



Tasmania: a State which produces quality, healthy, safe and affordable food, while sustaining the natural environment and strengthening the local economy; a community empowered to make food choices that enhance health and wellbeing.

Tasmanian Food & Nutrition Policy 2004

Foreword

Food is vital for sustaining life. It also plays an important role in our social experiences, our health, the economy and the environment.

Tasmania's first Food and Nutrition Policy was adopted in 1994 and led the nation in the approach taken. However, a lot of things have changed since then.

More recent issues include concern about rising rates of obesity and the burden of chronic diet-related disease, the development of the *Tasmania Together* goals, the Tasmanian Food Industry Strategy and the adoption of nationally consistent food safety legislation.

The Tasmanian Food and Nutrition policy 2004 and associated Action and Monitoring Plan brings us up to date and provides a framework for promoting a healthy and safe farm to fork food supply for Tasmanians.

It endorses the broad goals of *Tasmania Together* through integration of food and nutrition with broader social, economic and environmental goals and embraces a partnership approach embracing government, non-government, private sector and consumer interests.

I am pleased to welcome the new policy and urge all Tasmanians to work together towards improving the food supply now and for future generations.



Hon David Llewellyn MHA
Deputy Premier
Minister for Health & Human Services
Minister for Police and Public Safety

Acknowledgements

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ENDORSED POLICY STATEMENT

As well as being a great source of enjoyment and social interaction. The food we eat every day, can have many effects on our health and wellbeing. Food production, processing, advertising and marketing contribute to the economic wellbeing of Tasmania and impact on our environment, our employment and our future health.

Despite a fine environment and a high overall standard of living, Tasmanians experience a significant burden of preventable diet-related chronic disease and food borne illnesses. Tasmania has rates of heart disease, obesity, diabetes, hypertension and some cancers as high as, and in some instances higher than other Australian States. These preventable illnesses are costly in social and economic terms, both to the individual and their families as well as to the community.

This policy aims to develop a food system for Tasmania that contributes to the reduction in costs of diet-related disease and food-borne illness.

Food consumption patterns are influenced by a complex mix of social, cultural, physiological and economic factors, as well as the available food supply and its cost. Given that food choice and eating behaviour are intimately associated with culture, a population approach that seeks to improve the diet of the whole community is likely to be more effective than working only with individuals who are seen to be at *high risk* of chronic preventable disease and food-borne illness.

The policy recognises how important nutrition is now and in the future for growth and development of Tasmania's children. Breastfeeding is strongly endorsed as the preferred method of infant feeding and this policy supports enhanced food and nutrition promotion in pre-school, school, family and community settings.

All Tasmanians have the fundamental right to good health, which includes the right to have access to adequate amounts of safe, nutritious and acceptable food (food security). Most Tasmanians enjoy ready access to an ever-widening array of fresh foods, processed foods, ready-prepared foods and beverages, but a percentage of the population frequently worry about not having enough money to buy food for the household. Aside from financial barriers to accessing adequate food, some Tasmanians experience geographical, cultural and other social barriers. Ensuring food security requires coordinated action at a number of levels.

Food makes a substantial contribution to the economy of Tasmania by providing employment opportunities and export revenue. Food production and manufacture are vital to the Tasmanian economy, and the fine food niche marketing and *clean green* reputation the State has interstate and overseas is particularly important. Sustaining this reputation places extra responsibilities on the food industry to maintain high standards of food safety and quality control. For example, one Tasmanian product found to be *unsafe* or lacking in quality will not only jeopardise that product, but also the broader industry. Consequently, this policy endorses additional effort and commitment from both government and non-government sectors to meet national and international standards for food safety and quality food production.

Tasmanian international leadership in the area of food and nutrition policy is a result of the close policy linkages that exist between food suppliers, food regulators and food safety services and nutrition policymakers. This endorsed policy statement and the Policy goals acknowledge the importance of the food system as a major employer and contributor to the economy, and the importance of good nutrition and food safety in reducing ill health in the community.

Multi-strategic approaches will be required in order to protect and further develop Tasmania's food supply and to continue to improve the nutritional quality and cultural diversity of the Tasmanian diet. This policy statement, therefore, embraces a partnership approach between government, non-government, private and consumer sectors.

The Policy acknowledges and supports the significant roles of:

- Food Standards Australia New Zealand in the setting of safe food standards and labelling requirements;
- National Health and Medical Research Council in the ongoing development of the Dietary Guidelines for Australians and Nutrient Reference Values.
- National Public Health Partnership through the Strategic Intergovernmental Nutrition Alliance
- The National Food Industry Strategy and the Tasmanian Food Industry Strategy.

The policy endorses the broad goals of Tasmania Together (CLG, 2001), particularly:

- **Goal 1: Ensure that all Tasmanians have the economic capacity to enjoy a reasonable standard of living with regard to food, shelter, transport, justice, education, communication, health and community services.**
- **Goal 5: Develop an approach to health and wellbeing that focuses on preventing poor health and encouraging healthy lifestyles.**
- **Goal 6: Improve the health and wellbeing of the Tasmanian community through delivery of coordinated service.**
- **Goal 20: Promote our Island advantages including our 'clean green' image, natural resources, location and people.**
- **Goal 21: Value, protect and conserve our national and cultural heritage.**
- **Goal 23: Ensure there is a balance between environmental protection and economic and social development.**
- **Goal 24: Ensure our natural resources are managed in a sustainable way now and for future generations.**

Expertise will be required at many levels to achieve the goals set out in the Policy. Hence, a commitment to ongoing workforce development at all levels is required. Coordinated supportive networks, both within the State Government and between government and non-government sectors, will help to ensure the vision for food and nutrition in Tasmania is achieved.

Tasmania's Vision for Food and Nutrition

*Tasmania: a State which produces quality, healthy, safe and affordable food,
while sustaining the natural environment and
strengthening the local economy;
a community empowered to make food choices that enhance health and wellbeing.*



PART 1

INTRODUCTION



1.1 WHY A TASMANIAN FOOD AND NUTRITION POLICY?

Everyday we spend time purchasing, preparing and eating food. Food can be a great source of enjoyment and an integral component of many of our social and cultural experiences.

Food is a basic physiological requirement. It is essential for our health and wellbeing. A safe food supply and good nutrition are fundamental to healthy lifestyles, contributing to healthy growth and development during infancy and childhood, and to the prevention and management of a range of chronic lifestyle related diseases and food-borne illness.

Food production, manufacture, retail and export make a significant contribution to the Tasmanian economy. A viable economy affects the whole community through employment and industry development and determines our standard of living.

Primary production and food manufacturing practices that sustain or enhance the environment will help to ensure a viable future for food production and contribute to Tasmania's 'clean-green' image and the overall quality of life in Tasmania.

As food plays a fundamental role in our social experiences, our health, the economy and the environment, food and nutrition issues need to be addressed through a comprehensive policy. This integrated approach, encompassing the entire food system, reflects the vision of *Tasmania Together*.

1.2 THE HISTORY OF FOOD AND NUTRITION POLICY IN TASMANIA

Developed in the early 1990s, the first Tasmanian Food and Nutrition Policy was a partnership between private industry, non-government organisations, government departments and the community. The Policy, which included 39 recommendations, was released in 1994 following endorsement by the Tasmanian Government (DCHS, 1994).

This initial Policy was at the forefront of national and international action in food and nutrition. Whereas most food and nutrition policies aimed to improve health status via nutrition-based activities largely within the health system, the Tasmanian Policy adopted a food systems approach to improving health and wellbeing. The Policy incorporated strategies spanning the whole food system, from primary production to consumption, and acknowledged food as integral to the health and wellbeing of the community, to the environment and to the State's economy. The Policy became a driving force in placing food and nutrition issues on the political agenda.

Since the release of the 1994 Policy, there have been major developments in food and nutrition in Tasmania. Achievements that are largely attributable to the Policy include the establishment of a number of nutrition promotion campaigns (such as *Eat Well Tasmania*); improved quality assurance mechanisms (for example the *Tasmanian Shellfish Quality Assurance Program*); and improved environmental protection (including waste management).

Whilst the basis of the 1994 Policy remains relevant today, there is room for ongoing improvement and updating. Areas particularly identified through reviews of the Policy as requiring further effort include monitoring and surveillance, consumer protection and awareness raising, and training within the food industry and education sectors.

Significant issues have emerged across relevant Government and industry portfolios since the development of the 1994 Policy. These include the concern about rising rates of obesity and the burden of chronic diet-related disease, formation of the *Food Industry Council Tasmania*, the advancement of gene technology and organic farming, the effects of tax reform on food pricing and the release of *Tasmania Together*. Hence, it is timely for the State Government to review the Tasmanian Food and Nutrition Policy.

1.3 POLICY REDEVELOPMENT

The review and redevelopment of the Tasmanian Food and Nutrition Policy was initiated by the Department of Health and Human Services in mid 2002. The process was as follows:

Stage 1: Setting Visions and Directions for Food and Nutrition

Key stakeholder forums were held in the North and South of the State in August 2002. Attended by over 130 people with a diverse range of interests in food and nutrition, the forums generated key focus areas for the Policy and many innovative strategies. The forums also helped to formulate the vision and guiding principles.

During September and October 2002, a call for submissions for input into the Policy was widely publicised among potential key stakeholders. A total of 29 submissions were received from interest groups. These included pre-existing committees or coalitions as well as other interest groups formed for the specific purpose of developing a submission.

Stage 2: Developing Focus Areas and Recommendations

During October and November 2002, a Steering Committee made up of people with interest or expertise in food and nutrition was convened to oversee the Policy redevelopment. Expert working groups were also established to provide advice in specific focus areas. A review of international, national and state research was conducted to ensure information within the Policy was underpinned by the best available evidence and current best practice. The Steering Committee also reviewed the submissions and forum outcomes from Stage 1.

Steering Committee

Linda Hornsey (Chair)	Secretary, Department of Premier and Cabinet
Michael Kent	Deputy President, Tasmanian Chamber of Commerce and Industry
Wesley Hazell	Third Rock Agriculture, Tasmanian Farmers and Graziers Association
Tony Demeijer	President, Australia United Fresh
Mark Smith	Executive Officer, Tasmanian Agricultural Productivity Group
Kevin Baddiley	Food Industry Council Tasmania
Rod Gobbey	Director of Agriculture, Dept of Primary Industries, Water and Environment
Sonia Weidenbach	Research Policy Officer, Consumer Affairs and Fair Trading
Judy Seal	State Nutrition Officer, Department of Health and Human Services
Prof Madeleine Ball	School of Human Life Sciences, University of Tasmania
Julie Williams	Coordinator, Community Nutrition Unit, Dept of Health and Human Services
Eric Johnson	State Food Officer, Department of Health and Human Services
Graeme Cooksey	Principal Education Officer, Department of Education
Ros Escott	Australian Breastfeeding Association
Liz Gillam	Local Government Association of Tasmania
Peter Fehre	Executive Director, Retail Traders Association (Tasmania)
Peta Sugden	Assist. Gen. Manager, Food and Beverage, Dept of Economic Development
Dr David Woodward	Senior Lecturer, School of Medicine, University of Tasmania
Dr Tom Ross	Food Microbiologist, University of Tasmania
Lori Rubenstein	Policy Development, Department of Health and Human Services
Dr Roscoe Taylor	Director of Public Health, Department of Health and Human Services
Linley Grant	Poverty Coalition
Wayne John	Health Promotion Director, National Heart Foundation of Australia (Tas)
Kylie Jackson	Tasmanian Food and Nutrition Policy Officer, Dept of Health and Human Services

Stage 3: Community Consultation

During December 2002, the draft Policy was placed on a community consultation website along with a feedback guide. The consultation process was advertised in newspapers and a letter was sent to key stakeholders advising them of the consultation process and how they could become further involved.

Over 30 responses covering a wide range of issues (eg environmental protection, education, industry, food production, and nutrition) were received and incorporated into the Policy where appropriate.

Stage 4: Endorsement by the Tasmanian Government and Key Partners

The Policy is endorsed by the Tasmanian Government and is actively supported by the following key Departments and organisations.

- Department of Health and Human Services
- Department of Education
- Department of Premier and Cabinet
- Department of Economic Development
- Food Industry Council
- Australian Breastfeeding Association
- Dietitians Association of Australia
- Australian United Fresh.

Stage 5: Policy Dissemination, Promotion and Implementation

Dissemination and promotion of the Policy will raise the profile of food and nutrition and help to ensure food and nutrition are on the agenda of State and local Government, the private sector, non-government organisations and the community sector. Implementation of the Policy will require building commitment from a wide range of organisations and individuals involved in food and nutrition. Steering Committee members and others involved in the Policy redevelopment have a key role in promoting the Policy and ensuring effective implementation.

Stage 6. Policy Monitoring

The Policy's accompanying Action and Monitoring Plan contains intended outcomes and outcome indicators for the goals and sub-goals for each of the 12 focus areas. For each outcome indicator a lead Government Department has been designated responsibility for reporting against the indicator and action taken to address the goal and sub-goals. A Policy sub-committee comprising representation from each of the lead Government Departments will be formed. This committee will meet annually and provide a short report on Policy implementation to Government through the Inter-Agency Policy Coordination Committee. A full report on progress towards policy implementation, with broad consultation with key partners will be provided to Government on a four yearly basis (in 2008 and 2012). It is recommended that the Policy be reviewed after ten years.

1.4 STAKEHOLDERS AND KEY PARTNERS

There is a vast range of people with a specific interest in food and nutrition in the government, non-government, community and private sectors in Tasmania. These include farmers, food manufacturers, food retailers, food handlers, food transport workers, hospitality and catering workers, health professionals, teachers, regulatory bodies, peak industry organisations, government and non-government organisations and, of course, consumers.

Stakeholders have been widely consulted and involved in the redevelopment of the Policy. Implementing the Policy strategies will require a partnership approach. Existing and potential key partnership opportunities have been identified.

Potential key partners have indicated their support for the Policy. However, it is recognised that the level of responsibility for implementation of strategies may vary depending on roles and available resources of key partners.

1.5 THE STATUS OF FOOD AND NUTRITION IN TASMANIA

The increasing pace of food industry development, and application of science and technology, have brought improvements in living standards and increased employment opportunities. Additionally, medical advances in prevention and treatment of disease have resulted in increased life expectancy. However, changes to our food supply and to aspects of our lifestyle have, in turn, impacted on nutritional status and health. For example labour saving devices have resulted in a reduction in physical activity and an increase in the number of hours worked has led to a greater reliance on food prepared outside of the home.

1.5.1 HEALTH STATUS OF TASMANIANS

Australians, by world standards, experience a high standard of living and good health. The *healthy life expectancy* of Australians in 2000 (a measure of the expected number of years to be lived without reduced functioning) was 76.6 years for males and 82.1 years for females. This is among the highest in the world, ranked third for females and sixth for males (WHO, 2002 cited in AIHW, 2002). However, morbidity rates for chronic, non-communicable disease (such as cardiovascular disease, diabetes and cancer) constitute a major challenge for the Australian health system.

Tasmania has the lowest population growth rate in Australia and projections suggest there will be a significant increase in the proportion of elderly Tasmanians and a decrease in the proportion of young Tasmanians. It has been estimated that the median age of Tasmania's population will increase from 36 years in 1999 to 45 years by 2021 (ABS, 2001a). These demographic changes will result in a significant increase in demand on the health system due to chronic diet-related diseases such as type 2 diabetes¹, cardiovascular disease, some cancers and other related health conditions.

Our health may also be adversely affected by food-borne illness. While improvements have been made to food safety in terms of education and food safety practices in recent years, food-borne illness in Australia is still responsible for significant health and economic costs.

NUTRITION

Nutrition plays a significant role in the prevention of a range of chronic diseases (see Figure 1) including coronary heart disease, stroke, hypertension, arteriosclerosis, type 2 diabetes, some cancers, dental caries, osteoporosis, gall bladder disease, non-cancerous disorders of the large bowel and nutritional anaemias (Lester, 1994).

Adequate and nutritious food is fundamental to good health. Poor nutrition on the other hand comes at a significant individual and national cost. Current estimates put the economic burden of diet-related heart disease, stroke and cancer at about \$6 billion per year (NHMRC, 2003).

An important study in 1996 on the burden of disease in Australia found that cardiovascular diseases contributed 20% to the total burden of disease with type 2 diabetes and colorectal cancer each contributing a further 3% (Mathers et al., 1999). This study also estimated the contribution to *burden of disease* of some major risk factors. While it was unable to determine the total effect of poor nutrition, the contribution of inadequate vegetable and fruit intake alone was estimated to contribute to 2.7% to the burden of disease. The estimated contribution of other major lifestyle related risk factors include tobacco (9.7%) physical inactivity (6.7%), obesity (4.3%) and high blood cholesterol (2.6%) (Mathers et al., 1999).

In financial terms, the cost to the Australian health system of diseases closely linked to diet is staggering. When capital expenditure, community health services and public health program expenditure is taken into account, it has been estimated that cardiovascular disease alone costs in the order of \$3.7 billion annually, with similar figures for digestive system diseases (AIHW, 2000).

Mortality rates (for all causes) are higher in Tasmania than Australia-wide (Figure 1). Mortality rates attributable to cancer (all types) and cardiovascular disease are also higher than the Australian rates (Figure 1).

¹ Type 1 diabetes is caused by complete deficiency of insulin. Type 2 diabetes is more prevalent than type 1 and characterised by relative insufficiency of insulin and resistance to its actions. Lifestyle-related risk factors, such as obesity and physical inactivity, play a significant role in the development of type 2 diabetes.

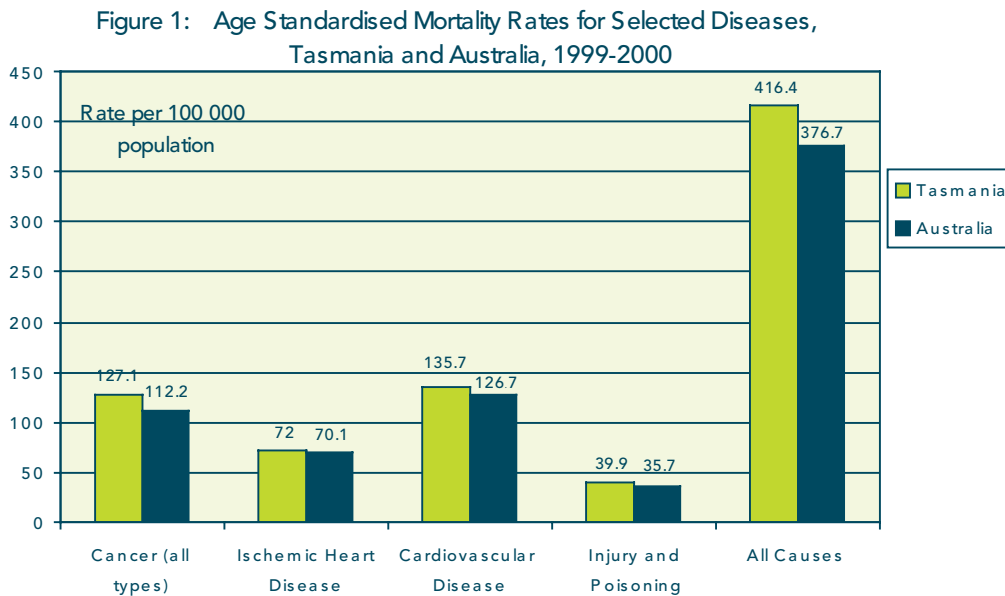


Figure 1: Age-standardised mortality rates for selected diseases. (Source: DHHS, 2003a) For cancers, cardiovascular disease and 'all causes', Tasmanian rates are significantly higher than Australian averages at the 1% significance level.

Cancer

There is now good evidence that colorectal, breast, lung and prostate cancer are diet related and that up to 30-40% of all cancers are preventable by dietary means (American Institute of Cancer Research and World Cancer Research Fund, 1997).

Colorectal, breast, lung and prostate cancer are the most commonly diagnosed cancers and have a significant impact on morbidity and mortality and on health service use in Australia (AIHW, 2002). Tasmanian age-standardised incidence rates per 100 000 population for these cancers are summarised (1994-1998) in Table 1.

Table 1 Tasmanian age-standardised incidence rates (2000) for some cancers (DHHS Population Health database extracted April 2004).

Cancer (site)	Age-standardised incidence rate (2000) per 100 000 population	
	males	females
colon	43.1	35.6
rectum	27.7	16.4
lung	53.3	29.7
prostate	109.7	-
breast	-	92.2

Age-standardised rates are standardised with the Australian 1991 population and expressed per 100 000 person years.

In 1999/2000, cancer was the single leading cause of death, responsible for 27.9% of Tasmanian deaths (ABS Mortality Database). Mortality rates in Tasmania are higher than the national average for lung, rectal and prostate cancer, and for colon cancer among women (analysis of the AIHW National Mortality Database, see Part 4: Data and Indicators for more detail).

Cardiovascular Disease

Cardiovascular disease is the leading cause of death for Australians, accounting for 42% of all deaths in 1996 (AIHW, 1999). Ischaemic heart disease alone is responsible for 21% of all deaths (AIHW, 1999) and cerebrovascular disease (stroke) accounts for 10% of all deaths (Mathers et al., 1999).

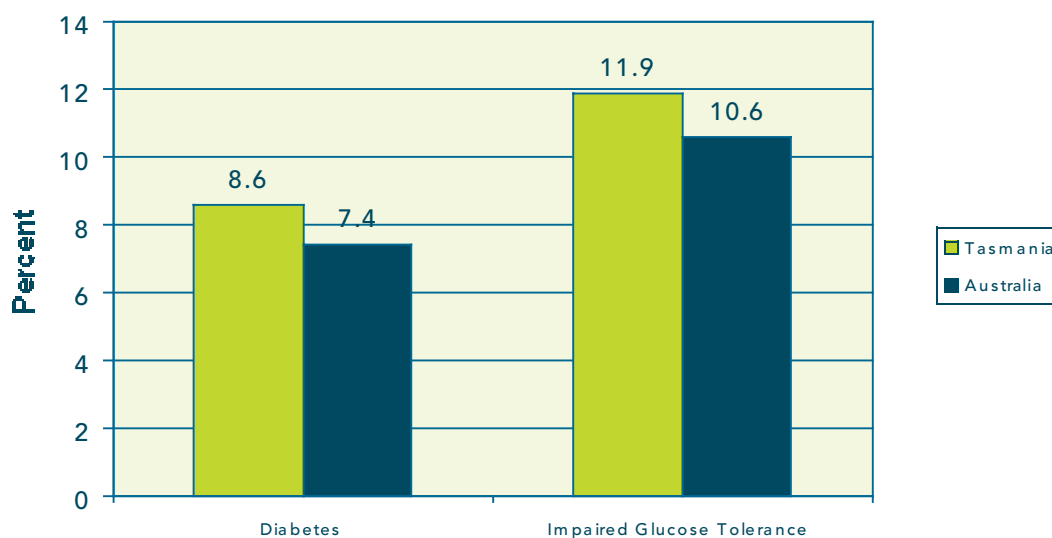
Tasmania experiences the second highest age-standardised death rate from ischaemic heart disease (20.2% of deaths in 1999/2000) of all Australian states and territories (ABS Mortality Database; AIHW, 1999). Mortality rates from both ischaemic heart disease and cerebrovascular disease (stroke) in Tasmanian men are significantly higher than the national average (ABS Mortality Database).

However, both nationally and in Tasmania, mortality rates from ischaemic heart disease have declined gradually from 1979 to 2000, especially amongst males. This decline is thought to be due to reductions in some risk factors (including blood pressure, smoking and saturated fat intake), medical interventions, and follow-up treatment (AIHW, 2000).

Diabetes

The AusDiab study (1999) reported Tasmanian diabetes (type 1 and 2) prevalence rates in the order of 8.7% of the adult population (compared with 7.2% of the national population), with a further 17.6% (compared with 16.0% of the national population) having impaired glucose metabolism - a condition associated with substantial increased risk of both future type 2 diabetes and heart disease (Dunstan et al., 2000). In total, the study indicates more than 1 in 4 Tasmanian adults (or more than 80 000 people), have either diabetes or impaired glucose metabolism (see Figure 2).

Figure 2: Age Standardised Prevalence Rates for Diabetes and Impaired Glucose Tolerance, Tasmania and Australia, 2001.



Hypertension

Hypertension, or high blood pressure, is a major risk factor for cardiovascular disease. It accounts for an estimated 5% of the burden of disease in Australia (Mathers et al., 1999). High blood pressure has been defined by the World Health Organisation (1999) as:

- systolic blood pressure greater than or equal to 140mmHg and/or;
- diastolic blood pressure greater than or equal to 90mmHg and/or;
- receiving medication for high blood pressure.

Using this definition, results from the AusDiab study suggest that 29% of Australian men and women aged 25 years and over had high blood pressure. The equivalent rate for Tasmania was 30% (Dunstan et al., 2001).

High Blood Cholesterol

High blood cholesterol is a major risk factor for coronary heart disease and has been estimated to cause nearly 3% of the total *burden of disease* in Australia (Mathers et al., 1999). Results from the 1999/2000 AusDiab study indicate that around 50% of Australian men and women (aged 25 years and over) and 53% of Tasmanian adults had blood cholesterol levels greater than or equal to 5.5mmol/L (Dunstan et al., 2001).

Overweight and Obesity

Overweight and obesity are significant risk factors for a range of conditions including type 2 diabetes, hypertension, cardiovascular disease, stroke and some forms of cancer as well as psychosocial disorders, musculoskeletal disorders and gall bladder disease (WHO, 1997).

Age-standardised rates of overweight and obesity are higher in Tasmania than in any other state or territory. In Tasmania in 1995, 67% of males and 54% of females were overweight or obese (nationally the rates were 64% for males and 49% for females) (AIHW, 1999). Rates of obesity have been increasing rapidly, so current figures are likely to be even higher.

There has been an alarming increase in childhood obesity in Australia over the past decade. Analysis of the data from the 1995 National Nutrition Survey indicated that for children and adolescents aged 7 to 15 years, over 15% of boys and girls were overweight, and a further 5% were obese (Magarey et al., 2001a). In the decade from 1985 to 1995, the prevalence of overweight children between 7 and 15 years of age nearly doubled and rates of obesity almost tripled (Magarey et al., 2001a).

Eating Disorders, Disordered Eating and Body Satisfaction

Eating disorders include anorexia nervosa, bulimia nervosa, binge eating disorder and eating disorders not otherwise specified. It has been estimated that as many as one in 100 adolescent girls develop anorexia nervosa (National Institute of Mental Health, 1994). Rates of other eating disorders are less well documented in Australia, partially due to the high number of undiagnosed cases. However, attempts to estimate the prevalence of bulimia suggest it is around 3% in the female population aged 15-30 (Beaumont, 1995).

Despite relatively low rates of clinically defined disorders there is a range of much more common behaviours, referred to as disordered eating, which impact on physical and mental wellbeing. These include repeated dieting, body image preoccupation, binge eating and purging (Scarano & Kalodner-Martin, 1994).

Many women in Australia are dissatisfied with their body weight and shape. The Australian Longitudinal Study of Women's Health found that among women aged 18 to 22, 74% wanted to weigh less and 48% had dieted to lose weight in the previous year (Kenardy et al., 2001). Research has also found that inappropriate weight loss practices, such as weight loss dieting among those of healthy weight are not uncommon (Crawford et al., 1998).

Oral Health

In an analysis of the cost of diet-related diseases in 1989/1990, dental caries were ranked the most costly (Crowley et al., 1992). Of all health problems in Australia, dental caries are considered the most prevalent, and periodontal diseases² the fifth most prevalent (AHMAC, 2001). Approximately 1% of all disability adjusted life years (DALYs) lost are due to oral disease. Mathers et al. (1999) estimated that more than 20 000 DALYs will be lost as a result of dental caries, periodontal disease and edentulism³ that occurred in 1996 alone.

The published 1998 age-standardised data on dental caries in the permanent teeth of children suggest that the percentage of children aged 5 to 12 years with no decayed, missing or filled permanent teeth was lower in Tasmania than the national average (75.9% versus 80.3%) (Armfield et al., 2001). Factors such as fluoridation, dental hygiene, breastfeeding, and limited consumption of foods and drinks containing sugar are all important in the prevention of dental decay (NHMRC, 2002).

² Disease associated with tissues that support and attach the teeth that may include inflammation of the gum and deeper tissues in the tooth socket (AHMAC 2001).

³ Having no natural teeth (AHMAC 2001).

Iodine Deficiency

Iodine deficiency is considered to be the world's greatest single cause of preventable brain damage and mental retardation. Even mild deficiency is now recognised to negatively influence physical and intellectual development, especially during foetal life (Dunn, 2001).

Tasmania has a history of iodine deficiency with cases of severe iodine deficiency prior to the 1950s. Iodine supplementation programs were implemented in the 1950s (potassium iodate tablets provided to school children) and iodine was added to bread improvers in the late 1960s and early 1970s (Gibson, 1995). During the 1980s the iodine status of Tasmanians was considered to be sufficient. Iodine, present in milk as residues from sanitisation practices in the dairy industry, was thought to have provided protection during this time.

Results from a urinary iodine survey of Tasmanian school children in 1998/1999 suggested a re-emergence of mild iodine deficiency. These results were confirmed by a further survey in 2000/2001 (Hynes, 2001). One plausible explanation for the re-emergence of iodine deficiency is a reduced reliance on iodine containing sanitising agents by the dairy industry and therefore less iodine residue in the milk consumed by the population.

In 2001 a Tasmanian Iodine Supplementation Program was implemented to encourage bread manufacturers to switch from the use of regular salt to iodised salt in bread baking. Preliminary data suggest there has been an improvement in iodine status since this time (Seal et al., 2003).

Folate and Neural Tube Defects (NTDs)

Neural tube defects are a group of major congenital abnormalities that affect the development of the spinal cord and brain. Neural tube defects can result in spontaneous abortion of a developing foetus, stillbirth, or severe abnormalities such as spina bifida. Children with NTD are typically seriously disabled, and usually die before adulthood.

Folate is a B group vitamin found in highest amounts in; fresh vegetables and fruit, orange juice, legumes, nuts, liver and yeast. There is evidence that 50% to 66% of neural tube defects can be prevented by ensuring adequate folate intake during pregnancy (NHMRC 1994). In recognition of this, a voluntary folate fortification program was introduced in Australia in 1995 by the Australia New Zealand Food Authority (now FSANZ) to encourage folate to be added to foods such as breads, breakfast cereals, yeast extracts, fruit and vegetable juices.

The 1998 Eat Well Tasmania Survey indicated that over half of adult Tasmanians had heard of folate. However, knowledge of its link to neural tube defects was low (only 11%) (TNPT, 1999).

Breastfeeding

Breastfeeding is the preferred method of infant feeding for the first six months of age and is closely related to immediate and long-term health outcomes (NHMRC, 2003b). Breastfeeding initiation rates in Tasmania are lower than elsewhere in Australia with only 78% of infants being breastfed at the time of post-natal discharge from hospital (Donath and Amir, 2000). These rates fall short of the Department of Health and Aged Care's recommended target of 90% (DHAC, 2001a). At only 44%, the proportion of infants in Tasmania being at least partially breastfed until six months of age falls even further short of the recommended 80% target (the corresponding rate for Australia as a whole is 46%) (Donath and Amir, 2000).

Food Security

Food security refers to the ability of individuals, households and communities to acquire food that is sufficient, reliable, nutritious, safe, acceptable and sustainable (Rychetnik et al, 2003). Closely related to poverty, food insecurity affects a small but significant proportion of Australians. In the 1995 National Nutrition Survey 5% of adults reported that they had run out of food in the previous twelve months and could not afford to buy more (ABS, 1997). In the 1998 Tasmanian Healthy Communities Survey, 10% of adults reported they frequently worry about whether the food that they can afford to buy for their households will be enough (DHHS, 1999).

FOOD SAFETY

Significant illness in our community may result directly from food-borne bacteria and viruses. There are an estimated 6 million cases of food-borne illness each year in Australia, with up to \$1.67 billion in health care costs (Food Science Australia and Minter Ellison Consulting, 2002). The main reported food-borne illnesses are campylobacteriosis and salmonellosis. However, other organisms that may be found in foods and cause illness include *Listeria*, the hepatitis A virus, *Shigella* and norovirus.

Many food-borne illnesses such as salmonellosis and campylobacteriosis may be prevented through effective food safety education and hygienic controls and prevention strategies in food manufacture. However, nationally, notification rates of illness due to pathogens such as *Salmonella* and *Campylobacter* have increased over the past three decades. A possible contributor to this increase may be changing food production systems that have enabled rapid and widespread distribution of contaminated foods.

Campylobacter Infection

Campylobacter is a bacterium causing gastrointestinal illness. Children and young adults are most commonly affected although cases may occur at any age. It is estimated that 75% of cases of *Campylobacter* infection in Australia are food borne (Hall, *In press*) and may have been acquired through improper or incomplete food preparation. Campylobacteriosis is the most notified communicable illness in Tasmania accounting for 68% of all cases of notifiable gastroenteritis in 2002 (DHHS, 2003b).

The rates of campylobacter infection nationally and in Tasmania in 2002 were 112 per 100 000 population and 129 per 100 000 population respectively (DoHA, 2003). The rate of campylobacteriosis in Tasmania increased from 75 per 100 000 population in 1998 to 129 per 100 000 population in 2002.

Salmonella Infection

Salmonella is another common bacterium that causes gastroenteric illness. It may be acquired through improper or incomplete food preparation or improper storage. Eighty seven percent of all cases of salmonellosis in Australia are thought to be food-borne (Hall, *In Press*).

In Australia in 2002, 92 food-borne outbreaks were reported and *Salmonella* was implicated in 33% (30/92) of these (DoHA, 2003). At 35 per 100 000 population in Tasmania in 2002, the rate of salmonellosis was less than the national rate of 39 per 100 000 population (DHHS, 2003b).

Salmonellosis is most common in children, with the highest rate occurring in the 0 to 4 age group. Certain types of *Salmonella* traditionally occupy localised niches in specific geographical areas in Australia. In Tasmania in 2002, *Salmonella* Mississippi accounted for 48% (79/165) of *Salmonella* infection notifications (DHHS, 2003b). This type of *Salmonella* is rarely reported anywhere else in Australia.

1.5.2 FOOD INDUSTRY IN TASMANIA

'As a sector, the food and grocery industry in Australia is three times larger than the Australian car industry and four times larger than the textiles, clothing and footwear industry.'
(Australian Food and Grocery Council, 2001).

With almost 4000 establishments and a turnover of \$50 billion in 1999-2000 (ABS, 2000), the Australian processed food and beverage industry is a large manufacturing sector. Going against the global trend of increasing processed food exports, there has been an overall trend in Australia toward an increased exportation of unprocessed or minimally processed foods using airfreight. Australia now ranks as the sixth largest exporter of unprocessed foods (ABARE and AFFA, 2000). With the value of our exported foods exceeding the value of imported food more than any other country, Australia ranks first in terms of net trade.

In 1999-2000 the food processing industry in Tasmania was valued at around \$1.68 billion (ABS, 2000). The greatest contribution to this was the agricultural industry. In 2000, the food industry had the highest turnover of all Tasmanian industries at \$1,416.9m or 43% of the overall retail turnover (ABS, 2002a).

Production and exports

In the 2000-2001 financial year the gross value of agricultural commodities produced in Tasmania was \$744.5m, an increase of \$44.6m from 1998-1999. The major products were milk, vegetables, cattle and calves, and wool. The main vegetables were potatoes, carrots and onions. Apples dominated fruit production with grapes, cherries and other fruits also grown (ABS, 2001b).

Noteworthy increases in production included a rise of 10% in the number of vineyards in the State between 1999 and 2000 (Office of the Commissioner for Licensing cited by ABS, 2001b). A 35.3% (\$26.2m) rise was also seen in farm gate value within the aquaculture industry (mainly salmonids) from 1996-1997 to 1999-2000 (ABS, 2000).

In 1999 food contributed approximately 25% to total international exports from Tasmania (DSD, 2000). In 2000-2001 seafood represented the majority value of exported food at \$176.73m, followed by dairy products (\$101.01m), meat products (\$88.68m) and vegetables and fruit (\$44.64m).

Retail

Food retail represents about 43% (\$58.5 billion in 1998 - 1999) of retail sales on a national basis (ABARE and AFFA 2000). Retail food turnover statistics show that the majority of food in our state is purchased through supermarkets and grocery stores, with national franchises dominating the food market. During 2000-2001, turnover by supermarkets and grocery stores in Tasmania was \$1,065m, in comparison to a turnover of \$195m from takeaway outlets and \$90m from cafes and restaurants (AFFA, 2002a). There is a national trend toward a rise in retail turnover in restaurants and cafes, and a decline in sales from takeaway outlets (ABARE and AFFA, 2000).



PART 2 – THE POLICY FRAMEWORK



2.1 PURPOSE

This Policy provides the basis for strategic action to improve social, health, economic and environmental outcomes associated with food and nutrition in Tasmania over the next 10 years. Whilst the focus areas identified in the Policy are those considered priorities in the current socio-political environment, it is likely that additional issues will emerge and priorities may change during the ten-year period.

The purpose of the Policy is to:

- Promote the importance of food and nutrition to the economy, the environment, health and the social wellbeing of the community;
- Foster consistent and complementary policy approaches to food and nutrition;
- Ensure the most efficient use of resources through effective partnerships across the food system;
- Reduce the burden of disease associated with poor diet and food-borne illness;
- Promote the food industry and its contribution to the Tasmanian economy and;
- Ensure an appropriate balance between environmental sustainability and economic development in the food production sector.

The Tasmanian community can exert a significant degree of influence on the food supply through consumer choice. Therefore the Policy also includes strategies for stakeholders to support consumers and strengthen consumer capacity to influence the food supply. Our capacity to produce safe, nutritious and affordable food is also very important and for this reason the Policy includes the need to balance environmental sustainability and economic development.

This section of the Policy outlines a strategic framework to guide activities, and includes principles and key focus areas with goals aiming to achieve the shared vision.

Tasmania: a State which produces quality, healthy, safe and affordable food,
while sustaining the natural environment and
strengthening the local economy;
a community empowered to make food choices that enhance health and wellbeing.

2.2 PRINCIPLES

In developing the Policy and the accompanying Action and Monitoring Plan, and to guide the development of future strategies, the following principles were generated by stakeholders. This set of principles will ensure we are all working toward achieving consistent and complementary goals and promote effective collaborative action.

The principles that underpin the Tasmanian Food and Nutrition Policy and its associated strategies include:

A commitment to:

- Environmental sustainability;
- Development of the local food industry in recognition of its contribution to the State's economy;
- Right of access to a safe and affordable food supply for all Tasmanians;
- Consumer participation in the development and implementation of food and nutrition policy and programs;
- Prevention and early intervention in relation to diet-related disease and food-borne illness;
- A whole-of-population approach to policy implementation, with recognition that some vulnerable groups may require additional focus;
- Partnership approaches and collaboration in policy implementation;
- Innovation;
- Evidence-based practice, including monitoring and surveillance.

Acknowledgement of:

- The influence of global markets on local food production and supply;
- The social and cultural factors that influence the eating patterns of individuals and community groups.

2.3 FOCUS AREAS

The food system involves a range of sectors and a complex array of interrelated activities. Food is produced, processed, transported, purchased and consumed. There are many influences on the food that is ultimately available for Tasmanians to eat and consequently many influences on our health and wellbeing.

Key focus areas for action across the food system have been identified through widespread consultation with a broad range of stakeholders who work with food and nutrition in Tasmania. While each area is discussed separately in the following section, there are many areas of overlap. Hence focus areas should not be considered in isolation. Throughout the Policy and accompanying Action and Monitoring Plan a partnership approach is promoted. The focus areas of the Policy with respective goals and sub-goals are listed in Table 2.

Table 2: Focus areas, goals and sub-goals

Focus Area	Goal	Sub-goals
1. Environment	To promote practices across the Tasmanian food system that are consistent with environmental sustainability.	1.1 Ensure the safety of Tasmanian food and water supplies. 1.2 Preserve the integrity of the Tasmanian environment. 1.3 Promote sustainability of the Tasmanian food production system.
2. Food Safety	To ensure the safety of food and drinking water for all Tasmanians and reduce the impact of food-borne illness.	2.1 Improve food safety practices in Tasmania. 2.2 Strengthen collaboration in relation to food safety between State Government Agencies with a role in food. 2.3 Improve monitoring of, and research into, the safety of food and drinking water. 2.4 Strengthen the capacity of State and local government to address food and water safety issues.
3. Promoting Healthy Eating	To promote healthy eating for Tasmanians and reduce the impact of diet-related disease.	3.1 Make healthy eating and the prevention of diet-related disease a priority goal for the Tasmanian population. 3.2 Promote eating patterns consistent with the National Health and Medical Research Council (NHMRC) Dietary Guidelines for Australians and Australian Guide to Healthy Eating. 3.3 Increase the proportion of Tasmanians who are a healthy weight. 3.4 Promote healthy growth and development of infants and children (including during fetal development). 3.5 Maximise the effectiveness of nutrition promotion. 3.6 Strengthen nutrition monitoring and surveillance and nutrition research in Tasmania.
4. Breastfeeding	To promote and support breastfeeding in Tasmania as the preferred method of infant feeding.	4.1 Increase community and environmental support for breastfeeding. 4.2 Increase the percentage of infants breastfed on post-natal discharge from maternity services. 4.3 Increase the percentage of infants exclusively and partially breastfed to six months of age.
5. Food Security	To ensure all Tasmanians have access to healthy and safe food in order to meet their nutritional needs.	5.1 Increase awareness of the factors that influence food security in Tasmania. 5.2 Reduce social, cultural and economic barriers to food security. 5.3 Reduce geographical and physical barriers to food security. 5.4 Ensure the nutritional needs of Tasmanians with special nutritional requirements are met.
6. Primary Production	To ensure Tasmania has a primary produce sector that is economically vibrant and produces safe and quality food.	6.1 Support primary industries in the production of safe food. 6.2 Promote quality food production by primary industries. 6.3 Strengthen organic food production in Tasmania. 6.4 Strengthen research and development in the primary production sector.

Table 2: Focus areas, goals and sub-goals (continued)

Focus Area	Goal	Sub-goals
7. Distribution, Retail and Wholesale	To ensure Tasmania has food distribution, wholesale and retail systems that are economically viable, safe and healthy.	<p>7.1 Ensure that food available for consumption in Tasmania is safe.</p> <p>7.2 Improve the quality of food in all Tasmanian food retail outlets.</p> <p>7.3 Foster commitment from food retailers to sell healthy, safe and quality food.</p>
8. Food Service	To ensure the Tasmanian food service sector is economically viable and provides healthy and safe food.	<p>8.1 Increase the availability and promotion of safe and healthy food from the food service sector.</p> <p>8.2 Promote practices consistent with food legislation and best practice in food safety among the food service sector.</p> <p>8.3 Increase consumer demand for safe and healthy food from the food service sector.</p> <p>8.4 Ensure food provided in institutions* and from delivered meal organisations is safe and meets the nutritional needs of the client group (*hospitals, nursing homes, residential care services and prisons).</p>
9. Labelling	To ensure food labelling in Tasmania complies with national requirements and assists consumers to make informed food choices	<p>9.1 Promote a consistent national approach to labelling for nutrient content claims.</p> <p>9.2 Improve industry consistency and accuracy in provision of health and nutrient claims.</p> <p>9.3 Enhance the ability of consumers to make informed food choices based on labelling information.</p>
10. Media, marketing and advertising	To promote media, marketing and advertising practices that promote healthy food choices, food safety and good nutrition and which promote locally produced foods	<p>10.1 Support and encourage increased media coverage, marketing and advertising of food safety, good nutrition and of healthy food choices, especially those of Tasmanian origin.</p> <p>10.2 Increase community awareness of, and demand for, healthy food choices, especially those of Tasmanian origin.</p> <p>10.3 Promote marketing and advertising practices consistent with the World Health Organisation (WHO) International Code of the Marketing of Breast Milk Substitutes in Tasmania.</p>
11. Technology	To monitor and, where appropriate, adopt evidence-based developments in food technology	<p>11.1 Ensure food type dietary supplements (FTDS) meet appropriate safety and nutrition outcomes.</p> <p>11.2 Position Tasmania to take advantage of beneficial applications of gene technology in food production.</p> <p>11.3 Enhance the State's capacity to benefit from new and emerging food technologies.</p>
12. Workforce Development	To strengthen the capacity, knowledge and skills of the Tasmanian food and nutrition workforce	<p>12.1 Strengthen the food and nutrition workforce (both specialist and generalist) within the health sector.</p> <p>12.2 Increase the capacity of the food service sector to contribute to food and nutrition promotion.</p> <p>12.3 Increase opportunities for food and nutrition education and training in Tasmania.</p>

Focus Area 1: ENVIRONMENT

Tasmania has established an excellent reputation for a *clean & green* environment. Such an environment is highly regarded in the world market because food can be grown in conditions that are not damaging to the environment and employ minimal use of chemicals (DSD, 2000). Protection of our natural resources whilst maintaining viable primary industries and production, is already a major priority in Tasmania.

Since the release in 1987 by the World Commission on Environment and Development of the report entitled 'Our Common Future' or 'Brundtland Report', protection and sustainability of the environment has been an international priority.

It is widely recognised that the environment needs to be protected from damage and depletion of resources through effective conservation and sound land management practices.

This has come about from growing awareness of the effects of pollution and land degradation resulting in severe adverse consequences to the environment, natural resources and the health of populations at a global level.

'Tasmania's future will depend on how we balance the use, development and conservation of the state's natural resources.' (DPIWE, 2002)

Tasmania's *clean-green* image is extensively promoted in marketing and tourism. Whilst it is crucial to effectively manage our natural resources for a sustainable future and to promote our environment, it is also important that there is strong economic and social development in our state. Therefore the maintenance of the environment needs to be balanced with industry progress and promotion of our products. Numerous policies, practices and legislative frameworks that impact on environmental protection, developed by industry and government departments in Tasmania, attempt to achieve this balance. These include waste and effluent management, pollution control, energy efficiency and natural resource management.

The *Tasmanian Natural Resource Management Framework* (DPIWE, 2002) guides the main directions in our State relevant to this area. It was introduced in 2002 to integrate legislation, policies and processes in regard to resource management. The Framework was developed by a Steering Committee consisting of representatives of State and local government, industry and community groups.

Priority areas for the Framework include capacity building, research, education and communication. In terms of areas of natural resources, priority issues were identified as management of water, vegetation, soil, weeds, pests and diseases, and of the coast (marine environment). These priorities will be reviewed on an annual basis.

This Policy focuses on those aspects of food production that impact on the environment, including agriculture, transport, processing and packaging.

Critical to these processes is effective management of waste and effluent, and of land (soil management). Effective waste and effluent management practices are required to minimise food contamination and subsequent risk of food-borne illness. It is recommended that waste should be minimised and, where possible, reused or recycled.

This will lead to a number of benefits to producers and the community, including less pollution, more efficient use of resources, reduced financial costs of waste management, less effluent and less waste provided to landfill (DPIWE, 2002). Waste management strategies in Tasmania focus not only on primary production outputs, but also on the treatment of municipal wastewater and enhanced ability to reuse water, such as for the irrigation of crops. The safety of wastewater for use on food crops requires careful investigation and management, as all recyclable effluent may not be suitable for all crops.

Goal:

To promote practices across the Tasmanian food system that are consistent with environmental sustainability.

Sub-goals

1. Ensure the safety of Tasmanian food and water supplies.
2. Preserve the integrity of the Tasmanian environment.
3. Promote sustainability of the Tasmanian food production system.

It is also important to minimise environmental and food safety risks by limiting crop contamination by pests, weeds, pesticides and chemical residues. This involves the implementation of effective quality assurance mechanisms, guidelines for pesticide and chemical use, and quarantine procedures for the State.

In recent years there has been a substantial increase in organic farming in Tasmania, which aims to increase sustainable farm management practices. The market for organic food is currently small (considerably less than 1% of total food sales) but is rapidly growing from a low base and has doubled in value to a farm-gate estimate of \$3.3 million in 2001 - 2002 (Tasmanian Organic Coalition in Tasmanian Country Hour, 2001).

Organic is defined as 'Grown using appropriate land management practices without the use of artificial fertilizers, herbicides, pesticides, growth regulators, antibiotics, or hormone stimulants, or intensive livestock systems,' (NASAA, 2002).

This increase in organic farming is due to a perception among many consumers that organic foods are healthier, safer and their production methods maintain the environment.

As previously outlined, the main dilemma in environmental management is finding the most workable balance between food production and environmental protection. Improved methods of reusing resources and effective waste management practices are assisting in meeting environmental and economic goals. Emerging trends and practices may also improve environmental management in a cost effective way. Similarly, in implementing improved resource and land management strategies, primary producers can work towards getting the greatest value from their produce and the natural environment. Maintaining the environment will continue to be a challenge in the future as greater demands arise in meeting market needs.

Focus Area 2: FOOD SAFETY

Food safety is critical across the whole food system including production, transport, processing, storage, handling and retail.

Safe food is generally described as food that is free of unintended chemicals and microbes. However, food safety also encompasses other factors such as reducing risks associated with the presence of potential allergens and examining long-term health outcomes associated with new food such as genetically modified and functional foods.

The consumption of unsafe foods can cause problems ranging from potentially life-threatening adverse reactions to food-borne illness with associated vomiting and/or diarrhea. Importantly, certain sectors of the community are more vulnerable to food-borne illness than others. The old, the very young and people whose immune system is already compromised are more susceptible to food-borne illness.

Food-borne illness also imposes major costs on the food industry, consumers and government. Work undertaken as part of the National Risk Validation Project, conducted by Food Science Australia and Minter Ellison Consulting (2002), estimated that the cost of food-borne illness in Australia is in excess of \$1.67 billion dollars per year. Whilst food-borne illness may be related to a number of causes, in Tasmania the two bacterial organisms most commonly linked to food-borne illnesses are *Salmonella* and *Campylobacter*.

Importantly, many causes of food-borne illness are preventable. It is clear from national and international studies that many such illnesses are caused by poor hygienic practice during food manufacture, transport and sale. In this regard, the Food Science Australia and Minter Ellison Consulting report concludes that many cases of food-borne illness in Australia can be prevented by the adoption of food safety practices that enable food operators to understand, identify and control food safety hazards.

In response to this situation, State and Territory Governments together with the Commonwealth Government have recently adopted several national initiatives that are designed to improve detection and prevention of food-borne illness.

The National Food Industry Council for example, has established the Australian Food Safety Centre of Excellence. The Centre is a consortium of the Tasmanian Institute of Agricultural Research (TIAR) and Food Science Australia and is based at the University of Tasmania. The TIAR is further discussed in Focus Area 6, Primary Industry.

The Centre aims to build Australia's capability in food safety and quality through rigorous, organised programs of scientific research, education and knowledge dissemination, by providing information and tools to:

- decrease the incidence of food-related illness among consumers of Australian food and
- to increase access to export markets by Australian food producers by demonstrably achieving the food safety requirements of those markets

Legislation, regulations and standards for food safety are now guided by one bi-national regulatory body, Food Standards Australia New Zealand (FSANZ).

The mission statement of FSANZ is:

'to protect, in collaboration with others, the health and safety of people in Australia and New Zealand through the maintenance of a safe food supply.'

Goal

To ensure the safety of food and drinking water for all Tasmanians.

Sub-Goals

1. Improve food safety practices in Tasmania.
2. Strengthen collaboration and cooperation between State Government Agencies with a role in food.
3. Improve monitoring of, and research into, the safety of food and drinking water.
4. Strengthen the capacity of state and local government to address food and water safety issues.

FSANZ has a number of responsibilities in regard to food safety, including:

- Developing standards for food manufacturing, labelling, processing and primary production;
- Providing clear and consistent information to consumers to enable informed food choices to be made;
- Coordinating national food surveillance, enforcement and food recall;
- Conducting consumer and industry research;
- Conducting dietary exposure modelling and scientific risk assessment and;
- Providing risk assessment advice on imported food.

A further important State and Commonwealth initiative in this area is the establishment of OzFoodNet. OzFoodNet is a collaborative, national system of monitoring food-borne illness that is designed to enhance existing surveillance mechanisms for food-borne disease.

The aims of OzFoodNet are to:

- Estimate the incidence of food-borne disease in Australia;
- Learn more about the causes and determinants of food-borne disease;
- Identify risky practices associated with food handling and preparation and;
- Provide training for food-borne disease epidemiologists.

Similarly, States and Territories have now agreed with the Commonwealth to adopt consistent food safety laws and legislative practices. A new Food Regulation Agreement has been signed that ensures the introduction of consistent best practice food laws in each State and Territory, and which provides improved mechanisms to reduce the incidence and cost of food-borne illness. Under this Agreement, Tasmania has now adopted three of the four National Food Safety Standards, and the *Food Act 2003* that includes nationally consistent food safety provisions. Adoption of the fourth Food Safety Standard, *Food Safety Programs*, has been deferred pending further confirmation of the costs and benefits to small businesses, and the development of a consistent national approach.

The new food legislation aims to '*ensure the provision of food that is safe and fit for human consumption and to promote good nutrition*' (Food Act, 2003). Objectives include preventing misleading conduct in connection with food, and allowing for application of safety standards. The Act and the Food Safety Standards cover both food and equipment used by food businesses, as well as manufacturing processes and transport and storage methods.

Whilst the Act and the Standards do not apply specifically to primary food production, there is a general requirement that all primary food producers must produce safe food. Importantly, most primary producers are already covered by specific food safety legislation and for those that are not, new national primary production and processing standards are being developed to ensure they continue to meet food safety requirements. The first primary production and processing standards to be developed will address food safety requirements for seafood and once developed, these standards will become part of the Australia New Zealand *Food Standards Code*.

Tasmania is becoming well known for the production of safe, quality foods and maintaining this status is often best managed through the application of quality assurance procedures and policies. For example, many Tasmanian food businesses are adopting a system known as Hazard Analysis and Critical Control Point (HACCP) principles. The adoption of HACCP requires businesses to undertake a thorough examination of manufacturing processes to identify and control hazards, and to put in place auditing processes that ensure the continuity of food safety and handling requirements.

In addition to HACCP, specific food industries may also be guided by relevant programs, and sometimes by specific legislation. The *Tasmanian Shellfish Quality Assurance Program* is an example of a quality assurance initiative implemented in the 1980s. This involves monitoring water quality in shellfish growing areas against internationally accepted standards. Likewise, specific legislation such as the *Meat Hygiene Act 1985* has been amended to improve food safety in the domestic industry.

In the retail sector, the new Food Safety Standards require food businesses to ensure that food handlers have skills and knowledge in food safety and hygiene matters that are commensurate with their activities.

Since this requirement was introduced in September 2001, a great deal of work has been done with industry and educators in Tasmania to ensure that all food handlers have a better understanding of food safety and hygiene matters. This not only ensures that businesses comply with the law, but should also result in the production of safer and better quality food.

There are also low-cost options for food businesses to become 'accredited' safe food providers, such as by adopting systems such as *Food Safe* through Local Government. Programs such as *Food Safe* ensure that retail and catering outlets, including institutions, implement food safety practices and training that are consistent with the national Food Safety Standards. Whilst food safety programs are not mandatory for all food businesses, the adoption of HACCP-based food safety programs is encouraged as part of good food safety practice.

The safety of food also involves appropriate labelling and new labelling laws introduced by FSANZ in December 2002 assist consumers to make informed choices about the food they eat. Developments in this area are discussed further in Focus Area 10 - Labelling.

Food safety often involves different regulatory agencies at all levels of government. Steps have therefore been taken to ensure that the various regulatory controls are consistent and that there is no overlap or duplication of effort between agencies. At the national level FSANZ is now the principal food standards regulatory agency. This ensures that food safety is managed in a consistent manner, at all steps from production through to consumption. Likewise, at the State level measures have been taken to ensure the continued cooperation and coordination of state and local government agencies involved in food safety regulation.

In summary, the management of food safety in Australia is a complex task that involves all levels of government, the food industry and consumers. Because of concerns about the cost of food-borne illness, this area has seen major investments that are designed to reduce the incidence of food-borne illnesses and to further improve the safety and quality of food in the State. Future directions are now focused on increased consumer and industry education about food safety and quality, and implementation and compliance with the new state food legislation and associated standards.

Focus Area 3: PROMOTING HEALTHY EATING

Good nutrition is essential for children to grow and develop into healthy adults, and plays a major role in the prevention of many chronic lifestyle-related diseases.

For over two decades the National Health and Medical Research Council (NHMRC) has set dietary guidelines for Australians. These guidelines are based on the best available scientific evidence, and aim to promote health and wellbeing and to reduce the risk of chronic disease in later life. The revised Dietary Guidelines for Australians were adopted by the NHMRC in April 2003:

- *Enjoy a wide variety of nutritious foods:*
 - *Eat plenty of vegetables, legumes and fruits.*
 - *Eat plenty of cereals (including breads, rice, pasta, noodles) preferably wholegrain.*
 - *Include lean meat, fish, poultry and/or alternatives.*
 - *Include milks, yoghurts, cheeses and/or alternatives. Reduced fat varieties should be chosen where possible.*
 - *Drink plenty of water.*
 - *Limit saturated fat and moderate total fat intake.*
 - *Choose foods low in salt.*
 - *Limit your alcohol intake if you choose to drink.*
 - *Consume only moderate amounts of sugars and food containing added sugars.*
- *Prevent weight gain by being physically active and eating according to your needs.*
- *Care for your food: prepare and store it safely.*
- *Encourage and support breastfeeding.*

In addition to the *Dietary Guidelines for Australians*, the NHMRC has produced *Dietary Guidelines for Older Australians*, the *Australian Dietary Guidelines for Children and Adolescents* and the *Infant Feeding Guidelines*.

Goal

To promote healthy eating for Tasmanians and reduce the impact of diet-related disease

Sub-Goals

1. Make healthy eating and prevention of diet-related disease a priority goal for the Tasmanian population.
2. Promote eating patterns consistent with the NHMRC Dietary Guidelines for Australians and the Australian Guide to Healthy Eating.
3. Increase the proportion of Tasmanians who are a healthy weight.
4. Promote healthy growth and development of infants and children (including prenatal development).
5. Maximise effectiveness of nutrition promotion.
6. Strengthen nutrition monitoring and surveillance and nutrition research in Tasmania.

In 1998 the Australian Government released the *Australian Guide to Healthy Eating*. This was the first time that an Australian food guide based on sound scientific evidence and consistent with the Dietary Guidelines for Australians had been developed. The Guide provides the basis for the development of consistent messages to the general public about healthy eating.

The best available information on the diets of Tasmanians comes from the 1995 National Nutrition Survey (ABS, 1998). The results of this survey suggest the diets of most Tasmanians fall short of current recommendations and there is significant room for improvement.

Vegetable and Fruit Consumption

The NHMRC recommends adult Australians be encouraged to consume at least two helpings of fruit and five of vegetables each day, selected from a wide variety of types and colours (NHMRC, 2003a). Epidemiological and clinical studies indicate that consumption of vegetables and fruit at this level is protective against illnesses, including coronary heart disease, hypertension, stroke, type 2 diabetes and some cancers (NPHP, 2001).

Economic analysis indicates that low consumption of vegetables and fruit in Australia results in health care costs associated with certain cancers (colorectal, lung, breast and prostate) in the order of \$90 million per annum. This analysis is based on 1993 - 1994 health care costs and it is considered likely that in 2003 the cost would be approximately 10% greater. It is also estimated that by increasing vegetable consumption by one serve per day, up to \$33 million could be saved from annual national health care costs associated with these cancers alone (Marks et al, 2002).

The 1995 National Nutrition Survey found that only 50% of adult Australians (42% of Tasmanians) over 19 years of age consume the recommended number of serves of fruit per day, whilst only 19% of Australians (19% of Tasmanians) consume the recommended number of serves of vegetables per day. (ABS, 1998 unpublished data from the National Nutrition Survey).

Coles, in association with the Dietitians Association of Australia, implemented a national fruit and vegetable program, *7-a-day*, in June 1999. As part of the program a fruit and vegetable index was established. A research company was commissioned to undertake a computer-assisted telephone survey of a representative sample of 2600 Australians aged 14 and over. The survey has been repeated three times in 1998, 1999 and 2000. The results suggest an increasing awareness of the recommended number of serves of fruit and vegetables and an increase in the mean number of serves of vegetables and fruit consumed (4.2 to 4.6 serves for males and from 4.5 to 5.9 serves for females) (Reeve, 2000).

Due to the small sample size, analysis of the Tasmanian data from the 1995 National Nutrition Survey is not reliable for children. However, analysis of the Australian data suggests that fewer than half of children aged 2 to 18 years have adequate fruit intake and only one-third have adequate vegetable intake (Magarey et al., 2001b).

One of the *Tasmania Together* indicators for the health goal is increasing consumption of fruit and vegetables by the community progressively over the next twenty years.

Saturated Fat

The NHMRC (2003a) recommends as a realistic target that saturated fat (plus trans fatty acid) intake should contribute no more than 10% of total energy intake. In Tasmania in 1995, saturated fat contributed an average of 14% of the total energy intake, significantly higher than the national average of 12.5% (ABS, 1998).

Consumption of full cream milk and fat on meat are sometimes used as indicators of saturated fat intake. Data from the 1995 National Nutrition Survey suggest that Tasmanians are more likely to consume full cream milk than the national average (57% v 49%) and less likely to trim fat from meat than the national average (68% v 72%) (ABS, 1998 unpublished data from the 1995 National Nutrition Survey). Under new food labelling regulations, saturated fat is included on the nutrient information panels (NIPs) on food packaging, assisting consumers and health professionals to identify the saturated fat content of foods.

Salt

High salt (sodium) intake is associated with the widespread prevalence of age-related hypertension (NHF, 2001).

'It has been estimated that a reduction in dietary salt by an average of 3g (50 mmol sodium) per day in a whole Western population would reduce age-specific stroke mortality by about 22% and ischemic heart disease mortality by about 16%.'

(Law et al., 1991).

The National Heart Foundation has estimated that sodium intake in Australia ranges from 130-200 mmol/day (8-12 g salt/day), with the recommended level being 40-100mmol/day (2.5-6 g salt/day) (NHF, 2001). In a study conducted in Hobart it was found that only 36% of women and 6% of men in Tasmania achieved sodium intakes within the recommended range (Beard et al., 1997).

Recognising that the majority of salt in the Australian diet comes in processed food, the Dietary Guidelines for Australians (NHMRC 2003a&b) recommend that Australians should 'choose foods low in salt'. Under new food labelling regulations, sodium is now included on the nutrient information panels (NIPs) on food packaging, and consumers and health professionals will be in a stronger position to identify foods that are high in salt.

Promoting Healthy Eating

Nutrition promotion aims to empower all Tasmanians to make healthy food choices through increased nutrition awareness, availability of healthy food choices in all food outlets, and enhanced food-related skills. This is challenging in a society where foods of limited nutritional value (high in saturated fat, salt and sugar) are widely advertised and promoted, where time for food preparation is limited, and, where it is economically more profitable for primary producers to sell foods of high nutritional value overseas. Hence, nutrition promotion must take a whole-of-population approach and make *healthy choices easy choices*, through a positive influence on the food supply.

There is now good evidence underpinning the effectiveness of nutrition intervention programs to address chronic disease prevention:

- The North Karelia project in Finland demonstrated significant improvements in dietary patterns with a concurrent reduction in cardiovascular disease at a population level over a 25-year period. The investigators on this study claim that whole-of-population dietary change is possible, but requires a persistent and comprehensive intervention (Pietinen et al., 2001).
- Reports have demonstrated sound evidence that nutrition interventions can reduce the prevalence of hypertension (Harsha et al., 1999) and cardiovascular morbidity and mortality (de Lorgeril et al., 1999).
- In Australia, a community-wide nutrition intervention program in a remote indigenous community clearly demonstrated that significant improvements can be made in physical and biological risk factors for chronic disease over a 12-month period when compared to a control community (Lee et al., 1994).

Strategies to improve nutrition need to address healthy eating in a social context. There is little point in providing nutrition counseling to an 'at risk' individual without addressing the social context in which that individual eats. Given that over half of the adult population is either overweight or obese, and there are high rates of diet-related disease, an approach that seeks to modify the eating patterns of the whole population is likely to provide greater and more sustained benefits than focusing on individuals alone, although a combination of both approaches could be complementary.

In 1997 the NHMRC developed a strategic plan for the prevention of overweight and obesity, *Acting on Australia's Weight*, as a joint initiative with the Commonwealth government. The strategy aims to prevent further weight gain among Australians and to reduce the proportion of the population already overweight or obese. This strategy places a major emphasis on changes to the macro-environment, recommending structural changes to assist the whole population to make healthy food choices and engage in physical activity (NHMRC, 1997).

The Strategic Inter-Governmental Nutrition Alliance (SIGNAL) is the nutrition arm of the National Public Health Partnership, established to coordinate action to improve the nutritional status of Australians. In August 2001, Australian Health Ministers endorsed the national public health nutrition strategy, *Eat Well Australia* and its associated National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (NATSINSAP), developed by SIGNAL.

Eat Well Australia promotes a population approach to improving nutrition with a particular emphasis on developing collaborative partnerships across the entire food system. Four key priority health initiatives are identified in *Eat Well Australia* including promoting healthy weight, increasing vegetable and fruit consumption, improving maternal and child health and addressing the nutritional needs of vulnerable groups. *Eat Well Australia* acknowledges that to achieve improvements in nutrition will require investment in strategic management and in capacity building (research and development; workforce development; communication; monitoring and evaluation) (NPHP, 2001).

In 2003 the NHMRC released clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children (NHMRC, 2003c&d). These documents outline evidence-base practices for managing, as opposed to preventing, overweight and obesity and will provide a valuable resource for health professionals.

During 2002 the Commonwealth Department of Health and Aging formed the National Obesity Taskforce that produced a report called *Healthy Weight 2008 – Shaping Australia's Future*. This report recommends a range of strategies to improve nutrition and physical activity.

In Tasmania a range of initiatives aimed at promoting healthy eating have been implemented since the adoption of the 1994 Tasmanian Food and Nutrition Policy. Examples include:

- *Eat Well Tasmania*: campaign aiming to increase awareness of initiatives promoting healthy eating and to increase intersectoral collaboration.
- *Healthy Options Tasmania*: an award accreditation program for food businesses covering food safety, healthy food choices and smoke-free dining.
- *Taste Buds*: a training program to improve the food offered to children in child-care.
- *Cool Cap*: an accreditation program to improve the foods sold in school canteens.
- *Eating with Friends*: a program aiming to encourage social contact for isolated individuals by bringing them together for a healthy meal.
- *Family Food Patch*: a peer education program to improve family nutrition.

Whilst these programs offer significant promise in their capacity to influence eating patterns, most have been supported by time-limited grants and often only implemented in specific areas. It is well recognised that to be effective these types of programs need sustained, ongoing funding and to be fully implemented before their success, or otherwise, can be appropriately determined.

To determine the effectiveness of nutrition interventions on food habits and subsequent health outcomes requires ongoing monitoring and surveillance of food habits, nutritional intake and nutritional status. Reliable data on nutritional intake has not been collected in Australia since 1995. Comprehensive monitoring of nutritional intake and nutritional status is costly and requires a high level of expertise. Whilst some degree of monitoring of food habits is possible at state level, it is unlikely Tasmania will have sufficient resources (expertise or finances) to support effective monitoring of nutritional intake and nutritional status at a state level. Hence, Tasmania needs to continue to advocate for effective national nutrition monitoring systems, at regular intervals, with adequate sample sizes at jurisdictional level to assess progress.

Focus Area 4: BREASTFEEDING

Breastfeeding offers many benefits. For the mother and child there are direct physical and psychological benefits and for the family and society there are economic benefits (DHAC, 2001a). In recognition of the value of family and community support, a guideline to encourage and support breastfeeding is included in the Dietary Guidelines for Australian Adults (NHMRC, 2003a).

The *National Breastfeeding Strategy* included two targets for the year 2000: first, that 90% of infants would be breastfed upon post-natal discharge from hospital, and second, that 80% would be at least partially breastfed at six months of age (DHAC, 2001a).

Breastfeeding rates as high as those recommended by the *National Breastfeeding Strategy* have been achieved in other developed countries and are therefore considered realistic. These targets have again been recommended in the recently revised *Dietary Guidelines for Children and Adolescents in Australia* (NHMRC, 2003b).

Breastfeeding initiation rates in Australia are generally high by international standards with over 80% of infants breastfed on post-natal discharge from hospital. However, breastfeeding initiation rates in Tasmania are lower than elsewhere in Australia with only 78% of infants being breastfed at the time of post-natal discharge from hospital (Donath and Amir, 2000).

Of greater concern than initiation rates in Australia is the early cessation of breastfeeding. The proportion of infants who are still breastfed, at least partially, at six months in Australia falls well short of the 80% target. At six months of age only 44% of infants in Tasmania are still being breastfed, at least partially, (46% Australia wide) and only 22% of infants in Tasmania are exclusively breastfed at six months of age (19% Australia wide) (Donath and Amir, 2000).

Improving breastfeeding rates in Tasmania will require ongoing, multi-strategic breastfeeding initiatives. This includes ensuring high quality support for pregnant and lactating women, increasing community-wide awareness and support for breastfeeding, addressing barriers to breastfeeding, and creating supportive environments.

Breastfeeding is more likely to be successful in situations where lactating women have support and encouragement from the infant's father, other family members, the hospital and the community. There is an important role for the media in portraying the value of breastfeeding and promoting breastfeeding as the norm (NHMRC, 2003b).

There is now good evidence to suggest that the earlier a decision is made during pregnancy to breastfeed, the more likely breastfeeding will continue for at least six months (Scott et al., 2001). Hence, experienced advice and improved preparation for breastfeeding early in pregnancy is recommended (NHMRC, 2003b).

Within the health care system it is recognised that good health care practices enhance establishment of breastfeeding and contribute to increased breastfeeding duration, just as inappropriate practices and failure to support and encourage mothers have the opposite effect (Saadeh and Akre, 1996). Given this, UNICEF and the World Health Organisation jointly developed the *Baby Friendly Hospital Initiative*. The *Baby Friendly Hospital Initiative* is an international accreditation program that aims to reduce the dramatic reduction in breastfeeding rates when women are discharged from hospital through addressing staff training in breastfeeding management, as well as hospital practices known to promote breastfeeding.

Goal
To promote and support breastfeeding in Tasmania.

Sub-Goal

1. Increase community and environmental support for breastfeeding.
2. Increase the percentage of infants breastfed on post-natal discharge from maternity services.
3. Increase the percentage of infants exclusively and partially breastfed to six months of age.

The World Health Organisation has developed an International Code for Marketing Breast Milk Substitutes (WHO Code) aiming to protect infants from inappropriate advertising of breast-milk substitutes. (See Focus Area 10: Advertising and Marketing).

Family, Child and Youth Health Nurses, maternity nurses, lactation consultants and other health workers have an important role to play in supporting mothers to breastfeed. This includes comprehensive follow-up, assessment and support when mothers are first discharged from hospital. Adequate support following post-natal discharge is becoming increasingly important given a current trend for mothers in Australia to be discharged from maternity services prior to breastfeeding being fully established.

Breastfeeding friendly workplaces and policies and agreements should be promoted and implemented to support breastfeeding mothers who choose to return to work. This requires the support of unions, employer organisations and industrial relations bodies.

Whilst there is general support in the community for breastfeeding in public places, it only takes one negative experience to affect a woman's confidence to breastfeed in public places. Evidence suggests there is a perception held by young Tasmanian women that breastfeeding in public is not universally accepted (Kennedy, 2001). Programs promoting businesses and facilities welcoming breastfeeding mothers, and campaigns promoting breastfeeding in public, will help increase and maintain a culture where breastfeeding is accepted anywhere.

Tasmania has seen a number of achievements in the area of breastfeeding initiatives in recent years. The Tasmanian Breastfeeding Coalition is made up of groups and organisations that have come together to improve breastfeeding rates. Initially formed in 1996, the Coalition now extends across the state with regional groups meeting in the north, northwest and south of Tasmania. The Coalition provides a coordinated approach to breastfeeding and has successfully received funding for, and managed, the following breastfeeding promotion projects:

- *Prepare to Succeed* bus poster campaign: aiming to increase the number of Tasmanian women making a positive decision to breastfeed early in pregnancy.
- Breastfeeding – Breaking Down the Barriers: examining attitudes to breastfeeding among young Tasmanian women, and implementing a social marketing campaign.
- Tasmanian Businesses Supporting Breastfeeding: aiming to increase the number of Tasmanian Businesses that identify as breastfeeding friendly.
- *It's OK to breastfeed anywhere* bus campaign: aiming to examine the influence on public awareness and opinion by a social marketing campaign using bus posters.

The Family, Child and Youth Health Service (FCYHS) has implemented a statewide breastfeeding support model for best practice. This provides a framework for practice within FCYHS, which will promote, encourage and support breastfeeding.

The Australian Breastfeeding Association received funding from the Commonwealth's Child Nutrition Initiative in 2000 to implement and evaluate the *Mum's the Word* project. This project uses a peer education approach to increase the level of support for breastfeeding amongst young women and women living on lower incomes in north-west Tasmania.

The State Baby Friendly Hospital Initiative Committee (BFHI) continues to promote hospital practices which support breastfeeding, and anti-discrimination legislation has incorporated a clause to cover discrimination against breastfeeding.

Focus Area 5: FOOD SECURITY

Food security refers to the ability of individuals, households and communities to acquire food that is sufficient, reliable, nutritious, safe, acceptable and sustainable (Rychetnik et al, 2003).

The Australian population is generally considered to be food secure. There is, however, evidence of food insecurity among sections of the population.

Groups that are more vulnerable to food insecurity include people on low incomes, people who are unemployed, people who are homeless, young people and people paying rent or board (Coles-Rutishauser and Penn, 1996). Aboriginal and Torres Strait Islander groups, refugees and other migrants are also vulnerable to food insecurity (Booth and Smith, 2001; NPHP, 2001).

Other groups with specialised nutritional requirements are also at risk of inadequate intake. People who are frail or aged, and people with mental and/or physical disabilities, chronic wasting illnesses such as cancers, Hepatitis C, HIV/AIDS, alcohol and/or other drug dependencies or eating disorders are nutritionally vulnerable. This can result from difficulties meeting increased basic food costs, the cost of specialised dietary supplements as well as reduced income and increased medical costs. Illness, mechanical eating and/or swallowing difficulties and incapacitation can also lead to difficulties accessing food. McKerchar et al. (2003) reported malnutrition rates of around 40% in a Tasmanian hospital.

Food insecurity is closely related to poverty (Booth and Smith, 2001). Having sufficient food and money to buy more food has been used as an indicator of food security. The National Nutrition Survey 1995 found 5% of Australian adults reported that they had run out of food in the past twelve months and could not afford to buy more (ABS, 1997). Similar figures were found in Tasmania (ABS, unpublished data from the 1995 National Nutrition Survey). The 1998 Healthy Communities Survey Tasmania also included questions on level of concern about food affordability and found 10% of adults reported they frequently worry about whether the food that they can afford to buy for their households will be enough (DHHS, 1999).

Food insecurity reduces the dietary quality (Kendall et al., 1996; Evans and Dowler, 1999; Hamelin et al., 1999; Smith, 2002) and directly affects health status in the short-term and long-term (Center on Hunger and Poverty, 2002; Burns, 2002). Australian studies have shown poorer intakes of micronutrients, fibre, fruit and vegetables in low socioeconomic groups (Smith and Baghurst, 1992; Smith and Baghurst, 1993). Psychological suffering due to food insecurity contributes to poor health (Hamelin et al., 1999). US data shows that food insecurity and poverty in children are associated with sub-optimal health status including more frequent health service use, increased stomach aches, head aches, ear infections, and iron deficiency anaemia (Center on Hunger and Poverty, 2002). Food insecurity can also lead to increasing rates of overweight and obesity as people rely on high fat, high calorie foods which are cheap and filling (Burns, 2002; Rychetnik et al., 2003; New Zealand Network Against Food Poverty, 1999).

Chronic malnutrition leads to impaired health and mental state, and reduced capacity for work (Green, 1999). Among hospital patients in Australia, it is estimated that the prevalence of malnutrition is 17% to 37% (Ferguson et al., 1997; Middleton et al., 2001; Banks, 1995). Recent systematic reviews have shown that nutrition interventions can lead to improvements in nutrition (Baldwin et al., 2002), clinical outcomes and cost savings (Green, 1999).

Determinants of food insecurity include social, cultural and economic factors. Knowledge, skills and preferences are important determinants of food choices but may not translate into improved food intake unless some of the socio-environmental barriers to change are also addressed, for example; finance, family preferences, transport (Crawford and Kalina, 1997 cited in Smith, 2002). Health education can contribute to inequities by improving the diet of some community groups and causing increasing anxiety and frustration to those disadvantaged by structural factors (Rychetnik et al., 2003)

Goal

To ensure all Tasmanians have adequate access to nutritious and safe food to meet their nutritional needs.

Sub-Goals

1. Increase awareness of the factors that influence food security in Tasmania.
2. Reduce social, cultural and economic barriers to food security.
3. Reduce geographical and physical barriers to food security.
4. Ensure the nutritional needs of Tasmanians with special nutritional requirements are met.

Where possible, information developed for increasing awareness, knowledge and skills in food and nutrition should be designed so it is appropriate for people of different cultural backgrounds. Consideration should also be given to pictorial representation for those with low literacy levels. Food Standards Australia New Zealand (FSANZ) has translated information into several languages regarding food-handling, preparation, and labeling requirements.

Physical and geographical factors also impact on food security. Limited mobility, lack of private transport, poor public transport and poor range of fruit and vegetables in local shops can make food access problematic in both metropolitan and rural areas. Many areas in Tasmania are classified as rural. Transport of food, particularly fresh food such as vegetables and fruit, to some rural areas is limited and the prices are often elevated due to higher transport costs (Rychetnik et al., 2003).

Food security has been identified as a key area for action nationally. Eat Well Australia – An Agenda for Action for Public Health Nutrition, identifies the need to address groups vulnerable to food insecurity (NPHP, 2001). An understanding of the determinants of food security in Tasmania for individuals, groups or communities is essential in order to plan the most effective collaborative interventions that address both the short term needs of the food insecure and the determinants that prevent food insecurity. In some vulnerable groups gathering of this information is a priority.

Options for interventions can target environmental and structural issues that have an impact on food security through policies or government subsidies. Interventions can also focus on improving the food supply or improving access to food by groups and individuals vulnerable to food insecurity (Rychetnik et al., 2003).

Strategies need to foster skills to influence the food system through building the capacity of individuals and communities to make healthy choices. In Tasmania several programs currently exist to decrease food insecurity. These programs have been developed based on evidence of food insecurity in vulnerable groups. As an example, the *Eating with Friends* program has been expanding since it started in 2000 and has increased access to a regular food supply as well as decreased social isolation for aged, culturally isolated and low income groups.

Interventions targeted at migrant groups may include increasing access to healthy foods and increasing experience of unfamiliar foods and eating practices. They may include affirming and re-establishing traditional practices that, in some cultures, can prevent the development of lifestyle related diseases. Developing and promoting skills in food purchasing, preparation and consumption may increase the confidence of migrant communities to safely use unfamiliar foods.

At a local level, communities should be encouraged to participate in identifying the causal factors of food insecurity and determining methods to address insecurity. In Victoria the Maribyrnong City Council Food Security policy (2003) is an example how a community has addressed food security in a sustainable way by actively involving the local community. The Penrith Food Project, in partnership with the local council, addressed food supply (bus routes, home delivery, retail development, food cost and food policy in schools and childcare centres and infrastructure) and food production (Penrith City Council, 2002).

Strategies that have been effective as a means of ensuring food security include subsidies and incentive schemes to support freight and transport in servicing rural and remote areas. This can be in the interests of governments and their constituents if it helps to retain a viable rural sector; creates employment opportunities; and promotes health and wellbeing by meeting food and nutrition needs (Rychetnik et al., 2003).

Increasing access and supply of appropriate foods and dietary education for individuals and groups with increased nutrition needs is important in the prevention of malnutrition or inadequate nutrition. Specialised dietary supplement products are available through the Home Nutrition Policy through the Royal Hobart Hospital, Launceston General Hospital and North West Regional Hospital. The demand on these services is increasing as the population ages and community based care increases.

Interventions for the prevention of malnutrition for vulnerable groups may include programs to build skills and knowledge in food and nutrition within the identified groups, screening for nutritional problems within hospitals and institutions and raising awareness among health workers.

Interventions to address determinants of food insecurity need to be complemented by safe-guards to prevent hunger. Organisations that provide emergency relief include Salvation Army, Red Cross, St Vincent De Paul, Anglicare, City Mission, Church Groups and local councils. Anglicare also run Anglicare Financial Counseling Service for people experiencing difficulties with money management. Both Government and non-government agencies provide emergency relief food parcels or vouchers, however there is no state or national policy governing emergency food relief.

Monitoring food security routinely over time is valuable as it allows an analysis of trends (Rychetnik et al., 2003). In Australia and Tasmania, food security has been typically measured by asking people about their ability to afford to buy enough food for the household. Whilst this has been described as a useful indicator, it is likely to underestimate the extent of food insecurity in Australia (Rychetnik et al., 2003). Other suggested measures include actual food intake, shortage or lack of food, hunger, food relief, concern or anxiety about acquiring food, whether intake is perceived to be acceptable, and conditions that may put people at risk of food insecurity (Rychetnik et al., 2003). There also needs to be an emphasis on collection of data on the effectiveness of policy changes and intervention strategies to show the benefits, the harm and the cost effectiveness. This will assist with advocacy, mobilising resources and demonstrate accountability (Rychetnik et al., 2003).

Focus Area 6: PRIMARY PRODUCTION

Tasmania is becoming popular for niche market products such as beef, wine, apples, cheese and salmon due to our clean-green image and the production of high-quality, processed and unprocessed goods.

Marine farming and shellfish production is a large contributor to the export market. The diversity and quality of Tasmanian produce has become integral to the tourism industry as well as providing substantial contribution to the economy. The value of primary production in Tasmania was estimated in 2000-01 to be around 1.2 billion, of which agriculture contributed \$903 million (ABS, 2002b) and fisheries \$312 million (ABARE, 2004). Primary production in our State continues to grow rapidly.

In 2003 the Department of Primary Industries Water and the Environment released the *State of Growth Report* (DPIWE, 2003) with the aim to increase the contribution that the primary industry and value-adding processing sectors make to the Tasmanian economy. This report outlines goals for 2008: to increase production (at the farm gate or beach) of \$200-\$250 million; to increase employment in the production sector of 1000 jobs; and, to increase output in the value-adding sector in the range \$250 million with a further 1000 jobs.

A focus on accessing more profitable international and national markets has highlighted an increased expectation for high standards in food safety and quality. State producers are required to meet international and national codes for food quality and safety to be able to supply their products domestic and export markets. To support this market, there has become an increased demand for eco-labelling to ensure quality and integrity of Tasmanian products as well as intensified support for organic farming.

A National standard for organic and biodynamic produce has been set by the Australian Quarantine and Inspection Service (AQIS, 2003) which provides a framework for the organic industry covering production, processing, transportation, labelling and importation. The Standard aims to ensure conditions of fair competition in the market place by distinguishing those products produced according to this Standard from those produced by other means. Use of this Standard provides transparency and credibility for the industry and protects the consumer against deception and fraud. Increased organic farming is a goal within *Tasmania Together*.

National and State organisations guide the direction of primary production through policy and planning processes, including the Australian Food and Grocery Council, the peak national body representing the food, drink and grocery product industry;

The Council's Charter is:

'To promote a domestic business environment conducive to International competitiveness, strong and sustained investment, innovation, business growth and profitability, coupled with greater export market opportunities.'

Around 170 companies and associates are members of the Council including a number of primary industries. These businesses contribute 80% - 85% of the gross dollar value to the food and beverage industry (Australian Food and Grocery Council, 2002).

On a State basis, the Food Industry Council Tasmania (FICT) was established in 1999 to provide advice to the Minister for State Development (now the Minister for Economic Development) and set policy directions for the food sector. The Council is a joint initiative between the State government and industry to increase the value of Tasmania's food industry.

In 2000, a *Tasmanian Food Industry Strategy* was developed and from this an implementation plan will be developed. The Council's vision is that Tasmania will become Australia's leading producer of quality food and beverages. Consistent with this vision, there is a mission to double the value of Tasmania's primary industry to \$3.4 billion per year by 2008 (Food Industry Council Tasmania, 2000).

Goal

To ensure Tasmania has a primary produce sector that is economically vibrant and produces safe and quality food.

Sub-Goals

1. Support primary industries in the production of safe food.
2. Promote quality food production by primary industries.
3. Strengthen organic food production in Tasmania.
4. Strengthen research and development in the primary production sector.

Strategic directions of the Council include the promotion of the unique 'island' qualities of the State, encouraging production of high-quality and safe products, promoting long-term sustainability of resources and maximising profitability by committing to strategic networks.

From the aims and directions of such policy and planning processes, the main goal is increasing the value of the food industry through the production of high quality Tasmanian food commodities. This goal is primarily focused on increasing employment and enhancing the economy of our State.

Whilst such industry organisations work with the overall food and beverage sector, there are other associations that represent primary producers and their interests. One such organisation is the Tasmanian Farmers and Graziers Association which has over 5000 members. The Association aims to ensure that the policies and interests of primary producers are considered by Government, industry and the wider community. Whilst the Association represents a number of agricultural, pastoral and farming interests, there are 5 main commodity councils of agriculture, dairy, meat, vegetables and wool.

Other organisations have also been established to promote and develop particular areas of primary production such as the Tasmanian Agricultural Productivity Group, Tasmanian Apple and Pear Growers Association, Tasmanian Fishing Industry Council and associations that support production of organic foods.

Research and development are also vital to Tasmanian agriculture and fisheries. The State Government and the University of Tasmania have established the Tasmanian Institute of Agricultural Research (TIAR) and the Tasmanian Aquaculture & Fisheries Institute (TAFI).

Tasmanian Institute of Agricultural Research (TIAR) is a joint venture that brings together the two major agricultural research providers in the State - DPIWE and the School of Agricultural Science, University of Tasmania. An annual grant has been established from DPIWE to TIAR each year for the purpose of undertaking agricultural research and development for the State. The University has undertaken to provide a similar amount from existing resources available through the School of Agricultural Science. Industry funds are sourced through the Research and Development Corporations, a range of industry partnerships and private contracts.

The establishment of the TIAR and supporting bodies (including Research Advisory Committees) recognises the need for better co-ordination of agricultural research and replaces former fragmented and separate agricultural research programs. TIAR therefore plays an important role in the future expansion of Tasmanian agricultural industries. The TIAR Board oversees its operations and ensures that agricultural research and development undertaken in Tasmania is aligned with industry's needs and priorities in order to maximise economic development on a sustainable basis.

Tasmanian Aquaculture & Fisheries Institute (TAFI) was established in 1998 as a joint venture between the Tasmanian Government and the University of Tasmania as a centre of excellence in applied marine research. The mission of TAFI is to develop the knowledge base for sustainable development, utilisation and management of aquatic resources, and, maintain a healthy, diverse and properly functioning aquatic ecosystems.

With increased international and national demand for fresh and unprocessed products, and transport technologies to be able to respond to such markets, food industries are reporting greater profits from export markets in comparison to sale in local areas. This is despite increased costs involved in transportation. Additionally, with the majority of foods in our State purchased through supermarkets and grocery stores (AFFA, 2002a), much of our primary produce is sold interstate and distributed by national outlets. Such international and national market processes have resulted in decreased availability of quality local produce in Tasmania, especially in rural and remote regions.

Due to such trends, food and nutrition policy in Tasmania needs to maximise economic benefits to our community through employment and market contribution while also meeting consumer demand for fresh and quality local produce. With the advent of globally renowned foods grown and sold from Tasmania, steps may be needed to ensure that the nutritional advantages of our high quality and safe food are also available and affordable to local consumers. This requires an appropriate balance between maximising profits through export markets and ensuring availability and access to foods that are Tasmanian produced.

Focus Area 7: DISTRIBUTION, RETAIL AND WHOLESALE

The majority of food that we eat in Tasmania is purchased from supermarkets and grocery stores (\$1,065 million turnover in 2002 and 6.4% increase from 2001) (AFFA, 2002a). There is an increasing trend for purchase of readily prepared food from takeaways, cafes and restaurants (\$285 million turnover in 2002, an 11.1% increase from 2001) (AFFA, 2002a).

'Food sales from cafes, restaurants and takeaway food outlets increased by 5 per cent between 1999 - 2000 and 2000 - 01 and are assuming increasing importance in the Australian lifestyle, now accounting for nearly 23 per cent of food and liquor retail turnover.' (AFFA, 2002a).

Goal

To ensure Tasmania has food distribution, wholesale and retail systems that are economically viable, safe and healthy.

Sub-Goals

1. Ensure that food available for consumption in Tasmania is safe.
2. Improve quality of food in all Tasmanian food retail outlets.
3. Foster commitment from food retailers regarding the sale of healthy, safe and quality food.

The production of safe quality food involves a range of processes including cultivation, picking, processing, storage, packaging and transport and retail sale. During each of these phases from 'farm to fork' it is important to ensure that the food is both safe to consume and that it is of consistent quality and nutritional value.

Nowadays supermarkets and other retail outlets are able to supply most foods regardless of seasonal variation. This achievement is largely due to improvements in storage technologies and transportation methods. However, long transport chains can lead to problems with maintaining the quality and safety of food. The distribution, retail and wholesale sectors therefore apply quality assurance principles in order to ensure products consistently meet standards of excellence for safety and quality.

With a trend towards international and national export, and distribution of products through national supermarket franchises, it is often claimed that Tasmanians experience some disadvantage in accessing affordable, high-quality local food. This issue is particularly pertinent to rural and remote areas (see Focus Area 5: Food Security for more discussion on this issue). The range of foods available to consumers may also be reducing because of a trend towards purchasing 'standardised' produce in order to provide a consistent range of foods with known profit margins. However, standardisation of produce is unlikely to be a problem due to the availability of alternative outlets including boutique stores specialising in alternative local and imported foods.

As noted above, accessing distant markets requires careful controls if the food is to remain safe and nutritious. Added to this, the range of technological processes required to ensure food remains ready for sale may bring about an increased potential for the transfer and growth of food-borne bacteria. Similarly, there are potential risks of contamination from pests and other diseases as well as potential for loss of vitamin content, hence decreasing nutritional quality. Risks can never be eradicated, but can be minimised with correct handling, storage and transport procedures, including temperature controls. National regulatory bodies, including FSANZ, set such regulations and standards for distributors, wholesalers and retailers (see Focus Area 2: food safety for more information).

In summary, members of the distribution, retail and wholesale sectors in Tasmania need to balance the commercial realities of the food supply with a commitment to supplying healthy and safe food that contributes towards health gains for all Tasmanians.

Focus Area 8: FOOD SERVICE

The majority of food eaten in Tasmania is purchased from supermarkets and grocery stores (see Focus Area 7: Distribution, Retail and Wholesale). However, there is an increasing trend towards food being prepared outside the home environment.

For the purposes of this policy the food service sector includes those responsible for preparing and serving foods and beverages in restaurants, cafes and take-away outlets, school and worksite canteens, child-care services, sporting venues, community centres and other community-based services. The food service sector also includes those responsible for preparing and serving food and beverages in institutions such as hospitals, nursing homes, residential care services and prisons and those responsible for delivered meals.

With today's busy lifestyle there is increased reliance on foods and beverages prepared by the food service sector. Food prepared by the food service sector can form a significant part of an individual's dietary intake. It is crucial, that food of high nutritional quality, and which is safe, is provided for consumption. It is therefore important that safeguards are maintained to ensure adequate nutritional content and safety of the food that is prepared by others.

In the food service sector taste, appearance, preparation time, product life, ingredient availability and cost are the drivers for menu development. Often little consideration is given to the nutritional balance and quality of the food. Many foods marketed to the consumer as convenience or 'fast' foods have poor nutritional quality and are often high in fat, particularly saturated fat, salt and sugar. Concerns have been raised with the current trend in the food service industry for convenient, relatively inexpensive, highly palatable energy dense foods available for purchase. Of more concern is the trend for large portion sizes and 'super sizing' (Hill and Peters, 1998). In addition there is wide spread media advertising and marketing of the 'fast food' sector. These practices can lead to increased consumption of these foods and in particular a high fat and sugar intake.

Improving the nutritional content requires that the food service sector have a commitment to providing foods that are consistent with the Dietary Guidelines for Australians and the Australian Guide to Healthy Eating. Key areas for consideration by the food service sector are to address the trend towards increased serve sizes, increase the availability of fruit and vegetables, using less total fat, reducing use of saturated fat and use of less sugar and salt whilst producing a tasty affordable and commercially viable product. This requires an understanding of food and nutrition for recipe and menu development, food preparation and serving by food service staff. In addition, having affordable wholesale ingredients to produce the food is needed. Ideally, where possible, the local food service sector should be encouraged to use Tasmanian produce to support the local economy and provide greater consumer accessibility to local foods. For successful public health campaigns to address the growing impact of food eaten away from home requires collaboration with the agricultural and food industries (to improve foods available), educators (who can promote healthier choices), government (to provide incentives) and researchers (to gain a greater understanding of this sector of our food supply and its influence) (Hill and Peters, 1998).

Participation in the voluntary accreditation programs that promote nutrition and food safety and developed collaboratively for the food service sector such as *Healthy Options Tasmania*, *Cool CAP* and *Start Right Eat Right* could achieve these outcomes. *Healthy Options Tasmania* is an initiative aimed at food retail outlets and worksite canteens, the *Start Right Eat Right* program is aimed at child care services (home and centre-based) and the *CoolCAP* program for school canteens. Such programs provide benefits to consumers in the provision of a greater range of healthy food options, but also benefits in promotion and marketing to the food businesses involved. The growing participation rate of the food service sector in these programs shows promise in addressing the nutrition and food safety issues affecting our community.

Goal

To ensure the Tasmanian food service sector is economically viable and provides healthy and safe food.

Sub-Goals

1. Increase the availability and promotion of safe and healthy food from the food service sector.
2. Promote practices consistent with food legislation and best practice in food safety among the food service sector.
3. Increase consumer demand for safe and healthy food from the food service sector.
4. Ensure food provided in institutions* and from delivered meals organisations is safe and meets the nutritional needs of the client group (*hospitals, nursing homes, residential care services and prisons).

Nutritional value and the safety of products is a crucial consideration for food provided within institutions such as hospitals and nursing homes, and by delivered-meal services where clients may have additional short-term nutrient requirements as well as long-term dietary needs and compromised immune status. For this purpose food service and personal care staff require an awareness of food safety and nutrition issues, food service staff require skills in preparation of nutritious meals in particular for those with special dietary needs.

Of particular relevance to the food service sector is the new requirement under the Food Safety Standards that staff meet appropriate skills and knowledge requirements. This includes knowledge of how to ensure the safety of food that is prepared for consumers, and in particular, minimising the risks of contamination by micro-organisms. Such requirements are also crucial for organisations engaging volunteers, some of whom may not have prior knowledge or training in the food service area. Integrating nutrition and food safety into staff training is required and promotion of standards of food safety and nutritional care which institutions can follow.

Currently accreditation schemes for institutions such as hospitals (Australian Council on Health Standards), child-care services (National Childcare Accreditation Council) and nursing homes (Standards for Aged Care Facilities) have a food provision component that complements other food safety regulations. Whilst the food safety controls are comprehensive, the nutrition components are vague and non-specific. This can result in inconsistent interpretation of the nutrition standards. The NHMRC has included a section in the Dietary Guidelines for Older Australians on *meal-assisted older Australians and residents of aged care accommodation* which provides useful guidelines for aged-care facilities (NHMRC, 1999).

In Tasmania there is limited local support for the practical application of accreditation schemes. One contributing factor to this is the limited number of dietitians in Tasmania (DHHS 2003c). Collaborating nationally to develop improved support for the application of accreditation schemes, as modeled by the Start Right-Eat Right Award Scheme for the childcare services (Pollard et al., 2001), may provide a framework for local interpretation.

Tasmania is involved in several regulatory initiatives designed to enhance the safety of foods within the food service sector. This includes the adoption of the revised Australia New Zealand *Food Standards Code*, the National Food Safety Standards and the Tasmanian *Food Act 2003*. These reforms are discussed in greater detail in Focus Area 2: Food Safety.

There has been only limited research into consumer knowledge of the impact of takeaway foods on health, on the nutrition knowledge of operators of takeaway food outlets and on the growth of the fast food industry and its effects on our culture (Ashton and Hughes, 2001). It is important that there is improved monitoring and evaluation in these areas to allow appropriate interventions to be developed.

Focus Area 9: LABELLING

Appropriate labelling of foods provides consumers with the information they need to make informed decisions regarding the food they purchase and eat. With accurate labelling consumer awareness should be increased in the areas of nutritional value of foods, technologies used for food production and preservation, and safety of food. Labelling may also assist in raising consumer awareness regarding country of origin of products, and may encourage Tasmanians to purchase more local produce.

Labelling laws are revised constantly to improve information for consumers. Labels now include mandatory nutrition information panels (NIPs), improved date marking (including best before and use by information), improved declarations about a range of potential allergens such as nuts, and labelling relating to the use of gene technology and food irradiation.

Concerns have been emerging in recent times regarding health and nutrient claims on particular food; through media advertising, point-of-sale promotion or through claims on food labels. Increasingly, foods are promoted for certain nutritional benefits such as 'high-fibre', 'low-fat' or 'salt-reduced'. Manufacturers are currently able to make nutrient claims if the products comply with the *Code of Practice on Nutrient Claims in Food Labels* and in some cases, under the provisions of the Australia New Zealand *Food Standards Code* as it relates to nutrient content claims.

Nutrient Content Claims

Food Standards Australia New Zealand (FSANZ) is reviewing nutrient content claims because there are anomalies within the current approach to regulating this area. The current self-regulation approach does not appear to have been sufficient and there are many examples of non-compliant labels in the marketplace. In addition, some of the nutrient content claims managed under the existing regimes may be potentially misleading to consumers. An example is '% fat free' claims where the food may still be high in fat. In some countries '% fat free' claims must meet the requirements for low fat food, that is the food must have less than 3g per 100g fat, and the actual fat level must be stated. This approach would ensure consumers are not misled by claims such as 90% fat free where the food still contains 10% fat.

The aim of the FSANZ review of nutrient claims is to introduce an approach to nutrient content and related claims that is based on sound scientific evidence, that promotes consistency with international and fair trading laws, that is compatible with New Zealand legislation, and more significantly, increases consumer confidence.

Importantly, as noted above, amendments to the *Food Standards Code* will provide consumers with more information by which to make informed choices in the marketplace. This includes nutrition information panels (NIPs) on virtually all classes of packaged foods listing (in a standardised format) energy (kilojoules), protein, total fat, saturated fat, carbohydrates, sugars and sodium content.

Will consumers use such additional information? Studies commissioned by FSANZ in 2002 suggest 40% of consumers were aware (unprompted) of NIPs, with 86% indicating awareness when prompted. Out of 15 label elements, NIPs were ranked equal second in terms of elements used, even if just occasionally. The majority of consumers, 65%, indicated that NIPs were clear and easy to understand and 55% felt sure they could trust the information. Consumers reported using NIPs *most of the time when I buy (these) products or when I buy for the first time*. The outcomes of this study indicate that the NIP is an important labelling tool to assist consumers in making food purchasing decisions (FSANZ, 2003).

In 2002, FSANZ estimated that the introduction of better food labelling could save between 320 and 460 lives per year in Australia due to a reduction in risk factors associated with diet-related disease (FSANZ, 2002a). This in turn could provide a reduction of \$47 to \$67 million in health care costs⁴. However, research by FSANZ has also indicated that whilst most people welcomed additional information,

Goal

To ensure food labeling in Tasmania complies with national requirements and assists consumers to make informed food choices.

Sub-Goals

1. Promote a consistent national approach to labelling for nutrient content claims.
2. Improve industry consistency and accuracy in provision of health and nutrient claims.
3. Enhance the ability of consumers to make informed food choices based on labelling information.

approximately 80% felt that they could not fully understand the new label in the format that was used (FSANZ, 2003). More assistance is therefore needed to ensure that consumers can fully understand and use the new labelling information.

Health Claims

Health claims are closely aligned to nutrient content claims. Health claims indicate the relationship between the consumption of a food, a category of food or one of its constituents and health, for example, 'a high fibre diet reduces the risk of certain cancers'. Health claims link foods to therapeutic or prophylactic actions, for example, 'a high fibre diet reduces the potential for certain cancers'. Traditionally health claims have not been permitted in Australia. However, consideration is being given to approve some health claims within a regulatory framework. Some manufacturers are already making implied health claims on their products in a way that does not appear to contravene the letter of the law. This leads to inconsistency in the application of the regulations within industry, where some manufacturers are benefiting by making claims while others do not make claims in accordance with their perception of the law. Certain health claims were also allowed as part of a folate trial conducted by FSANZ (See below for details).

Permitting health claims raises many issues. For example, many groups argue that the reduction in the risk of disease is affected by the total diet and lifestyle pattern and not by the use of an individual food. Health claims may promote a good food/bad food model rather than the total diet message that nutrition experts believe is more likely to promote better nutrition and health. However, other groups argue that there is no evidence that highlighting the value of individual products increases their consumption, thereby distorting the diet of individuals.

Policy guidelines have now been approved and a new standard for the health claims is being developed taking into account issues such as:

- For consumers, content information is unreliable and implied health claims are vague. Currently there is no need for manufacturers to substantiate claims, so some claims may be misleading;
- For industry, compliance with current regulations does not happen equally and enforcement is weak. Manufacturers who comply with the law are at a comparative disadvantage compared with those who transgress the regulations; and
- For industry and Government there are high administrative costs of continually resolving ambiguities in the regulations and inconsistencies in their application. Industry incurs legal costs for each challenge to an implied health claim. Government enforcement agencies incur additional resource costs in coordination and liaison, and there are costs to FSANZ.

Folate Trial

As part of the review of labelling regulations, a pilot of a health claims (on the relationship between folate and neural tube defects) management system was conducted between November 1998 and November 1999. The evaluations demonstrated that a health claim introduced in the context of a management system that included appropriate regulation and enforcement (including a code of practice), monitoring, education and substantiation, could be effective in raising awareness, and minimised some of the risks of health claims.

Based on the folate trial, FSANZ concluded that there is insufficient justification for a total prohibition of health claims. Health claims have the potential to increase consumer choice in the marketplace and within the context of a comprehensive management framework, have potential to support national public health and nutrition initiatives.

Whilst an appropriate policy and management framework is yet to be determined, many nutritionists believe that for public health and safety reasons a general prohibition on health claims should remain, with provision for exemptions for pre-approved health claims on a claim-by-claim basis. Such exemptions would be subject to strong management protocols, including supporting education and monitoring, rigorous scientific substantiation and tightened regulatory controls. This approach should improve consumer awareness of the contents of foods and their nutritional value, whilst preventing manufacturers from making health claims to promote the sale of food unless supported by scientific evidence of health benefits.

⁴ This is based on conservative estimates and conclusions drawn from information provided by the Australian Institute of Health and Welfare, Commonwealth Department of Health and Welfare and the Ministry of Health in New Zealand.

Focus Area 10: MEDIA, MARKETING AND ADVERTISING

Industry, government and non-government sectors use media coverage marketing and advertising to promote food products and to disseminate information about food and nutrition. Media coverage, marketing and advertising are among many factors that play an important role in influencing food consumption and purchasing patterns. Other important influences on food choice include family eating patterns, price and availability (Maskille et al., 1996).

Advertising of locally produced foods links closely with tourism in Tasmania as part of the clean environment marketing approach. Active promotion of affordable and accessible Tasmanian food, including fresh produce, has the potential to significantly influence the local market through increasing consumer demand.

Fostering collaborative links between media, advertising, marketing, the food industry, health and consumer groups, and, tourism may create opportunities to increase promotion of healthy foods and healthy eating messages.

Social marketing campaigns incorporating mass media advertising of healthy foods and healthy eating messages are used successfully in many developed countries and in other states of Australia (AFVC, 2003). Whilst these campaigns require substantial investment, there are lessons from these campaigns that can be adopted at a local level. Lessons include the importance of integrated, multi-strategy marketing and educational strategies to ensure consistent messages and consumer friendly advice. A local example of how this can be implemented is the Tasmanian School Canteen Association's accreditation program where there is collaboration between industry and health organisations, consistent messages, an education component and an identifiable logo and promotional material.

The *Eat Well Tasmania* campaign provides an opportunity to bring together industry, government and non-government organisations to work collaboratively on nutrition promotion and at the same time increase local demand for healthy, locally produced goods and services.

Whilst advertising and marketing can be useful strategies to increase consumer knowledge and awareness, they can sometimes be detrimental through the provision of incomplete or misleading information. Messages can be both influential and harmful, for example, messages regarding body image and diet within popular magazines and advertisements can be damaging to self-image and may influence eating disorders, particularly in teenage girls.

Television viewing has been cited as contributing to the childhood obesity epidemic, due to the sedentary activities of children and influence on unhealthy eating patterns established early in life. A recent study from Flinders University in SA found that *the majority of food advertising during children's viewing times is devoted to foods like ice-creams, biscuits, hamburgers, chocolates and soft-drinks*, which are recommended to be eaten only occasionally in small amounts (Zuppa et al., 2003). Monitoring advertising to children on three commercial television stations revealed that only 21.6% of foods were considered to be within the core food groups outlined in the Australian Guide to Healthy Eating. It was also suggested that misleading information was portrayed breaching the Australian Broadcasting Association's Children's Television Standards (Zuppa et al., 2003).

Some researchers speculate that childhood obesity results from children spending more time watching television than in any other waking activity, thereby being exposed constantly to televised portrayals of high-fat, high-energy foods.' (Borzekowski and Robinson, 2001).

Goal

To promote media, marketing and advertising practices that promote healthy food choices, food safety and good nutrition and which promote locally produced foods.

Sub-Goals

1. Support and encourage increased media coverage, marketing and advertising of food safety, good nutrition and of healthy food choices, especially those of Tasmanian origin.
2. Increase community awareness of, and demand for, healthy food choices, especially those of Tasmanian origin.
3. Promote marketing and advertising practices consistent with the WHO International Code of the Marketing of Breast Milk Substitutes in Tasmania.

It is important to contribute to the national debate on television food advertising and its influence on health. Consideration needs to be given to all forms of media, advertising and marketing including print media, Internet, cinema advertising, competitions, giveaways and point-of-sale and in-store promotion.

'Does television affect teenagers' food choices?'

A study by Woodward et al (1997) found that teenager's food choices were linked to the amount of television that they watched. When Grade 7 to Grade 10 students in Tasmania were asked about their frequency of consumption of foods from the five main food groups and amount of television viewing, it was found that 'Students who watched television more extensively tended to eat *healthy* foods less often, and *unhealthy* foods more often'.

Such conclusions were found even when results were adjusted in relation to socio-demographic factors. Woodward et al (1997) suggested that these findings represented a prima facie case for the linear relationship between diet and television viewing.

Eat Well Australia calls for the public to be provided with nutrition information based on good science (NPHP, 2001). Regulations and codes for advertising and marketing are regularly being updated to ensure that consumers are provided with factual information and are protected from misleading or ill-informed claims in advertising. Tasmania has a role in advocating for effective regulation and supporting the national regulators of advertising and marketing.

In 2002 an industry audit undertaken by the Department of State Development, involving the agriculture, aquaculture, fishing, food and beverage sectors, found that the marketing skills of primary growers within Tasmania are not well developed and there is a lack of coordination in the promotion of Tasmanian foods resulting in missed opportunities in overseas and interstate markets. It was recommended that industries need to take a partnership approach in promoting foods including joint marketing, cost sharing and market information. The Tasmanian Food Industry Council Strategy outlines a vision for development of the Tasmanian food industry. Encouraging business to seek support from the Commonwealth Department of Trade *Austrade* program should help develop markets. This should not be at the expense of supply to intrastate markets. Increasing demand for local produce, particularly fruits and vegetables, needs to be considered in marketing campaigns.

In support of such strategies, a number of tourist campaigns and promotional programs are being developed in Tasmania. One example is the *Brand Tasmania* initiative focusing on a State advertising and marketing strategy to promote our local products. By encouraging industry, government departments and non government organisations to work collaboratively with campaigns such as *Eat Well Tasmania*, *Brand Tasmania* and *Love this Place*, consumers will develop an awareness of, and demand for, healthy Tasmanian produce both within the state and externally, thus growing the Tasmanian food and food service industry.

Marketing of breast milk substitutes in Tasmania needs to be consistent with the World Health Organisation position. Australia was one of the first countries to sign the International Code of Marketing of Breast Milk Substitutes (WHO Code) when the World Health Assembly adopted the Code in 1981 (DHAC, 2001b). The Code aims to protect infants through the promotion of breastfeeding and ensuring the appropriate use of breast milk substitutes through adequate provision of information and appropriate marketing and distribution (DHAC, 2001b).

Since this time, Australia has established an Advisory Panel on the Marketing in Australia of Infant Formula (APMAIF). The Panel seeks to ensure that infant-feeding practices are consistent with the WHO Code and in particular, it provides advice on the interpretation and application of the Marketing in Australia of Infant Formula (MAIF). The MAIF Agreement is a voluntary agreement between manufacturers, importers and distributors authorised under the *Trade Practices Act 1974*. The MAIF Agreement and WHO Code seek to ensure that infant formulae are not marketed or samples provided to encourage the use of substitutes as an alternative to breastfeeding. However, samples may be provided to health professionals for the basis of professional evaluation and research (DHAC, 2001b). There are also regulations within the *Food Standards Code* that restrict particular representations of infant formula.

Focus Area 11: TECHNOLOGY

In a time of major technological development, the use of science to enhance or modify food has become an area of significant debate. There is an increased need to meet market demands in terms of availability, quality, safety and nutritional value. This has led to the application of scientific knowledge in many areas of food production and processing in order to achieve these outcomes.

Concerns have arisen about maintaining the integrity and safety of food, and upholding Tasmania's reputation as a 'clean-green' producer. Any consideration of use of food technologies in the State therefore requires a comprehensive assessment of the subsequent risks and benefits of doing so.

To meet global market needs and provide a variety of foods on a year-round basis, there are processing technologies used to extend the shelf life and storage of foods. Similar technologies are also used to provide convenience foods, such as ready-to-eat meals that may be easily reheated by consumers. The range of food technologies currently available includes irradiation, dehydration, cook chill and/or rapid freezing of foods. Additionally, preservatives may be added to extend the shelf life of foods and foods may be packed in 'controlled' atmospheres whereby certain gases are used within packages to extend shelf-life.

Food technology may include the reformulation of foods, for example, the deliberate addition of certain nutrients to food to counteract nutrient deficiencies in the population or the food supply. Recent examples include the addition of folate to foods to supplement the diet of women prior to conception and in the early stages of pregnancy.

Regulation of food technology is undertaken at a national level through Food Standards Australia New Zealand (FSANZ) who provide advice on a number of issues including safety, nutritional impact, technological need and labelling. In some cases other factors such as consumer education, packaging, testing protocols and benefits to industry, regulators and consumers may also need to be considered.

Whilst there are many examples of food technology, the use of gene technology and food irradiation have attracted much interest and are therefore worthy of further examination here.

Gene Technology

Gene technology has been used for the production of food, therapeutic goods and medicines, vaccines, bio-remediation agents and agricultural products (DPIWE, 2001). In relation to food, gene technology has been used to create some products with high nutrient content and longer shelf life. This is sometimes referred to as 'second wave' genetically modified (GM) foods, or 'GM nutraceuticals'. This is in contrast to the 'first wave' of GM foods that were generally modified only to make production simpler or less expensive, for example crops engineered to be resistant to herbicides or insecticides.

Genetic modification may involve either the introduction of genes to a particular organism that are derived from a different species or the addition of a gene that is derived from within that species.

The use of gene technology has a number of potential environmental, economic and health benefits. One benefit of first wave GM food crops is increased productivity and less harmful consequences to the environment through increased resistance of crops to pests and diseases, and possible reduction in chemical use. This could provide benefits to industries by increasing competitiveness in the global market. In terms of GM nutraceutical crops, there is potential for the nutrient content of foods to be increased and toxins, unhealthy fatty acids and allergens reduced in products (DPIWE, 2001). This could afford direct and convenient health benefits to the community.

Goal

To monitor and, where appropriate, adopt evidence-based developments in food technology.

Sub-Goals

1. Ensure food type dietary supplements (FTDS) meet appropriate safety and nutrition outcomes.
2. Position Tasmania to take advantage of beneficial applications of gene technology in food production.
3. Enhance the State's capacity to benefit from new and emerging food technologies.

However, along with the possible benefits of gene technology, there are risks. Gene technology is only recently emerging as a commercially viable process for many agricultural industries and whilst there are strict controls over GM food safety, labelling and GM crops, there is little known about the long-term health and environmental effects of combining genes from different organisms. There is also the problem of possible effects of gene modification on other crops, organisms and the environment.

In response to these issues, the Tasmanian Government has developed the Gene Technology Policy (DPIWE, 2001) outlining the position on gene technology for the State. Importantly, whilst gene technology is regulated using national controls, an avenue exists for states and territories to designate some areas to be free of GM crops.

The current Gene Technology Policy goal is:

'...to ensure that Tasmania can maintain its international reputation for producing quality food and beverages in a clean, healthy environment without the use of gene technology, until such time as customers in our key markets perceive advantages from the use of gene technology.'

Tasmania has a well-developed international and national profile as a provider of fresh, quality food whilst maintaining the natural 'clean-green' environment. The Government is concerned that the establishment of gene technology in our primary industries and food may put our market reputation at risk due to actual or perceived GM contamination. Currently, there is little market evidence that additional benefits would be afforded through the use of gene technology in Tasmania, in comparison to potential risks.

Consequently, Tasmania has chosen to take a cautious stance on the use of gene technology and has implemented a moratorium on the production of GM food crops in open-air environments until June 2008. The moratorium includes GM nutraceutical crops, however contained trials of GM food crops are permitted in certain circumstances. The *Genetically Modified Organisms Control Act 2004* has recently been proclaimed to underpin the existing moratorium on the commercial release of GM crops in Tasmania.

Tasmania will also continue to closely monitor trends and developments in gene technology including monitoring the economic costs and benefits, the possible effects on non-GM providers (such as organic producers) and public opinion regarding the issue. The Government will also monitor international and national developments in regulatory regimes and trends in GM crop development. Such issues need to be regularly and comprehensively considered for Tasmania to be able to adapt to innovative technologies and global markets in the event that our markets become accepting of such GM food and that risks can be adequately managed.

Food Irradiation

Food irradiation involves the application of a dose of ionising irradiation to foods to destroy certain bacteriological contamination or pests in order to prolong the shelf life. In terms of food safety, there have been many studies into the safety and suitability of irradiation, including the impact on nutrition and eating qualities such as taste, texture and flavour. To date, the overall international expert opinion is that irradiated foods are safe when the irradiation is performed at the minimum levels necessary to achieve the intended outcome. Irradiation itself is not considered harmful to the food. However, excessive irradiation may impact on the nutritional status of the food and may cause undesirable changes to flavour, taste and texture.

Importantly, the Australia New Zealand *Food Standards Code* prohibits irradiation of food unless specific permission is given. Permission is only granted where it fulfills a technological need or a necessary purpose associated with food hygiene and food irradiation cannot be considered as an alternative to good manufacturing practices. To date approval has been given to irradiate herbs, spices, nuts, oilseeds and teas as an alternative to treatment with chemicals. Consideration is also being given to allow its use on tropical fruits rather than employing the use of chemicals.

The Code also requires that food that has been irradiated must be labelled with a statement that the food has been treated with ionising irradiation. This means that unpackaged food, such as mangos would need to be accompanied with a statement advising consumers that the food has been treated with ionising irradiation.

Consumers have demonstrated strong suspicion of irradiated foods and market research indicates that many consumers are unwilling to purchase irradiated foods in the marketplace. Given this sensitive situation, the current cautious national policy in relation to the use of ionising irradiation as an alternative treatment technology is considered appropriate.

'Reconstituted' Foods or Food Type Dietary Supplements (FTDS)

Food Standards Australia New Zealand defines products that are designed to supplement the normal diet, usually food, as food type dietary supplements (FTDS). They are also known as 'reconstituted foods', 'functional foods', 'dietary supplements' or 'nutraceuticals'. The purpose of FTDS is to provide medical or health benefits beyond those provided within a normal dietary context (National Food Authority, 1993; DeFelice, 1993 cited in ANZFA, 2002). This may include the provision of nutrients lacking in the normal diet or additional nutrients to provide health benefits to vulnerable groups.

Internationally, there is a rapidly developing functional food/nutraceutical industry that has an estimated global value of \$US 65 billion (Lachance cited in ANZFA, 2002) offering significant potential for food industries to develop new products and markets.

However, in Australia there is currently no consistent and comprehensive framework regulating these products, and the general manufacture of FTDS is not permitted. Anomalies also exist between Australian and New Zealand standards, where some dietary supplements (considered foods, therapeutics or dietary supplements) can be manufactured in New Zealand and imported into Australia under the Trans Tasman Recognition Arrangement.

There are two broad categories of products intended for human consumption, namely food regulated under the Australia New Zealand *Food Standards Code*, and therapeutic goods regulated under the *Therapeutic Goods Act 1989* (TGA). Because many FTDS contain components in excess of currently permitted values, they do not conform to the Code or the TGA and fall outside the current regulatory framework.

The emergence of FTDS presents significant challenges to regulators and consumers. For example, it may be difficult to determine the potential and actual health gains that such foods may provide and from a nutritional point of view, many of the nutrients contained in FTDS are readily available in our food supply as part of a balanced diet. There is also a danger that such foods will encourage individuals to consume enhanced products at the expense of a balanced diet. Additionally, given that a number of FTDS have little history of use, demonstrating safety and efficacy is likely to be problematic for both proponents and regulators.

Because of these concerns new standards are being written by FSANZ to capture products that currently fall outside the current regulatory framework. A health claims policy and a policy for fortifying foods are also being developed in order to ensure that sufficient controls exist over the marketing and labelling of FTDS. (See Focus Area 9: Labelling). Critical to developments in these areas is continued monitoring and research into the viability and utility of FTDS in the Australian community.

Whilst regulation and application of FTDS within Australia is the responsibility of national regulatory bodies, such as FSANZ, States and Territories can assist in these processes. Roles can include monitoring and research, community education and support regarding the use of FTDS, and support and advice provided to FSANZ to assist in the development of standards. Tasmania should continue to provide such support to FSANZ to ensure that all FTDS meet appropriate safety and nutrition outcomes for the population.

Fortification of Foods with Vitamins and Minerals

International principles for the addition of nutrients to foods were developed by Codex in 1994. The basic principles include:

- Restoration of vitamins and minerals to those levels found in food prior to any processing, storage and handling;
- Nutritional equivalence of substitute foods;
- Fortification (where there is a demonstrated public health need) and;
- Ensuring the appropriate nutrient composition of a special purpose food (Codex, 1994).

Addition of vitamins and minerals to the food supply in Australia is regulated under the Australia New Zealand *Food Standards Code*. Consistent with Codex principles, the addition of vitamins and minerals to general purpose and special purpose foods is not permitted unless there is adequate nutritional rationale. Food Standards Australia New Zealand has developed regulatory principles that aim to prevent the indiscriminate addition of essential nutrients to foods thereby reducing the risk of health hazards due to nutrient excesses, deficits or imbalances (FSANZ, 2002).

In Australia there are several examples of nutrient fortification programs including:

- Mandatory addition of thiamin in flour for bread making that was introduced in Australia in 1990 primarily for the prevention of Wernicke-Korsakoff syndrome (alcohol-related brain disease) (Truswell, 2001).
- Voluntary addition of folate to a range of food (flour, bread, savoury biscuits, breakfast cereals, pasta, yeast extracts, fruit and vegetable juices and meal replacements) was introduced in Australia in 1995 in an attempt to reduce the rates of neural tube defects (Abraham and Webb, 2001).
- Voluntary addition of iodine (in the form of iodised salt in bread) in Tasmania in 2001 (Seal, 2002).

Vitamin D is also added to edible oils (such as margarine) under the principle of nutritional equivalence of substitute foods (butter is naturally a good source of vitamin D). However, there is growing evidence for further fortification with Vitamin D on public health grounds (Nowson & Margerison, 2001). For example, there are a number of groups in Australia considered at risk of vitamin D deficiency including:

- Older persons, particularly those in residential care;
- Dark skinned and veiled women who have limited exposure to sunlight and the breastfed infants of these women and;
- Adolescents and young children who are growing rapidly on marginal calcium intakes during winter.

Whilst food supplementation programs are routinely managed nationally, the Tasmanian Iodine Supplementation Program was implemented within the State to address an emerging need and as an interim measure whilst waiting assessment at a bi-national level by FSANZ.

A new national policy on fortification is being developed which establishes the framework within which fortification of foods can take place. The policy will address issues such as need, safety, marketing and labelling.

New food technologies should be approached with caution and used only if research can demonstrate that nutritional quality and food safety can be maintained. Regulation of technologies and food is conducted on a national basis through FSANZ. However, Tasmania has a role in monitoring food technologies and providing advice to FSANZ on the benefits and risks of emerging food technologies.

Focus Area 12: WORKFORCE DEVELOPMENT

A skilled and knowledgeable food and nutrition workforce in Tasmania is needed to ensure food and nutrition strategies are effectively implemented. The food and nutrition workforce in Tasmania includes both specialist and generalist workers in the health sector, the education and training sectors, the research sector, regulatory bodies and the food industry sector.

Workforce development can be defined as: *a process initiated within organisations and communities, in response to the identified strategic priorities of the system, to help ensure that the people working within these systems have the abilities and commitment to contribute to organisational and community goals (Australian Health Promotion Association, 2001).*

In Australia, specialist nutrition training in the health sector has occurred predominantly through dietetic training. A university qualification in science (or applied science) combined with practical clinical experience as part of a formal university program is required to qualify as a dietitian. Dietetic training is not offered in Tasmania, disadvantaging locals who wish to train in this field. Currently there is limited investment in the dietetics workforce reducing the opportunity for recruitment of dietitians from outside the State (DHHS, 2003c).

Goal

To strengthen the capacity, knowledge and skills of the Tasmanian food and nutrition workforce.

Sub-Goals

1. Strengthen the food and nutrition workforce (both specialist and generalist) within the health sector.
2. Increase the capacity of the food service sector to contribute to food and nutrition promotion.
3. Increase opportunities for food and nutrition education and training in Tasmania

Tasmania has half the rate of dietitians per head of population (3.6 per 100,000) as the national rate (6.8 per 100,000). (DHHS, 2003c).

There are now tertiary courses that teach human nutrition without training students specifically as dietitians.

To assist the food industry to comply with the skills and knowledge requirements of national food safety legislation there is a greater need for food safety education and monitoring. In Tasmania the food safety workforce does not currently have the capacity to meet this growing demand. However, there is now university-level training and research in this field at the University of Tasmania, having the potential to add to future workforce capacity.

In addition to the specialist nutrition and food safety workforce, there are a range of health workers, teachers and educators who are integral to the food and nutrition workforce within government, non-government and community sectors. These workers include teachers (home economics, catering, health and physical education), nurses, general practitioners, pharmacists, environmental health officers, child carers, caterers, and other health professionals. However, there are limited opportunities for these workers to acquire skills and expertise in nutrition in Tasmania.

The Tasmanian food and beverage sector provides around 70,000 jobs (DSD, 2000) in the State and continues to grow through increased activity in the agricultural industry, retail food turnover within supermarkets, restaurants and cafes (See Part 1: 2.2 Food Industry). Described in this policy are many strategies illustrating how this sector can assist in achieving both health and economic outcomes. However, to achieve this strategies are needed to develop the capacity of this sector to take on a greater role in food and nutrition education and promotion, product development and to ensure food safety standards are met.

The food service and food industry workforce require comprehensive knowledge of food and nutrition and the skills in producing foods to ensure that key nutrients are retained in foods through the cooking and preparation process. Similarly, skills in food preparation and storage are required to ensure the safety of food prepared for others (Also see Focus Area 2: Food Safety). The National Food Handling Benchmark Survey in 2001 found that a small, but substantial proportion (between 10% and 20%) of businesses either did not know correct food handling practices or were not implementing these practices (Campbell Research and Consulting, 2001).

A cooperative initiative between DHHS and local government, to provide education on the practical application of food safety legislative requirements in Tasmania, was undertaken in 2001 and 2002. There are further opportunities to improve knowledge and practice for food handlers by extending formal training programs in food safety. The National Food Industry Strategy (AFFA, 2002b) identified a need for a national industry position on the future education needs of the food industry. They noted that current education and training options have had little impact on the businesses within the food industry and were generally not responsive to the needs of the food industry.

The education and training sector needs to be able to meet the ongoing needs of the food and nutrition workforce. Food and nutrition education and training opportunities need to be provided at all levels of education.

Providing opportunities for children to develop skills in food and nutrition at an early age, and throughout the school years, is critical to developing our future food and nutrition workforce (see also Focus Area 3, Promoting Healthy Eating). All teachers can take a role in food and nutrition education. However, teachers of food studies, home economics, health and physical education are especially able to contribute to food and nutrition education during the school years.

Collaboration is required between the education sector and industry bodies to identify vocational education and training needs relevant to the needs of business and the community whilst being attractive to the current and potential workforce. Accreditation of courses recognised by employer groups, is more likely to encourage potential students.

The tertiary education sector needs to provide food and nutrition training opportunities for a wide range of workers. Over the past few years the School of Human Life Sciences of the University of Tasmania has developed nutrition units and electives for the Bachelor of Health Science and Bachelor of Education degrees and also developed an Honors research program in nutrition.

Human nutrition is also covered in the compulsory biochemistry component of the undergraduate medical, pharmacy, agriculture and biotechnology training programs, and in the optional biochemistry component of the undergraduate science degree. The University is currently undertaking major revisions of its medical curriculum, and it is crucial that the current coverage of nutrition is maintained and enhanced during this revision.

In-service training programs, such as the childcare services project *Taste Buds*, have been well received and demonstrate how increasing the food and nutrition capacity of a workforce can have a significant impact on food and nutrition in the community. However, to extend and sustain these types of in-service programs will require additional investment in the specialist food safety and nutrition workforce.

Other areas of education and training that assist in maximising economic and environmental benefits in the food and nutrition areas include appropriate farm management practices, business development and research and monitoring (See Focus Area 1: Environment).

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APPENDICES

APPENDIX 1: AUSTRALIAN RETAILERS ASSOCIATION (TAS) POLICY

FOOD AND NUTRITION

As Tasmania's leading food retailer association, ARA is committed to the widespread distribution of healthy and nutritious food to all Tasmanians.

ARA believes that a responsible balanced diet can only be achieved if food from the five food groups - *bread and cereals, vegetables and fruit, milk and milk products and meat & alternatives* - is readily available to the entire community irrespective of age or infirmity and ARA will support the promotion of this objective.

Being representative of retailers and wholesalers of food in all five food groups, ARA pledges to ensure that the nutritional quality of food that our members sell is retained by their approach to its storage, handling, distribution and retailing.

We believe the healthy, modern function environment in our members supermarkets is a key element in improving the health and nutrition status of all Tasmanians.

We seek a National approach on this issue but should this not be possible we seek consistency between States.

We support the HACCP process, safety analysis and the review of obesity and the Food Safety Program.

We support the following goals:

- To ensure that food products are safe for consumption;
- To improve the quality of food products in Tasmania; and
- Improve accessibility to nutritious food products in all areas of Tasmania.

APPENDIX 2: ACRONYMS

ABA	Australian Breastfeeding Association
ABS	Australian Bureau of Statistics
AHMAC	Australian Health Minister's Advisory Council
AHMC	Australian Health Minister's Conference
AIEH	Australian Institute of Environmental Health
AIHW	Australian Institute of Health and Welfare
APD	Accredited Practicing Dietitian
APMAIF	Advisory Panel on the Marketing in Australia of Infant Formula
AQIS	Australian Quarantine and Inspection Services
ARA	Australian Retailers Association
BFHI	Baby Friendly Hospital Initiative
CHA	Child Health Association
DAA	Dietitians Association of Australia
DALY	Disability Adjusted Life Year
DED	Department of Economic Development
DELM	Department of Environment and Land Planning
DHHS	Department of Health and Human Services
DIER	Department of Infrastructure, Energy and Resources
DJIR	Department of Justice and Industrial Relations
DoE	Department of Education
DoHA	Department of Health and Ageing
DPIWE	Department of Primary Industries, Water and Environment
EWA	Eat Well Australia
EWI	Eat Well Tasmania
FCYHS	Family, Child and Youth Health Service
FICT	Food Industry Council Tasmania
FOCIS	Federation of Canteens in Schools
FSANZ	Food Standards Australia New Zealand
FTDS	Food type dietary supplements
GE	Genetic engineering
GMO	Genetically modified organisms
GPs	General practitioners
HACCP	Hazards Analysis at Critical Control Points
HEIA	Home Economics Institute of Australia
HOT	Healthy Options Tasmania
IHHC	Institute of Hospitality in Health Care
LGAT	Local Government Association of Tasmania
MAIF	Marketing in Australia of Infant Formula
NGOs	Non-government organisations
NHMRC	National Health and Medical Research Council
NIPS	Nutritional Information Panels
NNS	National Nutrition Survey
NPHAC	National Health Priority Action Council
NPHP	National Public Health Partnership

NPHPG	National Public Health Partnership Group
PHA	Public Health Association
RACGP	Royal Australian College of General Practitioners
RCA	Restaurant and Caterers Association
RTA	Retail Traders Association
SIGNAL	Strategic Inter-Governmental Nutrition Alliance
SIW	Statewide Independent Wholesalers
TAPG	Tasmanian Agricultural Productivity Group
TASCHARD	Tasmanian Council of Hepatitis, AIDS and Related Diseases
TDGP	Tasmanian Divisions of General Practice
TIAR	Tasmanian Institute of Agricultural Research
TFGA	Tasmanian Farmers and Graziers Association
TFIC	Tasmanian Fishing Industry Council
TFNP	Tasmanian Food and Nutrition Policy
TGA	Therapeutic Goods Act 1989
TIW	Tasmanian Independent Wholesalers
TQA	Tasmanian Quality Assured
TSCA	Tasmanian School Canteens Association
TSQAP	Tasmanian Shellfish Quality Assurance Program
TTA	Tasmanian Transport Association
TWEX	Tasmanian Waste Exchange
UTAS	University of Tasmania
WHO	World Health Organisation



