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Health

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A message from the ACT Chief Health Officer

Welcome to the revamped Bulletin as it enters its seventh year. This Issue covers healthy weight, a topic which was covered in 2013 (Vol 2, Issue 4). Since that time, there have been many positive developments in the ACT related to the Towards Zero Growth Healthy Weight Action Plan which was launched in October 2013 and these are highlighted here.

Why do we worry about unhealthy weight? Obesity is both a disease and a risk factor for a wide range of conditions including cardiovascular disease, diabetes and several cancers. Obesity-related chronic disease is a major contributor to hospitalisation costs and the cluster of poor nutrition, inadequate physical activity and unhealthy weight account for a substantial proportion of the burden of disease in the ACT. The new normal is not normal, with the majority of adults now in an unhealthy weight range. The reasons for this dramatic change over the past 20 years are complex and so are some of the solutions. A multi-sectoral, multi-strategy approach with a long term view offers the best chance for successfully addressing this important population health issue.

Surprisingly small changes in behaviour can make large differences to weight at a population level. For example, changes in what or how much we eat and/or how and how often we move can lead to quick and effective changes in weight. However, it is crucial that these changes happen at scale (that is, a large proportion of the population are making these changes) and that they are sustainable (that is, they become the new normal every day). These changes need not be expensive or difficult. One article in this Issue busts the myth that a healthy diet is more expensive than an unhealthy one. In the ACT, healthy options are widely available and as long as one keeps food intake within the national guidelines, a healthy diet is in fact more affordable than an unhealthy one.

A message from the ACT Chief Health Officer (continued)

One feature of the Healthy Weight Initiative which arose from the Towards Zero Growth plan is a commitment to careful evaluation and monitoring and regular reporting against specific targets. Of 14 targets, we have succeeded in seven, four are so far unchanged from baseline and only one has worsened. The two remaining targets await data which is due in 2018. Most pleasingly, we appear to have maintained zero growth of overweight and obesity in both children and adults. In addition, the ACT has reversed a longstanding national trend by significantly increasing active travel to school. In common with some other jurisdictions, there has been a significant and sustained drop in sugar sweetened beverage consumption by children.

Several articles describe some of the highly innovative approaches taken to addressing overweight and obesity. These have included actions targeting urban design and the workplace, but the strongest impacts have been related to programs directed at school-aged children. The Sugar Swap Challenge used social media influencers to spread the message of alternatives to high energy, low nutrient foods – and it worked. A partnership between two ACT Government directorates and a non-government organisation which has included policy change, resource development, peer support, training and auditing has led to substantial and sustained improvement in the nutritional profile of school canteen food. Engaging and involving children, teachers, parents, non-government organisations and local businesses in program design and implementation have been key elements in success. The Entrepreneurs: It's Your Move program has built on a pilot research project to be transformed into a curriculum product which is being used in 12 Canberra high schools and has attracted a national innovation award.

Many thanks to guest editors Emma Spicer and Merryn Hare and to all the authors who have contributed to this Issue.

Dr Paul Kelly

ACT Chief Health Officer

February 2018

It's Your Move Festival of Great Ideas

Four Canberra high schools recently pitched their entrepreneurial ideas at the It's Your Move Festival of Great Ideas for the chance to secure funding for their healthy school projects.

Entrepreneurs: It's Your Move is a hands on high school subject created by ACT Health and the Education and Training Directorate, in partnership with Canberra-based design thinking agency, ThinkPlace.

Minister for Health and Wellbeing, Meegan Fitzharris was one of three judges on a panel at the Festival of Great Ideas, and said the inspiring pitches from high school students highlight the importance Canberra's youth place on living healthier and more active lifestyles.

Students from Canberra High, Canberra Girls Grammar, Lanyon High, Calwell High and Amaroo School participated in a newly developed curriculum Entrepreneur: It's Your Move to generate and test their innovative ideas, while refining their concepts alongside local business mentors.

Festival of Great Ideas. ACT Health

UPCOMING EVENTS

2-3 May 2018

Public Health Prevention Conference 2018 Sydney

4 May 2018

The Australian Prevention Partnership Centre - Dynamic simulation modelling symposium - Register at preventioncentre.org.au

5-7 June 2018

16th National Immunisation Conference Adelaide

25-27 July 2018

Australian Health Promotion Association Conference (Canberra)

26-28 September 2018

Australian Public Health Conference (Cairns)

20-21 November 2018

Food Futures Conference (Brisbane)

RESOURCES

Health Promotion Grants Program - http://www.health.act.gov.au/healthy-living/health-promotion-grants-program.

Smoke free - www.health.act.gov.au/smokefree.

Health Weight Initiative - www.act.gov.au/healthyliving

Incorporating Active Living Principles into the Territory Plan - https://www.yoursay.act.gov.au/activeliving

Fresh Tastes - www.health.act.gov.au/freshtastes

Kids at Play Active Play - https://goodhabitsforlife.act.gov.au/kids-at-play/

Good Habits for Life - https://goodhabitsforlife.act.gov.au/

Ride and Walk to School - https://goodhabitsforlife.act.gov.au/ride-or-walk-to-school/rwts-home

It's Your Move - http://www.health.act.gov.au/healthy-living/healthy-children-and-young-people/its-your-move

Healthier Work - http://www.healthierwork.act.gov.au/

Public transport waiting areas now smoke free

From 1 October 2017, all public transport waiting areas in the ACT are now smoke and vaping free. Public transport waiting areas – bus stops, taxi ranks and bus and train stations, including the Jolimont Bus Station and the Canberra Train Station – are now designated as smoke-free areas. This means no smoking or vaping at public transport stations or within five metres of a bus or taxi stop.

Other than at the Civic Bus Interchange, the smoking ban applies at all times even if public transport is not in operation and while an educative approach is preferred in enforcing this law, people may be fined for smoking in a declared smoke-free area.

This will improve people's experiences of catching public transport and a major public health benefit by limiting the harmful effects of passive smoking.

Tobacco smoking remains a leading cause of preventable death and disease in Australia. When in close proximity to someone who is smoking, bystanders can be exposed to harmful levels of second-hand smoke.

Evidence also shows that smoke-free outdoor areas can reduce the exposure of children and young people to role-model smoking, and help to prevent the uptake of this addiction. Further information: www.health.act.gov.au/smokefree.

Smoke free public transport. ACT Health

ACRONYMS

ABS-NHS	Australian Bureau of Statistics' National Health Survey
ACT-GHS	ACT General Health Survey
ACTHPGP	ACT Health Promotion Grants Program
ACTPANS	ACT Physical Activity and Nutrition Survey
AGTHE	Australian Guide to Healthy Eating
ASAP	Australian Standardised Affordability and Pricing Survey
ASSAD	Australian Secondary School Alcohol and Drug Survey
BMI	Body Mass Index
CVD	Cardiovascular disease
ECEC	Early childhood education and care
EPSDD	Environment, Planning and Sustainable Development
FACT	Freestyle ACT
FMS	Fundamental movement skills
GHfL	Good Habits for Life
GST	Goods and Services Tax
HWAP	Healthy Weight Action Plan
HWI	Healthy Weight Initiative
IOTF	International Obesity Taskforce
IYM	It's Your Move
KAPAP	Kids at Play Active Play
NCD	Non-communicable chronic diseases
PL	Professional learning
ROI	Return on investment
SEIFA	Socio-Economic Indexes for Areas
SOSE	Studies of society and environment
STEM	Science, technology, engineering and mathematics
WHO	World Health Organization
YMCA	Young Men's Christian Association
YTD	Year to date

Why is weight status a useful indicator of population health?

Dr Ginny Sargent, Health Improvement Projects, Population Health Protection & Prevention

To begin this issue of the Population Health Bulletin, which is focused on the topic of Healthy Weight, it is useful to first consider why weight status is a useful indicator of population health.

Population health involves the science of monitoring the health of a population and intervening with the aim of keeping people healthy. This is achieved through actions to prevent known risk factors for disease, hence preventing the transmission of communicable diseases and preventing and delaying the onset of non-communicable diseases. The ultimate aim is for the population to have a high life expectancy with high quality of life and minimal years lost to preventable ill-health.

Introduction

Weight and weight status

An increase in body fat (adiposity) is a normal homeostatic response to high levels of energy availability (through food and drinks) and low levels of obligatory requirements for physical activity, leaving excess energy to which the metabolic response is the storage of this excess energy in adipose tissue, resulting in weight gain.

The Body Mass Index (BMI) is calculated from height and weight using a standard formula (kg/m^2) and is the standard measure of body composition as it is quick, inexpensive and non-invasive. It is widely acknowledged that there are limitations to using BMI as an indicator of adiposity, for example, a person with high muscle mass will also have a high BMI. However, at a population level, BMI has consistently proved a useful proxy for adiposity.[1]

Analysis of life insurance data in the early 20th century was the first to reveal an association between increased levels of adult adiposity (measured using body fat mass), and decreased life expectancy. This was evident for those with 20 percent more fat mass than those with the highest life expectancy for a particular age, height and sex (the 'normal' group).[2] Subsequently, weight status of adults has been classified variably into 'underweight', 'normal weight' (sometimes referred to as 'healthy weight'), 'overweight' and 'obese' categories which are now defined using standard BMI cut-offs (Table 1).[3]

The population health concern regarding obesity is based upon further evidence that groups of adults with a BMI classified in the obese categories (class I, II and III) are at an increased risk of developing certain diseases as well as premature mortality.[4] There is limited evidence that the overweight category carries a higher risk of diseases associated with obesity, but strong evidence of a higher risk of moving into the obese category.[5] A recent meta-analysis of longitudinal data correlating BMI and mortality, confirmed that an adult BMI between 22.5 and 25 kg/m^2 was associated with the lowest risk of mortality.[5]

For children, the International Obesity Taskforce (IOTF) developed international population BMI cut-off points for increased risk of diseases associated with obesity by extrapolating the trajectories of childhood growth data with adult BMI categories.[6-8]

Classification	BMI(kg/m^2) Principal cut-off points
Underweight	<18.50
Normal weight	18.50 - 24.99
Overweight	25.00 – 29.99
Obese class I	30.00 - 34.99
Obese class II	35.00 - 39.99
Obese class III	≥40.00

Table 1. Weight status by BMI using the international classification of underweight, overweight and obesity according to BMI (sourced from WHO 2016 [3])

Why is weight status a useful indicator of population health? (continued)

It is useful to acknowledge that these BMI cut-offs of weight status categories (Table 1) are historical and contested but they have proved useful to assess relative risk of morbidity and mortality.[1,2] Hence, the continued use of standard cut-offs for classifying weight status is appropriate, as a standard is needed also for a comparison against which changes in weight status distribution can be monitored over time.[9]

Population weight status trends

The distribution of weight status in the global population has changed significantly over the last 40 years. According to World Health Organization (WHO), rates of obesity have more than doubled worldwide since 1980, and as at 2014 over 1.3 billion adults (39 percent) were classified as overweight, with 600 million (13 percent) more in the obese category.[3] Furthermore 41 million children under five years of age 5 were classified as overweight or obese in 2014.[3] Globally there are more people overweight than underweight; this situation is reflected in most regions of the world, other than parts of sub-Saharan Africa and Asia.[3]

Over time, the category termed 'normal weight' has become a misnomer, as in many countries the majority of the population are now classified above 'normal weight'. For example, in 2014-15 in Australia, 63 percent of Australians aged 18 years and over were classified as overweight or obese, up from 56 percent in 1995.[10] Over a similar period, the proportion of the population in the categories of normal weight and overweight have decreased (Figure 1), whilst the proportion in the obese category has increased.[10]

Ideally the dynamics of weight gain and loss and incidence of overweight and obesity over the life-course would be monitored to identify opportunities for age-appropriate population level interventions. However, this level of monitoring is seldom feasible at the population level. Hence monitoring of changes in weight status in a representative cross-section of the population is standard for monitoring at the population level (for more on measuring, refer to Hughes et al in this issue).

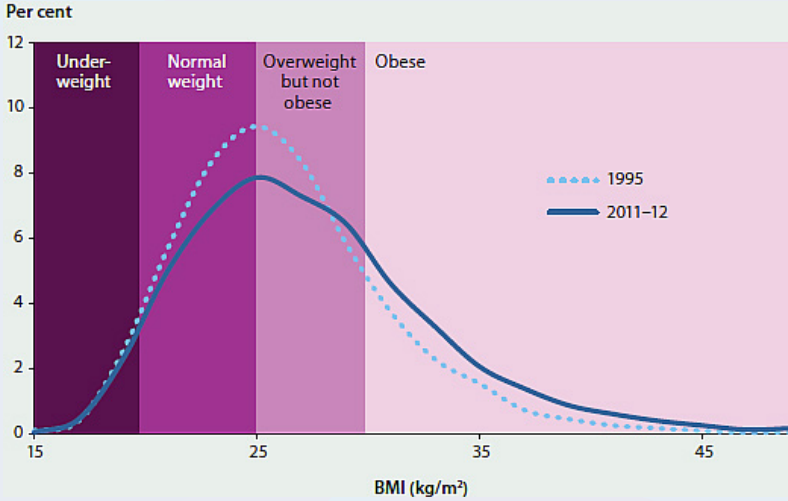


Figure 1 Distribution of BMI in Australian adults – 1995 compared with 2011-12, reproduced from AIHW 2016 [10]

The association between obesity and non-communicable chronic diseases (NCD)

Rises in the proportion of the population that can be categorised as overweight or obese has been accompanied by an increase in preventable non-communicable chronic diseases (NCD). An association with obesity has been shown for: type 2 diabetes mellitus, cardiovascular disease, stroke, coronary heart disease, gallbladder disease, obstructive sleep apnoea, asthma, chronic obstructive pulmonary disease, arthritis, some cancers, polycystic ovarian syndrome, chronic inflammation, chronic kidney disease, non-alcoholic fatty liver disease and orthopaedic problems. [4, 11-14] These studies tell us that there is a positive association between high BMI (particularly BMI>40) and the incidence of these chronic diseases, but that only a minor proportion of the incidence of these chronic diseases can be attributed to high BMI (population attributable fraction), with the remainder being attributable to other risk factors.[15] It is important to acknowledge that a substantial proportion of adults who would be classified as overweight (51.3 percent) or obese (31.7 percent) display no detectable signs of

Why is weight status a useful indicator of population health? (continued)

chronic disease, and have one or none of the metabolic indicators with which obesity is associated.[16] On the contrary 23.5 percent of 'normal weight' adults do have two or more of these metabolic risk factors for chronic disease with which obesity is associated.[16]

The evidence is stronger for a causal relationship between obesity and type 2 diabetes mellitus, and joint problems. [17,18]

Population health approaches to maintaining healthy weight status

Monitoring population weight status across age groups is important to inform decisions about appropriate population level actions that can be taken to reduce the risk of developing preventable chronic diseases at the population level. Analysis of the population distribution of weight status not only identifies the levels of population exposure to environments that encourage healthy behaviours (such as keeping active and healthy eating), but where potential leverage points might be, for example age groups and settings. Once identified, these may be amenable to modifications that increase health behaviours and reduce weight gain across the population.[19]

In the ACT, preventing an increase in the proportion of children and adults in the overweight and obese categories were the long term targets for the whole-of-government Healthy Weight Initiative.[20] More on the population wide actions of the Healthy Weight Initiative are reported in this and previous issues of the Population Health Bulletin and in the reports. [21,22] The other measures being monitored are indicators of intermediate outcomes, including indicators of changes in environments that support healthy behaviours, health literacy and attitudes of the population, and participation in behaviours (specifically healthy eating and physical activity) that support health.[21,22]

Conclusion

Obesity is one of the human biological responses to living in an environment in which healthy choices are not the intuitive ones for the majority of the population hence energy can be easily consumed and preserved. Population level monitoring of weight status is a pragmatic approach to monitoring population level risks of developing NCD. In summary, the reasons why distribution of weight status is a useful indicator of population health, are that:

- Height and weight are easy to measure (no need for biochemical tests) or can be self-reported. Even though we know when people self-report there is an overall underestimation of weight and an overestimation of height, these inaccuracies are well understood and can be adjusted for in the analyses. BMI is easy to calculate from height and weight and standard BMI cut-offs are used to classify weight status;
- Weight status of the population, (according to 'underweight', 'normal weight', 'overweight' or 'obese' categories I, II, and III, refer to Table 1) indicates population level risk of developing chronic diseases that are associated with, but not necessarily caused by, obesity; and
- Population weight status is a useful indicator of the level of population exposure to environments that encourage healthy behaviours (such as keeping active and healthy eating) or limit access to health promoting options.

Hence monitoring population weight status informs actions that can be taken to modify risk factors at the population level and reduce the population risk of developing preventable chronic diseases.

Why is weight status a useful indicator of population health? (continued)

References

1. *Must A, Anderson SE. Body mass index in children and adolescents: considerations for population-based applications. Int J Obes (Lond). Apr 2006;30(4):590-594.*
2. *Eknoyan G. Adolphe Quetelet (1796-1874)-the average man and indices of obesity. Nephrology Dialysis Transplantation. January 1, 2008 2008;23(1):47-51.*
3. *World Health Organization. Obesity and overweight fact sheet. June 2016.*
4. *World Health Organization Consultation on Obesity. Obesity: preventing and managing the global epidemic: report of a WHO consultation. Geneva: World Health Organization Technical Report Series;2000. 894.*
5. *Prospective Studies Collaboration. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. The Lancet. 2009;373(9669):1083-1096.*
6. *Cole T, Bellizzi M, Flegal M, Deitz W. Establishing a standard definition of child overweight and obesity worldwide: International survey. British Medical Journal. 2000;320:1240-1243.*
7. *Cole TJ, Flegal KM, Nicholls D, Jackson AA. Body mass index cut offs to define thinness in children and adolescents: international survey. Bmj. Jul 28 2007;335(7612):194.*
8. *Cole TJ, Lobstein T. Extended international (IOTF) body mass index cut-offs for thinness, overweight and obesity. Pediatric obesity. Aug 2012;7(4):284-294.*
9. *Denney-Wilson E, Booth ML, Baur LA. Development of the Australian standard definition of child/adolescent overweight and obesity. Nutrition & Dietetics. June 2003;60(2).*
10. *Australian Institute of Health and Welfare. Australia's health 2016. Canberra: AIHW;2016.*
11. *Lobstein T, Baur L, Uauy R. Obesity in children and young people: a crisis in public health. Report of the International Obesity Task Force Childhood Obesity Working Group; May 2004. 1467-7881 (Print).*
12. *Reilly JJ, Kelly J. Long-term impact of overweight and obesity in childhood and adolescence on morbidity and premature mortality in adulthood: systematic review. International Journal of Obesity. 2011;35:891-898.*
13. *World Health Organization. Diet, nutrition and the prevention of chronic diseases. Report of a joint WHO/FAO expert consultation, 28 January - 1 February 2002. Geneva: World Health Organization;2003.*
14. *Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. JAMA. 2003;289(1):76-79.*
15. *Australian Institute of Health and Welfare. Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011. 2016.*
16. *Wildman RP, Muntner P, Reynolds K, et al. The obese without cardiometabolic risk factor clustering and the normal weight with cardiometabolic risk factor clustering: prevalence and correlates of 2 phenotypes among the US population (NHANES 1999-2004). Archives of Internal Medicine. August 11, 2008 2008;168(15):1617-1624.*
17. *Al-Goblan AS, Al-Alfi MA, Khan MZ. Mechanism linking diabetes mellitus and obesity. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy. 12/04 2014;7:587-591.*
18. *Wills M. Orthopedic complications of childhood obesity. Pediatric physical therapy: the official publication of the Section on Pediatrics of the American Physical Therapy Association. Winter 2004;16(4):230-235.*
19. *Gill T, Hector D, Rissel C, et al. Whole of government obesity prevention interventions: a rapid review. Sax Institute;2013.*
20. *ACT Government. Towards Zero Growth: Healthy Weight Action Plan. 2013.*
21. *ACT Government. Healthy Weight Initiative Progress Report to June 2016. Canberra ACT 2016.*
22. *ACT Government. Healthy Weight Initiative 2016-17 Progress Report. Canberra ACT 2017.*

Healthy Weight Initiative – Where are we now?

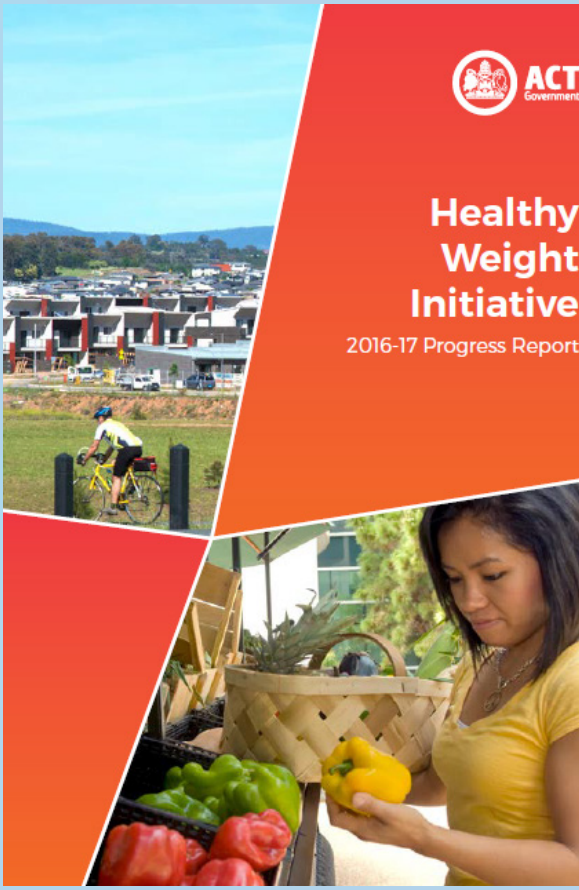
Bronwyn Wilkes, Dr Ginny M Sargent, Erica Nixon
Health Improvement Projects, Population Health Protection & Prevention
Andrew Hogan, Kirsten Rae, Workplace Safety and Industrial Relations, Chief Minister, Treasury & Economic Development Directorate

Introduction

In the ACT, the rate of overweight and obesity in adults grew from 44.9 percent in 1995[1] to 63 percent in 2011-12.[2] In response, the ACT Government released a document, the Towards Zero Growth: Healthy Weight Action Plan (HWAP),[3] outlining an approach to halt the rising rates of overweight and obesity in adults and children. Since the launch of the HWAP, various other activities have been instigated that contribute to addressing overweight and obesity and (together with the HWAP) come under the banner of the Healthy Weight Initiative (HWI).

The HWI is a whole of government approach to influence factors which contribute to weight gain at the population level and are associated with the incidence of non-communicable chronic diseases.[4] The HWI focuses on making systemic improvements to active living environments and food environments so that these environments support people living in Canberra to be active and eat well.

Numerous HWI activities have been operating since 2014. The HWI actions are grouped under six thematic focus areas for implementation: Schools, Workplaces, Food Environment, Urban Planning, Social Inclusion, and Information and Data (previously known as Evaluation). Initial activities were developed by a whole of government taskforce, with representation from each ACT Government directorate as well as the community sector and academic experts. Additional activities have been included as the HWI has progressed.[5-7] Each year since 2015 the HWI has published a report outlining activities that have been undertaken across the implementation areas. The most recent of these reports was released in June 2017 and is available at www.act.gov.au/healthyliving



Healthy Weight Initiative: Progress Report 2016-17

Monitoring progress

The progress of the HWI is being evaluated against health outcomes grouped under three headings as follows:

- Healthy weight: Achieving zero growth in the proportion of the population who are classified as overweight and obese.
- Healthy eating: Increasing the proportion of the population who are consuming adequate daily serves of fruit and vegetables, and reducing children's consumption of sugar-sweetened drinks.
- Active living: Increasing the proportion of the population who are participating in adequate levels of physical activity and participating in active travel to and from work or school.

Targets have been outlined for each of these health outcomes. The targets were established based on previous national partnership targets, national guidelines (Australian Dietary Guidelines, Physical Activity and Sedentary behaviour Guidelines) and other ACT Government policies (e.g. Transport for Canberra). Progress towards these targets are being monitored as data becomes available from the best available local and national data sets. Further details of the data sources are provided in the Healthy Weight Initiative 2016-17 Progress Report.[7]

A summary of the targets and preliminary indication of progress as at June 2017 were reported in the 2016-17 progress report and are reproduced in Figure 1. Preliminary results suggest that: progress towards the target has been made against seven indicators; there has been no change in four indicators; and there has been a trend away from the target in one indicator. Whilst this represents generally positive progress, there remains scope for further improvements, particularly with respect to increasing consumption of vegetables, as well as increasing the proportion of primary school children meeting physical activity guidelines.

	Target description	Baseline 2010-2012	2013	2014	2015	2016	Target 2018	Preliminary indication of progress
Healthy weight*	Zero increase in proportion of overweight and obese adults	63		63			≤63	✓
				% of adults				
	Zero increase in proportion of overweight and obese children	26		25			≤26	✓
				% of children				
	Zero increase in proportion of overweight and obese kindergarten children	16	15	15	16	16	≤16	✓
				% of children in kindergarten				
Healthy eating*	Increase daily serves of fruit consumed by adults	1.8	1.7	1.8	1.9	1.7	2	=
				average daily serves of fruit				
	Maintain daily serves of fruit consumed by children	2	2	2	2	2	2	✓
				average daily serves of fruit				
	Increase daily serves of vegetables consumed by adults	2.5	2.6	2.6	2.5	2.6	5	=
				average daily serves of vegetables				
	Increase daily serves of vegetables consumed by children	2.3	2.3	2.3	2.3	2.3	4.5	=
				average daily serves of vegetables				
	Reduce regular consumption of sugar-sweetened drinks by children	36	29	30	25	23	27	✓
				% of children				
Active living*	Increase adults meeting physical activity guidelines	59	52	60	64	59	67	=
				% of adults				
	Increase primary school children meeting physical activity guidelines	19			15		21	✗
					% of Year 6 children			
	Increase adults using walking and cycling to get to work	7.7					12.5	?
				% of adults				
	Increase children using walking and cycling to get to school	34	37	35	35	39	39	✓
				% of children				
	Increase adults using public transport to get to work	7.8					10.5	?
				% of adults				
	Zero increase in children exceeding screen time guidelines**	44	43	35	42	45	≤44	✓
				% of children				

✓ Early signs of progress towards the target
= No change towards or away from target
? No census data as yet
✗ Trend away from target
* Refer to **Figure 5** for a detailed description of the targets and data sources.
** The proportion of children exceeding screen time guidelines was slightly higher in 2016 but has not significantly increased from the baseline figure.

Figure 1. Healthy Weight Initiative targets and preliminary indications of progress (reproduced from the HWI 2016-17 Progress Report (7))

It should be noted that the HWI targets are long term goals and achieving them may be considered as a marathon rather than a sprint.[3] Given the complexity of factors that influence overweight and obesity, it will take some time to address the contributing social and environmental changes that have occurred over recent decades. Sustained efforts will be required to ensure progress continues to be made in years to come, to maintain the headline target of zero growth and the concomitant improvements in health and well-being across the ACT community.

What's next?

The ACT Government has committed to building on the progress made under the HWI by implementing a broader preventive health strategy that will address the following risk factors for non-communicable diseases: smoking; harmful alcohol consumption; poor nutrition; physical inactivity; and high BMI.

The preventive health strategy is being developed through a collaborative cross-sector process, the first step of which was taken in April 2017 with the ACT Government hosting a Preventative Health Forum that brought together international health experts and local community groups. A subsequent Forum was held in November 2017, and further stakeholder activities are planned for early 2018.

References

1. *O'Brien K, Webbie K. Are all Australians gaining weight? Differentials in overweight and obesity among adults, 1989–90 to 2001. Canberra: Australian Institute of Health and Welfare, 2003.*
2. *Australian Bureau of Statistics. Australian Health Survey: First Results, 2011-2012. 2012.*
3. *ACT Government. Towards Zero Growth: Healthy Weight Action Plan. 2013.*
4. *Australian Institute of Health and Welfare. Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011. 2016.*
5. *ACT Government. Healthy Living 2014-15 Report. Canberra ACT: 2015.*
6. *ACT Government. Healthy Weight Initiative Progress Report to June 2016. Canberra ACT: 2016.*
7. *ACT Government. Healthy Weight Initiative 2016-17 Progress Report. Canberra ACT: 2017.*

How affordable is a healthy diet in Canberra?

Kathleen Graham, Health Improvement Projects, Population Health Protection & Prevention

Research supports cost as being an important factor in the purchase of food and drinks. This becomes a public health issue when affordability results in a reassessment of purchases which favours consumption of an unhealthy diet. In 2015, the Australian Standardised Affordability and Pricing (ASAP) survey was used to assess the price and affordability of a healthy diet compared to that of an unhealthy diet in Canberra, Australia. The survey methodology involved pricing food and drink items from a range of food outlets in locations selected to be as representative as possible of Canberra's population, and compared these prices to Canberra's median household income and an indicative low (minimum) household income. Food and drink items which were priced and compared represented an unhealthy (current) and healthy (recommended) diet based on national consumption data from the 2011-12 National Nutrition and Physical Activity Survey.

Food shopping. ACT Government

Unexpectedly, the results of Canberra's ASAP survey showed that the cost of a healthy diet was between 65 to 90 percent of the cost of an unhealthy diet across the range of reference household structures, making it more affordable for all household types. The higher cost of the unhealthy or current diet was due to the inclusion of discretionary food and drink items, which comprised between 50 and 60 percent of the total cost. Of concern is the finding that the cost of including discretionary items in the diet was being offset by purchasing less than the recommended amounts of food and drinks needed for good health. Results from Canberra's ASAP survey suggest that future initiatives to encourage healthy eating should consider how best to communicate the findings that the recommended diet for health is also a less expensive and more affordable way to eat for everyone.

CASE STUDY

Research supporting the perception that a healthy diet is becoming less affordable was recently reported in an address at the launch of the American Chamber of Commerce in Sydney on 27 July 2017.[1] The research, which was conducted by NERA Economic Consulting, found that the rise in the cost of living across all regions of Australia has placed significant pressure on household budgets with less being spent on fresh produce and meat in a trade-off to contain costs. Is this 'trade off' unavoidable when for health and wellbeing the *Australian Dietary Guidelines* outline that: vegetables and legumes; fruit; grains and cereals; lean meats and poultry, fish, eggs, tofu, nuts and seeds; and milk, yoghurt, cheese and their alternatives should form the basis of our everyday diets?[2]

In 2015, the perception that healthy foods are more expensive than unhealthy foods was tested by work managed through The Australian Prevention Partnership Centre using the Australian Standardised Affordability and Pricing (ASAP) Survey. Using a standardised tool, which was piloted in 2014, the ASAP survey assesses the relative price and affordability of a healthy diet with that of the current (unhealthy) diet.[3] The methodology involves the collection of price data for specified food items from selected food outlets and compares these to the median household income and a low indicative household income for reference household structures. Currently, there are no other known standardised tools and protocols which assess the relative price and affordability of healthy and unhealthy diets in Australia or globally.[4]

Testing the cost of a healthy diet in Canberra

The 2015 ASAP survey covered six locations in Canberra. Pricing data in each location were collected from a Coles, IGA, Woolworths and Supabarn supermarket; two major takeaway food chain outlets; an independent takeaway or service station offering fast food; and two alcoholic liquor outlets. To ensure the sampled locations were as representative as possible, the 100 Statistical Area Level 2 locations in Canberra were stratified by Socio-Economic Indexes for Areas (SEIFA)* quintile and two locations within SEIFA quintiles 1, 3 and 5 were selected randomly.

The food and drink items in the current (unhealthy) diet reflected national consumption data and included discretionary food choices (i.e. food and drinks of poor nutritional value that are generally high in kilojoules (energy), saturated fat, added sugars and/or salt). Items in the healthy diet reflected *Australian Guide to Healthy Eating* (AGTHE) food group recommendations and, in line with dietary recommendations, did not include discretionary choices. Results of the survey were reported by household structure and SEIFA quintile.[#]

*SEIFA is a product developed by the Australian Bureau of Statistics which ranks areas according to relative socio-economic advantage and disadvantage. The indexes are based on information from the Census, including income, education and occupation.

[#]To allow easy comparison, the five reference household structures referred to in the 2015 Canberra ASAP survey match those used previously in Australian state and territory food price surveys.

What the testing found

Overall, little variation - around 2 percent - was found in the price of food items by SEIFA quintiles in the six locations surveyed. Furthermore, contrary to expectations, the results showed that the cost of a healthy diet was less than that of the current (unhealthy) diet and therefore more affordable and for all five reference household structures. The healthy diet sampled cost 82 to 90 percent of the cost of the current (unhealthy) diet for all reference households with children, 90 percent of the cost of the current (unhealthy) diet in households of two elderly adults, and 65 percent of the cost of the current (unhealthy) diet in single male households.

The higher cost of the current (unhealthy) diet could be attributed to the purchase of discretionary food items, which were found to comprise over half (50 to 60 percent) of the cost of the current diet. This was true for all surveyed locations. Expenditure on takeaway foods ranged from 6 to 18 percent of the total food spend, and was up to 4 percent for sugar sweetened drinks. Households with children expended the most on these discretionary food categories. Expenditure on alcoholic drinks ranged from six to 23 percent across all reference households. Households with two elderly adults spent around 19 percent of their total food cost on alcoholic drinks while the highest expenditure at around 23 percent was in single male households.

Conversely, the high spend on discretionary food items was reflected by an expenditure less than half that needed to meet the dietary recommendations (for all reference household structures). Expenditure in the current (unhealthy) diet on fruit, vegetables and legumes was 13 to 19 percent of the total food spend rather than around the 29 percent ?estimated to meet dietary recommendations. For grains and cereals, expenditure was 5 to 7 percent but needed to increase to 12 to 19 percent; expenditure on meat, poultry, fish, eggs and plant alternatives was 12 to 17 percent but needed to increase to 28 to 31 percent; and expenditure on milk, cheese and yoghurt was 5 to 8 percent but needed to increase to between 16 to 29 percent to meet dietary recommendations.

Although prices varied little across the surveyed locations, a healthy diet was more affordable for low income households than the current (unhealthy) diet, particularly for those households in the most disadvantaged locations (SEIFA quintile 1) compared to those in the least disadvantaged locations (SEIFA quintile 5). Affordability of a healthy diet as a proportion of disposable incomes for low income households was 21 percent for the reference household of two elderly adults, 28 percent for the household of two adults and two children, and 33 percent for a household of six.

A policy change to expand the base of the Goods and Services Tax (GST)

Food shopping. Public Health Image Library

to include fresh healthy food – currently exempt from the GST – would increase the cost of the healthy diet by $58 per fortnight for the reference household of two adults and two children. The price of the current (unhealthy) diet would increase by $27 per fortnight. However, a policy change to increase the GST to 15 or 20 percent (without expanding the base items to which the tax applies) would result in little change to the cost of a healthy diet and a greater cost increase to the current (unhealthy) diet, thereby making the healthy diet 7 to 9 percent more relatively affordable than the current (unhealthy) diet.

Conclusion

Findings from the 2015 Canberra ASAP survey provide useful insights into the costs and relative affordability of a healthy diet compared with the current (unhealthy) diet. Importantly, the results show that households spend more on the current (unhealthy) diet than is needed to support healthy eating. This was true across all reference household structures and suggests that efforts to support healthier food choices should address the assumption that a healthy diet is more expensive than an unhealthy diet.

Levels of expenditure on alcohol, which was particularly high among single male households at almost one quarter (23 percent) of the total food budget, is also worth noting.

An important finding is provided in relation to food security. The ASAP survey showed that low income households with children spent between 31 and 39 percent of their disposable income on the current (unhealthy) diet, which is higher than the estimated 30 percent of income used to indicate diet affordability.[2] Shifting to a healthy diet would reduce the total amount spent on food to between 28 and 33 percent of disposable income.

Limitations to be aware of with the Canberra ASAP survey include: the small sample size of six locations, which limits the extent to which the results can be generalised; the cost of the current diet, which is based on national consumption data and may not reflect actual food expenditure in the selected locations; and the assumptions that: there is no home production of food, that food waste is minimal and food distribution within households is equitable. It was also assumed that price and health are key factors in the purchase of healthy foods, although it is acknowledged that other factors, such as convenience and taste, may have an equally large (or larger) influence on food choices.

References

1. *Ryan P. Surging power bills force customers to be unhealthy. ABC news online 2017; 27 July* http://www.abc.net.au/news/2017-07-28/coles-boss-on-energy-bill-fallout/8751852 *(accessed 28 July 2017).*
2. *National Health and Medical Research Council. Australian Dietary Guidelines. Canberra: National Health and Medical Research Council, 2013.*
3. *Lee AJ et al. Testing the price and affordability of healthy and current (unhealthy) diets and the potential impacts of policy change in Australia. BMC Public Health 2016; 16: 315-327.*
4. *Barosh L, Friel S, Engelhardt K, et al. The cost of a healthy and sustainable diet – who can afford it? Aust N Z J Public Health 2014, 38 (1), 7-12.*

Monitoring overweight and obesity in children: the role of survey data

Dr Ann-Maree Hughes, Frances Gibson, Dr Hai Phung, Lindy Fritsche, Epidemiology Section, Population Health Protection & Prevention

The Epidemiology Survey Program administers and manages a series of population health surveys that routinely collect information on health status and behaviours. Some of these data are used in the ongoing evaluation of the ACT Government's Healthy Weight Initiative.

In this article, we describe these population health surveys and the role of survey data in monitoring overweight and obesity in ACT children. We also discuss the recommendations from a recent review and how these are being used to inform next steps.

Introduction

With 1 in 4 Australian children now overweight or obese,1 increasing the proportion of people at a healthy body weight in the population is a major priority.

The ACT Government's Healthy Weight Initiative (HWI)[2] is a whole of government approach that aims to improve the health and wellbeing of ACT residents by supporting them to eat well and keep active.

Core measures of health status and behaviours, including height and weight, physical activity and nutrition, are needed to monitor the health of the ACT population and to measure progress of the HWI. Some of these data are routinely collected at regular intervals in a series of population health surveys, administered and managed by the Epidemiology Survey Program.

ACT Health Population Health Survey Data Collection

The ACT Health Population Health Survey Data Collection includes the ACT Physical Activity and Nutrition Survey (ACTPANS), the ACT component of the Australian Secondary School Alcohol and Drug (ASSAD) Survey, and the ACT General Health Survey (ACTGHS).[3] The Collection covers all ages; specifically, 10-11 year olds in ACTPANS, 12-17 year olds in ASSAD, and children and adults in the ACTGHS.

Scales. Public Health Image Library

ACTPANS

ACTPANS was developed as a surveillance tool to provide information about determinants of healthy weight in upper primary school-aged children. It has been conducted in a sample of Year 6 students in the ACT every three years since 2006. Students (n≈1300) complete a questionnaire about the pattern of physical activity undertaken in and out of school, use of active transport to and from school, frequency and type of foods con-

Monitoring overweight and obesity in children: the role of survey data (continued)

sumed at home and at school, and amount of electronic screen time. Attitudes towards food choices, eating patterns, health and wellbeing and physical activity are also collected and participants have their height and weight measured to calculate their body mass index.

ASSAD

The ASSAD is a national survey coordinated by Cancer Council Victoria, with each of the States and Territories managing the survey within their own jurisdictions. The aim is to monitor and report on the uptake of harmful drug use to support programs designed to improve health, social and economic outcomes for Australians by preventing and reducing the harmful effects of licit and illicit drugs. It has been conducted in a sample of secondary school students (n≈1800) in the ACT every three years since 1996. Students complete a questionnaire on their attitudes to, and use of, tobacco, alcohol, licit and illicit drugs, as well as other health-related behaviours, such as physical activity, screen time and diet.

School students. FreeDigitalPhotos.net

ACTGHS

The ACTGHS is a telephone-based survey that has been conducted annually since 2007. It was developed to obtain health information for the ACT in a timely manner and to address issues around small ACT sample sizes in national surveys and the irregularity of national surveys. Initially, the ACTGHS only included ACT residents living in private households; however, in 2012, mobile phones were incorporated into the survey sample. Participants (adults: n≈1200; children: n≈500) are asked questions about their health status, health behaviours, health service use and satisfaction with health services and about other factors that influence health, including self-reported height and weight.

Additional data sources

ACT Health also has access to additional data sources that provide population prevalence estimates for the ACT, including the Kindergarten Health Check (5-6 year olds) and other Australian household sample surveys, such as the Australian Bureau of Statistics' National Health Survey (ABS-NHS) (all ages).

Use of survey data to monitor overweight and obesity in ACT children

The Body Mass Index (BMI), based on a person's height and weight, is commonly used to measure overweight and obesity.

Rather than taking physical measurements, participants in population health surveys are frequently asked to report their height and weight because it is quicker and more cost-effective to collect. However, self-reported height and weight is less reliable and may, therefore, result in inaccurate estimates of the BMI distribution in a population because, on average, respondents tend to overestimate their height and underestimate their weight.[4]

Monitoring overweight and obesity in children: the role of survey data (continued)

Height and weight is self-reported in ASSAD and ACT-GHS, but ACT Health has access to three sources of measured height and weight in children for calculating BMI: the Kindergarten Health Check, ACTPANS and the ABS-NHS. As a national survey, the ABS-NHS is particularly useful because it allows for comparisons between jurisdictions.

2016 Review

In June 2016, a review[5] of the population health survey program was undertaken by ACT Health to identify data needs, gaps and methodological issues. Despite their limitations (ie. low response rates and lack of accessible mobile phone lists for sampling purposes), the external independent reviewers concluded in their report that sampled health surveys of the ACT population still have a role, and are likely to continue, as they are the least expensive way to obtain population prevalence estimates for health status and health behaviours.

Recommendations from the review included adopting a person-centred focus, instead of a population-centred focus, whereby the emphasis shifts to maximising a person's health and wellbeing at major transition points in their life: birth, pre-school, primary school, secondary school, university/work, family/career, retirement and older age. These review recommendations are under consideration. The ideal model would be one that could identify those at 'high need', who may be particularly vulnerable, and link those individuals to the services they require, whilst continuing to fulfil the population health monitoring role.

Next steps

The ACT Government has committed to implementing a year 7 Health Check program. While still in the early stages of scoping, lessons learnt from existing survey programs and the recent review process will be crucial to determining the best model moving forward. The model will be finalised following stakeholder consultation in 2018.

Obesity in childhood and adolescence may persist into adulthood, but it is not inevitable; this lends support to implementing environmental measures for whole school communities that promote health and wellbeing. Therefore, these population-level data will be used to inform health promotion activities targeted at a critical time in a young person's life – when they are transitioning from primary school to secondary school – and to evaluate such programs.

School students. FreeDigitalPhotos.net

References

1. *Australian Institute of Health and Welfare (AIHW).* http://www.aihw.gov.au/overweight-and-obesity/ *(accessed August 2017)*
2. *ACT Government. Towards Zero Growth: Healthy Weight Action Plan. 2013*
3. *ACT Government. HealthStats. ACT Population Health Data Collections.* http://stats.health.act.gov.au/data-collections *(accessed August 2017)*
4. *Australian Bureau of Statistics. Investigating the discrepancy between measured and self-reported BMI in the National Health Survey. ABS Cat. No 1351.0.55.039. 2012*
5. *Sax Institute. ACT Health Survey Program Review: Focus on Information Systems. 2016*

Active living in the ACT

Kathleen Moorby, Heart Foundation ACT

Currently approximately 40 percent of all adults in the ACT are not sufficiently active to experience health benefits.[1] To encourage higher levels of physical activity and promote health, neighbourhoods in which Canberrans live, work and play should be designed with the right infrastructure to support active living - a way of life that integrates physical activity into daily life, including walking and cycling for transport.

Since 2009 the Active Living Program has been implemented by the Heart Foundation ACT with the support of the ACT Government, to create a built and natural environment that supports a healthier and more active Canberra. To this aim, through research, education, policy development and advocacy, the program has sought to identify and influence ACT Government policies and practices, resulting in Draft Variation 348 (DV348) 'Incorporating the Active Living Principles into the Territory Plan', a change in the attitudes, behaviours and understanding of active living concepts by ACT Government officials and employees and the increased prioritisation of government funding towards active living initiatives in the ACT.

Active Living in the ACT

Similar to National trends, nearly two thirds of the ACT adult population and a quarter of children are overweight or obese.[2] The implications are significant for future health care expenditure and the burden of disease. Being obese increases the risk of developing chronic diseases such as cardiovascular disease (CVD), diabetes and some cancers. Health expenditure is expected to increase by more than 250 percent by 2031-2032 for cardiovascular disease and type 2 diabetes, and by 221 percent for all diseases.[2] In addition, hospital based services expenditure is projected to increase by 274 percent, out-of-hospital medical services by 162 percent and pharmaceuticals by 108 percent in the next two decades.[2]

Physical activity is an established key modifiable lifestyle behaviour in the prevention of chronic diseases and the maintenance of a healthy weight. Physical inactivity, insufficient levels of activity to achieve health benefits, is ranked second to tobacco as a behavioural risk factor in the global burden of disease.[3] Integrating incidental and recreational physical activity (active living) into people's daily lives is an important means to increase population levels of physical activity and subsequent health benefits.[4] Several factors interact to motivate, support and provide opportunities that encourage and facilitate physical activity including:

- Individual factors - knowledge, attitudes, values, skills and self-efficacy;
- Social environmental factors - social support, someone to talk with and social norms (a belief of belonging to a group that has shared values and morals); and
- Built environment factors - as part of the Active Living Program, the ACT Government, in collaboration with the Heart Foundation ACT, has developed six key Active Living Principles. These Principles are being incorporated into the ACT's planning and statutory framework (the Territory Plan) to influence all aspects of future planning and development.[5]

Active living in the ACT (continued)

ACT Active Living Principles

The social and physical characteristics of the neighbourhoods and communities in which people spend their lives can have a profound effect on the quality of health they experience. For example, increasing urban sprawl has been linked with physical inactivity and obesity.[6] Conversely, walkability, land use mix, density, and access to public transport are beneficially associated with increasing levels of walking and cycling.[7] These built environments prevail for many years, often effecting population health for multiple generations, particularly where associated behaviour change has been achieved and become the new norm.

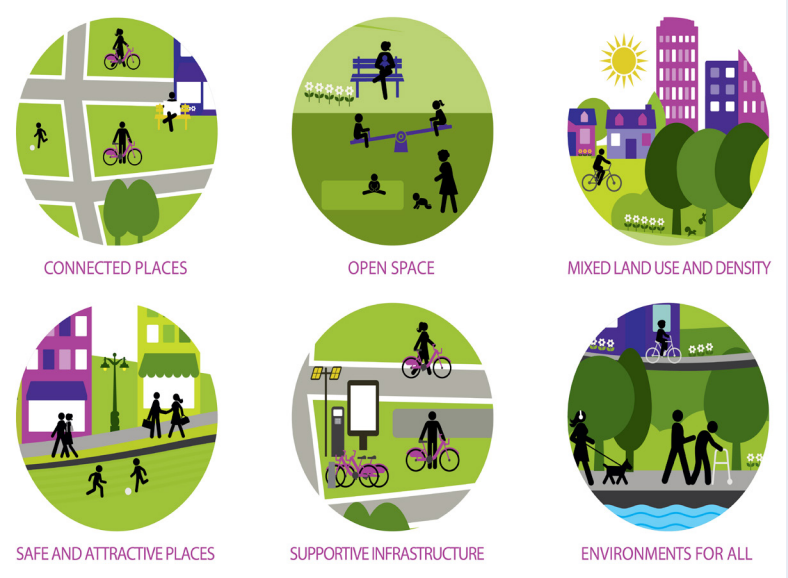


Figure 1: ACT Active Living Principles

Active Living Program

The Active Living Program has sought to identify where ACT Government policies and practices can be enhanced to create a more active and healthy Canberra community.

As a result, Draft Variation 348 (DV348) '*Incorporating the Active Living Principles into the Territory Plan*' has been developed and subsequently approved by the Environment, Planning and Sustainable Development Directorate (EPSDD), and commenced from December 2017.

The Active Living Program has continued to advocate, educate and promote the understanding of the Active Living Principles and active living concepts, obtaining support from government and the built environment sector to support the implementation of active living in the ACT. The key project areas of the most recent version of the Active Living Program were:

- Research into Practice
- Capacity building and awareness raising
- Evaluation

Research into Practice

Four research projects were undertaken including:

- Analysis and advice on the broad quantitative and qualitative benefits of ACT Government investment in urban design and infrastructure to support active living;
- Analysis of available results from the University of Canberra Urban Wellbeing Survey - Crace Study and recommendations regarding approaches to strengthen active living in Crace and in the ACT more broadly;
- Analysis of the relationship between urban planning and cardiovascular disease prevalence and recommendations on possible urban design, infrastructure and planning solutions; and broader lessons for other areas of the ACT to inform master plans and precinct codes; and
- Analysis of the ACT results of the National Cycling Participation Survey, with particular focus on participation of young children.

These projects provide evidence specific to the ACT to support future policy development. For each of these projects, relevant literature and ACT data were analysed and recommendations to support active living were made based on the key findings.

Active living in the ACT (continued)

These projects resulted in the following research papers:

- Economic Benefits of Infrastructure to support Active Living
- Active Living in the ACT: an evidence review
- Approaches to strengthen Active Living in the ACT
- Urban Design, Infrastructure and Planning Solutions to Inform Master Plans and Precinct Codes in the ACT
- Cycling Participation Among Young Children in the ACT

The evidence review was used by EPSDD to support the development of the information paper, Incorporating Active Living Principles into the Territory Plan (available to view at https://www.yoursay.act.gov.au/activeliving).

Capacity Building and Awareness Raising

Capacity building and awareness raising involved the Heart Foundation's Active Living Program team delivering numerous presentations and events to a wide range of audiences to promote the ACT's Active Living Principles and active living concepts, such as the BeActive Seminars, Active Living Presentations and professional workshop series. The six Active Living professional workshops were each based around one of the Active Living Principles related to DV348, namely:

- Workshop 1: *Understanding the fundamentals; liveable environments for all*.
- Workshop 2: *Connected places, making sense of our nature and relationships to space*.
- Workshop 3: *Mixed land use, density and smart urban transformation*.
- Workshop 4: *Safe and attractive places, more than just vibrancy*.
- Workshop 5: *Supportive infrastructure: unleashing creative potential*.
- Workshop 6: *Open space: discover the magic*.

All workshops comprised a mix of theory and practical application (walkshops) where professional learning occurred whilst walking around a specific neighbourhood.

Promotional events – the Active Living Program team worked with the Active Travel Office to promote the Active Living Principles and Active Travel. Key events were the launch of the 'Park&Pedal' pilot program, a 'Jane Jacobs' walk (a citizen-led walking tour towards community-based city building and neighbourhood urban planning) as well as a workshop for ACT Government employees and Parliamentary Friendship Group for Better Cities forum featuring visiting international practitioner Brent Toderian from Canada.

Walking in Duffy. Heart Foundation ACT

Advisory documents - Three advisory documents were developed for ACT Government practitioners to showcase how to achieve improved active living outcomes and best practice within ACT. Benefits of Infrastructure to Support Active Living and Changes to Support Active Living in the ACT provide an overview of the findings and recommendations from the Active Living Program research projects and ACT Active Living Principles provides an overview of the Principles, including ACT case studies to demonstrate the Principles in action in the ACT.

Active living in the ACT (continued)

Evaluation

Two Active Living Program independent evaluations were commissioned during 2015/2017 resulting in the following reports:

- Active Living Program Evaluation 2012/2015 – desktop review and qualitative interviews (University of Canberra Health Research Institute)
- Active Living Program Evaluation Report (Karen Wright Projects)

These reports detail the positive influence the Active Living Program has had on the attitudes, behaviours and understanding of the Active Living Principles and active living concepts of ACT Government officials and employees. As well as the Program's influence in the creation of the Active Travel Office and the increased prioritisation of government funding towards active travel and public transport, the program has also been supportive of active living measures, especially around creating environments that better support active travel choices and increased multi-modal transport options.

Workshop 6 participation. Heart Foundation ACT

Participants interviewed identified that the Active Living Program had a positive impact on their work and their workplaces and that the Program had been effective in engaging the 'core industry' of government, relevant peak bodies, central stakeholders, the community and academia.

The Program has influenced the significant increase in the number of references made to and incorporation of the Active Living Principles into recent ACT policy and planning documents including the Statement of Planning Intent, various Master Plans and the Territory Plan.

As stated in the Active Living Program Evaluation Report:

"Reflective of the program's success is the fact that the ACT is one of very few jurisdictions in Australia, and in fact worldwide to have comprehensively reviewed and to be incorporating Active Living Principles into a statutory planning document."

These reports have also highlighted that more is still to be done to ensure the effective implementation of active living in the ACT.

Next Steps

The next steps for the Active Living Program will be to ensure the implementation of DV348. This will be achieved through industry engagement and education in the practical implementation of the Active Living Principles and active living concepts, as well as raising the public's awareness of active living, associated benefits and the opportunities available in the ACT to incorporate active living into everyday life.

References

1. *ACT Government. Healthy Weight Initiative Progress Report 2016.*
2. *Nichols M, Peterson K, Herbert J, Allender S. (2015). Australian heart disease statistics. Overweight, obesity and cardiovascular disease – past, present and future. Melbourne: National Heart Foundation of Australia.*

Active living in the ACT (continued)

3. *World Health Organization. (2009). Global health risks: mortality and burden of disease attributable to selected major risks. Geneva, Switzerland: WHO,* http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf *(accessed 02/06/2016)*
4. *National Preventative Health Taskforce. Australia: the healthiest country by 2020. National Preventative Health Strategy - the roadmap for action. Canberra: Commonwealth of Australia; 2009.* http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/nphs-roadmap *(accessed 28/01/2016):*
5. *ACT Government (2016). Incorporating Active Living Principles into the Territory Plan, Draft Variation Number 348. Canberra.* https://www.yoursay.act.gov.au/application/files/3214/8123/2456/20161114-Incorporating-Active-Living-principles-WebAccessible.pdf *(accessed 5/01/2017)*
6. *Garden, F.L & Jalaludin, B.B. (2009) Impact of urban sprawl on overweight, obesity and physical activity in Sydney, Australia. J Urban Health, 86(1), 19-30.*
7. *McCormack, G.R., Giles-Corti, B., Bulsara, M. (2008) The relationship between destination proximity, destination mix and physical activity behaviours. Prev Med, 46(1), 33-40. doi:10.1016/j.ypmed.2007.01.013*

Healthy food and drink policy

From the Healthy Weight Initiative Progress Report 2016 - 2017

School canteens

One of the actions from the ACT Government *Towards Zero Growth: Healthy Weight Action Plan* was the implementation an ACT Public School food and drink policy with supporting resources that mandate the implementation of the National Healthy School Canteen Guidelines in ACT Government schools.

The 2016-17 Healthy Weight Initiative Progress Report School reported that:

- canteens have continued their concerted effort to make changes to meet the guidelines and policy requirements.
- The ACT Nutrition Support Service completed 70 canteen menu assessments in ACT public schools across 2015-16 and 72 to date in 2016-17.
- **GREEN** (healthy) food and drinks now represent 49 percent of all the food and drinks available across public school canteens. The proportion of **RED** (less healthy) food and drinks has dropped from 23 percent to only 3 percent of all food and drink items.

School canteen menu assessments

There has been substantial improvement to the food environment across ACT public schools through the efforts of school canteen managers, with support from the ACT Nutrition Support Service and the Collaborative Working Group on Food at School. This partnership effort has seen an increase in healthy food and drinks and a decrease in unhealthy food and drinks available from canteens across ACT public schools. It is hoped the implementation of similar policies in the Catholic and Independent schools in the ACT will achieve equally positive outcomes.

The ACT Public School Food and Drink Policy, which was introduced in February 2015, highlights guidelines for the types of menu items available in school canteens. The policy uses the traffic light system set out in the National Healthy School Canteen Guidelines to classify food and drink items as **GREEN** (always on the canteen menu), **AMBER** (select carefully) and RED (not recommended on the canteen menu). Under the policy, the majority of food and drink items must be **GREEN**, and no **RED** items should be available.

Healthy School Canteens. ACT Health

As shown in Figure 2, the most recent round of canteen menu assessments conducted by the ACT Nutrition Support Service found that **GREEN** food and drinks now represent 49 percent of all the food and drink items available across ACT public school canteens, up from 32 percent in the previous assessment period. Furthermore, the proportion of unhealthy **RED** food and drinks has dropped from 23 percent to only 3 percent of all food and drink items. This represents a considerable effort by school canteens and is a positive outcome for students health.

A favourable change can also be seen in schools meeting the policy requirements. Among the 72 ACT public school canteens completing assessments during the 2016 - 2017 round:

- 56 percent of canteens met the criteria for a majority of GREEN items (up from 10 percent pre-policy),
- 57 percent of canteens met the criteria for phasing out RED items completely (up from 16 percent pre-policy), and
- 42 percent of canteens met both of the above criteria (up from 8 percent pre-policy).

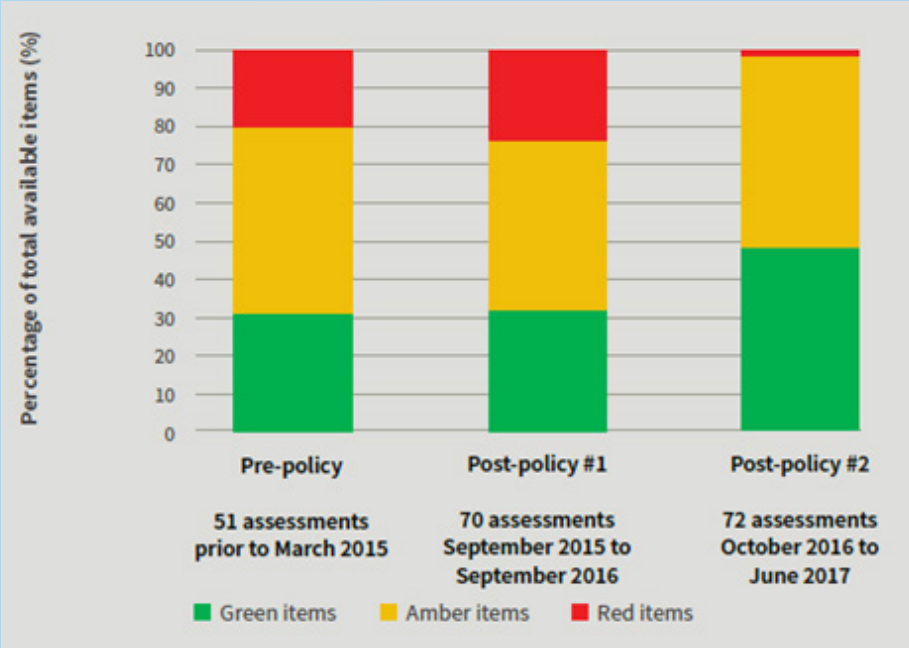


Figure 2: Percentage of all canteen food and drink items according to the traffic light classification system

Further canteen site visit assessments will be undertaken next year to continue to monitor changes in menus and further support schools to meet the policy requirements and increase healthy food and drinks available in canteens.

ACT Government workplaces

Another action from the ACT Government *Towards Zero Growth: Healthy Weight Action Plan* was the to improve the availability of healthy food and drink choices and reduce unhealthy choices at ACT Government workplaces, facilities and government-funded events.

The 2016-17 Healthy Weight Initiative Progress Report reported that:

- The ACT Public Sector Healthy Food and Drink Policy was launched in July 2016 with the aim of increasing the availability of healthier options for ACT public service staff members. It applies to catering, fundraising and food outlets which predominantly provide food and drink to ACT public service staff members.

- As part of the policy, the Healthy Choices Catering Providers List provides staff with a list of menus that meet policy requirements, making it easier to order catering for functions and meetings. There are currently eight providers on the list.
- The second phase of the ACT Public Sector Healthy Food and Drink Policy is under development.
- 124 vending machine assessments were undertaken in 2016.

Healthy food and drink policies

As part of the whole of government approach to improving the availability of healthy food and drink at ACT Government workplaces and facilities, the ACT Public Sector Healthy Food and Drink Choices Policy commenced in July 2016. This policy was introduced following the commencement of the ACT Health Healthy Food and Drink Choices Policy and the ACT Public Sector Healthy Food and Drink Choices Vending Machine Policy in 2014. Food and drink items are classified using the traffic light system as follows:

GREEN food and drinks offer a wide range of nutrients and are generally low in saturated fat, sugar and salt.

AMBER food and drinks contribute some valuable nutrients, but contain more saturated fat, sugar and/or salt than **GREEN** foods and also may provide excess kilojoules.

RED food and drinks are low in nutritional value and may be high in saturated fat, added sugar, excess energy and/ or salt, and do not contribute positively to the diet.

The policies set the following targets for food and drink items available in ACT Government facilities: at least 50 percent of items are **GREEN**, and no more than 20 percent of items are **RED**.

Healthy catering options. ACT Health

Let's swap out the sugar

Susie Leydon and Sommer Sherwood, Health Promotion Section, Population Health Protection & Prevention

The *Good Habits for Life* (GHfL) *Sugar Swap Challenge* was developed with the aim of motivating Canberra families to recognise how much added sugar they are consuming and help them identify healthier options to incorporate into their daily lives. This third active phase of the GHfL campaign featured content written by local social media influencers to encourage people to swap breakfast cereals, snacks and drinks that contain added sugar for healthier options. This article explores the development of the *Sugar Swap Challenge*, the outcomes achieved and recommendations for future campaigns.

Context

Evidence shows that children's food choices are shaped early in life and the link between nutrition and health is well established. A diet high in saturated fat, added sugar and added salt increases the risk of becoming overweight or obese and developing chronic diseases later in life.[1]

Children who are overweight or obese when they are young are not only at increased risk of immediate health problems, they are far more likely to become overweight or obese adults. Current figures show that one in four children in the Australian Capital Territory (ACT) are overweight or obese.[2] While the health of children is influenced by a number of factors, measures to change nutrition behaviour can be taken to reduce negative outcomes. The percentage of children (aged 5-15 years) consuming sugary drinks is decreasing over time (42.7 percent in 2010 to 29.6 percent in 2014 of children drink two or more cups of sugar-sweetened drinks per week).[3] This indicates that although change is occurring, there is an opportunity to address awareness of the health impact of added sugars in food as well as drinks.

Campaign Posters. ACT Health

Let's swap out the sugar (continued)

ACT Health has developed a number of local programs and initiatives aimed at reducing childhood overweight and obesity such as *Fresh Tastes, Ride or Walk to School* and *Kids at Play, Active Play*. Complementing these programs and activities being delivered in the ACT, *Good Habits for Life* (GHfL) is a locally developed social marketing campaign which uses commercial marketing techniques to positively influence behaviour change in its target audience of parents and carers with children aged eight and under. The campaign was informed by a literature review and qualitative and quantitative testing with the Canberra community.

Content produced by social media influencers HerCanberraa and Canberra Raiders

A timely message

There is strong community support for action to reduce children's intake of sugary drinks[3]. Following the successful phasing out of sugary drinks in ACT public schools and the introduction of water refilling stations in schools, parks and public places across Canberra, there was an opportunity to increase knowledge of the food and drinks containing high levels of added sugar.

The *GHfL Sugar Swap Challenge* was developed to challenge families to commit to a 'sugar swap' for four weeks in March and April 2016 and launched by the then Assistant Minister for Health, Meegan Fitzharris MLA.

The *Sugar Swap Challenge* promoted the substitution of sugary cereals, drinks and snacks with healthier options, focusing on food and drinks with added sugars and excluding natural sugars. The challenge sought to encourage families who had started making healthy lifestyle changes to recognise the hidden added sugars in their food and drinks and help them find alternative options to incorporate into their daily routine.

Innovative campaign implementation

The *Sugar Swap Challenge* campaign was implemented with a limited budget. Communication was weighted towards more cost effective digital and social media channels, and the television advertisement used in the previous 2014 and 2015 *GHfL* active campaign waves was updated to include reference to the *Sugar Swap Challenge*. Paid media comprised of advertising (TV, online and social media) and promotional events in shopping centres.

Additional campaign pages and materials were produced for the *Sugar Swap Challenge* and placed on the *GHfL* website where families were encouraged to register their family's sugar swap. Those who registered for the challenge were sent a *Sugar Swap Challenge* Starter Kit which included a recipe book, a nutritional wallet card to help when shopping, along with a printed sugar cube tracker with stickers so that children could build a 'sugar mountain' to track how much sugar they had avoided.

Along with paid advertising on Facebook and Google search activity, dedicated *Sugar Swap Challenge* content including photos, videos and articles were developed. A number of local Canberra based "social media influencers" who could communicate the messages of the challenge to enable stronger engagement with the target audience were enlisted to support the campaign. An innovative approach for government, each influencer was chosen to ensure they were relatable, credible and could reach the target audience. Influencers included registered nutritionist Kate Freeman, local blogger Amanda

Let's swap out the sugar (continued)

Whitley from the HerCanberra website, and players from the professional rugby league team the Canberra Raiders. Each influencer developed content about the *Sugar Swap Challenge* which ran across their respective digital and social media channels for the duration of the campaign.

All campaign content was based on publicly available information from the product's Nutrition Information Panel but presented in a way that could be easily understood. This included a collaboration with The George Institute for Global Health to promote their free FoodSwitch app to help families make informed decisions about what they eat and drink. The free app was available to download to a smartphone from either the Apple App Store or Google Play Store. People use the app to scan the barcodes of packaged food or drink items to help them understand the nutrition content as well as receive suggested healthier products in that category.

Campaign digital images. ACT Health

A simple memory swap online game to enable young children to match two food or drink items that could be swapped (e.g. instead of a chocolate bar, swap for a yoghurt) was also developed and made available via the campaign website.

Sugar Swap dietitian kits and water bottles were also distributed via partnerships with ACT Health Dental Health and Women Youth and Children's teams.

The results

The campaign's effectiveness was measured through a mix of pre and post telephone surveys[4] website and social media analytics.

The campaign results showed that the *Sugar Swap Challenge* message was timely and achieved good reach using innovative social media and web platforms.

Website and Google Analytics data showed that 1,277 people registered for the *Sugar Swap Challenge* – representing a total of 4,286 individual family members. Most registered users chose to swap sugary snacks for the challenge.

Engagement through local social media influencers was positive and achieved a good reach. Through Facebook, Twitter and Instagram it was shown that the campaign was able to reach 772,896 individuals. In addition:

- HerCanberra's editorial content reach was 124,025
- The average amount of time spent on influencers' websites was four minutes and 11 seconds.
- The combined influencers' Facebook, Twitter and Instagram social media posts reached 435,004 users.

Overall 772,896 people were reached via Facebook, including 487,174 people via HerCanberra Facebook content. The top performing social post was from the Canberra Raiders with a reach of 76,235.

A baseline telephone survey was conducted before the *GHfL* campaign launch in November 2014. Post telephone surveys were conducted in 2015 and 2016 following active campaign phases to measure:

- overall awareness of the campaign
- awareness of key messages and branding elements

Let's swap out the sugar (continued)

- changes in knowledge and attitudes around factors which lead to good health and wellbeing
- intentions to change behaviour
- actions taken, including as a result of seeing the campaign.

Questions were asked of parents or carers on their attitudes, knowledge and reported behaviour, as well as about behaviour of one child in the household. The telephone survey indicated the extent of the campaign reach as exposure and knowledge of the *Sugar Swap Challenge* increased from 35 percent to 51 percent. It also showed that over half of the respondents that participated in the challenge took actions to reduce added sugar in their diets (adults and children).

The *Sugar Swap Challenge* generated significant exposure. Of the 300 respondents, one in three people (32 percent) recognised the television advertisement, with 43 percent aware of the *Sugar Swap* phrases and materials.

Spontaneous recognition of the *GHfL* campaign name increased significantly from 35 percent pre-campaign to 51 percent post-campaign, and over half (52 percent) of respondents overall recognised the *Sugar Swap Challenge*, including marketing of phrases such as 'swap out sugary drinks'.

89 percent of respondents mentioned an aspect of 'nutrition' when asked what they felt were the most important things for a healthy lifestyle for themselves and their family – indicating the timeliness of the *Sugar Swap Challenge* message

Respondents reported relatively high levels of taking steps in the last three months to increase healthy behaviours for both themselves and their children:

- to increase the amount of vegetables for both themselves (59 percent) and their children (72 percent)
- 61 percent of parents had taken steps to increase the amount of fruit in their child's diet

There were similar levels of 'taking steps' in the past three months for both parents and children for swapping out sugary drinks (53 percent parent, 54 percent child) as well as swapping out sugary cereals and snacks (56 percent parent, 58 percent child), indicating that over half of parents had taken steps towards reducing sugar in their own and their child's diets in the past three months. 16% of parents who recognised the *GHfL* TV advertisement stated that they 'changed their behaviour or acted' as a result of seeing the ad.

Conclusion

Increasing the population's understanding about the health impact of added sugar in food and drinks and engaging in behaviour change requires a variety of approaches including linking campaign messages to supporting programs. Raising awareness and encouraging behaviour change around families' consumption of breakfast cereals, snacks and drinks that contain added sugar for healthier options through the *GHfL Sugar Swap Challenge* proved to be a timely and cost effective approach.

References

1. *National Health and Medical Research Council.* Australian Dietary Guidelines Summary. *Australian Government, Canberra, ACT, 2013. https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55a_australian_dietary_guidelines_summary_130530.pdf (accessed 28 November 2017)*

2. *ACT Health.* Australian Capital Territory Chief Health Officer's Summary Report 2016. *ACT Government, Canberra, ACT, 2016. http://health.act.gov.au/sites/default/files/CHO%20Report%202016.pdf (accessed 26 July 2017)*

3. *ACT Health.* Australian Capital Territory Chief Health Officer's Summary Report 2016. *ACT Government, Canberra, ACT, 2016. http://health.act.gov.au/sites/default/files/CHO%20Report%202016.pdf (accessed 26 July 2017)*

4. *ACT Health.* February 2014 Canberra Omnibus Survey. *ACT Government, Canberra, ACT 2015. http://www.cmd.act.gov.au/__data/assets/pdf_file/0004/762637/FOI-15-09-Documents-for-Open-Government-website.pdf (accessed 28 November 2017)*

5. *AMR Interactive: Quantitative testing for Good Habits for Life Sugar Swap Challenge. ACT Government, 2016. Unpublished.*

Kids at Play Active Play

Elizabeth Phythian, Health Promotion, Health Improvement Branch

Kids at Play Active Play (KAPAP) is a free ACT Government program which has been designed to help early childhood educators feel more confident to promote active play and teach fundamental movement skills (FMS) to children aged 3 to 5 in ACT early childhood education and care (ECEC) services (pre-schools and long day care facilities).

During early childhood, it's important for children to learn fundamental movement skills (running, jumping, kicking, catching, throwing, etc). These skills help children learn how to control and coordinate their bodies and are the building blocks for participation in active play, school physical education (PE) lessons, sports and recreational activities, and therefore the solid building blocks for a healthy active life.

The KAPAP program supports the ACT Government's Healthy Weight Initiative and seeks to contribute to addressing the 2015 Australian Early Development Census results which showed that ACT children were below the national average in terms of physical health and wellbeing.

Through KAPAP, educators become up-skilled to confidently provide children with the opportunity to learn FMS through intentional teaching, active play games and free play. Components of the KAPAP program include:

- face-to-face professional learning (PL) sessions for leaders (Principals/Directors/Executive Staff) and educators;
- three active play visits to each participating centre/preschool where KAPAP officers (physiotherapists and occupational therapists) mentor educators to assist them in applying the learnings from the PL in their ECEC setting. This occurs through demonstrating/modelling the teaching of FMS and encouraging active play through games with the children;
- resources (manual, website, FMS lanyard cards, FMS video clips, parental engagement material);
- tools (Active Play Audit Tool, Physical Activity and Small Screen Recreation policy template); and
- access to the ACT Government's *Healthier Work Service* to assist in developing a Workplace Health and Wellbeing Program for their workplace.

Kids at Play Active Play. ACT Health

CASE STUDY

In the program's three years of operation (July 2014 – June 2017), 163 ACT ECEC services (representing approximately 65 percent of all eligible ACT services), 171 leaders and 332 educators have participated in the KAPAP program, with over 9,000 children aged three to five years of age enrolled in these services. After participating in the program the majority of educators reported being more confident in teaching fundamental movement skills and encouraged active play more frequently in their classes. Teaching the skills in early education settings allows children the opportunity to be skilled and confident participating in physical activity by the time they start school.

Kids at Play Active Play. ACT Health

Fresh Tastes: Healthy Food at School

Nicole Coyles, Health Promotion, Population Health Protection & Prevention

Fresh Tastes is a free ACT Government service for Canberra primary schools to make healthy food and drinks a bigger part of everyday life at school. It was launched in 2014 and has been contributing to the school and food environment focus areas of the ACT Healthy Weight Initiative. The goal is to take a population approach to help lower rates of overweight and obesity and increase the fruit and vegetable consumption of children in the ACT.

For each year of involvement, schools write and implement a simple 12-month action plan against an action area framework. The action areas for *Fresh Tastes* are: Classroom Learning; Food for Sale; Growing Food; Cooking Food; Food from Home; and Healthy Food and Drink Guidelines.

Action plans identify activities that will reach everyone in the school community including students, parents, teachers, and local community and business partners. To implement action plans schools access financial grants, curriculum resources, Teacher Quality Institute accredited professional learning (Food&ME), communication materials and individualised assistance from the ACT Health *Fresh Tastes* team. The Food&ME professional learning course developed to support educators in their delivery of appropriate nutrition education to primary students is now also available for Kindergarten to year 6 as an online course in 2017. Schools also access networking opportunities with other schools to share ideas for innovation.

Many of Canberra's primary schools already promote healthy food and drink choices, teach students about nutrition, add healthier options to their canteen menus, and give students hands-on food growing and cooking experiences. *Fresh Tastes* helps schools build on these activities and strengths, and encourage their introduction where this did not previously exist.

Fresh Tastes is managed by ACT Health in partnership with the ACT Education Directorate and supported by the Catholic Education Office and the Association for Independent Schools of the ACT. It is an evidence-based initiative that uses models of best-practice for health behaviour change, supporting schools to take a whole school approach over three years and

Fresh Tastes. ACT Health

beyond to influence their food and drink culture. The work of Fresh Tastes is complemented by the support provided to schools and canteens to implement the ACT Public School Food and Drink Policy, the impressive results of which are discussed in more detailed elsewhere in this Bulletin. Fresh Tastes is further strengthened by the partnerships established with local businesses such as Feed Inc; The Green Shed; Healthy Eating Hub; and Rodney's Plants Plus, formalised through Collaboration Deeds.

As at November 2017, more than 80 percent of all ACT primary schools are involved in Fresh Tastes on a voluntary basis. This equates to 87 ACT primary schools reaching approximately 35,000 students. The majority are public schools which has been partly driven by the introduction of the ACT Public School Food & Drink Policy in early 2015. The aim is to engage a cumulative total of 100 schools by 2018. The first 20 schools have completed their three year participation in 2017 with evaluation indicating all have improved against baseline data on culture, infrastructure and policy.

ACT Health helps schools celebrate success with their community. This is done through a series of written and short 45-second video case studies that are available on the Fresh Tastes website at www.health.act.gov.au/freshtastes where further information about the Fresh Tastes program as a whole can also be found. The Fresh Tastes team would like to thank all of the schools and government and business partners who are helping to make heathier food and drinks a bigger part of life for students at ACT schools.

Action areas. Fresh Tastes. ACT Health

Ride or Walk to School

Adrian Ison, Simon Cosier, Ingrid Coote Health Promotion, Population Health Protection & Prevention

The *Ride or Walk to School* program is a free ACT Government initiative in which 76 schools and over 34,000 students currently participate. The program has been expanded with a goal to reach 108 schools by June 2018.

The Physical Activity Foundation delivers the program on behalf of ACT Health. The program encourages active travel, and is particularly aimed at increasing the number of students riding and walking to and from school. To date, the program has included assisting schools to develop active travel plans and guidelines, safe route maps, professional development for teachers, provision of bikes, helmets and maintenance kits, assistance with bike storage, self-defence to enhance student safety, and BMX workshops to increase student confidence and skills.

Ride or Walk to School - new bike shed is opened at Hughes Primary School . ACT Education Directorate

The program was designed in consultation with the ACT Children and Young People's Commissioner with input from over 550 students from Kindergarten to Year 12 across nine schools. Parents and teachers, community organisations and other relevant government departments were also consulted to identify barriers and potential enablers to active travel. Local businesses, such as Backbone BMX and Freestyle ACT (FACT) BMX, help to engage students and demonstrate cycling skills needed, while Trek has been a valuable local partner is sourcing appropriate gear (including bikes).

A recent independent evaluation of the *Ride or Walk to School* program found that it has been successful in increasing the rates of active travel amongst primary school students participating in the program. Notably:

- On average, 67 percent of students enrolled at a participating school reported using active travel at least once a week, compared to 44 percent in non-participating schools; and
- On average, 51 percent of students at participating schools reported using active travel as their usual mode of travel (five or more trips a week to or from school), compared to 30 percent in non-participating schools.

A key component of *Ride or Walk to School* is the development of Safe Cycle education units aligned to the Australian Curriculum: Health and Physical Education. The Safe Cycle curriculum educates students in safe cycling techniques and bike maintenance, and increases their confidence to ride to school. Newly developed Teacher Quality Institute accredited online versions of the Safe Cycle resources for both primary and high schools are now available.

Entrepreneurs: It's Your Move 2017

Naomi Lee and Emma Nikolic, Health Promotion, Population, Health Protection & Prevention

It's Your Move (IYM) is an ACT Government initiative that encourages high school students to develop creative solutions to improving school health, with a focus on nutrition and physical activity. 12 Canberra schools have participated in IYM to date. The aim is to have 24 high schools involved by 2020.

The IYM pilot was a research project undertaken in 2012 with three active high schools using a systems approach to reduce unhealthy weight in adolescents. The schools were Alfred Deakin High, Calwell High and Melrose High. Two of the three schools showed a significant decrease in the prevalence of overweight and obesity. The third school achieved no increase in overweight and obesity. Two schools also had a significant increase in the proportion of adolescents eating five or more serves of vegetables each day. One school, Calwell High, achieved their specific school aim of a significant reduction in depressive symptomology.

In response to the successful pilot and its subsequent expansion, a number of IYM 'how to' guides have been developed, capitalising on the innovative projects implemented by ACT high schools to date. One 'how to' guide in demand aims to improve the school canteen dining space, first undertaken by Calwell High. In response, IYM in partnership with the Young Men's Christian Association (YMCA) and ACT Parents and Community Council will work with five high schools and colleges in 2018 to transform their dining space with a recycled furniture fit out, while embedding student leadership and innovation into the process through the *Entrepreneurs: IYM* curriculum.

Entrepreneurs: It's Your Move (IYM) is the new delivery format for the IYM program. IYM is now delivered within the school curriculum rather than as an extracurricular project. The aim of this new model is to embed IYM into the school system, address education requirements within the Australian Curriculum, and to better ensure that students are able to take leadership roles in improving school health. IYM aims to create the social and health entrepreneurs of the future.

Students from Lanyon High attend an IYM networking event
Students from Calwell High created a café style vibe for their schoo canteen
ACT Health

Entrepreneurs: IYM is a high school subject, fully mapped to the Australian Curriculum, with links to Health and Physical Education; Technologies; business studies within SOSE (studies of society and environment) and STEM (science, technology, engineering and mathematics). The curriculum is flexible and can be delivered by schools in a variety of ways: as a full semester (20 week) unit; as a component of an existing subject; or through a school leadership program.

Students use an innovation approach called design thinking as well as systems mapping, to develop and implement a real health improvement project in their school. Schools receive access to comprehensive student and teacher toolkits, online Teacher Quality Institute accredited professional learning, project seed funding and support from mentors (local entrepreneurs). At the end of each semester, schools pitch their idea against each other at an exciting "shark tank" style event with local business leaders as judges.

Entrepreneurs: IYM activities are hands-on, engaging, project based and solution focused. The curriculum provides students with skills that are highly transferrable and relevant in today's workforce.

Entrepreneurs: IYM was released in 2017. To date seven schools have taught the subject. Early feedback from the first schools indicates that the sessions are engaging and that students are embracing the opportunity to create and implement a project specific to the needs of their own school.

Entrepreneurs: IYM partners, the local Canberra based ThinkPlace, received a national Good Design Award in 2017 for their work on the IYM curriculum and have been invited to participate in an international design award in 2018 for this work.

An extensive evaluation process will continue over the next two years to measure effectiveness of *Entrepreneurs: IYM* at building the capacity of students and teachers to create healthier high school environments.

Students from Mount Stromlo High encourage riding and walking to school. ACT Health

References

1. Malakellis, M. et al. 2017. School-based systems change for obesity prevention in adolescents: outcomes of the Australian Capital Territory 'It's Your Move!'. Australian and New Zealand Journal of Public Health, [Online]. Volume 41, No. 5, p. 490-496. Available at: http://onlinelibrary.wiley.com/doi/10.1111/1753-6405.12696/epdf *[Accessed 29 November 2017].*

Healthier work

Christine Spicer, Healthier Work, Access Canberra

Since 2012, Healthier Work (The Service) has provided over 8000 Canberrans access to health and wellbeing activities within the workplace. The Service is operated by Access Canberra as part of the whole of government Healthy Weight Initiative and builds the capacity of workplaces to create healthier work environments by providing tools, materials and support to local workplaces to:

- increase understanding of employee health and wellbeing needs;
- develop tailored 12-month health and wellbeing plans targeted at improving health in the workplace; and
- increase the capacity of workplaces to identify and implement healthy activities and initiatives on an ongoing basis.

Through the development and delivery of the 12-month plans, the service achieves positive outcomes for participating workplaces and employees, including:

- positive health outcomes for employees (increased physical activity, healthier eating behaviours, smoking reduction/cessation, reduction of harmful alcohol consumption, maintenance of a healthy weight and improved social and emotional wellbeing factors)
- a return on investment (ROI) to the organisation (potentially including increased productivity and/or decreased absenteeism).

About Healthier Work

Healthier Work is an ACT government service which aims to build the capacity of workplaces to create healthier work environments. From 2011 to 2014, Healthier Work received funding under the Australian Government's National Partnership Agreement on PreventativeHealth (NPAPH). The service is now funded as part of the ACT Government's Healthy Weight Initiative (Healthier Lifestyles) and operates out of Access Canberra.

By focusing on health in the workplace and realising improved health outcomes for employees, the service contributes to the overarching aims of the Healthy Weight Initiative - to address the rising rates of overweight and obesity across the ACT population.

Access Canberra is actively delivering the Healthier Work service, conducting regular awareness raising and capacity building activities, and supporting workplaces to create healthier environments. The service is currently targeting large workplaces to increase overall program reach and has engaged an external consultant to monitor and evaluate the performance and impacts of the service.

Healthier Work is managed by Access Canberra and forms part of the ACT Government's Healthy Weight Initiative (HWI). The HWI is a whole of government approach to address the rising rates of overweight and obesity across the ACT population. The initiative includes multiple programs and activities which work to address six key themes, including workplaces.

Healthier work (continued)

Program model

Healthier Work assists ACT workplaces to understand the health needs of their employees and introduce environmental and behavioural changes to improve overall health and wellbeing. A range of resources, tools and supports are provided by the service.

Healthier Work plans and resources

The Healthier Work service supports workplaces to develop and implement 12-month health and wellbeing plans to improve and maintain employee health and wellbeing. These 12-month plans are developed by identified workplace champions in conjunction with Healthier Work's Industry Advisor, and are tailored to the individual needs of each workplace. The plans vary depending on the needs of each workplace and its employees, and have included activities and organisational changes targeted at:

- increasing the physical activity levels of employees;
- introducing and encouraging healthy eating behaviours;
- reducing smoking and/or alcohol consumption; and
- improving the social and emotional wellbeing of the workforce.

Healthier Work's Industry Advisor assists workplace champions to take responsibility for the design and development of the 12-month plans, leveraging tools, resources and support made available by Healthier Work, including:

- workplace site visits from the Healthier Work team; and
- tools and resources designed to understand workplace needs, identify activities and events which can be implemented in the workplace and assess changes which have occurred.

Participating workplaces are expected to realise a range of benefits from the service, and delivery of the 12-month plans, including:

- positive health outcomes for employees (increased physical activity, healthier eating behaviours, smoking reduction/cessation, reduction of harmful alcohol consumption, maintenance of a healthy weight and improved social and emotional wellbeing factors); and
- a return on investment (ROI) to the organisation (potentially including increased productivity and/or decreased absenteeism).

These benefits motivate workplaces and employees to make an ongoing commitment to Healthier Work and actively seek further opportunities to improve workplace health.

Healthy workplaces. ACT Government.

Healthier work (continued)

Recognition Scheme

The Healthier Work recognition scheme acknowledges and celebrates workplaces based on the length of time they have been actively engaged with the program. Evaluation of the workplace's 12 month plan is required before progressing to the next stage of Recognition.

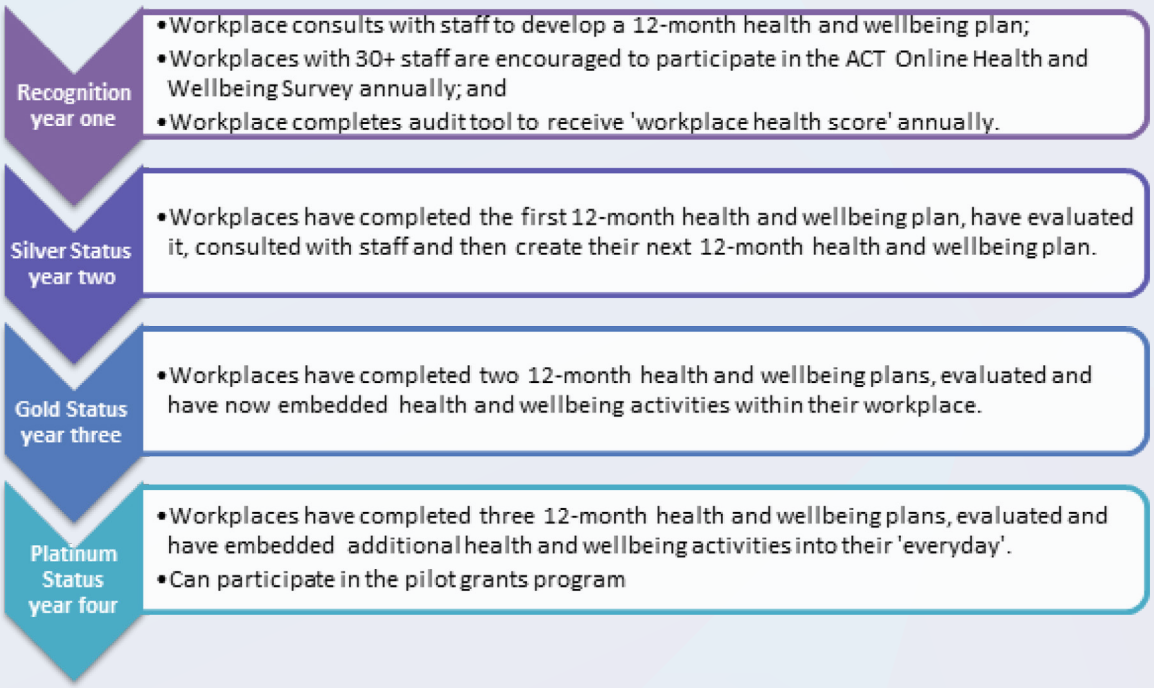


Figure 1: Recognition process

Capacity Building

Healthier Work also provides training and activities to upskill workplace champions in the identification and delivery of health initiatives. By upskilling these individuals (and consequently the workplace), organisations are expected to be able to more effectively identify and implement activities within each 12-month period, supporting a sustained commitment to and ongoing improvement in health in the workplace. The core functions of the Healthier Work program are summarised in Figure 2.

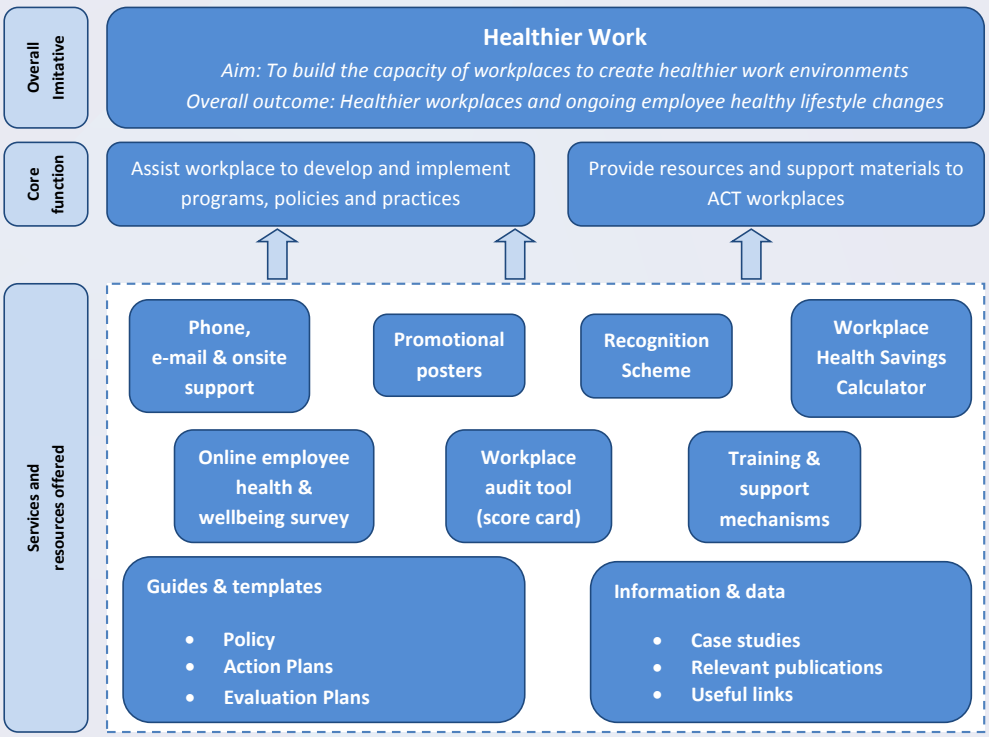


Figure 2 Healthier Work program model

Healthier work (continued)

Performance and Achievements

ACT workplaces are actively supported by Healthier Work to participate in this important initiative, with over 383 workplaces having engaged with the service since its commencement.

Workplace participation

Healthier Work is currently supporting 94 recognised workplaces to implement 12-month health and wellbeing plans. Of the 94 workplaces currently engaged (to August 2017):

- The Service is currently supporting four workplaces to move onto their fourth year of recognition, resulting in platinum status;
- 15 are in their third year of healthier work and have received gold status;
- 27 have received silver status for successfully completing the first 12-month plan and committing to the program for a second year; and
- 48 have received recognition for developing their first 12-month plan.

Through these workplaces, Healthier Work is supporting the delivery of health and wellbeing activities across a range of industries, workplace types and sizes. Industries currently participating with Healthier Work include - but are not limited to - health, construction, not-for-profit, education and professional services.

Employee and community reach

By engaging with ACT workplaces, Healthier Work is seeking to achieve positive health outcomes for individuals in the ACT. Through the 90 recognised workplaces, Healthier Work is providing over 6,000 individual employees in the ACT with access to health and wellbeing activities.

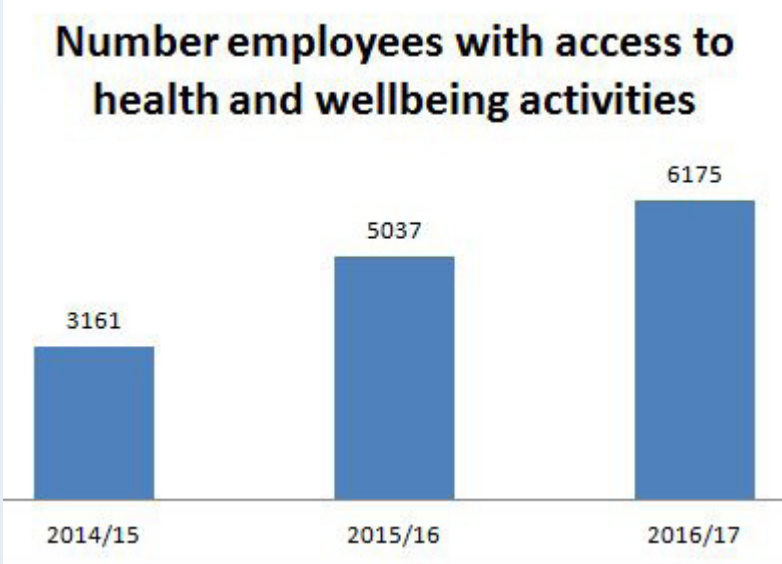


Figure 3 Employees with access to health and wellbeing activities as part of their employer's involvement in the Healthier Work Recognition Scheme

Participating workplaces have acknowledged the positive impact that the service is having on the health and wellbeing of employees, as well as their businesses. The service annually creates a case study book featuring the workplaces supported throughout the year; a copy can be viewed here.

Events and resources

In addition to reaching workplaces and employees participating in the 12-month plans, Healthier Work is engaging with the broader ACT community through its tools, resources and events. The Healthier Work team regularly conducts awareness raising and educational events, including:

- networking breakfasts and sessions (attended by over 350 individuals in 2016/17);
- workplace Champion Mentoring and training sessions (209 attendees in 2016/17); and
- Healthier Work training sessions delivered in partnership with the Canberra Business Chamber (91 participants in financial year 2016/17).

Healthier work (continued)

The team also manages the tools and materials on the Healthier Work website (14,232 site visits during the financial year 2016/17) and has active facebook (2,777 likes) and twitter (968 followers) accounts.

Evaluation of performance

Monitoring and evaluation activities completed to date highlight the successes of the Healthier Work Service. The 2015 external evaluation activities provided evidence about the early successes of the program, including increasing program awareness and the application of Healthier Work tools and materials by ACT workplaces. The report highlights that, as of 2015:

- ACT workplaces were making a sustained commitment to the Healthier Work program and implementing organisational changes;
- the Healthier Work recognition scheme was successfully achieving and contributing to changes in workplace policy, programs, culture and physical environment;
- training and mentoring sessions for workplace champions were having a positive impact on the capacity of workplaces to implement healthier programs and practices; and
- employees were motivated to engage with activities and had observed tangible benefits and/or made sustained behavioural changes as a result of the program.

Current program data and reporting highlights the ongoing performance of the program.

Next Steps

During 2017/18 the Healthier Work service will continue to:

- provide tools, materials and resources to support workplaces to understand the health needs of their staff;
- support workplaces in the ACT to develop and implement healthy activities through the 12-month plans;
- recognise workplaces based on the length of time they have engaged with the program; and
- pilot a grants program to support workplaces who are becoming Healthier Work Platinum Status (four years of Recognition).

Engaging larger workplaces

A needs analysis was undertaken in 2011 by PwC to understand the makeup of the ACT business community, as well as the health promotion needs and practices of local employers, employees and other market stakeholders. The study indicated that in Canberra, it was small business and blue collar industries that required additional support. As a result, while the service is available to all workplaces, it has historically targeted small, blue collar employers.

However, by targeting larger workplaces, the service can continue to increase the number of engaged workplaces, and also substantially increase overall employee reach. From 2016, Healthier Work has been operating a Healthier Work XL program which actively targets larger workplaces. The XL program model ensures the engagement of multiple champions in a large workplace through the delivery of in-house training provided by Healthier Work.

During the 2016/17 financial year Healthier Work supported six workplaces into the XL Recognition Scheme resulting in 1690 employees having access to health and wellbeing initiatives within the workplace.

References

1. *Full details of the tools and resources supported and promoted by Healthier Work are included on the Healthier Work website. Available at:* http://www.healthierwork.act.gov.au/supporting-resources/. *Key resources and tools include the ACT Online Employee Health and Wellbeing Survey and the workplace health and wellbeing score card.*
2. *Reference 2 The Miller Group (March 2015) Healthier Work Evaluation* http://www.healthierwork.act.gov.au/supporting-resources/

Health Promotion

The Health Promotion section sits within the Health Improvement Branch, Population, Health Protection & Prevention Division. The section is divided into two teams, who manage different projects and campaigns.

The team highlighted in the Bulletin manages programs aimed at creating healthier environments within the ACT.

Key areas of responsibility include:

- Implementation of behaviour change campaigns including Good Habits for Life, cervical screening and smoking in pregnancy.
- Coordination of the It's Your Move program to harness student innovation for healthier high schools.
- Working with ACT school canteens and stakeholders to implement the National Healthy School Canteen Guidelines.
- Managing a number of new and exciting programs in the ACT food environment to encourage healthier food and drink choices. This includes work with:
    - licenced clubs, supermarkets and children's entertainment venues
    - local sports clubs on healthier food and drink provision and healthier sponsorship options
    - young people to design and promote healthier food and drink products.

To contact the team:

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- (02) 6205 2610

Back Row L-R: Lisa King, Sommer Sherwood, Susie Leydon, Miranda Farmer, Lynn Spratt, Helen Skeat
Front Row L-R: Veronika Pasalic, Cal Chikwendu, Emma Nikolic, Naomi Lee, Joon-Li Choo

Number of notifications of notifiable conditions received in the Australian Capital Territory, December 2017 (Q3 and Q4 2017).

	Q3 2017	Q4 2017	Annual Total 2017	Annual Total 2012-2016 Average	Ratio Total 2017: Total 2012-2016 Average
VACCINE PREVENTABLE CONDITIONS					
INFLUENZA	2673	273	3098	1057.8	2.9
PERTUSSIS *	45	23	253	377.2	0.7
GASTROINTESTINAL DISEASES					
CAMPYLOBACTERIOSIS	83	142	472	509.6	0.9
CRYPTOSPORIDIOSIS	4	2	83	32.4	2.6
GIARDIA	28	27	128	128.8	1.0
HEPATITIS A *	1	0	2	3.0	0.7
HEPATITIS E	0	0	0	1.0	0.0
LISTERIOSIS	0	1	3	0.6	5.0
PARATYPHOID	0	2	3	3.0	1.0
SALMONELLOSIS	42	33	347	248.8	1.4
SHIGELLOSIS	1	2	7	7.0	1.0
STEC/VTEC	0	0	0	1.8	0.0
TYPHOID	1	0	1	2.4	0.4
YERSINIOSIS	2	4	11	12.0	0.9
SEXUALLY TRANSMITTED INFECTIONS					
CHLAMYDIA	321	369	1466	1275.4	1.1
GONOCOCCAL INFECTION	54	73	250	133.4	1.9
SYPHILIS <2 YEARS DURATION	7	8	33	14	2.4
SYPHILIS >2 YEARS/UNKNOWN DURATION	4	3	12	15	0.8
VECTORBORNE & ARBOVIRUS					
DENGUE FEVER *	7	13	40	21.4	1.9
MALARIA	3	2	12	10.0	1.2
Q FEVER	0	0	0	0.8	0.0
ROSS RIVER VIRUS INFECTION	0	0	11	10.4	1.1
RESPIRATORY CONDITIONS					
TUBERCULOSIS #	7	3	23	21.0	1.1

All Diseases except Tuberculosis are reported by onset date or closest known test date. Tuberculosis is reported by notification date.

* This condition includes cases that meet the probable and confirmed case definitions. Both probable and confirmed cases are nationally notifiable.

For the relevant year, Q1 refers to 1 January to 31 March, Q2 refers to 1 April to 30 June, Q3 refers to 1 July to 30 September, Q4 refers to 1 October to 31 December.

N.B. Data reported are the number of notifications received by ACT Health. Data are provisional and subject to change.

The number of notifications received for all notifiable diseases in the ACT is available at: http://www9.health.gov.au/cda/source/cda-index.cfm

Vaccine preventable conditions

The influenza season during 2017 was larger and more sustained than any previous season on record in the ACT. There were a total of 3,098 notifications of laboratory-confirmed influenza, which was approximately three-times higher than the average number of notifications in the previous five years (2012-2016; "5-YR mean"). For further information on the 2017 influenza season, please refer to the final ACT influenza report (No.9 2017).

Two measles cases were notified to ACT health during 2017, both occurring in Q4. The two cases were unrelated with different genotypes detected (D8 and D9). One case acquired their infection overseas (Vietnam), however the source of infection for the other case was not identified. There were two unrelated cases of meningococcal during 2017, both occurring during Q3. Both cases were caused by serogroup Y.

Gastrointestinal disease

During Q3 and Q4 2017, campylobacteriosis, salmonellosis, and giardia were the most common gastrointestinal infections notified to ACT Health. Notifications of salmonellosis during 2017 were above the 5-YR mean, however this was primarily due to a large foodborne outbreak during Q1 2017. The number of cryptosporidiosis cases notified during 2017 was 2.6 times the 5-YR mean, however no specific reason for this increase was identified.

There were a total of three cases of listeriosis notified during 2017. One of these cases was reported in Q4 – this case had an underlying medical condition and reported consuming high-risk foods. There was one case of typhoid notified in Q3 2017 and two cases of paratyphoid notified in Q4 2017. All typhoid and paratyphoid cases in 2017 were returned overseas travellers.

There was one case of hepatitis A notified in Q3 in an unvaccinated individual. This case had not travelled interstate or overseas, however did have a strain of hepatitis A matching that of the NSW hepatitis A cluster. No high-risk activities, food, or clear source of infection could be identified following a detailed interview with this case.

Sexually transmitted infections

During 2017, notifications of gonococcal infections (n=250) and syphilis <2 years duration (n=33) were 1.9 and 2.5 times higher, respectively, than the 5-YR mean.

Vectorborne & arboviral infections

There were a total of 40 dengue cases notified during 2017, which was approximately two-times higher than the 5-YR mean, however this was likely related in increased global dengue activity during 2017. All cases notified during 2017 acquired their infections overseas: Vanuatu (n=7), Sri Lanka (n=6), India (n=6), Thailand (n=4), Solomon Islands (n=2), Samoa (n=2), Nauru (n=2), Malaysia (n=1), East Timor (n=1), Bangladesh (n=1), Vietnam (n=1), American Samoa (n=1), New Caledonia (n=1), Mexico (n=1), Papua New Guinea (n=1), Philippines (n=1), Africa (n=1), and Nepal (n=1).

Review of the ACT's Kilojoule Display Laws

From 1 January 2013, the *Food Act 2001* was amended to require standard food outlets operating as part of a company chain or franchise to display the average energy content of their standard food items in kilojoules. These requirements are commonly called the 'kilojoule display laws' and aim to support the health of Canberrans by providing information to enable healthier food and drink choices.

In 2016, a review of the kilojoule display laws was initiated with the aim of assessing the operation and impact of the legislation, and identifying possible areas for improvement. Findings from the review were tabled in the ACT Legislative Assembly on 14 September 2017.

The review found that the ACT's kilojoule display laws are operating as intended, with a high level of business compliance. Of the 67 standard food outlets inspected as part of the review, only four were found to be displaying very limited or no kilojoule information.

Fifteen businesses were asked about their reaction to the laws. Some businesses reported a shift towards the inclusion of healthier menu items including meal combinations, side orders and drinks as a result of kilojoule displays. None of the businesses reported a reduction in overall sales.

The review found that consumers are supportive of kilojoule display laws, and that the laws are having some impact on purchasing behaviours. Kilojoule display information is valued, in particular, by people who are looking to control or reduce their weight, as well as those who make an effort to choose healthier options. Overall, around 1 in 7 Canberrans (15 percent) reported using kilojoule displays as part of their most recent purchase from a standard food outlet.

The review report contained a number of recommendations to improve and further support the ACT's kilojoule display laws. The recommendations included further support for businesses to implement the laws; as well as consumer education to promote more widespread understanding and use of kilojoule displays in guiding purchase decisions. The review also recommended that any future changes to the ACT's kilojoule display laws are considered in consultation with other jurisdictions. This will help to minimise the compliance burden on affected businesses, particularly those that operate in more than one jurisdiction. The recommendations have been accepted by the ACT Government.

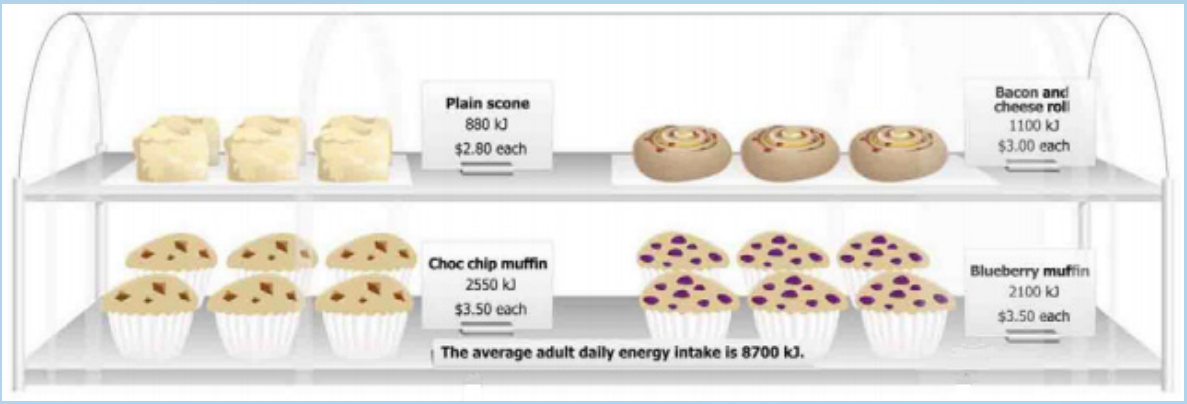

Figure 1 - Nutritional information in display cabinet

ACT Government funds meningococcal ACWY vaccination program in the ACT

Meningococcal disease is a rare but serious infection that can become life-threatening very quickly.

From 2018, ACT Health will be offering a free meningococcal vaccine to adolescents in Year 10 that protects against meningococcal A, C, W and Y strains. The program will be offered through a school-based vaccination program that will commence in February 2018 to coincide with the start of the school year.

In addition to the school based program, adolescents aged 16 to 19 years will be eligible to receive the vaccine as a catch-up dose through their GPs in 2018 only. Students in year 10 who miss their vaccine through the school program will be able to receive it through their GP in the same calendar year.

Since 2014, meningococcal W and meningococcal Y cases have increased across Australia.

Meningococcal W is associated with a higher fatality rate, compared with other strains of meningococcal disease circulating in Australia. In 2017, an outbreak of Meningococcal W disease occurred in Central Australia affecting parts of the Northern Territory, Queensland, South Australia and Western Australia.

Older adolescents and young adults are at increased risk of meningococcal disease and more likely to spread the bacteria to others. Vaccinating this age cohort is expected to protect immunised individuals and interrupt transmission of the bacteria in the community.

For individuals outside the recommended cohort for this program wishing to be vaccinated, the vaccine is available through prescription on the private market. Vaccination outside the recommended cohorts is likely to provide individual protection, but not expected to achieve the same population health benefits as vaccinating older adolescents.

For more information visit http://www.health.act.gov.au/our-services/immunisation

Meningococcal ACWY vaccine poster. ACT Health