Target revision

Data from the 1997 National Nutrition Survey will be available in early 1999, and will enable the trend for the targets to be interpreted. Once these data are available separate targets for Māori and different subgroups should be considered.

The target for sodium requires revision and should be set using an appropriate indicator (based on the research currently being undertaken).

Obesity

Key points

- The most recent national data for New Zealand showed that 10 percent of males and 13 percent of females were obese, and 55 percent of males and 38 percent of females were considered to be overweight.

- It is likely, given international data and data from regional studies, that the prevalence of obesity is increasing.

- The activities of Agencies for Nutrition Action should result in an increased awareness of the health implications of obesity as well as increasing the programmes focusing on the prevention of obesity.

- Revision of the target, particularly the need for separate targets for subgroups of the population, will be undertaken when data from the 1997 National Nutrition Survey are available.

- Discussion around revision of the indicator will be undertaken in 1998/99.

| Food standards | New Zealand commenced a joint food standards-setting system with Australia in June 1996. At present there is a transitional phase with the aim of having a joint food standards code by the year 2000. One of the roles of the Australia New Zealand Food Authority (ANZFA) in developing food standards is to provide consumers with adequate information to make informed food choices. The review of food standards and production of a joint food standards code is also likely to reduce the prescriptiveness of food standards. This may assist innovation within industry to produce food products that assist consumers with achieving food and nutrient targets. Food standards allow New Zealand food manufacturers and importers to fortify a range of foods with an increased number of vitamins and minerals. |
| Food labelling | Information on the nutrient content of foods is often provided on the information panel of packaged foods. Nutrition labelling is voluntary unless a nutrition claim is made. Information on reading a food label can be found in the pamphlet *The Addition of Vitamins and Minerals to Foods* (code 7025, available from authorised providers of HHSs). |
| Food Administration Review | The Government is conducting a review of food administration with an objective of creating a single food regulatory system to enhance food safety and food regulation in New Zealand. This will include consideration of key legislative, organisational and administrative actions necessary to achieve a single system. Initial proposals are set out in a discussion paper *Assuring Food Safety* (Ministry of Health and Ministry of Agriculture and Forestry 1998), released for nationwide consultation. Consultation on the review finishes on 30 September 1998. |
**Target derivation**

The target for obesity was developed by the Public Health Commission, as part of the *National Plan of Action for Nutrition* (PHC 1995e). Most overseas targets aim at decreasing the prevalence of obesity, but given the international trend for increasing rates of obesity in developed countries, the Public Health Commission considered that a target to prevent any further increase in the prevalence of obesity was more realistic and achievable.

A separate target for Māori was not set in 1995 because reliable prevalence data for Māori were not available and current measures of overweight and obesity may not be applicable to Māori due to their different body composition.

**Indicators**

Measures of obesity include those which measure body size, measurements of body composition (body fat and lean tissue) and measurements of fat distribution. Body mass index (BMI) is the most frequently used measure of body size. It is determined by dividing weight (in kilograms) by height squared (in metres). Adults of European origin that have a BMI value greater than 30 are classified as obese. Overseas studies have suggested that a BMI of 20–25 is the ideal weight range in terms of subsequent mortality (Hodge and Zimmet 1994).

Waist-to-hip ratio (WHR) is a measure of body fat distribution, particularly central obesity (accumulation of abdominal fat). Central obesity is a better indicator of relative risk than body size for some obesity-related diseases such as diabetes (Lundgren et al 1989). WHR in excess of 0.8 for females and 0.9 for males is considered to indicate risk. There has been growing interest in the use of a waist-only measure as an indicator of central adiposity. Studies have shown that measures of waist circumference have a high sensitivity and specificity for identifying people with a high BMI and central fat distribution. It is also a very simple measure to use (Han et al 1995; Lean et al 1995).

The current indicator for obesity (BMI greater than 30) is not appropriate for all groups, particularly children, adult athletes and Pacific peoples. For these groups current BMI values are not an accurate indicator of body fatness or the health risks associated with being obese. A recent study looking at body composition in Samoan people has shown that, at all BMI values, Samoan people had less body fat and more lean tissue than Europeans (Swinburn et al 1996). Further recent research among Pacific peoples has produced similar results (Rush et al 1997; Bell et al 1997).

Research on body composition of Māori shows that, at a given BMI, Māori had a lower fat mass compared to Europeans, but a higher fat mass compared to Samoans (Swinburn, Ley et al 1997). A review of appropriate BMI values is required for Māori and Pacific peoples, and should include the results from the 1997 National Nutrition Survey (due in January 1999).
Data sources
Comparison of data from 1982 Auckland Risk Factor Study and the 1993–94 Auckland Heart and Health Study.

Related targets
- Physical activity
- Ischaemic heart disease
- Diabetes

Health impact
Obesity is one of the most important avoidable risk factors for a number of life-threatening diseases and for serious morbidity (Garrow 1992).

Overweight and obesity are difficult conditions for the individual to manage and for the health professional to treat, and the costs to the individual and the community are high. Therefore, prevention on a population basis has the potential to be more beneficial than an individual high-risk approach. A small reduction in the mean weight of the population can result in large changes in the prevalence of obesity. A one kilogram reduction in population mean weight equates to a 25 percent decrease in the prevalence of a BMI greater than 30 (Rose 1993). A public health approach to the causes of obesity focusing on the obesogenic environment of Western societies has recently been reported (Egger and Swinburn 1997).

There has been an alarming increase in the prevalence of obesity in the past decade in most developed countries (Prentice and Jebb 1995; Kuczmarski et al 1994; Bennet and Magnus 1994). The most recent national data for New Zealand showed that 10 percent of males and 13 percent of females were obese, and 55 percent of males and 38 percent of females were considered to be overweight (BMI between 25 and 30). Māori showed much higher rates of obesity than other New Zealanders; however, the numbers of Māori in the survey were very small (Hillary Commission and University of Otago 1991). Comparison of data from two Auckland studies looking at risk factors for coronary heart disease in 35–64-year-old people showed that the proportion of males and females who were obese had increased from 1982 to 1993–94 from 8.2 percent to 13.9 percent for males and from 9.8 percent to 13 percent for females (Simmons et al 1996). Further age-group breakdowns of the 1993–94 Heart and Health Study showed 10.3 percent of 65–74-year-old and 6.3 percent of 75–84-year-old males self-reported as obese, and 13.5 percent of 65–74-year-old and 8.9 percent of 75–84-year-old females self-reported as obese (Bullen et al 1998).

In New Zealand, the cost of obesity is estimated to be about $130 million each year. This figure is based on the costs attributable to obesity from ischaemic heart disease, non-insulin-dependent diabetes, gallstones, and some cancers (Swinburn, Gillespie et al 1997). In the United States obesity has been estimated to contribute 8 percent of all illness costs, or $40 billion per year (Colditz 1992).

There has been much debate and research to investigate why the prevalence of obesity is increasing at such an alarming rate. In Britain, the average population energy intake is actually decreasing, while the proportion of energy from fat is increasing (Prentice and Jebb...
Current evidence suggests that public health strategies for improving the total diet – focusing on reduction in fat content, increasing intake of fruits, vegetables, breads and cereals, reduction of high sugar intakes and increasing physical activity – will be most successful in reversing trends in obesity.

**Progress toward the targets**

**Figure 12:** Percentage of adult New Zealanders with BMI values greater than 30, by age and sex, 1989–90

![Graph showing BMI values by age and sex](image)

**Figure 13:** Percentage of adult New Zealanders with BMI values greater than 30, by sex and ethnicity, 1989–90

![Graph showing BMI values by sex and ethnicity](image)
Assessment

Data quality

National data more recent than the 1989–90 LINZ Survey are not available. The baseline data for Māori collected in this survey are not adequately representative because the numbers of Māori who completed the health section of the survey were small. The Ministry of Health has collected information on BMI, WHR and other measures of body fatness with higher Māori representation in the 1997 National Nutrition Survey.

Limitations of indicator

BMI has been used as the measure to define obesity. A review of the data is required to define levels of BMI for Māori, Pacific peoples and Asian people which are associated with health risks. The current BMI levels are not the most appropriate indicator to use for these groups.

Interpretation of trend

Comparison of data from the Auckland Risk Factor Study and Auckland Heart and Health Study show a trend of increasing prevalence of obesity, which is similar to other developed countries. If this trend for increasing rates of obesity is true for the whole New Zealand population it is unlikely that a target for no increase in the rates will be met in the next four years.

Strategies

| Agencies for Nutrition Action | More effective prevention and treatment strategies are necessary to combat New Zealand’s increasing prevalence of obesity. Reasons for lack of success in the past have been considered by Agencies for Nutrition Action (ANA) in their efforts to identify strategies to promote a healthy body weight. ANA are an incorporated society including the Heart Foundation of New Zealand, the Nutrition Foundation, the Cancer Society, the New Zealand Dietetic Association, Te Hotu Manawa Māori and the National Diabetes Forum. National and regional meetings have been part of consultations on a national strategy to promote a healthy body weight. These and other activities have resulted in an increased awareness of the health implications of obesity among New Zealanders. The consultation process undertaken by ANA indicated significant support for increasing the role and profile of physical activity in the prevention of obesity, as well as supporting consumption of a diet consistent with the Food and Nutrition Guidelines. From 1999 ANA’s co-ordinating, communicating, advocacy and support role for nutrition and physical activity programmes will include the implementation of a targeted nutrition and physical activity programme for 25–40-year-old men. The programme will emphasise intersectoral links (eg, with the Hillary Commission) to promote physical activity and healthy eating. |
| Strategies for the Prevention and Control of Diabetes in New Zealand | Consultation undertaken by the Ministry of Health on Strategies for the Prevention and Control of Diabetes in New Zealand (Ministry of Health 1997a) identified the prevention of obesity as a major issue in preventing diabetes. A key priority was to develop intra/intersectoral collaboration to promote and increase physical activity and healthy nutrition, and reduce obesity. |

continued/...
There are seven Food and Nutrition Guidelines within the series. They have been developed for healthy infants (0–2 years), children (2–12 years), adolescents, pregnant women, breastfeeding women, adults, and older persons. Guidelines for health professionals and educators consist of a series of simple statements supported by a technical document. The Food and Nutrition Guideline series promotes physical activity as a method to maintain and achieve a healthy weight. The Ministry has developed a Healthy Lifestyles for a Healthy Weight pamphlet (Code 8020, available from authorised providers or HHSs), which has a strong emphasis on the importance of physical activity. The food and nutrient targets and physical activity targets also have strategies which deal with obesity.

Target revision

A target for Māori and a revised target for other New Zealanders will be considered when data from the 1997 National Nutrition Survey are available in early 1999. This will enable consideration of the most appropriate indicator to use to monitor this target.

Breastfeeding

Key points

• There has been no change in prevalence of full breastfeeding at three months between 1994 and 1997.

• Comparison of breastfeeding rates between different studies is difficult due to the use of inconsistent definitions for breastfeeding and different survey designs.

• Developing a periodic survey to monitor infant care practices (including breastfeeding) is a priority for monitoring this target.

• A project to develop clear and consistent definitions for breastfeeding was completed in September 1998. The definitions will be used in the new infant care practices survey.

• Recent New Zealand qualitative data indicate that most women found breastfeeding more difficult than anticipated, and that information available about baby feeding was generally inconsistent, unrealistic and incomplete.

TARGETS

To increase full breastfeeding at three months to 70 percent by 1997, and to 75 percent by the year 2000.

To increase breastfeeding (full or partial) at six months to 70 percent by 1997, and to 75 percent by the year 2000.

Target derivation