



FOOD COSTS FOR FAMILIES

Analysis of the proportion of the minimum wage
and income support benefit entitlements that
families need to purchase a healthy diet

This analysis provides evidence of the inequity and financial difficulties faced by families on low incomes to purchase healthy food adequate to meet daily nutritional needs. The Otago University food costs survey was used to calculate the percentage of a family's income (received solely from either the national minimum wage or income support benefit entitlements) needed to adopt a healthy eating pattern based on Ministry of Health nutritional guidelines.

New Zealanders spend on average 16% of their income on food. An Australian paper suggests that no more than 25% of disposable income should be spent on food and 'food stress' is believed to be experienced when more than 30% of income is needed.

A range of low income family scenarios are presented in this paper. Findings suggest that most families on low incomes will need to spend a much higher percentage of income to purchase 'basic' healthy foods and many will experience 'food stress'. Families need to spend between 23-53% of their net income and 42-75% once rent is deducted, to purchase a 'basic' healthy diet. While the geographic access to food is not considered in this paper, this has the potential to increase costs and reduce accessibility of healthy food options further.

Food insecurity and its consequences of poor nutrition, obesity, and nutrition related health conditions are evident in families on low incomes. Tackling issues of income adequacy and the accessibility to lower cost healthy foods needs to be addressed more aggressively as part of the solution to achieve a reversal in these health trends.

Contents

- Executive Summary..... 1
- Contents 2
- Purpose 3
- Background 4
 - Food insecurity 4
 - Income 4
 - Housing costs 5
 - Food Costs..... 6
 - Proportion of disposable income spent on food 6
 - NZ Government 2010 Budget..... 7
 - International studies..... 7
- Methods 8
 - Scenario 1: Minimum Wage..... 9
 - Scenario 2. Minimum Wage..... 11
 - Scenario 3: Unemployment benefit (Housing NZ Accommodation) 13
 - Scenario 4: Unemployment benefit (Private accommodation) 15
 - Scenario 5: Domestic Purposes Benefit 17
 - Scenario 6: Sickness Benefit (Living in Housing NZ House)..... 19
- Discussion 22
- Recommendations..... 24
- References 25

Purpose

The Regional Public Health (RPH) 2009-2010 'Access to Income' project identifies income as one of the major determinants of health. This project aims to work across sectors to address the role that access to income plays in health and to work towards equal opportunities to good health. Quantifying the proportion of both the minimum wage and state income support benefits that is necessary to spend on food to select a 'healthy diet' is one of the objectives of this project. An increased understanding of the barriers to accessing healthy foods especially for those on low incomes, will support RPH's work

in its role to improve health outcomes for high need populations.

This report sets out to assess the proportion of the statutory minimum wage and income support benefits required to purchase a healthy diet. This work fits well with Regan's [1] research recommendations suggesting the need to build evidence and advocacy of the links between income and other social determinants of health and health outcomes. This is one means to reduce the inequitable effects of inadequate income on health and wellbeing.

Background

Food insecurity

Food security has been defined as the assured access to sufficient food that is nutritious, of good quality, safe, meets cultural needs, and has been acquired in a socially acceptable way [2]. Results of the 2002, Ministry of Health National Nutrition Survey [3] found that between 20-22% of New Zealanders experienced *food insecurity* with higher rates in Pacific and Māori people [3, 4]. Food insecurity has been identified as being most prevalent in females and in those of younger ages (25-44 years), those who have never been legally married or are separated, divorced or widowed, and those of Māori or Pacific ethnicity. Sole parent families, large households, those unemployed or actively looking for work, those receiving a means tested government benefit, and those living in highly deprived areas (NZ Dep deciles 7-10) are all more likely to be food insecure [4].

The ability of a person to purchase sufficient quantity and variety of food is influenced by both the available income and the cost of food [3].

Food insecurity and access to food have been associated with detrimental health outcomes such as obesity, diabetes and micronutrient deficiency [5] [6] and therefore measures to reduce this issue have the potential to improve health outcomes and reduce health care costs.

The 2010 Salvation Army third annual report [7] identifies an increased demand for its

countrywide food bank services. A nearly 40% increase in demand was experienced in the year to 30 December 2009, with 47,000 food parcels being provided to over 25,000 families. In 2008 the Salvation Army also experienced a 29% increase in demand for food parcels from the year previously.

Local research has identified that health education has limited impact in changing food purchasing behaviour [8], with a reduction in the price of healthy foods having more potential to support this change. Evidence suggests that people do know about good food choices but that lack of income is a barrier to making such choices [4]. A range of possible economic tools for dealing with the problem of food insecurity have been proposed in recent local research such as the use of a subsidy on food prices by the use of a 'smart card' targeted to high need communities [4].

A 2010 RPH 'Access to Health and Income Working Group Survey' identified that approximately 60% of participants of Benefits Rights Training days held in 2009 and 2010, were regularly requested to provide clients with advice on how to access a special needs grant for food and power [9].

Income

The New Zealand Income Survey (NZIS) [10] provides a snap shot of income statistics for people and households. Results from the

June 2009 quarter (April to June) reveal that the medianⁱ weekly income for *each individual* from all sources (including those with no source of income) was \$538 weekly or \$27,976 annually gross. Two thirds of total income received by the working aged population (15 years and over) is from wages and salaries. In the June 2009 quarter, 54 percent of people derived their income from this source while 11.5 percent received income from self-employment and 33.5 percent from investments.

In contrast the Household Economic Survey found the median annual *household* income derived from all regular sources (wages and salaries, self employment, superannuation, investments, government benefits), was \$63,867 and the average (mean) annual income was \$78,876 [11].

Brian Perry provides useful insights in his analysis of the 2008 Household Economic Survey [12]. He identifies that 20% of NZ children (216,000 individuals) in 2008 lived in relative poverty (based on 60% of the median income after housing costs are deducted). Forty nine percent of single parents households were judged to live in relative poverty as where 12% of two parent households, 10% in households with 1 or more full time workers, 61% in households without a full time worker and 69% in 'workless' households.

ⁱ The median is the point where half the people receive more and half receive less. The median is influenced less by high and low values than the average.

Minimum Wage

The adult minimum wage applies to all employees aged 16 and over who are not new entrantsⁱⁱ or trainees [13]. The adult minimum wage as of 1 April 2010 was \$12.75 an hour. This equates to \$102 for an eight-hour day or \$510 for a 40-hour week or \$26, 520 gross annually.

Income support benefits

At the end of March 2010, 325,000 working age people were receiving main social security benefitsⁱⁱⁱ. This compares with 292,000 in March 2005 and 289,000 in March 2009. The number of working age people receiving main benefits increased by 36,000 (12 percent) in the 12 months ended March 2010. Numbers receiving main benefits decreased by 36,000 (12 percent) between March 2005 and 2008, then rose by 69,000 (27 percent) in the two years ending March 2010 [14].

Housing costs

The median household expenditure for rental accommodation rose by 9.1 % nationally from June 2008 to June 2009. The Household Economic Survey (Income) [10, 11] in the year ended June 2009 reports the median rent in Wellington to be \$250. The importance of

ⁱⁱ The New entrants minimum wage applies to employees aged 16 and 17 except for those who have completed 200 hours or three months of employment, whichever is shorter; or who are supervising or training other workers; or who are trainees.

ⁱⁱⁱ Includes Unemployment Benefits, Domestic Purposes Benefits – Sole Parent, Domestic Purposes Benefits – Care of Sick or Infirm, Domestic Purposes Benefits – Women Alone, Sickness Benefits, Sickness Benefits – Hardship, Emergency Maintenance Allowances, Invalid's Benefits, Widow's Benefits and Emergency Benefits

housing for health is undeniable for both physical protection and psychological wellbeing [15]. For this reason these calculations have taken into account accommodation costs by deducting either private rental or Housing NZ accommodation costs prior to calculating the percentage of income available for food costs.

Food Costs

The Department of Human Nutrition, Otago University [16] estimates each year food costs for individuals based on data collection in the five main centers. These costs are calculated using specified amounts of each food category (e.g. meat, bread, eggs, fruit, etc) needed for one week, based on the New Zealand Food and Nutrition Guidelines [17] and will meet the nutritional needs of most healthy people appropriate for each age and sex group.

Food costs are provided for a 'basic', 'moderate' and 'liberal' diet.

The 'basic' food costs category has been used in the calculations for this report and assumes that all foods will be prepared at home and are purchased from supermarkets. This 'basic' category includes the most commonly consumed fruits and vegetables and the lowest priced items within each food category. Shelf prices only are used (not specials or coupon prices) and the lowest priced alternative is recorded when more than one brand is available.

It is evident however that not everyone does have easy access to a supermarket. Residents of Eastern Porirua, a neighbourhood with high deprivation, were found to have poorer access

to supermarkets but better access to convenient stores to purchase food [18]. These shops were less likely to carry a healthy range of foods and healthier alternatives were found to be more expensive. This serves as a reminder that the use of supermarket derived food costs are likely to underestimate the true costs incurred by those living in such underserved areas making real food even greater.

Proportion of disposable income spent on food

The 2007 Household Expenditure Survey (year ending 30 June) [11] found that the three largest components of household expenditure are related to housing, food and transport costs. Nationally 23% of household income was spent on housing (mortgages, rent payments, council rates and energy costs), 16% on food and 14% on transport. Average household spending on food was \$156 per week, with 44 percent of this expenditure going on grocery items. By comparison, over the past 10 years the American population on average spent less than 10% of their income on food, eaten at home and away from home [19].

Kettings and Sinclair [20] cite that the only Australian benchmark available on an acceptable proportion of disposable income of a low income family to be budgeted on food was published 18 years ago and this recommends one quarter or 20-25% as being suitable.

Professor John Covenoy of Flinders University in Adelaide, Australia describes the term 'food stress;' as where people on low incomes are required to spend greater than 30% of their income to be able to eat healthily [21].

NZ Government 2010 Budget

At the time of writing this report the government outlined its 2010 budget. From 1 October 2010, Goods and Services Tax (GST) will increase from 12.5 to 15 percent [22]. All food attracts GST although renting of a dwelling is exempt from GST[23]. Income support (for all main benefits) and other payments (including Working for Families tax credits) will also be increased by 2.02 per cent from 1 October 2010, to compensate for this increase [22].

International studies

International studies have used varying methods (calculated both with and without housing costs) to assess the affordability of a healthy diet. Findings have consistently found that a healthy eating pattern is unachievable for socially disadvantaged and vulnerable groups.

A Canadian study undertaken in 2002 found that purchasing a healthy diet was difficult when on the minimum wage and placed health at risk, with a family of four needing to spend 35% and a single parent family 27% of income on food [24]. Monthly costs of shelter and other expenses deemed essential such as

transportation, telephone, clothing and childcare were deducted from the total income prior to determining funds available for food costs. Little disposable income was left available for other expenses such as personal hygiene products, cleaning products, prescriptions, costs related to physical activity or other unexpected costs.

A more recent Irish study [25] using 'healthy food baskets' based on national dietary guidelines found households with 2 adults and 2 children needed to spend close to 70% of their weekly welfare entitlements to purchase a healthy diet, while those for a single parent with one child need to spend 80%.

Similar studies have been undertaken using 'healthy food baskets' in Australia. A key finding from the New South Wales (NSW) Cancer Council Food Basket Survey in 2006 was that low income families in NSW would have to spend on average 56% of their household budget to maintain a healthy diet; this is compared to 22% for a family on an average income [26]. More recently in Adelaide 31% of family's welfare payments and 35% of the average weekly earnings (of one earner) were found to be required to cover food costs [27]. The use of 7 day meal plan models were used to assess food costs for two typical welfare dependant families in Melbourne [20]. This study found that at least one third (33%) of the total income available for all expenses was needed to purchase food that meets public health recommendations.

Methods

Six typical family scenarios and income sources were devised (Table 1).

The net total income was calculated for each family scenario using either the statutory minimum wage (as of 1st April 2010) [13] or income support benefits [28]. An accommodation supplement was included as appropriate [29]. Income received from the minimum wage or benefit was deemed the sole source of income for the purpose of these calculations with the assumption that only one person in the household is employed.

Net income from these sources was used to determine the percentage required to purchase food adequate to meet the Ministry of Health nutrition guidelines [17].

The fixed cost of housing was then deducted from the net income to determine the proportion needed for food costs. Housing costs were based on either Housing NZ rentals [30] or private accommodation, based on Work and Income, April 2010, data [31].

The cost of eating a 'healthy diet' was calculated for each scenario based in Wellington, using the 2009 Otago University food costs survey [16]. The percentage of each family's total net income before and after rent needed for food was calculated. Impacts of changes to GST, tax and income from the 2010 budget and effective from 1/10/10 have also been assessed.

Scenario 1	Minimum Wage	Single male
Scenario 2	Minimum Wage (Single wage)	2 adults / boy,13 / girl, 10
Scenario 3	Unemployment benefit (Housing NZ accommodation)	2 adults / boy, 13 / girl, 10
Scenario 4	Unemployment benefit (Private Rental)	2 adults / boy, 13 / girl, 10
Scenario 5	Domestic purposes benefit	Solo parent / boy, 5 years / girl, 4
Scenario 6	Sickness beneficiary	2 adults / boy 13 /girl 14/ boy 10/girl 1

Table 1: Typical family scenarios used to base income and food costs.

Scenario 1: Minimum Wage

(Single male 20 years)

Table 1.1 Income and housing costs

Income and expenses	Prior to 1/10/10	From 1/10/10 [22]
Yearly gross income based on minimum wage \$12.75 X 40 hours [13] = \$510/week	\$26, 520	\$26, 520
Income tax [32] \$0 to 14,000 taxed at 12.5% \$14,000 to 26,520 taxed at 21% Total Tax	\$ 1750.00 <u>\$ 2629.20 +</u> \$ 4379.20	\$1470.00 (10.5%) <u>\$2191.00 (17.5%)</u> \$3661.00
Net Income (after tax) Yearly Weekly	\$ 22,140.80 \$ 425.78	\$22,859.00 \$ 439.59
Accommodation supplement [29]	\$ 60.00 +	\$ 60.00 +
Rent (single person) [31]	\$189.00 -	\$189.00 -
Total net week income (after rent)	\$296.78	\$310.59

Table 1.2 Food costs of a 'basic' balanced diet in Wellington [16]

Weekly Food costs of a 'basic diet' [16]	Prior to 1/10/10	From 1/10/10 ¹
Weekly food costs for a 20 year old male in Wellington [4, 16]	\$61.00	\$62.35

¹ ibid pg 9

Table 1.3 Percentage of income required for a healthy diet

Weekly food costs for a 20 year old male in Wellington [4, 16]	\$61.00	\$62.35
Total net income (prior to rent)	\$485.78	
Total net week income (after rent)	\$296.78	\$310.59
Percentage total net income (prior to rent) to purchase a 'basic' balanced diet	12.5%	
Percentage of total net income (after rent) to purchase a 'basic' balanced diet	20.5 %	20.0%

Scenario 2. Minimum Wage

(Male and Female adult, Boy 13, Girl 10)

Table 2.1 Income and housing costs

Income and expenses	Prior to 1/10/10	From 1/10/10 [22]
Yearly gross income based on minimum wage \$12.75 X 40 hours [13] = \$510/week	\$26, 520	\$26, 520
Income tax [32] \$0 to 14,000 taxed at 12.5% \$14,000 to 26,520 taxed at 21% Total Tax	\$ 1750.00 <u>\$ 2629.20 +</u> \$ 4379.20	\$1470.00 (10.5%) <u>\$2191.00 +(17.5%)</u> \$3661.00
Net Income (after tax) Yearly Weekly	\$ 22,140.80 \$ 425.79	\$22,859.00 \$ 439.60
Income supplements Tax Credits [33] Accommodation supplement [29]	\$ 206.00 + \$ 94.00 +	\$210.16 + [32] \$94.00 +
Total net income (including income supplements)	\$ 725.79	\$ 743.76
Rent (other family types) [31]	\$ 236.00 -	\$236.00 -
Total net income (after rent)/week	\$ 489.78	\$ 507.75

Table 2.2 Food costs of a 'basic' balanced diet in Wellington [16]

Weekly Food costs of a 'basic diet' [16]	Prior to 1/10/10	+ GST from 1/10/10 ¹
Male adults	\$61.00	\$62.35
Female adults	\$58.00	\$59.29
Boy 13 years	\$77.00	\$78.71
Girl 10 years	\$50.00	\$51.11
Total weekly food cost	\$246.00	\$251.46

Table 2.3 Percentage of income required for healthy a diet

Total weekly food cost	\$246.00	\$251.46
Total net income (prior to rent)	\$725.79	
Total net income (after rent)	\$ 489.78	\$507.75
Percentage total net income (prior to rent) to purchase a 'basic' balanced diet	\$33.9 %	
Percentage of total net income (after rent) required to purchase a 'basic' balanced diet	50.2%	49.5%

¹ As from 1/10/10 The New Zealand Government Income tax system changes with reductions to personal income tax rates and a raise in GST from 12.5% to 15%. This equates to $(1.15/1.125 = 1.0222 \%$ increase in costs)

Scenario 3: Unemployment benefit (Housing NZ Accommodation)

Male and Female adult; Boy,13; Girl, 10 living in a housing NZ house)

Table 3.1 Income and housing costs

Income and expenses	Prior to 1/10/10	From 1/10/10 [22]
Income based on Unemployment Benefit		
Net weekly rate for married couple with one or more children	\$323.52	\$330.05
Family tax credits [14]		
(First or only child 0-15 years)	\$86.29 +	\$88.03 +
(Second or subsequent child 0-12yrs)	\$59.98 +	\$61.19 +
Total net weekly income including tax credits	\$469.79	\$479.27
Housing NZ rent (25% of net income) [30]	\$100.00 -	\$100.00 -
Total net income from unemployment benefit minus rent	\$369.79	\$379.27

Table 3.2 Food costs of a 'basic' balanced diet in Wellington [16]

Weekly Food costs of a 'basic diet' [16]	Prior to 1/10/10	From 1/10/10¹
Male adult	\$61.00	\$62.35
Female adult	\$58.00	\$59.29
Boy 13 years	\$77.00	\$78.71
Girl 10 years	\$50.00	\$51.11
Total weekly food cost	\$246.00	\$251.46

Table 3.3 Percentage of income required for healthy diet

Total weekly food cost	\$246.00	\$251.46
Total net income from unemployment benefit	\$469.79	
Total net income from unemployment benefit minus rent	\$369.79	\$379.27
Percentage total net income (prior to rent) to purchase a 'basic' balanced diet	52.4%	
Percentage total net income (after rent) to purchase a 'basic' balanced diet	66.5%	66.3%

Scenario 4: Unemployment benefit (Private accommodation)

Male and Female adult; Boy, 13; Girl, 10 renting a house

Table 4.1 Income and housing costs

Income and expenses	Prior to 1/10/10	From 1/10/10 [22]
Income based on Unemployment Benefit		
Net weekly rate for married couple with one or more children	\$323.52	\$330.05
Family tax credit [14]		
First or only child 0-15 years	\$86.29 +	\$88.03 +
Second or subsequent child 0-12yrs	\$59.98 +	\$61.19 +
Accommodation supplement [29]	\$94.00 +	\$94.00 +
Total net weekly income including tax credits and accommodation supplement	\$563.79	\$573.27
Rent [31]	\$236.00 -	\$236.00 -
Total net income remaining after rent is paid/week	\$327.79	\$337.27

Table 4.2 Food costs of a 'basic' balanced diet in Wellington [16]

Weekly Food costs of a 'basic diet' [16]	Prior to 1/10/10	From 1/10/10¹
Male adult	\$61.00	\$62.35
Female adult	\$58.00	\$59.29
Boy 13 years	\$77.00	\$78.71
Girl 10 years	\$50.00	\$51.11
Total weekly food cost	\$246.00	\$251.46

Table 4.3 Percentage of income required for a healthy diet

Total weekly food cost	\$246.00	\$251.46
Total net income from unemployment benefit	\$563.99	
Total net income from unemployment benefit (after rent)	\$327.76	\$337.27
Percentage total net income (prior to rent) to purchase a 'basic' balanced diet	43.6%	
Percentage total net income (after rent) to purchase a 'basic' balanced diet	75.8 %	74.6%

¹ ibid pg 9

Scenario 5: Domestic Purposes Benefit

Female adult; Boy, 5 years; Girl, 4 years

Table 5.1 Income and housing costs

Income and expenses	Prior to 1/10/10	From 1/10/10 [22] (x1.0202)
Income based on Domestic Purposes Benefit Net weekly rate for solo parent	\$278.04	\$283.65
Family tax credit [14] First child aged 0-15 years	\$86.29 +	\$88.03 +
Second child, 0-12 years	\$59.98 +	\$61.19 +
Accommodation supplement [29]	\$102.00 +	\$102.00
Total net income	\$526.31	534.87
Rent [31]	\$236.00 -	\$236.00 -
Total net income remaining after rent	\$290.57	\$298.87

Table 5.2 Food costs of a 'basic' balanced diet in Wellington [16]

Weekly Food costs of a 'basic diet' [16]	Prior to 1/10/10	From 1/10/10¹
Female adult	\$58.00	\$59.29
Boy 5 years	\$34.00	\$34.75
Girl 4 years	\$31.00	\$31.68
Total weekly food cost	\$123.00	\$125.72

Table 5.3 Percentage of income required for healthy diet

Total weekly food cost	\$123.00	\$125.72
Total net income from Domestic Purposes benefit	\$526.31	
Total net income from Domestic Purposes benefit (after rent)	\$290.57	298.87
Percentage total net income (prior to rent) to purchase a 'basic' balanced diet	23.4%	
Percentage total net income (after rent) to purchase a 'basic' balanced diet	42.3 %	42.1 %

Scenario 6: Sickness Benefit (Living in Housing NZ House)

Female adults, Boy 13; Girl 14; Boy 10, Girl 1

Table 6.1 Income and housing costs

Income and expenses	Prior to 1/10/10	From 1/10/10 [22]
Income based on Sickness Benefit Net weekly rate for married, civil union, de facto couple with 1 or more children	\$323.52	\$329.00
Family tax credit [14]		
First child aged 0-15 years	\$86.29 +	\$88.03 +
Second subsequent child, aged 13-15	\$68.40 +	\$69.78 +
Subsequent child, 0-12 years	\$59.98 +	\$61.10 +
Subsequent child, 0-12 years	\$59.98 +	\$61.19 +
Accommodation supplement based on renting [29]	\$94.00 +	\$94.00 +
Total net income	\$692.17	\$703.10
Rent [31]	\$236.00	\$236.00
Total net income remaining after rent	\$ 456.17	\$467.10

Table 6.2 Food costs of a 'basic' balanced diet in Wellington [16]

Weekly Food costs of a 'basic diet' [16]	Prior to 1/10/10	From 1/10/10¹
Male adult	\$61	\$62.35
Female adult	\$58	\$59.29
Boy 13 years	\$77	\$78.71
Girl 14 years	\$64	\$65.42
Boy 10 years	\$50	\$51.11
Girl 1 year old	\$27	\$27.60
Total weekly food cost	\$337.00	\$344.48

Table 6.3 Percentage of income required for healthy diet

Total weekly food cost	\$337.00	\$344.48
Total net income from Sickness Benefit	\$692.17	
Total net income from Sickness benefit (after rent)	\$456.17	\$467.10
Percentage total net income (prior to rent) to purchase a 'basic' balanced diet	48.7%	
Percentage total net income (after rent) to purchase a 'basic' balanced diet	73.9 %	73.7%

Income Source	% Food costs of total net income (prior to 1/10/10)	% Food costs of total net income after rent is paid (prior to 1/10/10)	% Food costs of total net income after rent is paid (after 1/10/10)
Scenario 1	12.5%	20.5%	20.0 %
Scenario 2	33.9%	50.2%	49.5 %
Scenario 3	52.4%	66.5%	66.3 %
Scenario 4	43.6%	75.8%	74.6 %
Scenario 5	23.4%	42.3%	42.1 %
Scenario 6	48.7%	73.9%	73.7 %

Table 2: Percentage of food costs of net income before and after rent is paid (based on one adult working a 40 hour week or an typical benefit allowance)

Discussion

While food insecurity and its impact on health are now well recognised, this paper sets out to build new evidence and to further highlight this issue.

The percentage of low incomes needed to purchase a healthy 'basic diet' was derived from both net income and income remaining after essential fixed accommodation costs are deducted. The percentage food costs derived solely from net income allow for a comparison to be made with benchmarks identified. Calculations which take into account accommodation draw attention further to the harsh financial realities and difficulties faced by many people on low incomes to make ends meet.

New Zealand is fortunate to have access to the Otago University food costs survey, which is updated annually to monitor food costs that meet the Ministry of Health nutrition guidelines. The 2009 figures have been used in these calculations and therefore do not take into account recent rises in food costs. Food costs used in this analysis are also likely to be lower than the real costs as these prices are derived from supermarkets and all meals are expected to be prepared from raw ingredients at home. Recent NZ research would suggest however that this would rarely be the case in most families today [34].

Percentage food costs identified are also likely to be lower than reality due to the use of standard average regional rental costs [31]. These are lower than the median rents [11] in Wellington and are likely to underestimate true rental costs especially for families of larger

sizes. This analysis does not take into consideration any other costs such as those for personal hygiene products, households and laundry cleaners, prescriptions, costs associated with physical activity, personal health and dental needs, clothing and footwear, transport, telephones and heating.

The minimum wage was sufficient to cover the cost of a 'basic' healthy diet of a single male (Scenario 1) with 12.5% of net income and 20.5% of income after rent, being needed to cover these costs.

Families on low incomes and benefits are required to spend between 23.4% (Scenario 5) and 52.4% (Scenario 3) of their net income to purchase a healthy 'basic' diet.

This requires a very high percentage being required compared to both the national average of 16% [11] and an Australian benchmark of 20-25% [20] which has been identified as a reasonable amount of disposable income to be budgeted on food.

Having a job does not prevent food insecurity with a family (Scenario 2) receiving the minimum wage needing to spend 34% of net income or 50% after deducting rent to purchase a healthy diet. The family scenarios described which receive their sole source of income from the Unemployment, Domestic Purposes and Sickness benefit were even worse off. A family receiving the Unemployment Benefit and living in a Housing New Zealand house (Scenario 3) would need to spend 52.4% of net income and 66% after accommodation costs to purchase a healthy

diet. A family in similar circumstances but renting a house (Scenario 4) at \$236 a week (based on Work and Income average weekly regional rents [31]) would need to spend almost 44% (net income) and 75% after rental costs. A sole beneficiary on the Domestic Purposes Benefit with 2 young children (Scenario 5) needed 23.4% of net income or 42.3% after rent to purchase food to meet a healthy eating pattern. Having younger children helps to reduce food costs. Food costs for older children are higher and increase percentages considerably. Almost 49% of net income or 74% after a family on the Sickness Benefit pays rent (Scenario 6) would be required to cover expenses of \$337 if a healthy 'basic' diet were to be consumed. A disposable income of only \$120 each week would remain after rent for this family of six, to purchase all other sundries including household and personal cleaning products, power, transport, telephones and clothing.

The impact of the governments 2010 budget [22] and increasing GST on food appears to have been offset by rising income levels and tax reductions. However it remains clear that increased costs of any kind have major impacts on the purchasing power of families on low incomes which impacts on their ability to provide for the nutritional needs of their families.

It is evident that food insecurity and 'food stress' is widespread in the community [4]. Families earning low incomes and receiving benefits need to spend a high proportion of their income to purchase a healthy diet and are likely to have little option but to compromise

their food choices to be able to provide for the many competing expenses of daily life. Lack of income is likely to explain why there has been an increase in waged people anecdotally accessing food banks and is a major contributing factor to poor food choices, obesity and health related conditions. The knowledge that poor food choices can stem from a lack of money raises the concern about the feasibility, futility and ethics of promoting healthy diets to such groups. This further raises the concern for the short and long term nutritional status of many growing families.

This report has highlighted the extent of financial difficulties faced by people on low incomes and in particular the difficulties and inequity in purchasing basic healthy foods to meet essential dietary needs. Reducing rising obesity and nutrition related disorders especially amongst low socioeconomic groups will require much more than developing personal budgeting, cooking and nutrition skills. To adequately address and reduce nutrition related health conditions the complex issues of improving access to sufficient income and affordable healthy foods need to be tackled. A collaborative approach is needed to work on ways to create debate and work on solutions to address this issue.

Recommendations

Regional Public Health recommends that

- Stakeholders become familiar with the issues of food insecurity in vulnerable families and its impact on healthy food choices and health
- A cross sectoral approach be used to consider food insecurity and ways to impact on adequate income levels and food costs.
- Public debate is created to support finding innovative solutions to enable all people to eat a healthy diet.

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