Key actions

- Support appropriate applied research into effective interventions for children and young people in nutrition, physical activity and obesity.
- Monitor the nutrition status of infants, and the nutrition, physical activity and weight status of children, young people and their families and whānau, including older people, with a focus on the most vulnerable groups.

Priority 3: Environments

Environments need to be developed and modified to support good nutrition, physical activity and healthy weight across all key sectors and settings.

Rationale

Major changes in social and physical environments are likely to be largely responsible for the growth in sedentary lifestyles and obesity. It is critical, therefore, to take not just an individual approach to behaviour change, but an ecological approach that addresses the causes of poor nutrition, physical inactivity and obesity. Macro-environmental influences include the food supply, physical environment, availability and access to facilities, and the values and expectations of the wider community.

Micro-environmental influences, such as transport options and labour-saving devices, are closer to the individual and are often addressed through the development of personal skills or behaviour modification.

Changes in transportation, town planning, technological innovations and entertainment, and issues around safety, availability and affordability all influence individual behaviour and choices about participation in physical activity and food consumption, yet are largely outside the sphere of an individual's control. Many factors need to be addressed in order to improve the wider environment that impacts on physical activity, diet and weight. These factors include technologies that require less activity (motor vehicles, TV, videos, DVDs, computer games), increases in the fat and sugar content of foods produced outside the home, the cost of fruit and vegetables, increased portion sizes, sociocultural influences (eg, fashion and trends), family patterns and peer influences (Egger and Swinburn 1997).

Patterns of work and recreation mean that much physical activity in daily life is not a result of planned exercise or sport, but occurs in the course of transport, occupational, incidental, domestic and leisure activities. Also, food patterns reflect a grazing pattern, with a higher reliance on take-away and convenience foods.

At the strategic policy level, policies should pursue shared objectives and intersectoral collaboration to create environments and infrastructures that support healthy and safe food choices, and physical activity, and take into account the health impacts of policy decisions.

The role of and inter-relationship between legislation and the interests of the food industry in enabling or creating barriers to healthy eating is a key element of the wider environment. The role of industry groups in general is essential in the development of environments that are supportive of healthy eating and increased physical activity.

Access to healthy food choices and opportunities for safe physical activity are required across all relevant sectors and settings (eg, transport, schools, workplaces, education, local government, food industry, recreation, sport and fitness, and the weight-loss industry, and institutions such as hospitals and retirement homes). Account must also be taken of individual cultures, and of age-related and disability needs.

Māori

Māori tend to view the world in a holistic way, in which the wider social, spiritual and physical environments are inextricably linked to individual, whānau, hapū and iwi experience. Improving the wider environmental context will improve the lives of all Māori. In doing so, values and concepts common to Māori, and the diversity of the Māori population, must be recognised. Te Pae Mahutonga (Durie 1999) is one example of a Māori health promotion framework that can be a useful model to assist in developing approaches that aim to improve the physical and social environment to improve outcomes for Māori. These frameworks help to highlight the need to improve access to resources, to deliver services through culturally appropriate mechanisms (eg, kaupapa Māori approaches, the use of te reo), and to minimise the negative impacts of the constructed physical environment on the natural environment and communities, whānau and individuals using a Treaty-based approach.

Objective 3.1: Build healthy public policies for healthy environments

Policies need to be developed that provide supportive environments for improving nutrition, increasing physical activity and attaining a healthy weight. There are many policy tools that can be used, from increased information through to legislation.

Key actions

- Develop integrated policies that support nutrition, physical activity and healthy weight in key sectors and settings (eg, health care, education, schools, residential homes, workplaces, transport, local councils, food industry, weight-loss industry, recreation, sport and fitness, marae, wānanga, kōhanga, sports and social clubs).
- Investigate regulatory and policy options to improve nutrition and increase physical activity.
- Ensure appropriate input into any legislation, regulations and reviews that impact on food and nutrition, physical activity and healthy weight, both nationally and internationally.

Objective 3.2:
Create supportive environments

Supportive environments need to be developed that encourage improved nutrition, physical activity and healthy weight. Environments include those created at a national and regional as well as at a personal level.

Key actions

- Ensure that impacts on nutrition and physical activity are considered in the development and re-development of towns, suburbs and communities so that infrastructure becomes more supportive of good nutrition and physical activity.
- Support culturally appropriate programmes and services that aim to improve environments that demonstrably improve nutrition and increase physical activity for target groups.

Objective 3.3:
Strengthen community action in local environments

Communities need to be supported to address environmental factors that impact on nutrition, physical activity and healthy weight.

Key actions

- Support community development initiatives to identify and modify local environments to improve physical activity and nutrition.
- Support community development approaches to address Māori needs, which are based in Māori world views, and which recognise the holistic view of environmental influences.
- Support community development approaches to address the needs of Pacific peoples which are based on a Pacific framework and recognises the holistic view of environmental influences.

Objective 3.4:
Develop personal skills to improve environments

Key personnel in stakeholder organisations must have the knowledge, skills and commitment to make decisions that improve environments to support good nutrition, physical activity and attaining a healthy weight.

Key actions

- Provide education and training programmes, incorporating Māori knowledge and culture, that promote ways to improve environments for improving nutrition and increasing physical activity.
- Encourage and educate key leaders in influential positions to understand the potential implications of environmental change that can impact on the health status of New Zealanders.
- Provide education and training programmes that reflect Pacific knowledge and culture on ways to improve environments for improving nutrition and increasing physical activity.

Objective 3.5:
Reorient services and programmes to modify environments

Services and programmes need to be integrated and provided in a way that supports people to eat well, be physically active and achieve and attain a healthy weight.

Key actions

- Encourage and support services and programmes with demonstrated effectiveness to integrate nutrition, physical activity and healthy weight initiatives into each programme (across, for example, transport, local government, education and health).
- Support the development of appropriate programmes and services for the treatment of overweight, and obesity, including partnership with treatment and prevention services.

Objective 3.6:
Monitor, research and evaluate environments

Monitoring, research and evaluation provide evidence that helps to develop supportive environments for nutrition, physical activity and healthy weight. Appropriate monitoring and evaluation are essential to establish effective programmes and enable modification of ongoing programmes to ensure they are still effective.

Key actions

- Continue to monitor the health of New Zealanders (including physical activity, nutrition and healthy weight) through a periodic survey programme, including appropriate sampling of Māori, Pacific and other population groups.
- Encourage, support, and monitor research (both national and international) into environmental interventions to increase physical activity, improve nutrition and achieve healthy weight, including a focus on Māori and Pacific peoples and other priority population groups.
- Support the ongoing development and upgrading of key tools for measuring and monitoring nutrition, physical activity and body weight.
- Monitor the impact of environmental policies and societal developments that impact on nutrition, physical activity and weight (eg, transport policies, urban design, etc).

Priority 4: Communication

Clear and consistent messages promoting the importance of good nutrition, physical activity and healthy weight will be understood by the general public and key stakeholders across relevant sectors and be effective in improving health outcomes.

Rationale

To create population changes in eating habits and levels of physical activity, effective evidence-based public health nutrition and physical activity programmes are needed.

Dietary behaviour change is complex because food choice is determined by the interaction of personal, behavioural, cultural and environmental (both physical and social) influences. An individual's behaviour is uniquely determined by interactions with all these factors (Glanz et al 1997; Contento et al 1995).

A comprehensive descriptive review of 217 nutrition intervention studies concluded that 'nutrition education 'works', in that it is a significant factor in improving dietary practices when behavioral change is set as the goal' (Contento et al 1995). The most effective programmes were 'based on appropriate theory and prior research'. In contrast, studies based solely on 'dissemination of information', aiming to increase the population's awareness and/or knowledge, were *not* very effective in bringing about dietary behaviour change. Few studies have evaluated the impact of environmental interventions on dietary behaviour (Ammerman et al 2001; Contento et al 2002).

Theories of health behaviour, drawing from fields such as cognitive, social and organisational psychology, sociology, marketing, and communications, can be used to influence behaviour on three levels (Glanz et al 1997):

- individual level (eg, transtheoretical model, theory of planned behaviour)
- interpersonal level (eg, social cognitive theory, social networks and social support)
- community level (eg, theories of community organisation and community building, organisational change, communication theory – media studies framework).

For physical activity, improving public awareness of accurate messages is a key element in communications. A balance needs to be found between providing general and targeted messages on physical activity, and taking into account the stage of behaviour change. The overall message is that all people should do at least 30 minutes of moderate-intensity physical activity per day, and that this is primarily linked to improved cardiovascular health (which is the highest contributor to morbidity and mortality). However, particular messages also need to be developed for specific groups; for example, older people (emphasising strength and resistance

activity), those with specific health conditions or disabilities, or those wanting to lose weight (where an hour of moderate-intensity activity per day is recommended). While mass media campaigns are important, they must be supported by community infrastructures and resources (National Health Committee 1998).

Effective physical activity communication should consider the following components:

- the message – achievability, appropriateness, acceptability
- the target audience – stage of behaviour change
- the method of delivery – television, print media
- environmental and societal influences, awareness of programmes, opportunities for activity.

Shephard (2002) recommends that the focus should be on enjoyable physical activity, and given current levels of underachievement, physical activity targets should be set above the minimum energy expenditure required for health. Different messages may be required for those at the pre-contemplation or contemplation stage of change compared to those who are already active.

Physical activity messages can be delivered through a variety of media. The Push Play advertising campaign developed by the Hillary Commission and continued by Sport and Recreation New Zealand (SPARC) began in 1999, using television, event sponsorship, signage and print media to deliver physical activity messages. The campaign appears to be relatively effective compared to similar campaigns internationally (Logan-Milne 2002).

Communication with the media requires well-defined policies, audiences and stakeholders, clear short- and long-term goals, good relationships with media personnel, and comprehensive background data and media kits (Shephard 2002).

Finally, to achieve the short- and long-term goals, a supportive environment is required. Media messages alone are not enough; they need to be backed up by appropriate and accessible services and facilities.

Physical activity and nutrition messages need not be communicated separately: economies of scale can be achieved through integrating messages with other forms of health promotion (Shephard 2002).

Messages in relation to prevention of overweight and weight loss need to be careful not to perpetuate stigma and discrimination that already exists for people who are overweight or obese.

Māori

Mainstream health promotion and communication strategies can be ineffective in reaching Māori. To make changes, messages, messengers and the media used must reflect Māori realities and must be developed either by Māori or in partnership with Māori (Ministry of Health 1994).

Objective 4.1:
Build health public policy that supports effective communication

Policies need to be developed that support the effective development and dissemination of key health messages around nutrition, physical activity and healthy weight.

Key actions

- Work on the development and ongoing review of communication messages at a national policy level to ensure approaches and communication tools are effective and appropriate in relation to nutrition, physical activity and healthy weight/overweight and obesity, including for children and young people and Māori and Pacific peoples.
- Investigate options that would minimise the adverse health impact of inappropriate advertising or communication about nutrition, physical activity and healthy weight.

Objective 4.2:
Create supportive environments that are reinforced through health-promoting communication

New Zealanders can be encouraged to be physically active, eat well and attain a healthy weight through an environment supported by comprehensive communication strategies.

Key actions

- Develop appropriate communication strategies that support initiatives to promote good nutrition, physical activity and healthy weight (including positive body images) for all population groups but ensuring they are appropriate for Māori and Pacific peoples.
- Work with national and local media to develop appropriate messages and campaigns.

Objective 4.3:
Strengthen community action communication strategies

Local communities need to be supported to develop and deliver customised messages on physical activity, nutrition and healthy weight.

Key actions

- Support the development of local community communication strategies that encourage good nutrition, physical activity and healthy weight.
- Convey messages using appropriate communication methods and language for Māori, Pacific communities, and other target populations.

Objective 4.4:
Develop personal skills through effective communication

Health-promoting messages can be effective in assisting individuals to make healthy decisions regarding physical activity, nutrition and healthy weight. These messages need to be well developed, appropriate and acceptable, and supported by other approaches.

Key actions

- Promote the messages of the Food and Nutrition Guidelines for all population groups, including infants, children, adolescents, pregnant and breastfeeding women, adults and older people using a range of proven strategies, ensuring communication is appropriate for Māori and Pacific peoples.
- Promote the messages in the *New Zealand Physical Activity Guidelines*, with specific messages for individuals at risk of different conditions/ diseases based on current evidence.
- Ensure that messages aimed at those who are overweight and obese do not further stigmatise or foster an environment conducive to the development of eating disorders.

Objective 4.5:
Reorient services and programmes to communicate effectively

All relevant service providers must work collaboratively to communicate clear and consistent messages about the importance of good nutrition, physical activity and healthy weight.

Key actions

- Foster collaboration across the health sector and between appropriate industry groups (eg, food, recreation, sport and fitness, weight-loss industry) to ensure consistent and appropriate messages on nutrition, physical activity, and healthy weight are disseminated.

Objective 4.6:
Monitor, research and evaluate communication strategies

Monitoring, research and evaluation provide evidence to support effective communication of key messages on nutrition, physical activity and healthy weight.

Key actions

- Research and evaluate communication strategies, including media campaigns, on nutrition (including the Food and Nutrition Guidelines), physical activity and healthy weight for at-risk population groups (eg, children and young people, Māori and Pacific peoples, older people).
- Facilitate the collection and dissemination of research information regarding effective programmes for physical activity and nutrition, including for Māori and Pacific peoples.

Priority 5: Workforce

A skilled and knowledgeable workforce will be in place to support improving nutrition, increasing physical activity and reducing obesity.

Rationale

Improving population health relies on having the right personnel with the appropriate skills, knowledge, attitudes and experience to plan, deliver and evaluate quality services across public, primary and secondary health care. Workforce development for *Healthy Eating – Healthy Action* includes any activities that influence entry to and exit from the sector, movement within the sector, education, training, skills, attitudes, rewards and the associated infrastructure. Key personnel include primary health care providers, specialists, nutritionists, dietitians, experts in physical activity, midwives and early childhood health professionals, researchers, teachers, health promoters, physical education trainers and counsellors, community health workers, physiotherapists, and dental professionals. At some levels of the workforce, particularly the tertiary level, there is a lack of people with adequate skills in nutrition and physical activity. In some areas there appears to be a lack of opportunities for those who have received training, and there are few opportunities for career development.

Improved integration across the services is also required to improve collective efforts to increase population physical activity levels, improve nutrition and reduce obesity. There are opportunities to improve partnerships between schools, workplaces and community settings so that primary and secondary health providers serve to reinforce the adoption and maintenance of healthy lifestyles.

Due to the large body of often contradictory messages about nutrition, physical activity and weight loss, it is vital that all those who are involved in providing services and programmes are delivering consistent and accurate messages. In some areas this may require the development of training and/or best practice material and additional training opportunities.

Improvements are also needed to ensure that service providers have the appropriate skills and knowledge to develop and provide effective programmes and services to Māori and Pacific peoples.

There is a need to ensure that the research and academic community has suitable expertise and the resources to provide high-quality data and research in areas that can make a difference to improving health outcomes.

Māori and Pacific peoples in particular have identified workforce as a key barrier to change. Not only is there a need to train new people in nutrition and physical activity at the tertiary level, but there is also a need to maintain and strengthen the

current workforce and to offer clear career development. There needs to be an emphasis on training at all levels, from community worker to postgraduate levels.

The Ministry of Health is working on a number of initiatives to address a range of workforce needs in the health sector, including the development of actions to address the capacity and capability of the Pacific workforce.

Māori

Māori have identified the need for a stronger Māori workforce as a key factor to be addressed in Healthy Eating – Healthy Action. Māori are underrepresented in the health and disability workforce in almost every area, holding back both Māori provider development and improvements in mainstream delivery to Māori. Māori workforce development needs acceleration and greater co-ordination in collaboration with the education sector (Minister of Health and Associate Minister of Health 2002a). Training needs to recognise the value of Māori knowledge and the skills that many Māori bring to promoting good nutrition and increasing physical activity.

Objective 5.1:
Build healthy public policies to support workforce development

Policies need to be developed that help develop a workforce to support the importance of good nutrition, physical activity and healthy weight.

Key actions

- Develop a national strategic plan to address the workforce development needs required to improve nutrition, increase physical activity and reduce obesity, including developing a stronger Māori and Pacific workforce.
- Work with appropriate bodies to investigate the potential to include physical activity and nutrition as areas of learning in the training of health and education professionals.

Objective 5.2:
Create supportive environments to facilitate an expanding and more effective workforce

A wide range of people need to be encouraged and supported to undertake careers in the health, nutrition, recreation, sport and fitness, and related sectors.

Key actions

- Establish mechanisms to increase effective communication and collaboration across the nutrition, physical activity and weight-loss sectors.
- Support training organisations to expand training opportunities for Māori and Pacific peoples in nutrition, physical activity, and weight loss.

Objective 5.3:
Strengthen community action to develop an effective workforce for local needs

Communities will be supported to identify their local workforce development needs and implement strategies to address them.

Key actions

- Support the identification of key and appropriate community workers to upskill in nutrition, physical activity and particularly in Māori and Pacific communities.
- Develop local networks to increase co-ordination and collaboration across nutrition, physical activity and weight-loss sectors.

Objective 5.4:
Develop personal skills to improve the effectiveness of the workforce

All those involved in the nutrition, physical activity and weight-loss sectors have the skills, knowledge and attitude to be effective.

Key actions

- Support training opportunities in nutrition, physical activity and obesity prevention and management among relevant health and education professionals.
- Support workforce development opportunities to increase the effectiveness of non-Māori personnel who work with Māori.
- Support the development of best practice guidelines which provide a consistent approach for health professionals to implement Healthy Eating – Healthy Action (eg, guidelines for weight loss).

Objective 5.5:
Reorient services and programmes to expand and improve the effectiveness of the workforce

Services and programmes need to be reoriented to support a workforce knowledgeable in nutrition, physical activity and healthy weight issues.

Key actions

- Encourage partnerships between health care providers, schools, workplaces and community organisations in prevention efforts targeted at the social and environmental causes of overweight and obesity.
- Implement initiatives to increase collaboration of those working across prevention and treatment health settings.

Objective 5.6:
Monitor, research and evaluate the workforce

Monitoring, research and evaluation are required to provide evidence to develop and support a knowledgeable workforce to improve nutrition, increase physical activity, and reduce obesity.

Key actions

- Monitor, review and quantify existing and projected workforce needs to improve health outcomes for physical activity, nutrition and obesity, including a particular focus on Māori and Pacific peoples.
- Evaluate workforce development initiatives and disseminate findings.

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