

Northern Territory Department of Health Submission Senate Select Committee into the obesity epidemic in Australia

1. *The prevalence of overweight and obesity among children in Australia and changes in these rates over time*

Rates of overweight and obesity in Australia have increased substantially in recent decades. The 2014 National Health Survey (NHS) estimated that 25.8% of Australian children aged 2-17 years were overweight or obese, a similar rate was found for NT children, with 25.6% estimated to be overweight or obese¹.

The Northern Territory has a unique demographic profile with approximately 25% of the population being Aboriginal or Torres Strait Islander people, of whom approximately 58% live in remote or very remote communities. National health surveys by the Australian Bureau of Statistics generally examine a largely urban-dwelling, non-Indigenous population sample and caution is required when making inferences to the entire NT population as the Indigenous population is often under-represented. Hence, an estimate of obesity rates for NT Indigenous children is not available from the 2014 NHS. However, results from the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey showed that the prevalence of overweight and obesity among NT Indigenous children (23.0%) was similar to NT non-Indigenous children (23.8%)² (see table 1.1 for more details). Of note, is a marked difference in obesity rates between male and female children in the NT that is not evident in the Australian data. Underlying factors for this anomaly and analysis of variation between ages need to be determined in order to design effective strategies.

Table 1.1: Overweight/obesity* prevalence (%) among Australian and NT children, aged 2-17 years, by sex and Indigenous status (NT only)

	Indigenous ^(a)	Non-Indigenous ^(a)	Northern Territory ^(b)	Australia ^(c)
Male	17.0	18.1	17.6	24.6
Female	29.6	29.8	29.7	25.7
Person	23.0	23.8	23.5	25.1

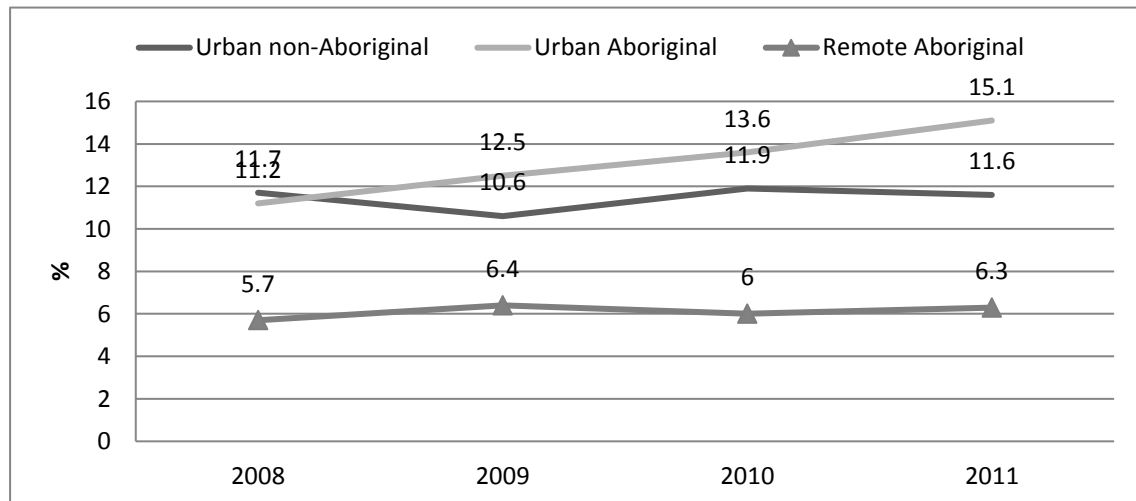
* BMI for children are derived from the International Obesity Taskforce cut-off points, sourced from Cole et al, Establishing a standard definition for child overweight and obesity worldwide: international survey, 2000³. (a) Reported crude rates from AATSIHS and AHS. (b) Based on Indigenous and non-Indigenous estimates from AATSIHS and AHS.

Data sources: (a) ABS Customised report, 2014, Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) 2012-13, (b) Australian Health Survey (AHS) 2011-13, 2014 and (c) Australian Health Survey (AHS): Updated Results, 2011-12 (Table 5.1), 2014.

Data from NT health services provides more insight into the weight status of NT Indigenous children and suggests that the rates of overweight and obesity vary considerably by geographic location. In 2004 data indicated that NT Indigenous children aged 4-6 years from remote areas had a substantially lower rate of overweight and obesity than Indigenous children from urban locations³. More recent data from NT Health services support this difference and also indicate the rates of overweight and obesity in

both these groups has been steadily increasing over time. Among children aged 4-6, in 2011, the highest proportion of overweight or obese children was 15.1% for urban Aboriginal children, followed by 11.6% for urban non-Aboriginal children and 6.3% for remote Aboriginal children (Figure 1.1). Of concern is the steady rise in the proportion of overweight or obese urban Aboriginal children³.

Figure 1.1: Trends in overweight and obesity, NT children aged 4-6, 2008-2011



Recent unpublished data from NT health services suggests that there might be further variation in rates of overweight and obesity amongst older (aged 5-17 years) remote Aboriginal NT children, with children in the Central Australia (31%) having higher rates than those in the Top End (21%) of the NT.

Along with high rates of overweight and obesity, undernutrition continues to be a problem amongst Aboriginal children in remote NT communities. In 2016, 14% of Aboriginal children under the age of 5 and living in remote communities were stunted, 5% were underweight and 3% wasted⁴. Coupled with what appears to be an emerging trend of increased rates of overweight and obesity in later childhood, this places NT Aboriginal children at greater risk of developing chronic conditions including diabetes, insulin resistance, high blood pressure, cardiovascular disease and some cancers later in life.

Summary and Recommendations

Within the NT, the proportion of the population who is overweight or obese varies by age, gender, Indigenous status and location. Difference in data collection and small samples often make data comparison difficult, however the data indicates that overweight and obesity remains a significant public health issue and rates may be increasing more rapidly in some population subgroups, e.g. urban Aboriginal children.

Ongoing monitoring and surveillance of rates of overweight and obesity in both children and adults is vital at a national level. Consideration must be given to ensuring adequate sampling to enable data to be disaggregated by a variety of variables including sex,

ethnicity, geographic location and age group. This is necessary to determine the drivers of overweight and obesity and to inform the development of appropriate and targeted strategies, policies and programs.

References

1. Australian Bureau of Statistics. National Health Survey. First Results, 2014-15 [4364.0.55.001]. 2016. Canberra.
2. Health Gains Planning – Fact Sheet. Overweight and obesity in the Northern Territory, 2011-2012. 2015. Darwin: Department of Health
3. Thompson T, Guthridge S. Overweight and obesity in the NT: Recent data telling the same store. *The Chronicle* 2013;25(2). Darwin: Department of Health
4. Department of Health. Healthy Under 5 Kids Annual Report 2016. 2016. Darwin: Northern Territory Government.

2. The causes of the rise in overweight and obesity in Australia

Obesity is a complex issue and factors leading to the rise in overweight and obesity in Australia are similar to other developed countries and are well documented elsewhere. A recent report by the Australian Institute of Health and Welfare, *A picture of overweight and obesity in Australia, 2017*¹ provides a comprehensive discussion of these issues.

Territorians are subject to the same determinants that influence overweight and obesity rates as the rest of Australia. However, cultural and social determinants of health are especially prominent in the NT and are key drivers of persistent health inequalities between Indigenous and non-Indigenous people. The nutritional status of Aboriginal people is greatly affected by socio-economic disadvantage, and those who live in regional and remote areas of the NT experience further burden of reduced access to quality, nutritious and affordable food².

These same people also experience the highest rates of overcrowded housing in Australia, with 62% of NT Aboriginal people in remote areas living in overcrowded houses³. Lack of health hardware to prepare and store food adds to the challenge of consuming a healthy diet with almost a quarter of Aboriginal households in the NT lacking working facilities to store and prepare food³. As a result, anecdotal reports suggest that energy dense, nutrient poor takeaway foods are playing an increasing role in the diet of many NT Aboriginal people and represents a significant portion of household expenditure.

References

1. Australian Institute of Health and Welfare 2017. A picture of overweight and obesity in Australia 2017. Cat.no.PHE 216. Canberra: AIHW.
2. Department of Health. 2016 Northern Territory Market Basket. Department of Health: Darwin, 2017.
3. Chronic Conditions Prevention and Management Strategy 2010 – 2020: Annual Progress Report 2012-2013. Department of Health: Darwin, 2015.

3. The short and long term harm to health associated with obesity, particularly in children in Australia

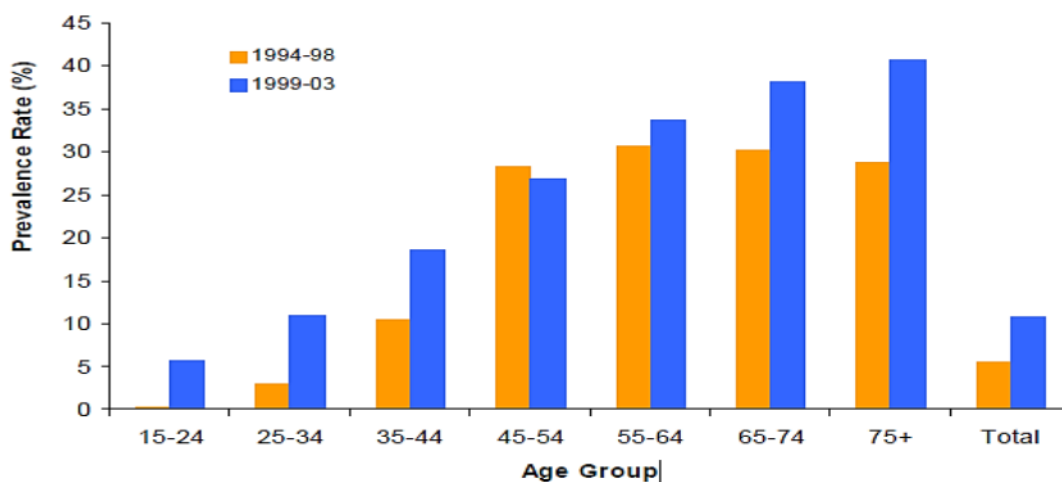
The detrimental effects of overweight and obesity on health are well documented in the literature, *A picture of overweight and obesity in Australia* describes the long term harm to health of obesity amongst children as 'higher risk of breathing difficulties, fractures, hypertension, insulin resistance, and early markers of cardiovascular disease.

Overweight and obese children are also more likely to become obese adults, and to develop chronic conditions at younger ages, including cardiovascular disease and type 2 diabetes'. The AIHW report also describes impacts of overweight and obesity on adult health as 'increases the likelihood of developing many chronic conditions, including some cancers, cardiovascular disease, asthma, back pain and problems, chronic kidney disease, dementia, diabetes, gallbladder disease, gout, and osteoarthritis'.¹

Dietary risks and being overweight or obese are now rated as the highest individually modifiable risk factor for chronic disease internationally and nationally. Significantly, poorer health outcomes across chronic conditions are experienced by people that are from low socio-economic circumstances, are Indigenous, and live in remote and very remote locations. The NT typically experiences much higher rates of chronic conditions than most other places in Australia due to our population, demographic profile and geographical characteristics².

The NT has the highest rate of diabetes in Australia and data suggests that there is an increasing number of young Aboriginal Territorians diagnosed with type 2 diabetes (figure 3.1). This is consistent with a recent global increase in prevalence of type 2 diabetes in children and adolescents. Type 2 diabetes occurs at a younger age in Indigenous Australians compared to the general Australian population².

Figure: 3.1 – Type 2 diabetes prevalence rates by age group, Aboriginal NT 1994-2003²



The impact increasing rates of diabetes has on Aboriginal communities is of great concern and has significant implications in terms of future burden of disease from renal, cardiac, neurological and ophthalmological diabetes related complications. The NT

already has the highest incidence of end stage renal disease in Australia and youth onset type 2 diabetes will likely contribute to even higher rates of renal disease in the near future.²

Chronic disease-related death rates for NT Aboriginal people are also much higher than the Australian population, and are worse for those living in remote and very remote locations compared with urban areas. Table 3.1 compares the underlying cause of death rate ratios of Aboriginal and non-Aboriginal Territorians (relative to Australians at large) for five major chronic diseases. There is a pronounced differential between the death rate ratios of NT Aboriginal and non-Aboriginal people, particularly for the conditions of diabetes, renal failure and COPD³.

Table 3.1: Major chronic diseases death rate* ratio, NT by Indigenous status to Australians at large, 1998-2012

Condition	NT Aboriginal: Australian	NT non-Aboriginal: Australian
Ischaemic heart diseases(a)	1.9	0.9
Chronic obstructive pulmonary disease(b)	4.8	1.7
Cerebrovascular diseases(c)	1.5	0.7
Diabetes mellitus(d)	9.4	1.4
Renal failure(e)	7.0	1.0

*Directly age-standardised rates using the 2001 Australian standard population, by 0, 1-4 and 5-year age groups up to 85+

Note: ICD10 AM & ICD9 CM codes - (a) I20-I25 & 410-414; (b) J40- J43 & J47 & 490-496; (c) I60 & 430-438; (d) E10-E11, E13-E14 & 250-259; and (e) N17-N18 & 584-586.

Data sources: (a) ABS and ACR cause of death unit record file; (b) DoH NT Resident Population by Indigenous status by five-years age group and sex, 2015; and (c) Australian Demographic Statistics, Table 4: Estimated Resident Population, States and Territories. ABS Cat. no. 3101.0

References

1. Australian Institute of Health and Welfare 2017. A picture of overweight and obesity in Australia 2017. Cat.no.PHE 216. Canberra: AIHW.
2. Chronic Conditions Prevention and Management Strategy 2010 – 2020: Annual Progress Report 2012-2013. Department of Health: Darwin, 2015.
3. Health Gains Planning. Fact sheet - mortality in the Northern Territory, 1967-2012. Department of Health: Darwin 2016

4. *The short and long term economic burden of obesity, particularly related to obesity in children in Australia*

Illnesses associated with overweight and obesity have a significant impact on the Australian economy. *A picture of overweight and obesity in Australia*, 2017¹ provides a recent analysis of the direct and indirect costs to the Australian economy.

The NT experiences a higher burden of obesity related disease than the rest of Australia. Although data specifically for the Territory is not available, it is likely that the economic burden will also be higher than the rest of Australia. Of particular concern to the NT is a projected increase in renal disease and corresponding demand for haemodialysis services.

At four times the national average, Territorians already have the highest rates of renal disease in Australia². The demand for haemodialysis services in the NT is projected to increase by up to 70% by 2023, when it is expected that more than 1,000 Territorians will require kidney replacement therapy to sustain life³. In 2011-13, it was estimated that haemodialysis costs approximately \$100,000 per patient annually in the NT⁴.

The number of Aboriginal people requiring dialysis is disproportionately high. During 2012-13, 93% of Territorians receiving dialysis treatment were Aboriginal². In addition to the economic costs, the social cost of renal disease is especially challenging for Aboriginal people from remote parts of the Territory for whom a diagnosis of renal disease has the potential to seriously affect whole families and communities and can lead to dislocation from land and culture⁴.

References

1. Australian Institute of Health and Welfare 2017. A picture of overweight and obesity in Australia 2017. Cat.no.PHE 216. Canberra: AIHW.
2. Chronic Conditions Prevention and Management Strategy 2010 – 2020: Annual Progress Report 2012-2013. Department of Health: Darwin, 2015.
3. Zhao Y, Poppe S, Lawton P, Hutchings J, You J, Annesley K, Cameron N, Guthridge S, Satellite Dialysis Costs in the Top End, 2011-2013. Department of Health, Darwin, 2014.
4. Northern Territory Renal Services Strategy 2017-2022. Department of Health, Darwin.

5. *The effectiveness of existing policies and programs introduced by Australian governments to improve diets and prevent childhood obesity.*

The NT Government is committed to reducing current rates of adult and childhood obesity and has the following high-level overarching strategies in place (or drafted):

- *NT Health Nutrition and Physical Activity Strategy 2015-2020*, this strategy provides an overview of the key health issues associated with poor nutrition and physical inactivity throughout the life-course, brings together available evidence of interventions that have been effective in addressing them, and suggests a range of strategic actions relevant to the NT context.
- *NT Chronic Conditions Prevention and Management Strategy 2010-2020*, this strategy provides the framework for improving population health and wellbeing across the Territory through reducing the incidence and impact of chronic conditions on our communities.

- The Division of Sport and Recreation within the Department of Tourism and Culture has developed an Active Recreation Strategy that is expected to be launched during 2018.
- The NT Government has recently released a whole of NT plan for early childhood development - *Starting Early for a Better Future - Early Childhood Development in the Northern Territory 2018-2028* and release of a *Child and Adolescent Health Plan* is expected this year. Both plans prioritise health and wellbeing through a focus on health promotion, prevention and early intervention and building a system that provides for Territorians to live healthy, happy productive lives.

In recent years, the Department of Health (DoH) has funded a variety of evidence informed initiatives supporting obesity prevention in the community, these have included:

- *Childhood Obesity Prevention and Lifestyle (COPAL), 2011-2016* - a multi-strategy, community-based obesity prevention initiative that combined healthy eating and physical activity programs involving schools, local government, health services and community organisations in the city of Palmerston, which represents approximately 25% of the NT urban population. Palmerston was a site of South Australia's Obesity Prevention and Lifestyle (OPAL) program which was renamed COPAL for the Territory. COPAL was funded under the Healthy Children Initiative, as part of the then Council of Australian Governments' (COAG) National Partnership Agreement on Preventative Health. OPAL utilises methodology of French program (called EPODE) that is one of the few programs, nationally or internationally, to have proven effective in reducing the escalating rates of childhood obesity. More details on EPODE are provided in question 6.

Funding for the National Partnership Agreement on Preventative Health was withdrawn in May 2014; and formal evaluation of the initiative was not able to be conducted. A small scale quantitative evaluation was undertaken that demonstrates that COPAL had made a positive and valuable contribution to children, families and the broader Palmerston community. The City of Palmerston Council that delivered the initiative, has continued to build on relationships created by COPAL by employing a Health Programs Manager.

- *Live Lighter* – this is an adult focussed Social Marketing Campaign, purchased under licence from the Western Australian DoH. Evaluation of the Western Australian Live Lighter campaign found that it had raised awareness about the rising levels of obesity in WA, made an impact on healthy attitudes and behaviours and generated debate about the health issues associated with being an unhealthy weight. Analytic reports from social media platforms rate this as a very cost effective campaign with good audience reach. Victoria, Tasmania and the Australian Capital Territory have also adopted the campaign. Funding for the NT campaign finishes in June 2018 and local evaluation is not yet available.

The NT Department of Health (DoH) is currently funding *Healthy Territory Kids* – a free, family based healthy lifestyle program for children aged 7-13 who are above a healthy weight. It engages with families and carers of the children, helping them to adopt a long-lasting healthy lifestyle. *Healthy Territory Kids* is the licensed, evidenced based Better Health Program that is currently delivered in New South Wales (where it is called Go4Fun®) and Perth (where it is called the Better Health Program). Healthy Territory

Kids is being implemented in urban NT settings only, as the efficacy of delivering the program in a remote community setting has not been tested.

The NT Government has a number of policies to create healthier lifestyles in institutional settings, these include:

- The NT Department of Education (DoE) has had a Healthy Eating Policy for the provision of food and drink in NT government schools since 2009. The current version, *School Nutrition and Healthy Eating Policy* reflects nutrient criteria from the National Healthy School Canteen Guidelines and the Federation of Canteens in Schools. The Policy covers food and drink in fundraising, as a reward, in canteens and food services, in the curriculum and at whole school events. It has many similarities with other jurisdictions but there is not national consistency in how school policies and nutrition guidelines are implemented.
- DoE has the Physical Activity Requirements for Schools Policy which specifies that schools are required to provide at least two hours of physical activity in the curriculum each school week for students in the primary and secondary years of schooling.
- *Healthy Choices Made Easy* - In 2014 DoH introduced a policy for food supply in all NTG health facilities, including vending machines, hospital kiosks, fund raising and food trolleys. The policy also covers catering to ensure food and drink provided at Departmental events are healthy.

National action

In October 2016, Health Ministers discussed the issue of childhood obesity and considered collective action that could improve children's health by limiting the promotion and availability of unhealthy food and drinks. Ministers agreed to actions that could be taken to limit the impact of unhealthy food and drinks on children and to consult with Ministers in other portfolios to collaboratively develop joint approaches.

Schools, sport and recreation, and public healthcare facilities will be the focus of this national childhood obesity prevention project, as well as potential enhancements for the food regulation system and nutrition profiling. The NT Department of Health is actively involved with other jurisdictions in implementing the agreed actions.

The NT is a small jurisdiction and has welcomed previous social marketing campaigns that the Australian Government (AG) have initiated that focus on obesity, nutrition and physical activity (for example 'Go for 2 and 5', 'Girls Make Your Move', 'Swap it, Don't Stop It', 'Measure Up', 'Get Moving'). However, due to our unique population, input into the development of these campaigns would have provided an opportunity to provide guidance on the development of culturally and geographically appropriate materials to support these on campaigns at the local level.

6. Evidence-based measures and interventions to prevent and reverse childhood obesity including experiences from overseas jurisdictions.

To date, there have been very few programs, nationally or internationally, that have proven effective in reducing the escalating rates of childhood obesity. One program that has been successful in reducing childhood obesity is EPODE¹ (translated as "together let's prevent childhood obesity").

EPODE is a French multi-strategy, community-based obesity prevention initiative that brings together healthy eating and physical activity programs and activities available through schools, local government, health services and community organisations. A particular feature of the EPODE methodology is its multi-layered positive social marketing approach that is used as a behavioural change strategy by public and private organisations. Community momentum is built through a unifying marketing campaign and all local programs/schools/community groups work to that theme and share ideas for action. This requires strong direction and coordination from project staff, along with active involvement of teachers, schools, nurses, health workers, recreation and sport deliverers, community associations and local media.

Due to its success, the EPODE methodology has spread across the world and has been implemented in over 250 sites in Europe and other countries. In 2008, the South Australian Government purchased a licence to utilise the EPODE methodology in South Australia (SA) under the name OPAL (Obesity Prevention and Lifestyle). COPAL (see question 5) was one site of the SA program. When adopting international programs consideration must be given to the flexibility of the program to allow modifications which may be necessary for success in the local context.

References

1. <https://epodeinternationalnetwork.com/>

7. *The role of the food industry in contributing to poor diets and childhood obesity in Australia*

The NT shares the concerns that other jurisdictions have regarding the role of the food industry in contributing to poor diets and supports work around food reformulation and regulation that is being conducted by national committees, for example the Healthy Food Partnership and the Food Regulation Standing Committee. The rationale for the work being conducted by these groups is well documented and there is a plethora of articles and reports from public health advocacy groups regarding the influence of the food industry on the diets of Australians. Due to population and geographical characteristics, the food industry plays a unique role in contributing to the diets of Territorians particularly in regards to the food supply chain.

Nearly three quarters of Aboriginal Territorians live in remote areas, in low socio-economic circumstances and depend heavily on the store and/or takeaway in their community for food and other essential supplies. Despite noted recent improvements, the availability and the variety of foods available in these communities remain more limited than in regional centres, and prices are significantly higher, suggesting the likelihood of food insecurity. There are many factors contributing to the high cost of food in remote stores, including transport. However, for many products, remote stores are not even able to purchase the food from local wholesalers at a price that is less than what major supermarket chains may be selling the same product for¹.

In the past, poor management of stores has been a major contributor to high food prices as well as limited variety of healthy foods. In 2007, the Australian Government introduced two initiatives to improve the management and quality of food provided in remote stores;

Outback Stores – an Australian Government owned company set up to manage stores on behalf of remote communities to ensure their commercial viability and a reliable supply of health, affordable food.

Community Stores Licensing – in late 2007, the Australian Government commenced licensing of remote stores to improve both the management of stores and the quality of food they provide. As part of licensing conditions, stores are expected to have a reasonable range of groceries and consumer items, including health food and drinks.

An evaluation in the Community Stores Licensing program in 2011 found the following impact on food security²

“Overall, this evaluation indicates that stores licensing has had a positive impact on food security, especially with regards to the quality, quantity and range of healthy food available. Data analysis and feedback from stakeholders and community members indicates that generally, the range of healthy food available in remote communities has improved since the introduction of stores licensing. The evaluation also suggests retail management practices have improved, which appears to have had a positive impact on the quality of food available, and also the security of food supplies for communities.”

“Information on price was difficult to assess, primarily because in most cases community members and stakeholders felt that prices were high. However, the mark-up policies identified in the research indicated that for most stores a lower mark-up is used for healthy foods in comparison to unhealthy foods to encourage consumption of nutritious foods.”

Outback Stores currently manages 23 stores in the NT and has a Healthy Food Strategy. They have recently reported a reduction in sugary drinks sold through their stores³.

The NT welcomed and supports the ongoing investment by the Australian Government into these initiatives, however the high cost of food in remote communities remains a significant impediment to food security in remote communities.

The NT Department of Health has been conducting the ‘Market Basket Survey (MBS)’ since 2000. The annual survey maps food price, availability and quality in different locations in the Northern Territory. The survey has found that the cost of a healthy basket of foods has been on average between 15% and 57% more in remote stores compared to a Darwin supermarket⁴. The high cost of packaged foods in remote stores has been highlighted in further research. Major grocery outlets have the ability to buy bulk food supplies at cheaper costs. Although occurring outside the timeline of the focus of this

report, the study suggests that large supermarkets, wholesalers and manufacturers could play a significant role in helping everyone access healthy food at a reasonable price¹.

In Australia and internationally, there is little information on the relative cost of healthy diets and meals compared with unhealthy diets and meals. There is however indication that a healthy diet can cost less in some situations than the diet that Australians⁵ and Indigenous Australians⁴ currently consume. Whilst the MBS indicates that it can be cheaper to purchase a healthy diet, foods in the basket generally require storing, preparation and cooking, which in turn requires facilities to do so. Many remote households lack these facilities; hence people are often forced to purchase and consume the less healthy 'takeaway' alternatives.

Summary

- NT continues to support national work regarding food reformulation and regulation
- AG initiatives, stores licensing and Outback Stores support work of NT staff to improve food supply in remote stores
- Some improvements have been made in the availability of healthy food in remote stores, however the high cost of food remains an issue
- There is some evidence that a healthy diet may cost less to purchase in remote communities than what people are currently purchasing, however a lack of facilities and skills to prepare these foods at home is an issue.

References

1. Ferguson M, O'Dea K, Chatfield M, Moodie M, Altman J, Brimblecombe J. 'The comparative cost of food and beverages at remote Indigenous communities, Northern Territory, Australia'. Australian and New Zealand Journal of Public Health. 2015.
2. Department of Families, Housing, Community Services and Indigenous Affairs. Evaluation of the Community Stores Licensing Program, Final Report. Cultural and Indigenous Research Centre Australia. Melbourne 2011.
3. Outback Stores. Annual Report 2016 – 17. Available from: <https://outbackstores.com.au/wp-content/uploads/2017/12/os-annual-report-17-fa-web.pdf>. Last accessed: 13 June 2018
4. Department of Health. 2016 Northern Territory Market Basket Survey. Department of Health: Darwin, 2017.
5. Lee A, Kane S, Ramsey R, Good E, Dick M. 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.

8. Any other related matters

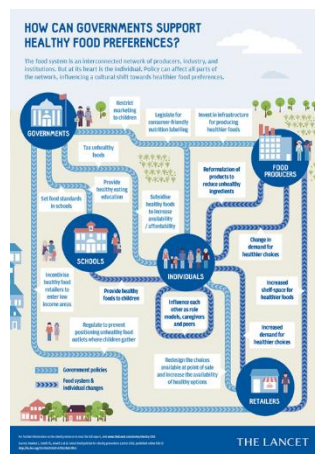
Overweight and obesity is a complex issue, it is not just about eating and inactivity. Different contextual factors, e.g. culture, gender, social factors and geographic location drive differences in food consumption and need to be considered in developing policies and solutions. For example, evidence suggests males and females differ in both

exposure and vulnerability to obesogenic environments, as well as in the consequences of obesity and responses to interventions¹.

Action to halt the rising obesity pandemic requires action by both the health and non-health sectors due to the multitude of interactions - societal, psychological, cultural, politics and economics. Public health initiatives need to be combined with a range of approaches that will change the food environment to promote healthy eating. The involvement of Government is crucial along with increased effort from food industry and civil society to curb rising rates of obesity.

The interconnected network of producers, industry and institutions than make up the food system is depicted succinctly in the figure 8.1 below². It also articulates the role that government can play in forming policy and regulations to support healthy food preferences.

Figure 8.1: How can governments support healthy food preferences



Source: <https://www.thelancet.com/infographics/obesity-food-policy>

In late 2017, the Obesity Policy Coalition (OPC) released a document (*Tipping The Scales*) prepared by an expert advisory group of health professionals that calls on the Australian Government to undertake the following eight actions to address overweight and obesity³ -

1. Toughen restrictions on TV junk food advertising to kids
2. Set food reformulation targets
3. Make Health Star Ratings mandatory
4. Develop an active transport strategy
5. Fund public health education campaigns
6. Add a 20% health levy to sugary drinks
7. Establish a national obesity taskforce
8. Monitor diet, physical activity, weight guidelines.

The full report can be found here on the following website:

<http://www.opc.org.au/downloads/tipping-the-scales/tipping-the-scales.pdf>



References

1. Sweeting H. Gendered dimensions of obesity in childhood and adolescence. *Nutrition Journal*. 2008; 7 (1). Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2265740/>
2. Lancet Obesity 2015 series. How can governments support healthy food preferences? Available at <https://www.thelancet.com/infographics/obesity-food-policy>
3. Australian Obesity Coalition and Global Obesity Centre. Tipping the scales: Australian obesity prevention consensus. 2017. Available at <http://www.opc.org.au/downloads/tipping-the-scales/tipping-the-scales.pdf>