Healthy Eating – Food Security

Investment Plan

2005 – 2010

VICHEALTH

Updated August 2005
1. Purpose

This paper aims to provide a context for VicHealth’s investment in promoting food security by focussing on regular **access** to healthy eating. Food security has been defined as:

“the state in which all persons obtain nutritionally adequate, culturally acceptable, safe foods regularly through local non-emergency sources. Food security broadens the traditional conception of hunger, embracing a systemic view of the causes of hunger and poor nutrition within a community while identifying the changes necessary to prevent their occurrence. Food security programs confront hunger and poverty”.

Strategies to improve food security need to consider:

- Addressing the socio – cultural, built and natural environments and economic determinants of healthy eating.
- Population groups on low incomes, with a disability, who are chronically ill, single parent with dependent children, Kooris, new arrivals (refugees or asylum seekers) from culturally and linguistically diverse groups.
- Population groups living in low socio-economic index areas (SEIFA) in Victoria.

This is consistent with the 2003-2006 VicHealth Strategic Directions which committed to:

- Increasing understanding of social, environmental and cultural factors that influence eating patterns;

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1 Sue Booth and Alison Smith (2001), in ‘Food Security and Poverty in Australia – Challenges for Dieticians’ in the Australian Journal of Nutrition and Dietetics, 58(3):p.150, identified four key aspects of food access - economic, physical, food availability sustainable and secure. This paper has decided to use food access and food supply as an integrated concept for food access. Without a supply of food, there is no access.


3 Karen Glanz et al. (2005), in ‘Healthy Nutrition Environments: Concepts and Measures’, summarized the literature that considered the impact of socio-cultural, built, natural and economic environments that impact on communities ability to access healthy food choices and used the term “nutrition environments”. American Journal of Health Promotion; 19 (5) pp.330-333.

4 The Socio-Economic Indexes for Areas-(SEIFAs (2001). SEIFAs provides a range of measures to rank areas based on their relative social and economic wellbeing. It contains four indexes, each summarising a different aspect of the level of socio-economic wellbeing in an area. For example, VicHealth uses the index of Advantage/disadvantage, low values indicate areas of disadvantage and high values indicate areas of advantage. It takes into account variables relating to income, education, wealth and living conditions. The Australian Bureau of Statistics, Census of Population and Housing. ACT. http://www.abs.gov.au/census.
• increasing knowledge base regarding socio-economic factors that cause poor health and
• Identifying effective ways to reduce inequalities.  

2. Background

Since its establishment, VicHealth has been committed to promoting healthy eating across the lifespan. Strategies implemented have included research, ways to improve skills and knowledge in a variety of settings such as projects to raise awareness through sports and arts sponsorships, health education and community development focussing on specific population groups. These groups are people with disabilities, chronically ill or low incomes, Kooris and new arrivals (refugees or asylum seekers) from culturally and linguistically diverse groups. Most of these projects received one year and “one – off” funding.

Several recent exceptions included two food insecurity community demonstration projects completed in 2002. These eighteen month projects were jointly funded between the Department of Human Services and VicHealth and implemented through Maribyrnong City Council and North Yarra Community Health Service. The follow up/evaluation studies, a year after the completion of funding for both projects have provided findings that contributed to our understanding of the complex issues surrounding food security. These include the socio–cultural and economic determinants of food access and food supply systems and the role of a local government authority involved in food activities. 

VicHealth has over $3 million currently invested in research related to healthy eating through programs such as fellowships, scholarships, research grants and programs

3. Reasons for the focus on food security

Having adequate food to eat is one of the basic elements of human rights. Basic human rights are about upholding dignity. Dignity does not come from being fed such as in soup kitchens, or receiving food vouchers, but from providing for one self. It is about having a choice over what foods to eat. Eating nutritious foods contribute to physical and mental wellbeing across the life span.

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5 "VicHealth Strategic Directions 2003-2006" (2003), Victorian Health Promotion Foundation p.9
http://www.vichealth.vic.gov.au
8 Universal Declaration of Human Rights, Article 25, paragraph (1).
10 As summarised in VicHealth’s position paper on healthy eating. Nutritious foods refer to (a) a wide variety of foods in accordance with the Dietary Guidelines for Australians (Adults, Children and Adolescents and Older Australians, (b) be that which is balanced against the body’s requirement for growth, metabolism and physical activity across the life stages (c) be that which is consumed regularly and consistently, without periods of over consumption or severe restriction as evident in patterns of extreme dieting or hunger and (d) be fundamentally unchanged in its definition over many years.
The ability to eat well involves more than understanding how to choose nutritious food, the cooking and consumption of these food, and the protection this gives against chronic illness. It also involves the social and cultural significance of purchasing, preparing, eating and the enjoyment of eating experiences with families, friends and communities.11 12

Healthy eating is about eating from a variety of food groups in line with the Dietary Guidelines for Australians and having 7 serving of fruits and vegetables13 each day. Plant foods have been found to protect against a range of conditions including type 2 Diabetes, coronary heart disease and cancer. People who have low incomes and or living in disadvantaged neighbourhoods reported lower level of consumptions of fruit and vegetables.14 15

In Australia, there have been reports on the increasing gap between the rich and the poor, the growing number of working poor and the increasing number of Australians experiencing food insecurity. In March 2004, the Senate Standing Committee reported that:

“the numbers of Australians living in poverty generally ranges from 2-3.5 million – with one study finding 1 million Australians in poverty despite living in a household where at least one adult works.”16

Unpublished data from the Australian Bureau of Statistics (presented by the ACTU in support of wage claims) indicates that almost 60,000 Australians in low income working families go without meals or are food insecure.17

There is a continuum of experience involving food insecurity from episodic periods of food shortage to constantly feeling hunger or anxiety related to the food scarcity situation.18

Food insecurity extracts a high cost from individuals, families and communities. The immediate effects are anxiety, hunger and lack of energy. In the longer term, there is growing evidence that people experiencing food insecurity are more likely to be overweight or obese, particularly women19 20

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17 Australian Bureau of Statistics (2002) catalogue No 4159, unpublished data used by the ACTU to support wage claim.
21. Being overweight or obese causes a range of debilitating and life threatening conditions such as cardiovascular disease, type 2 diabetes and other non-communicable diseases. 22 There is a related impact on mental wellbeing through a sense of powerlessness and social exclusion, which often results in disruption to the family and community.23

Hunger during pregnancy “programs” foetal tissues to make the most of all food energy available. In adult life, greater food availability and a sedentary lifestyle will then more easily result in obesity.24

3. Who is vulnerable to food insecurity?
The words “vulnerable”, “at risk” and “disadvantaged” are often used when discussing food security.

Several studies have identified that individuals and groups with the following characteristics are “at risk” or vulnerable to food insecurity. They include:

- Low income families (particularly women of child-bearing age, children and adolescents, and single parents with young dependent children).
- People who are unemployed or have limited formal education,
- People with a disability, including mental illnesses
- People from non-English speaking backgrounds (refugee and asylum seekers)
- Frail elderly people (particularly those who are socially isolated and have low incomes)
- People affected by alcohol and/or substance abuse
- Homeless people (particularly youths, women of child-bearing age and the elderly)
- People from Aboriginal and Torres Strait Islander backgrounds.25 26 27

For the purpose of this paper, vulnerability to food insecurity occurs when “at risk” groups are unable to access adequate food for healthy living. Often, this is triggered by factors beyond the control of these groups such as the closing of a major factory (figure 1 on page 11).

Several key aspects of food access have been highlighted. 28 These include:
- Economic – having adequate income or resources to buy food or having affordable food outlets in the neighbourhood;

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27 Wood, B., et.al op. cit. p. 31
28 Booth, op.cit., p.150.
• Physical ability – ability to walk, cycle, drive and carry purchases home;
• Physical infrastructure – availability of public transport or safe walkable route or footpaths to shops;
• Shops with a variety of socially and culturally appropriate food.
• Geographical isolation

Groups experiencing food insecurity are also known to be more likely to be overweight or underweight and living in the most disadvantaged areas

4. Associations between low socio-economic status, obesity and food insecurity.

People with low socio-economic status have poorer health and higher level of overweight. The analysis of the 1995 National Nutrition Survey for persons age over 16 years of age with data on food security (n=11, 219) reported that people who were food insecure were more likely to be overweight (26.8%) or obese (22.1%) or decrease in weight (27.8%).

A recently commissioned report shows the risk of obesity is 20 to 40% higher in women who have low incomes and are experiencing food insecurity. This was observed consistently across the United States, Europe and Australia.

When money is scarce, food choices are discretionary but not utilities or rents. Vulnerable groups are more likely to consume higher amounts of “energy dense” foods (high in fat and sugar), and lower amounts of plant-based foods. Energy dense foods (such as take-away and delivered foods) are often perceived as being more affordable, more filling, more acceptable by family members and readily available in disadvantaged areas.

In 2001, approximately 9 million (50%) of Australians over the age of 18 were estimated to be overweight or obese. Excess weight is now more common among lower socio-economic and vulnerable groups.

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29 Wood, op.cit., p. 17 and p.43.
32 Wood et al., op.cit., p.62.

A person is obese when the body mass index (BMI = weight in kilograms divided by height in metres squared) is more than 25.
5. Locality and food insecurity

Individual factors have traditionally been used to explain the inability of some people to change dietary habits, and only limited studies have been conducted to find out how the physical availability of healthy foods affects individual diets. In Australia, the exceptions are some studies focusing on indigenous people living in remote areas and the study by Turrell et al. in Brisbane.

The physical environments in which people live influence life expectancy. In Victoria, a recent report on the difference in life expectancy between people living in different local government areas has highlighted the importance of local government as a potential stakeholder in health promotion. For example, the life expectancy of a man living in Manningham (high SEIFA) is 80.6 years whereas male life expectancy in Maribyrnong (low SEIFA) is 74.8 years.

This is also supported by studies overseas. For example the study in Sweden, involving 2.6 million women and men between the age of 40-64, found high levels of neighbourhood deprivation independently predict coronary heart disease. This study advocated individual and neighbourhood level approaches as both important in health care policies.

Low SEIFA areas also have features that are associated with people with low incomes and being ‘at risk’ of food insecurity as discussed in section 4. They are more likely to live in a cluster of areas with low rental housing and lacking in adequate basic infrastructure, such as public transport, supermarkets, and fruit and vegetable shops. The state government’s recognition of the link between location and population health is reflected in the selection of the Neighbourhood Renewal Program sites.

This association of locality, low income and mortality offers the potential for local governments to be more involved with people with low disposable incomes who are experiencing food insecurity. Local government authorities have a responsibility to ensure that their communities are able to function effectively and to create an environment in which people not only survive but thrive. Investing in health and wellbeing of their communities is investing in the future.

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42 Shamarina Shohaimi et.al. (2004). ‘Residential area deprivation predicts fruit and vegetable consumption independently of individual educational level and occupational social class: a cross sectional population study in the Norfolk cohort of the European Prospective Investigation into Cancer (EPIC-Norfolk).’ Journal of Epidemiology Community Health, 58:686-691.
Local governments are already delivering some food related services. A 1995 national postal survey to all local governments (n=742) in Australia identified low overall involvement in food and nutrition activities. Half of the respondents were involved in fewer than ten of the 29 identified activities. Involvement was low in the areas of emergency food provision, fresh fruit and produce market and public transport to food outlets.45

6. The extent of food insecurity

The only direct studies of food insecurity in Australia using computer-assisted telephone interviewing (CATI) reported that of the 10,451 people interviewed in Queensland the unemployed were twice as likely to be food insecure.46

The extent of food insecurity in Victoria is yet to be established. The only Victorian data was derived from the 1995 National Nutrition Survey (NNS). One question in the survey found that 5% of the (n=11,219) respondents had run out of food and had no money to buy more at some time in the last 12 months. The figure was 10% for men and women aged between 19 -24 years. The rate was higher among the unemployed (11.3%) and those paying rent or board (15.8%).47

It is likely that the 1995 data underestimates the true prevalence of food insecurity. The question did not measure the rates of hunger or anxiety about acquiring food, nor did it cover input from people who are homeless or have limited English language. These groups are underrepresented in surveys of the general population48

This same question was repeated in other surveys in several states, such as the 2001 New South Wales Child Health Survey. Across the population, 6.2% of those surveyed reported that they had run out of food and could not afford to buy more in the last 12 months. Parents from low-income areas (such as those covered by the Macquarie Area Health Service, NSW) were three times more likely (9.9%) to experience food insecurity than parents from other areas such as Northern Sydney (2.8%)49.

A recently-completed needs assessment to determine food security status in the Ashburton area in Melbourne found that 26% of the population who agreed to take part in the survey (n = 62) were food insecure.50

50 Fiona Pickford et.al. (2003). ‘A needs Assessment to determine food security status in the “Ashburton” Area” and a feasibility study into a proposed strategy’. Boroondara Community Health Centre.
7. The national and state context of promoting food security

Two national reports endorsed by State and Territory governments have identified food security as part of their action plans. These are:

- *Eat Well Australia (EWA) – An Agenda for Action for Public Health Nutrition 2000 – 2010*\(^{51}\)
- *Healthy Weight 2008 – Australia’s Future, the National Action Agenda for Children and Young People and their Families*\(^{52}\)

Both of these action plans recognised that there are groups of people from low socio-economic backgrounds who are vulnerable to food insecurity, obesity and being overweight. For example, the *Healthy Weight 2008* Action Plan noted that “excess weight is now more common among lower socio-economic and disadvantaged groups, particularly amongst women. Aboriginal and Torres Strait Islander adults are about twice as likely to be obese as non-indigenous Australians”.

In 2004, the state government in Victoria had committed $21.9 million for the next four years through the Department of Human Services and the Department of Victorian Communities to address obesity and physical activity. While a state plan for how the funds will be spent has yet to be announced, indications are the focus will be on addressing health inequalities among people from low socio-economic backgrounds.

Results from funded completed projects highlighted the need to implement strategies to address systemic barriers to food security\(^ {53} \)\(^ {54}\)

In Australia health promotion focussing on system barriers to access of healthy food choices by people with low socio-economic backgrounds has only been explored in a limited way.\(^ {55} \)\(^ {56}\)

In the context of a recent literature review commissioned by VicHealth that highlighted the association between poverty, food insecurity, overweight and obesity \(^ {57}\), it is interesting to note that the Health Development Agency of the United Kingdom has compiled a short list of the most urgent research needs in the management of obesity and being overweight, and recommended that:

“Research should redress the balance by focussing on ‘upstream’ interventions, such as policies or strategies at a national or regional level,

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\(^{52}\) Department of Health and Ageing, 2003, op.cit.
\(^{53}\) *One-Year Follow-Up and Evaluation of a Food Insecurity Community demonstration project: The Braystone fruit and vegetable shop and delivery service 2004*, CIRCLE, RMIT University.
\(^{54}\) *One-Year Follow-Up and Evaluation of a Food Insecurity Community demonstration project: The Subsidised Café Meals, 2004*, CIRCLE, RMIT University
\(^{55}\) *What’s Eating South Sydney; a policy for a safe, affordable, accessible and nutritious food supply in South Sydney*, 1990 onwards, South Sydney City Council, New South Wales.
\(^{56}\) A multi-sectors project auspiced by the Penrith City Council Food Policy Committee in Webb.K.et al. 1999, ‘Penrith Food Project’, Penrith, NSW.
\(^{57}\) Burns, C., (2004), ‘A Review of the Literature describing the link between poverty, food insecurity and obesity with specific reference to Australia’, Victorian Health Promotion Foundation, Melbourne.
and focusing on population and environmental interventions of obesity and overweight in both children and adults, rather than individual interventions."  

The following Determinants of food security framework is an attempt to understand the systems that impact on food security as a basis for developing effective long term solutions.

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Adapted from Rychetnik, Story and Katz (2003), *Food Security Options Paper*, NSW Centre for Public Health Nutrition (adapted from a model by McComb, Webb and Marks 2000).
8. Determinants of food security

There are a variety of ways to promote food security. The above determinants of food security framework contributes to the understanding of factors impacting on food security and offer opportunities for health promotion interventions.

The framework (p.11) highlights the systems that may impact on groups “at risk” due to low income and argues that future interventions to be focussed on Food Supply and Food Access.

One key shared characteristic amongst groups in the highlighted box 6 (highlighted) is low disposable income. For example, people who have adequate income can overcome barriers caused by natural disaster, or political upheaval (box 1) by moving to another country or location. However, if this is not possible, political and natural disasters can have a major impact on “food systems” and the socio-economic determinants of the community (boxes 2 and 3).

To take an example from box 2, sudden closure of a railway line may affect the price of food at a local level. Another example is the closure of factories due to global trade competition causing retrenchment in a particular community. Those affected have limited or no ability to prevent these impacts.

VicHealth, together with other partners, may be able to gather enough evidence in the long term to influence some political decisions that impact on the systemic factors affecting people “at risk” of food insecurity. (Of course, VicHealth has very limited ability to influence items listed under the heading of disasters.)

There may be potential for VicHealth to contribute to improving the location of food outlets (box 4) by working with local governments through municipal public health plans and via the business sector. An example of VicHealth’s contribution to improving “food access” (box 5) was through a funded project that delivered fruit and vegetables to frail and low income people living in high rise accommodation, which was implemented by WESTNET, an organisation working with a group of intellectually disabled people in conjunction with business and the Maribyrnong City Council.

Health promotion interventions with a specific focus on areas such as food access and food supply systems (which VicHealth can influence) are most likely to improve food security and inequality in health outcomes.

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9. Future directions

VicHealth’s Strategic Directions document 2003-2006 indicates a commitment “to reflect national and state public health priorities with a focus on improving the health status of all population groups, while reducing health inequalities”.

VicHealth is in an unique position to expand its current initiatives to improve healthy eating with a specific focus on improving food access component of food security and complement governmental and non-governmental initiatives by:

(a) Building on activities involving local government authorities in addressing systemic and infrastructure barriers by encouraging integrated planning, such as the Planning and Health and Wellbeing, Leading the Way and the Walking School Bus projects.

(b) Building on lessons learned from funded projects such as the North Yarra Community Health and Maribyrnong City Council Food Insecurity Community Demonstration projects.

(c) Collaborating with other government and non-government initiatives that will improve our understanding of the social, environmental and cultural factors that influence food security.

(d) Capitalising on the unique opportunity offered by the potential integration within VicHealth priority action areas related to increased physical activity, food insecurity, and mental health.

People living in isolated areas, people with disabilities, people with low socio-economic status, and people from culturally and linguistically diverse backgrounds (those most at risk of food insecurity) are also prioritised in the promotion of tobacco control, improving participation in physical activity, and positive mental health across VicHealth’s programs. The resulting synergy offers VicHealth opportunities for cross-program initiatives.

At the state level, examples of some initiatives with a focus on the same “at risk” groups who are also vulnerable to food insecurity include:

- **Neighbourhood Renewal Program.** This Department of Human Services program aims “to bring together the resources and ideas of residents, governments, local communities, businesses and community groups to tackle disadvantage in areas with a high level of public housing”. 60

- **Transport Connections Projects** (Department of Human Services, Department of Infrastructure, Department of Education and Training). These projects aim to facilitate local, community-oriented, inclusive, flexible transport initiatives, specifically targeting the remote, rural and regional areas of Victoria.

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60 Described in section 6, p. 5.
• *Best Start*. This is a prevention and early-intervention project that aims to improve the health, development, learning and wellbeing of all Victorian children from pre-natal care through to school. $7.6 million has been allocated for demonstration projects between 2002 and 2006. The focus is on Victoria’s most vulnerable children and families, including those from indigenous backgrounds.

In the non-government sector, some similar initiatives include:

- The Arthurton Gardens Food Buying program (Brotherhood of St Laurence)
- Vinnie’s Budget groceries – set up by St Vincent de Paul as a not-for profit supermarket in West Heidelberg.

By investing in initiatives that address food security, VicHealth could add value to other existing government and community projects with compatible objectives, to strengthen overall health promotion efforts.