

## Relief for the needy in rural and remote Northern Territory

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### Introduction

In July 2009, Baptist Care Northern Territory (BCNT) was formed to investigate the potential development of services that would help to address the needs of the Darwin community. This needs assessment revealed an increased demand for emergency food relief and the need for a 'food bank' (Fisher 2009). In November 2009, BCNT opened 'Food for Life' Food Bank NT (FBNT) working in partnership with the food industry to manage and distribute surplus food stock to the welfare sector. The rescued food is incorporated into food assistance programs targeting individuals experiencing or at risk of food insecurity.

This paper describes the results of an investigation into the provision of food assistance programs in the NT. This project has led to the development of future recommendations for food banks and organisations providing food assistance and the NT Government.

### Background

In Australia, there are pockets of society who experience or are at risk of becoming food insecure (Booth & Smith 2001; Rychetnik et al 2002). To be food insecure, one may have insufficient access to or supply of nutritious and safe foods, or become anxious or worried about the acquisition of food or the quality of the food obtained and finally, acquire food in an unorthodox way (for example resorting to emergency food relief, scavenging or stealing) (Kendall & Kennedy 1998). The cost of food insecurity is great; it can reduce the physical, mental and social health and wellbeing of individuals, families, and society (Booth & Smith 2001; Doljann & van Herwerden 2002).

Determining the prevalence of food insecurity is difficult as there are multiple dimensions to be assessed (Temple 2008). Our National food insecurity data is restricted to only one question which attributes the issue to financial difficulty (ABS & DHFS 1997). In 1995 across all social and economic groups, 5.2% of respondents identified as being food insecure (ABS & DHFS 1997). The 2005 National Health Survey (NHS) illustrated a 1% increase in food insecurity over a 10 year period (see Table 1) (Temple 2008), suggesting the prevalence of food insecurity is increasing over time.

The NHS data comes with several limitations; known in the under-representation of disadvantaged people in population surveys, the survey does not capture people living away from private dwellings, or those living in remote or very remote areas of Australia (Rychetnik et al 2002; Temple 2008). To better measure food insecurity in Australia there is a need to investigate population groups most at risk.

**Table 1 Prevalence of food insecurity in Australia**

Year	Survey	Sample size	Prevalence (%)
Food depletion OR inadequate intake			
1995	National Nutrition Survey <sup>a</sup>	11,219	5.2
2001	National Health Survey <sup>a</sup>	17,918	6.2
2005	National Health Survey <sup>a</sup>	19,501	6.2
	Food depletion only “moderate” <sup>b</sup>		3.7
	Inadequate intake “severe” <sup>c</sup>		2.5

Source: ABS Survey Data, 1995-2005 (Temple 2008)

Notes:

a. Respondents answering yes to “In the past 12 months were there any time when you ran out of food and couldn’t afford to buy any more”; b. Respondents answering no to “When this happened (ran out of food and couldn’t afford to buy any more) did you go without food”; c. Respondents answering yes to “When this happened (ran out of food and couldn’t afford to buy any more) did you go without food”.

It is believed food insecurity is far greater in low socioeconomic groups (see Table 2). Such groups include individuals living in rural/remote areas, low-income earners, Aboriginal and Torres Strait Islanders, migrants, refugees, homeless people and those dependent of meal assistance as a result of a disability or illness (Booth & Smith 2001).

Factors contributing to food insecurity experienced by these groups are vast; they include limited financial reserves, limited access to nutritional and low-cost foods, insufficient knowledge to prepare or purchase food and inadequate facilities to prepare or store food (Rychetnik et al 2002). Inadequate access to culturally appropriate food can also result in food insecurity (Gallegos et al 2008).

It cannot be assumed that all members of low socioeconomic groups experience food insecurity (Doljann & van Herwerden 2002; Burns 2004). Furthermore, individuals from higher socio-economic groups are not exempt from becoming food insecure; these individuals may become vulnerable with job losses, unexpected births or deaths, illnesses and increased living expenses (Doljann & van Herwerden 2002).

**Table 2 Prevalence of food insecurity attributed to financial difficulty in low socio-economic groups**

Group	Survey/study	Food insecure %
Lowest level of equivalent income	NNS 1995	36
Second lowest level of equivalent income	NNS 1995	20
Government pension as main source of income	NNS 1995	51
Single parent households	NNS 1995	23
Rental Households	NNS 1995	20
Aboriginal and Torres Strait Islanders	National Aboriginal and Torres Strait Islander Survey 2004-2005	24
Newly arrived refugees	Still there’s no food! Food insecurity in a refugee population in Perth, WA 2008	71

Source: Marks et al 2001; Browne et al 2009; Gallegos et al 2008

Data concerning the prevalence of food insecurity in the NT is limited. The 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) suggests 45% of NT Indigenous and 3% of NT non-Indigenous Australians (aged >15 years) had run out of food in the previous 12 months (Browne et al 2009). As a third of the NT’s population is Indigenous (ABS 2009), these findings have greater amplification.

Apart from Indigenous Australians, little research has been conducted in the NT to identify the severity of food insecurity in other high risk groups. It should be noted however, that a large number of people in high risk groups live in the NT:

- Amongst all the state/territories NT has the highest population of individuals living in remote or very remote areas (79.3% of the population) (ABS 2008).
- 11.7% of the NT population are dependent on government allowances as their main source of income (NTCOSS 2009).
- NT was found to have the highest rate of homelessness in Australia (NT Shelter 2010).

In consultation with welfare organisations in Darwin, BCNT found there was a 30% increase in the need for material aid assistance (which includes food) from 2008-2009 (Fisher 2009). This data suggests the prevalence of food insecurity is high in the NT and there is a great need for interventions that reduce food insecurity.

Food insecurity is associated with the reduced health status of low socio-economic groups (Olson 1999; Doljann & van Herwerden 2002). The burden rates of cardiovascular disease and type 2 diabetes mellitus is higher amongst these disadvantaged groups (Begg et al 2003). Research has found inadequate intakes of fruit and vegetable and increased consumption of saturated fat contribute to the development of these chronic diseases (Thomas & Bishop 2007).

Respondents who reported 'running out of food' in the 1995 NNS consumed significantly lower intakes of fruit and vegetables (Marks et al. 2001). The cost of these foods may account for this decreased intake. Studies have shown fats, sugars and refined grain products are more affordable than certain foods recommended by the Australian Guide to Healthy Eating (Drewnowski & Specter 2004).

Consumption of the affordable nutritionally poor options products contribute to the development of obesity (Drewnowski & Specter 2004). Wood et al. (2000) found the prevalence of obesity (BMI>30kg/m<sup>2</sup>) to be higher in food insecure people than food secure people (22.1% and 18.9% respectively). Obesity places individuals at an increased risk of developing chronic diseases (Thomas & Bishop 2007). Chronic disease places an increased financial and emotional strain on those already experiencing disadvantage (Hoffman et al. 1996; Turner & Kelly 2000).

Food assistance programs are one type of intervention helping to alleviate hunger and possible prevent food insecurity (Rychetnik et al 2002). A positive association exists between food insecurity and the participation in food assistance programs (Drewnowski & Specter 2004). There are a variety of food assistance programs, they can be sub-divided into food relief programs and food subsidised programs (Rychetnik et al 2002).

Food relief programs are free, and generally serve the most disadvantaged members of society (Rychetnik et al 2002). For this fact, food relief programs are not a socially acceptable means to attain food; those accessing these services are considered food insecure (Hamelin et al 1999; Rychetnik et al 2002). Food subsidised programs however, are considered more like a community service and participants pay or volunteer to receive food (Rychetnik et al 2002). These programs are more socially acceptable and can prevent the need for food relief – thus participants using these services are not necessarily food insecure (Rychetnik et al 2002). Table 3 describes the main types of food assistance programs available in Australia.

**Table 3 Food assistance programs in Australia**

Food assistance programs	
Food relief programs	Food subsidised programs
<ul style="list-style-type: none"> <li>• Soup kitchens</li> <li>• Free community meals</li> <li>• Emergency food parcels</li> <li>• Emergency food vouchers</li> <li>• School meals</li> <li>• Outreach food services</li> </ul>	<ul style="list-style-type: none"> <li>• School meals</li> <li>• Community subsidised meals/cafes</li> <li>• Meal delivery service</li> <li>• Food cooperatives</li> <li>• Farmers markets</li> </ul>

Source: Rychetnik et al 2002; Doljann & van Herwerden 2002; Browne et al 2009

Each program has unique advantages and disadvantages, it is essential to coordinate the provision of food assistance programs to address gaps and improve service delivery (Innes-Hughes et al 2010).

No food assistance service directory exists in the NT or the Darwin urban area. This provides the rationale to investigate the provision of food assistance programs in Darwin urban area and the potential FBNT could have to address gaps or enhance these programs.

Food assistance programs have an important role in addressing the health inequalities experienced by those at risk of food insecurity. Food assistance programs not only increase the quantity of food consumed by participants, they also have the ability to increase the nutritional quality of participants' diet (Drewnowski & Specter 2004).

This provides the rationale to investigate what food assistance programs are currently doing to ensure healthy meals are distributed. As food assistance programs are beginning to access FBNT to purchase food, it is also necessary to investigate the potential role FBNT has in providing or promoting the purchasing of nutritious foods.

## Methods

In order for FBNT to help food assistance programs obtain low-cost foods, FBNT needs to investigate the provision of food assistance programs in the NT. Currently FBNT has one outlet that is only accessible to organisations/services in the Darwin urban area. Thus, the goal of this project was to develop a profile of food assistance programs in the Darwin urban area and to assess the need for FBNT to provide or promote the nutritious foods to food assistance programs.

Discussions were held with the CEO of FBNT and individuals on the BCNT board of directors to identify current FBNT-affiliated food assistance programs. To identify other food assistance programs operating in the Darwin urban area key stakeholders were also contacted, namely:

- Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA)
- Northern Territory Council of Social Services - the peak body for the Social and Community Sector in the NT
- Identified food assistance providers were asked to identify other program providers during the consultation process (below)
- Consultations with community organisations and services.

Sixteen interviews were conducted over a three week period to major food assistance programs though to provide more than one program. The interview included the following topics: type of food assistance provided, target group, frequency of use, program attendance numbers, demand for the program, types of food available, presence of guidelines to assist in food selection and the potential use of FBNT. All interviews were conducted by the same person to ensure consistency. The interview was semi-structured; the interviewees were led through all the discussion points to ensure all respondents provided the desired information. Respondents were given the opportunity to add information which they felt important or related, this revealed information that may not have been considered.

Fifteen self-completed questionnaires were emailed out to food assistance programs considered to be minor food assistance programs. Email addresses and contact person were obtained from the 'Northern Territory Emergency Relief Service Providers' directory or from a telephone inquiry. The questionnaire was developed incorporating piloted questions from Food Bank South Australia's 'End Hunger' survey and Food Banks Canada 'Hunger Count 2010'. The survey was piloted prior to use by a public health dietitian to ensure readability and clarity of questions. The questionnaire covered the same topics as the interviews. A telephone call was made to each food assistance program to describe the purpose of the survey and the importance of their participation. Additionally, a cover letter was emailed out with the each survey detailing date of reply, confidentiality and offer for feedback of results. A follow-up telephone call was made after the collection deadline to investigate reasons for no response.

To investigate the potential for FBNT to provide or promote the purchase of nutritious foods interstate food banks were consulted. FBNT is affiliated with Food Bank Australia (FBA). As this is an established network, CEOs from five FBA affiliated food banks were contacted - Foodbank Queensland, Foodbank South Australia

(FBSA), Foodbank New South Wales (FBNSW), Foodbank Western Australia (FBWA) and VicRelief Foodbank (VRFB).

## Results

### Identification of food assistance programs

A total of 53 food assistance programs were identified during the investigative process. Emergency food vouchers were found to be the most common type of food assistance available in the Darwin urban area, offered at 23 organisations/services. Emergency food parcels were the next highest food assistance program (11), followed by free community meals (6) and meals with assisted accommodation (5). No community subsidised meals/cafe programs or food co-ops were identified. Compared with food-subsidised programs, the majority of food assistance program available were a food relief type program (7.6% and 92.4% respectively).

### Consultation with community organisations and services

Through the consultation process data was obtained from 37 out of the 53 identified food assistance programs in the Darwin urban area. A total of 16 interviews were conducted, and 8 out of 15 surveys (53% response rate) were returned.

### Target group

Over half of these food assistance programs were accessible to all experiencing financial difficulty. Others had eligibility criteria to target youth, Indigenous, CALD and single men.

### Accessibility restrictions and frequency of meal provision

Several organisations/services providing emergency food vouchers (EFV) and/or emergency food parcels (EFP) were involved in the consultation process (13 and 8 respectively). If an organisation provided EFVs and EFPs, based on individual need, people could obtain either or both. The aim of EFVs and EFPs is to provide crisis relief, thus, access is restricted to 1-4 times per year. The identified soup kitchen was contact, which provides breakfast and lunch from Monday-Saturday. Individuals may access to the soup kitchen as many times as they need. All the identified free community meals programs were consulted; these programs provide 1 meal/week and access to these services was unlimited. Of the three school meals programs identified, one provided 5 meals/day, another 5 meals/week and the last 1meal/week. The target groups of these school meal programs have unlimited access. All the identified outreach service was consulted. The frequency of meal provision differed for each outreach service; one provided 7 meals/week, the other 1 meal/week and the last 1 food parcel/ fortnight. Access to outreach services was unrestricted. Finally, three of the five services who provide meals with assisted accommodation were contacted. Each provide 3 meals /day and access is unrestricted to those in accommodation.

### Attendance and demand for food assistances programs

Of the 37 food assistance programs that were consulted, 17 stated they were meeting the demand for their service. Meeting demand was defined as providing food assistance to all eligible individuals who requested food assistance in the last month. A further 12 food assistance providers stated they were meeting the demand for their service; however, this was only made possible through an established relationship with FBNT. Finally, 8 food assistance programs stated they could not meet the demand for their service in the last month; eligible individuals were denied access to food assistance.

Attendance data could not be attained. Some organisations/service did not record program attendance. Of those organisations/services who did record attendance data, it was difficult to ascertain if participants were first time or repeat users of the food assistance program.

### Food provided and use of nutrition guidelines/recommendations at food assistance programs

In order to determine the nutritional value of food/meals provided at food assistance programs, organisations/services involved in the consultation process were asked to supply a list of food/meals. Of the 24 programs that actually provide food, only three were able to provide a list of food consistently purchased. The remainder were unable to ascertain what foods were provided as it consistently varied. No nutritional analyses could be carried out on the lists provided.

To further determine the nutritional value of food/meals provided at food assistance programs, organisations/service involved in the consultation process were asked whether nutritional guidelines/recommendations were followed. Only 1 of the 24 programs who provide food followed a recognised nutritional guideline.

#### **Food sources of food assistance programs**

To investigate the influence FBNT could have on food assistance programs organisations/services were asked where they purchase food for their food assistance programs. Of the 24 programs that provide food, 14 used a combination of supermarkets, wholesalers and FBNT. The percentage of food purchased from FBNT ranged from 10%-90%. The main reason for a continued use of supermarkets and wholesalers was the inability to purchase fresh/frozen food from FBNT. Other reasons included the inconsistency of FBNT's stock, damaged stock, and the convenience of placing orders with wholesalers. Two of the 24 programs solely used FBNT to purchase food, and eight did not access FBNT currently.

To further identify the potential influence FBNT could have on food assistance programs all organisations/services were asked if they would use FBNT in the future. All bar one food assistance program responded 'yes'.

#### **Consultation with FBA-affiliated food banks**

Food banks affiliated with FBA were asked 'What strategies or programs does your food bank have in place to provide or promote nutritious food to food assistance programs?' to investigate the potential interventions FBNT could employ to provide or promote nutritious foods. Table 4 outlines the strategies/programs food banks provide.

**Table 4 Strategies or programs employed by FBA-affiliated food banks**

Food bank	Strategy or program
VicRelief Foodbank	<ul style="list-style-type: none"> <li>To encourage organisation to make healthy choices, fresh fruit, vegetables, milk, bread, rice, pasta, canned meals (baked beans etc), canned fruit, noodles, frozen vegetables, frozen meat, spreads, tea, coffee, frozen meals, pasta/rice sauces, UHT milk, cereal are free. All other products have handling fee.</li> <li>Currently in the process of implementing traffic light labelling system in partnership with the City of Melbourne and Nutrition Australia. Nutritionists will code current products (170) green, amber and red according to yet to be defined guidelines. VicRelief will be charged a consultancy fee by Nutrition Australia for future products. The City of Melbourne will hand over Intellectual Property rights to VicRelief thus providing free educational resources. Nutrition Australia will be able to evaluate the program by investigating individual organisation's purchasing patterns, e.g. organisation 'X' purchased 70% red in May and 30% red in June.</li> </ul>
Foodbank Queensland	<ul style="list-style-type: none"> <li>To encourage organisation to make healthy choices, fresh fruit, vegetables, milk and bread free. All other products have handling fee.</li> </ul>
Foodbank NSW	<ul style="list-style-type: none"> <li>To encourage organisation to make healthy choices, fresh fruit, vegetables, milk and bread free. All other products have handling fee.</li> <li>Developing relationships with food industry to source "good" food. Nil input from a nutritionist.</li> </ul>
Foodbank SA	<ul style="list-style-type: none"> <li>Surveyed all affiliated food assistance programs to determine their high priority foods, defined as 'staple foods'. Foodbank SA developing relationships with food industry to source 'staple foods' and their healthier alternatives. Nil input from a nutritionist.</li> </ul>
Foodbank WA	<ul style="list-style-type: none"> <li>To obtain more fresh produce and nutritious staples Foodbank WA are forming partnerships: <ul style="list-style-type: none"> <li>The CBH group to source grain products – e.g. oat wheat biscuits</li> <li>Lions and Rotary Rice Bowl Project to source rice</li> <li>Strengthening relationships with local growers and the Perth Market Authority</li> </ul> </li> <li>Have an established Healthy Food for All team who coordinate: <ul style="list-style-type: none"> <li>School breakfast programs (SBP) to over 360 schools with a demonstrative need (lethargic children, poor health, food theft). All foods must comply with the Department of Health's Healthy Food and Drink Policy (HFD). Schools are unable to access HFD defined red foods from Foodbank WA.</li> <li>Food Sensations – a nutrition and cooking program available to all SBP school students in years 5-12. Food Sensations offer educator training days for SBP schools which teaches participants to incorporate nutrition, cooking and gardens into their target groups. Other Foodbank WA-affiliated agencies have limited access to this program as it is funded by the Department of Education.</li> </ul> </li> </ul>

An important outcome of this project process is FBNTs increased consideration of the foods they are providing. FBNT now believe they have a responsibility to ensure foods are available and incorporated into food assistance programs to prevent or delay the development of dietary-related diseases.

## Discussion

There is limited research into the prevalence of food insecurity; thus there is limited knowledge on how big this problem is in Australia and the NT. The dated food insecurity data outlined in Table 1 does not capture the true prevalence of food insecurity. Furthermore, some members of society are underrepresented in these surveys (Rychetnik et al 2002). To better understand food insecurity and the need for appropriate interventions it is essential to measure all dimensions of food insecurity, especially in groups who have been identified as high risk.

The mapping of food assistance programs in the Darwin urban area identified a gap in service provision. Of the 53 identified food assistance programs, only four could be classified as a food subsidised program. Furthermore, each of these food subsidised programs had comprehensive eligibility criteria to target specific groups. Thus, it could be suggested that no food subsidised programs are available to all in the Darwin urban area and, consequently, people requiring food assistance must turn to food relief.

The use of food relief is a defined form of food insecurity as it is a socially unacceptable method to acquire food (Kendall & Kennedy 1998). Some consider food relief a 'free-handout' (Browne et al 2009) and often, people experiencing food insecurity are strongly reluctant to use this method due to feelings of alienation, powerlessness, embarrassment and shame (Hamelin et al. 1999). Food subsidised programs however, provide an alternative method of acquiring food that is socially acceptable (Rychetnik et al 2002). These programs are not considered a 'free-handout'; in order to receive food participants contribute money or volunteer their time (Browne et al 2009). The advantages of food subsidised programs is the preservation of personal dignity, prolonged or prevented need for food relief and most importantly, access to food security (Rychetnik et al 2002). These findings strongly illustrate the need for food subsidised programs in the Darwin urban area and most likely throughout the NT.

The mapping of food assistance programs also highlighted the poor coordination of program delivery. A large proportion (64%) of food assistance programs in the Darwin urban area are emergency relief programs (EFV and EFP) which supply 3-4 days worth of food. The consultation process revealed that emergency relief programs provide short-term assistance, as individuals are restricted to 1-4 visits per year. Some individuals require long-term food assistance. This can be attained from food subsidised programs, soup kitchens, free community meals and outreach services. These programs make up a small proportion (18.8%) of the food assistance programs in the Darwin urban area. Unfortunately, the consultation process revealed the limited frequency of these programs, with the majority only providing 1 meal/week. Thus, it could be suggested that individuals who require long-term food relief experience periods without a meal, which could result in hunger, fatigue and illness and further contributing to the poverty cycle (Booth & Smith 2001).

In the Darwin urban area, non-profit organisations provided the soup kitchen and all the free community meal programs and outreach services. These organisations identified limited financial resources as the main factor preventing the delivery of more or more frequent long-term food assistance programs. Access to Government funding is available to these organisations, but in the form of emergency relief funding. The provision of this Government funding is contributing the uneven delivery of food assistance programs. To ensure effective coordination of food assistance programs in the Darwin urban area, the Government may need to provide financial support to other food assistance programs as well as emergency relief.

Awareness of the need for food assistance programs could promote Government support. In order to demonstrate this need, all organisations/services should record the number of people receiving food assistance. To demonstrate the incidence of people requiring food assistance, organisations/services should record repeated food assistance use separately. This was not a common practice amongst organisations/services in the Darwin urban area. Organisations/services stated their ability to record data was constrained by limited staff, time and financial resources.

Although organisations/services were unable to provide accurate program attendance data, they were able to comment on whether their program was meeting demand. This knowledge could inherently depict the community's need for food assistance programs. A high percentage of food assistance programs (78.4%) were able to help all eligible individuals requesting food assistance in the previous month. This could suggest that food assistance programs are adequately meeting the community's need for their service. However, demand may not be a true representation of a need. Programs may be 'meeting demand' because they have strict eligibility criteria, their location restricts access, and they do not advertise their program and therefore people are unaware of their program or people are reluctant to access their program as it is socially unacceptable (Hamelin et al. 1999). Thus, there may be more people requiring food assistance.

It has been documented that individuals requiring food assistance are at higher risk of developing dietary-related diseases (Townsend et al 2001; Drewnowski & Specter 2004). So, it is interesting to understand how food assistance programs can affect the nutritional value of their participant's diets. Only 12.5% of food assistance programs were able to present a list of foods consistently provided in their programs. No nutritional analyses could be carried out on the lists provided, as there was insufficient detail describing each food product. For example, when milk was listed, it was unknown whether this was full-fat or reduced fat milk. Investigation of these food products was beyond the scope of this project. Further studies on the nutritional value of foods provided at food assistance programs are needed. With the Government becoming increasingly concerned over the nutritional value of society's diet (Northern Territory Government 2009), such information could enable organisations/services to advocate for funding to provide nutritious foods.

The use of nutritional guidelines/policies can provide an insight into the nutritional value of foods provided at food assistance programs. Although all organisations/services stated they have a role in providing nutritious foods, only 1 program used nutritional guidelines to ensure nutritious foods were provided. One could therefore assume that the foods provided at the remaining programs are not in line with the Australian Dietary Guidelines or other recognised nutritional guidelines.

Organisations/services stated their food purchases were primarily driven by cost due to their limited budget. Research has found cheaper foods are generally energy dense, high in fat, sugar and salt (Drewnowski & Specter 2004). This supports the assumption that food provided at food assistance programs are of limited nutritional value. Furthermore, several organisations/services stated they purchase foods they know are 'healthy'. Supermarkets hold thousands of different foods of varying nutritional quality (Kelly et al. 2008). Research has found consumers are finding it increasingly difficult to interpret complex food labels, and thus, consumers are finding it increasingly difficult to make healthy food choices (Kelly et al. 2008). Consequently, the 'healthy' food choices made by organisations/services may not be the healthiest food choice.

These findings raise some interesting points. If organisations/services are providing food to a vulnerable population, should a nutritional policy or set of standards be enforced? State Governments are enforcing nutrition policies on other institutes catering for vulnerable people (schools, disability services, child-care centres, hospitals) (Martin & Macoun 1996), so why isn't the NT Government or Australian Federal Government enforcing nutrition policies on food assistance programs? Should the NT Government or the Australian Federal Government provide these organisations with nutritional direction? The answers to these questions are unknown. However, if these organisations/services were provided with better nutritional direction, the individuals who are requesting food assistance and also at high risk of dietary-related disease would be provided with more nutritionally appropriate foods.

The enforcement of nutritional policies may restrict organisations from delivering food assistance programs. Nutritional policies may require trained staff, of which many organisations do not have as they rely on volunteers. Nutritional policies may require increased food expenses and many organisations are already financially restricted. In the absence of nutritional policies, individual organisations/services are responsible for making healthy food choices. How could FBNT assist these organisations/services?

Two-thirds of the food assistance programs providing food currently access FBNT. Additionally, all food assistance programs, with the exception of one, believe they will access FBNT in the future. With a captive audience who caters to those experiencing or at risk of developing a diet-related disease, FBNT could play a major role in influencing the purchasing behaviours of food assistance programs.

Food banks around Australia have realised the potential impact they could have on health, and have begun implementing different interventions. The success of these interventions on increasing the nutritional value of food in food assistance programs has not been evaluated. Luckily similar interventions have been implemented in the supermarket setting have been evaluated.

Three of the five food banks involved in the consultation process provided free fruit, vegetables, milk, bread and a variety of nutritious staples. Structural changes like this have been shown to have a stronger influence on food choice than education-based interventions that rely on individual responsibility (Ni Mhurchu et al. 2010). The uptake of free produce by organisations/services is likely to be great, as their purchasing decisions are driven by cost. However, the price of food at food banks are already significantly reduced; consequently, foods with limited nutritional value are at a significantly reduced cost. Without knowledge, organisations/services may continue to purchase less healthy food choices as well. As FBNT is in its early development stages and does not have significant financial support, the ability to provide free produce may be reduced.

Additionally, in order to provide free fruit, vegetables, bread and dairy, FBNT needs to stock them. Currently in the NT, there is no law protecting food donors. This is restricting food industry's ability to donate fresh produce (N. Cook, personal communication, August 2, 2010). When the law is passed, there will be significant increases in the donation of these foods.

Food Bank Australia and three of its affiliated food banks have started developing relationships with food industry to increase the availability and variety of nutritious foods. Currently FBNT has established a

relationship with one food producers. Further relationship development could be an effective strategy to ensure nutritious foods are available at FBNT. The availability of nutritious products in supermarkets has been shown to increase the nutritional value of its consumer's diet (Glanz & Yaroch 2004). Again, without the knowledge on healthy food choices, selection of nutritious foods may be limited.

VicRelief's traffic light system strategy is a point-of-purchase (POP) intervention. These interventions have been shown to have a positive effect on knowledge (Glanz & Yaroch 2004). Consumers are able to correctly identify healthy choices and make comparisons between products easier (Kelly et al. 2008). POP interventions however, have been shown to have varying effects on food purchasing behaviours (Glanz & Yaroch 2004; Kelly et al. 2008). Thus for a POP intervention to be successful structural changes (stated above) to FBNT may also be required. A traffic light system intervention can be time-intensive and difficult to sustain without the continue input of a nutritionist, thus it may not be a feasible option for FBNT at the moment.

## Conclusion

This report suggests the current provision and delivery of food assistance programs in the NT has created an environment that is promoting food insecurity, not supporting food security. Food security is more than just having consistent access to available food. There are also social and nutritional aspects of food that everyone should be able to appreciate. This paper argues that those requiring food assistance in the NT are unable to obtain food through socially acceptable methods. Furthermore, individuals accessing food assistance programs in the NT cannot be guaranteed a nutritionally adequate meal. Thus, they are unable to appreciate the social and nutritional aspects of food, and are being subjected to more disadvantage in the form of social exclusion and poor health (Hamelin et al. 1999; Drewnowski & Specter 2004).

There is insufficient policy, research and funding to provide a solution. Government and non-government organisations need to recognise common interests and work together to develop a coordinated approach to reduce food insecurity. Until this is carried out, FBNT can, and should, play a role in influencing the nutritional quality of foods incorporated into food assistance programs. Additionally, BCNT, who want to develop services to meet the needs of the community, should continue to develop FBNT and implement further services to provide affordable, nutritious food to individuals throughout the NT.

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